PSYCHOSOCIAL FUNCTIONING OF CHILDREN WITH DISRUPTIVE BEHAVIOUR DISORDERS

By

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2011

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A Dissertation submitted to

Dr. Muhammad Ajmal
NATIONAL INSTITUTE OF PSYCHOLOGY
Centre of Excellence
Quaid-i-Azam University, Islamabad

In Partial fulfillment of the requirements for the
DEGREE OF PHILISOPHY
IN

PSYCHOLOGY
2011

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ACKNOWLEDGEMENTS

Thanks to Allah Almighty, who enlightened, and blessed me with this opportunity to accomplish this goal.

I owe debt of gratitude to my supervisor Prof. Dr. Anila Kamal, whose valuable guidance and brilliant supervision has always been a source of inspiration for me. I am thankful for her keen interest, advice, guidance, and constructive criticism that proved helpful through out my research work.

I express my deepest gratitude to Dr. SeemaGul for providing me every possible support during my research work.

I am also indebted to Dr. Pelham, Dr. Sue Spence, and Dr. Paul Frick, and Dr Achenbach for granting me permission to use/ translate their scales.

I express my gratitude to school principals for giving me permission for data collection; class teachers, mothers, and children for participation in the study.

I express my deepest gratitude to Ms. Sadia Aziz and Ms. Momna Anwar for helping me in translation of scales.

Many thanks to Library, Computer, and Administration staff of NIP for their facilitation during the research work, especially Mr. Abdul Qayoom, who assisted me in compilation of thesis.

I would cordially thank my friends Rafia, Ayesha, Iffat, Sadia,Humaira,Gulnaz, Irum and Naila, for providing me every possible suggestion. I would not forget to mention my colleagues Madam Rabia, Madam Maryam, Madam Mussarat, Dr. Uzma, Madam Bushra and Madam Nazia for their moral support.

Especially, I owe deep sense of gratitude to my mother for her never ending support and prayers, and my brother for his encouragement and motivation throughout my work.

Mamoona Ismail Loona

ABSTRACT

The present research focused on studying disruptive behaviour disorders i.e., Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) in Pakistani children. The research is consisted of two Parts. Part I is carried out in the school setting to study gender and grade wise prevalence rate, academic performance, social competence, antisocial behaviour, and perceived parenting styles of screened out children via teachers ratings on Disruptive Behaviour Disorder (DBD) rating scale. Part II is designed to examine pervasiveness of DBD symptoms at home and school settings. Moreover, internalizing behaviour disorders and Callous Unemotional traits in screened out children were also assessed. In Study I of Part I, DBD rating scale by Pelham, Gnagy, Greenslade, and Milich, (1992) was translated into Urdu language and its psychometric properties were determined. Sample includes 280 children (Mean age = 9.65, SD =1.29).Confirmatory Factor Analysis (CFA) of DBD rating scale (χ^2 = 791.60, CFI = .980, RMSEA = .024) indicates this model fits the data. Study II of Part I investigatedsocial competence and antisocial behaviour of (N = 806; Mean age = 9.55, SD = 1.27) children. Results indicate children screened out as ADHD-I and ADHD-C have lowest social competence as compared to comparison group. Whereas, comorbid group showing high antisocial behaviour as compared to all other DBD groups.Study III investigates role of parenting styles and demographic factors in prediction of DBD symptoms. Sample includes children of 9 to 13 years (N = 635; Mean age = 9.99, SD = 1.27). Multiple regression analysis indicates paternal authoritarian, and maternal authoritative and authoritarian styles proved significant predictors for childhood behaviour problems.

Part II consists of four studies that focus on translation of Spence Child Anxiety Scale (SCAS-P: Spence, 1999), pervasiveness of DBD symptoms, validation of DBD rating scale and SCAS-P through Child Behaviour Checklist/6-18 (Urdu version: Khan&Awan, 2011), and assessment of Callous Unemotional Traits through Inventory of Callous Unemotional Traits (Parent version) (ICU-P) (Frick, 2004) respectively. In Study I of Part II, SCAS-P (Spence, 1999), was translated into Urdu language and its psychometric properties were determined. Study II investigates pervasiveness of DBD at home and school settings, it includes academically low performing children (N = 245; Mean age = 9.68, SD = 1.56) within age range 7 to 13 years. Mothers of selected children with age range 26 to 55 years (N = 245; Mean age = 35.96, SD = 4.87) and teachers (N = 82) rated these children. Findings of paired sample t - test indicates teachers have high mean scores as compared to mothers on DBD rating scale. In Study III, validation of DBD rating scale and SCAS-P through CBCL/6-18 (Urdu version: Khan&Awan, 2011) was performed, In Study IV, Multiple regression analysis indicates Callous and Uncaring traits are significantly predicting childhood behaviour problems. Scales translated into Urdu language i.e., DBD Rating scale, SCAS-P, and ICU-P will prove useful for future researchers working in the area of developmental psychopathology and clinical psychology. The present research for the first time provided detailed analysis of disruptive behaviour disorders of children in exclusive home setting; and in home and school settings simultaneously that will prove useful in understanding DBD and its causes and correlates in Pakistani context.

CONTENTS

Chapter-I

INTRODUCTION

In the field of developmental psychopathology childhood behaviour problems represents an important topic. Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association, 1994) includes three types of disruptive behaviour disorder: Conduct Disorder (CD), Oppositional Defiant Disorder (ODD), and Attention-Deficit/Hyperactivity Disorder (ADHD), each occurring in about 1–8% of the population (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Verhulst, van der Ende, Ferdinand, & Kasius, 1997).

The term externalizing problems describes both the clinical and the subclinical manifestation of disruptive behaviour problems. Externalizing problem behaviour often persists over the course of early and later childhood and adolescence into adulthood (Bongers, Koot, van der Ende, & Verhulst, 2004; Do¨pfner, Adrian, & Hanisch, 2007).

Childhood behaviour problems can be manifested in either externalizing or internalizing behaviour. Externalizing behaviour consists of disinhibited behaviour and other expressions of under socialization (Kovacs & Devlin, 1998). Children with externalizing problem behaviour have underdeveloped self-regulation skills, leading to under controlled behaviour (Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1996). Internalizing behaviour, by contrast, includes fearfulness, withdrawal, inhibition, and anxiety (Eisenberg et al., 2001; Roeser, Eccles, & Strobel, 1998).

Internalizing and externalizing behaviour problems, from depressed affect and aggression to withdrawn behaviour and delinquency, manifest across childhood and adolescence (Bongers, Koot, van der Ende, & Verhulst, 2003; Sterba, Prinstein, & Cox, 2007). Research on the development of behaviour problems suggests that, usually with age, internalizing problems increase and there is decrease in

externalizing problems (Bongers et al., 2003). However, some children and adolescents show stability and some show change over time in behaviour problems. These variations in children are because of individual differences in the initial levels and rate of change in behaviour problems. Furthermore, persistently high levels of problem behaviour can result in specific clinical outcomes such as suicide, treatment resistance, or extreme antisocial behaviour (Broidy et al., 2003; Cicchetti & Toth, 1998).

In early childhood, Internalizing behaviour problems are risk factors for teenage and adult depression, anxiety, and suicide, while externalizing behaviour problems are risk factors for later juvenile delinquency, adult crime, and violence (Farrington, 1989; Moffitt, 1993a; Raine, 2002). Mansoor and Ahmed (2010) stated anxiety is manifestation of the development of such feelings which are abnormal and develop in normal situations. Thus, identification of early childhood behaviour problems is extremely essential to understand and prevent the development of problem behaviours later in life (Liu & Wuerker, 2005). Childhood externalizing and internalizing behaviour disorders have been discussed in detail to know their features, differences and co-occurrence.

Childhood Externalizing Behavioural Disorders

The three most common childhood externalizing behaviour disorders are Attention-Deficit/Hyperactivity Disorder (ADHD), Conduct Disorder (CD), and Oppositional Defiant Disorder (ODD).

Distinguishing features of ADHD, CD, and ODD are as follows:

Oppositional defiant disorder. ODD typically has an onset in early childhood, and is characterized by temper tantrums, irritability, spiteful attitudes, frequent arguments, anger, defiance of adults' authority, and excessive blaming and intentional annoyance of others. CD often develops later than ODD, and is characterized by behaviours including stealing, lying, fire setting, truancy from

school, and property destruction. Although, children with ODD are often diagnosed with CD when they reach adolescence, not all individuals with CD have had a previous diagnosis of ODD (Dick et al., 2005; Lahey, McBurnett, & Loeber, 2000).

The essential characteristic of ODD is disobedient, negativistic, and provocative opposition to authority figures such as parents and teachers. A primary feature is a persistent oppositional attitude even when it goes against the interests or well-being of the child or adolescent.

In the developmental trends study of clinic-referred boys seven to twelve years old, 96 percent of those who met criteria for CD also met criteria for ODD. The reported average age of onset was about six years for ODD and about nine years for CD, suggesting that among boys with conduct disorder, this disorder is preceded by behaviors characteristic of oppositional-defiant disorder and that these behaviors are "retained" as additional antisocial behaviors emerge. On the other hand, ODD does not always result in CD. Of the boys with ODD (but no CD) at the initial assessment, 75 percent had not progressed to CD two years later. About half of the boys with ODD at year 1 continued to meet the criteria for ODD at year 3, and about one-quarter no longer met the criteria for ODD. Thus, although most cases of conduct disorder meet the criteria for oppositional-defiant disorder, most youngsters with oppositional-defiant behaviors do not progress to a conduct disorder (American Psychiatric Association, 2000; Hinshaw, Lahey, & Hart, 1993).

Conduct disorder. National Mental Health Association (NMHA, 2001) defined Conduct Disorder as a repetitive and persistent pattern of behaviour in children and adolescents in which the rights of others or basic social rules are violated. The child or adolescent usually exhibits these behaviour patterns in a variety of settings e.g., at home, at school, and in social situations and they cause significant impairment in their social, academic, and family functioning.

The diagnosis of conduct disorder requires that three or more of these behaviors be present during the past twelve months, with at least one of them present

in the past six months. Two subtypes, childhood-onset and adolescent-onset, are specified on the basis of whether one or more of the criterion behaviors had an onset prior to age ten years.

The essential feature of CD is a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated. The behaviors are categorized into four groups: aggressiveness to people and animals (bullying, fighting, using a weapon, physical cruelty to people, physical cruelty to animals, stealing with confrontation of victim, forced sexual activity); property destruction (fire setting, other destruction of property); deceptiveness or theft (breaking and entering, lying for personal gain, stealing without confronting victim); and serious rule violations (staying out at night, before age 13), running away from home, being truant (before age 13) (APA, 1994).

Attention deficit hyperactivity disorder. ADHD involves developmentally inappropriate levels of inattention, impulsivity, and hyperactivity that are long-standing, pervasive, and severe enough to cause significant impairment in critical areas of the child's life. Secondary features associated with the disorder are often quite troublesome; such difficulties include poor peer relations, aggression, learning problems, academic underachievement, and low self-esteem and depressive symptoms as well (see Barkley, 1998; Hinshaw, 1994, for reviews).

Inattention. By definition, children and adults who have ADHD are said to display difficulties with attention relative to nondisabled children or other control groups of the same age and gender. Parents and teachers often describe these attention problems in terms such as "Doesn't seem to listen," "Fails to finish assigned tasks," "Daydreams," "Often loses things," "Can't concentrate," "Easily distracted," "Can't work independently of supervision," "Requires more redirection," "Shifts from one uncompleted activity to another," and "Confused or seems to be in a fog" (Barkley, DuPaul, & McMurray, 1990). Many of these terms are the most frequently endorsed items from rating scales completed by the caregivers of these children (DuPaul, Power, Anastopoulos, & Reid, 1998; Mahone et al., 2002).

Children with ADHD also spend much more time engaged in off-task behavior instead of attending to their assigned tasks (Sawyer et al., 2001), which could give others the impression that they are distractible when they are merely unable to persist as well as others (Hoza et al., 2001).

Impulsivity and hyperactivity. The second dimension of symptoms that emerges from factor analyses of symptom ratings in both children and adults is that of poor inhibition and associated hyperactivity (Burns et al., 2001; DuPaul et al., 1998; Gioia et al., 2000; Lahey et al., 1994; Murphy & Barkley, 1996).

Waiting for their turn in a game or in a group lineup before going to an activity is often problematic for children with ADHD; indeed, waiting in general may be problematic for all ages of the disorder. When faced with tasks or situations in which they are encouraged to delay seeking gratification and to work toward a longer-term goal and larger reward, they often opt for the immediate, smaller reward that requires less work to achieve. They are notorious for taking "shortcuts" in their work performance, applying the least amount of effort and taking the least amount of time in performing tasks they find boring or aversive. When they desire something to which others control access and they must wait a while to obtain it, as in a parent's promise to eventually take them shopping or to a movie, they may badger the parent excessively during the waiting interval, appearing to others as incessantly demanding and self-centered.

Impulsivity. Like attention, impulsivity is multidimensional in nature (Kindlon, Mezzacappa, & Earls, 1995; Milich & Kramer, 1985; Nigg, 2000, 2001). These often involve constructs of executive control, delay of gratification, effort, and even compliance (Olson, Bates, Sandy, & Lanthier, 2000). Others reorganize inhibition into executive (volitional), motivational (precipitated by fear or anxiety), and automatic attentional inhibitory processes (Nigg, 2000). Those forms of impulsivity often associated with ADHD involve the under control of behavior (poor executive functioning), poor sustained inhibition, the inability to delay a response or defer gratification, or the inability to inhibit dominant or prepotent responses

(Barkley, 1997; Kendall & Wilcox, 1979; Kindlon et al., 1995; Neef, Bicard, & Endo, 2001; Newcorn et al., 2001; Nigg, 1999, 2000, 2001; Rapport, Tucker, DuPaul, Merlo, & Stoner, 1986; Scheres et al., 2004). But there is also evidence that children with ADHD have an equal or greater problem with delay aversion: They find waiting to be aversive, and therefore act impulsively to terminate the delay more quickly (Sonuga-Barke, Taylor, & Hepinstall, 1992; Solanto et al., 2001)

Although defined as separate disorders, ADHD is often comorbid with ODD and CD, and there has been discussion as to whether ODD and CD should be combined into one disorder. Factor analyses have repeatedly shown that ADHD, ODD and CD are distinct from one another (e.g. Burns, Walsh, Owen, & Snell, 1997; Burns et al., 1997; Hartman et al., 2001; Pardini, Obradovic, & Loeber, 2006). Nevertheless, researchers have often treated these constructs uniformly, collapsing across ODD and CD, and occasionally ADHD as well. It has become increasingly evident that this practice has led to gaps in existing models of child psychopathology. For example, although ADHD had been thought to be a significant direct predictor of CD, research has indicated that ODD mediates the relationship between ADHD and CD (Burke, Loeber, Lahey, & Rathouz, 2005; Van Lier, van der Ende, Koot, & Verhulst, 2007).

The safest conclusion is that ADHD clearly increases the risk for early onset of ODD and CD; its ability to predict later antisocial patterns over and above such facilitation of early aggressive behaviour is still questionable. There is no doubt, however, that the comorbid presence of ADHD and ODD/CD in childhood signals a persistent, early-developing treatment-refractory subcategory of youngsters who are deserving of research and clinical attention (Loeber, 1990). Before discussing comorbidity between externalizing and internalizing behaviour disorders it is worthwhile to understand what does comorbidity means?

Understanding Comorbidity

Comorbidity refers to the coexistence of two or more distinct disorders in the same individual at the same point in time (Achenbach, 1991; Caron & Rutter, 1991). Comorbidity is not only pervasive but, at times, occurs more frequently than single disorders and has worse developmental consequences than single-form disorders (see review by Nottelman & Jensen, 1995). Research on this phenomenon is extremely important to the field of developmental psychopathology because it has implications for the validity of past and future classification systems, etiological theories, treatment outcome research, and treatment recommendations.

Comorbidity among these behavioural disorders has been reported in both epidemiological and clinical samples (Biederman, Newcorn, & Sprich, 1991; Jensen, Martin, & Cantwell, 1997; Simonoff et al., 1997). That observation has generated considerable debate about the appropriateness of the current diagnostic system for these childhood externalizing disorders. Some research groups have proposed that individuals with comorbid disorders may represent distinct subtypes (Biederman et al., 1991; Faraone, Biederman, & Monuteaux, 2000). For example, it has been suggested that ADHD with CD may represent a more severe form of ADHD, while ADHD with ODD represents an intermediate phenotype between ADHD with CD and ADHD alone (Biederman et al., 1991).

According to the literature review, externalizing behaviour disorders i.e., ADHD, ODD and CD usually exist in a comorbid form in children therefore assessment of all three disorders is important for the complete information and proper diagnosis. Few relevant researches have been reported in the following section that will further explain the issue of comorbidity between externalizing disorders.

Comorbidity between Externalizing Behaviour Disorders

Children diagnosed with ADHD are a heterogeneous population. Specifically, when assessed using rigorous diagnostic criteria, ADHD co-occurs with ODD and CD

at rates of at least 40 to 50% or higher (Biederman et al., 1991). Such comorbidity is associated more specifically with the hyperactive/impulsive dimension underlying ADHD than with inattentive features per se (e.g., Lahey et al., 1994). The presence of comorbid ODD and CD yields key differences with regard to family history (Lahey, et al., 1988), family interaction (Fletcher, Fischer, Barkley, & Smallish, 1996), prognosis (Hinshaw, 1994), and social functioning (Landau, & Milich, 1988; Hinshaw & Melnick, 1995).

The co-morbidity between CD and ADHD has lead researchers to explore personality, temperament, family factors, genetics, aggression and other factors as possible links between these two disorders (Hinshaw, Lahey, & Hart, 1993; Hudziak, 1997; Rutter, Silberg, O'Connor, & Siminoff, 1999; Young, 1998).

In another research, Loeber, Green, Keenan, and Lahey (1995) found a link between ADHD and the development of CD in boys. Most children with ADHD develop a comorbid disruptive behaviour disorder (Jensen et al., 1997). The most common is ODD, characterized by chronic argumentativeness, defiance and anger, but the more pernicious CD, involving serious violations of societal norms, is present in a quarter to half of all cases (Barkley, DuPaul, & McMurray, 1990; Biederman et al., 1991; Szatmari, Boyle, & Offord, 1989).

The combination of ADHD and CD is associated with an earlier age of onset for CD and more persistent and serious conduct problems (Lahey, McBurnett, & Loeber, 2000). ODD behaviours have high stability from preschool through school age and early adolescence (Lavigne et al., 2001). ODD is generally considered a milder disorder than CD, but it is far from benign: it is associated with functional impairment and disturbed interpersonal relations, and in some cases it progresses to CD. However, many cases of prepubertal ADHD comorbid with ODD do not progress to the prepubertal form of CD (Lahey et al., 2000), which is the classic early-onset pattern associated with persistent and serious antisocial behaviour (Farrington, 1995; Moffitt, 1993b).

One model that takes into account these issues is the distinction that has been made between a childhood onset and adolescent-onset to serious conduct problems (American Psychiatric Association, 2000; Moffitt, 1993b: Patterson & Yoerger, 1997). The most thoroughly delineated pathway, and the one that seems to have the most negative long term prognosis, has been variously referred to as the "early starter" (Patterson, Capaldi, & Bank, 1991), "childhood-onset" (Hinshaw, Lahey, & Hart, 1993), "life course persistent" (Moffitt, 1990), or "aggressive-versatile" (Loeber, 1988) pathway. The childhood onset type is defined by the onset of at least 1 of the 15 behaviour prior to 10 years of age, whereas CD behaviour does not appear until age 10 or older in the Adolescent Onset Type.

There have been a number of studies showing important differences between children in the two developmental trajectories (see Moffitt, 2003 for a review). One of the most consistent differences is that children in the childhood-onset group show a more severe, aggressive, and chronic pattern of antisocial behaviour than youth with an adolescent-onset (Frick & Loney, 1999; Moffitt et al., 2002; Woodward et al., 2002). More importantly for causal theories, there have also been a number of studies to suggest that these two developmental patterns are differentially related to several important risk factors.

Further, the childhood-onset group has been reported to show more temperamental and personality risk factors, such as impulsivity (McCabe et al., 2001; Silverthorn et al., 2001), attention deficits (Fergusson et al., 1997), and problems in emotional regulation (Moffitt et al., 1996). This group has also been shown to come from homes with greater family instability, more family conflict, and with parents who use less effective parenting strategies (Aguilar et al., 2000; McCabe et al., 2001; Patterson & Yoerger 1997; Woodward et al., 2002).

Externalizing behaviour disorders also comorbid with internalizing behaviour disorders; few relevant researches have been mentioned in the subsequent section.

Comorbidity of Internalizing and Externalizing Behaviour Disorders

Although internalizing conditions such as anxiety disorders and depression may appear, at first glance, to be diametric opposites of such prototypically externalizing difficulties as aggression and antisocial behaviour, dimensional and categorical investigations reveal substantially above chance rates of overlap for these two domains (e.g.., Offord et al., 1987; Zoccolillo, 1992).

Research involving epidemiological (Angold, Costello, & Erkanli, 1999), clinical (Biederman et al., 1991) and community samples (Blackman, Ostrander, & Herman, 2005) has reliably demonstrated a high rate of comorbidity between ADHD and depression among children and adolescents. The relationship between ADHD and depression cannot be attributed to the shared association that both disorders have with anxiety or conduct symptoms (Blackman et al., 2005).

Naz and Siddiqui (2010) studied early signs of depression in adolescent school girls in Pakistan. Depressive symptoms in adolescence are risk factor for psychiatric disturbances in adulthood. Expression of sadness and feeling bad about yourself is often observed in adolescence and more so in girls. In Pakistan, girls face many challenges; they sometimes are made to assume many responsibilities even before they are prepared for such roles (Afzal, Rana, & Mehmood, 2008 Niaz & Hassan, 2006).

DSM-IV-TR (APA, 2000) lists the symptoms of depression as: depressed mood (or irritable mood if a child or adolescent), loss of all interest and pleasure; appetite or weight disturbance, either abnormal weight loss (when not dieting) or decease in appetite; Abnormal weight gain or increase in appetite; sleep disturbance, either insomnia or hypersomnia; psychomotor agitation or retardation, fatigue or loss of energy, self reproach or inappropriate guilt; poor concentration or indecisiveness, recurrent thoughts of death (not just fear of dying) or suicide.

The high level of depression displayed by children with ADHD does not seem to be further differentiated when comparisons are made between the inattentive and combined subtypes of ADHD (Crystal, Ostrander, Chen, & August, 2001). Likewise, children with ADHD and comorbid depression have similar levels of inattention and hyperactivity-impulsivity when compared to their non-depressed ADHD counterparts (Blackman et al., 2005).

The rate of comorbidity between depression and ADHD is reported to be very high (e.g., Angold et al., 1999; Biederman et al., 1991); however, comorbidity rates of ADHD with other disorders are even higher. In particular, the co-occurrence of ADHD and externalizing disorders such as CD and ODD is estimated to range from 55 to 75% (Angold et al., 1999). Given the extensive overlap between ADHD, ODD/CD and depression, studies have pointed out the need to account for comorbid CD or ODD when examining the relationship between ADHD and depression (Angold et al., 1999; Crystal et al., 2001). It is also noteworthy that children with ADHD in conjunction with either depression or other externalizing disorders have more social difficulties than do their ADHD counterparts without such coexisting disorders (Blackman et al., 2005; Treuting & Hinshaw, 2001).

Loeber and Keenan (1994) reported that females with CD were more likely than males to experience a co-morbid diagnosis of anxiety or depression, while males experienced higher rates of substance use disorders and ADHD. Loeber et al. (1995) reported that of 7–12 year old clinic referred boys with ADHD; almost 50% developed CD one to five years later. Knowledge about these associations in general population samples is limited, although Costello et al. (2003) reported significant co-occurrence between the three disorders in their population sample.

Internalizing disorders such as anxiety and depression occur at higher than expected rates among youngsters with conduct disorders (Loeber & Keenan, 1994; Loeber, Burke, Lahey, Winters, & Zera, 2000). Estimates of the rate of co-occurrence of conduct problems and anxiety disorders vary widely from 19 to 53 per cent (Nottelman & Jensen, 1995). The impact of the co-occurrence of anxiety with conduct

disorders may also differ by age, the impact being worse in older children. Younger, prepubertal boys with both conduct and anxiety disorders have been reported to be less aggressive than those with conduct disorder alone; however, older boys with both disorders were more aggressive than the boys with only conduct disorder (Hinshaw et al., 1993).

The co-occurrence of depression and conduct disorder in community samples has been estimated as between 12 to 25 per cent (Loeber & Keenan, 1994; Nottelmann & Jensen, 1995). However, among a community sample of older adolescents, Lewinsohn, Klein, and Seeley (1995) found that a major depressive disorder co-occurred in 38 per cent of youngsters with a disruptive behaviour disorder (CD, ODD, or ADHD). In clinical samples, approximately 33 per cent of children and adolescents have a co-occurrence of conduct and depressive disorders. It may be that one disorder creates a risk for the other. For example, frequent failures and conflict experiences (e.g., with peers and school) may contribute to depression in youngsters with conduct problems (Dishion, French, & Patterson, 1995).

Considerable data indicate that, particularly in clinic-based samples, children with ADHD are more likely to meet diagnostic criteria for one or more mood disorders than are comparison children (Biederman et al., 1991; Jensen, Shervette, Xenakis, & Richters, 1993; Rey, 1994). Some measures of childhood depression include symptoms of academic failure, behavioural disruption, and peer disharmony, potentially leading to the spurious attribution of "depression" to samples of children with externalizing behaviour (Hoza, Pelham, Milich, Pillow, & McBride, 1993). To remove the spurious effect, Hoza et al. (1993) removed such items from depression scales, ADHD and comparison groups did not differ significantly in terms of depressive symptomatology.

Jensen et al. (1993) found that nearly 49% of their sample of children with ADHD had an anxiety disorder, depression, or both. In their study of both preschool and school-age samples of clinically referred children with ADHD, Wilens et al. (2002) found that 28% of preschoolers and 33% of school-age children had at least

two or more anxiety disorders (one of which was typically a phobia), with the age at onset of the anxiety disorders being 2.6 to 3.0 years. The large Multimodal Treatment Study of ADHD (MTA) also found that 33–39% of its clinic-referred sample (n = 498) having ADHD, Combined Type (ADHD-C), also had an anxiety disorder (Newcorn et al., 2001).

Rehna (2009) designed a study to measure cognitive errors and anxiety among depressed and non depressed adolescents. Age range of the sample was 12 to 20 years (Mean age = 16.28). Findings indicated significant differences between anxiety and cognitive errors of depressed and non depressed adolescent.

Ansari and Aftab (2009) studied gender differences in depressive symptomatology among adolescents. Sample consisted (N = 200) students within age range 17 to 20 from various educational institutions of Karachi, Pakistan. It was hypothesized that there would be a difference among male and female adolescents on the depressive symptomatology. Findings indicated that female adolescents scored higher than male adolescents on the depressive symptomatology.

The review of the literature on the overlap of ADHD with anxiety disorders reported a range of 10–50% and suggested that about 25–35% of children with ADHD, on average, were likely to have such a disorder (Biederman et al., 1991; Tannock, 2000). Peterson, Pine, Cohen, and Brook (2001) consistently noted a relationship between ADHD and anxiety disorders across four follow-up periods in their longitudinal study of 976 children, suggesting that this is a real comorbidity rather than a coincidence or referral bias.

A number of researchers have reported that ADHD Combined type children tend to exhibit more internalizing behaviour, such as anxiety and depression, than do children in either one or both of the other subtypes (Faraone, Biederman, Weber, & Russell, 1998; Ostrander, Weinfurt, Yarnold, & August, 1998; Wolraich, Hannah, Pinnock, Baumgaertel, & Brown, 1996). Other investigators, however, find no differences, especially between the ADHD Combine and ADHD-Inattentive groups,

on these dimensions (Eiraldi, Power, & Neru, 1997; Willcutt, Pennington, Chabildas, Friedman, & Alexander, 1999; Paternite, Loney, & Roberts, 1996).

Children with comorbid ADHD and CD/ ODD appear to have higher levels of impulsivity than children with only ADHD or with ADHD and an anxiety disorder (Lynam, 1998). Similarly, Peterson et al. (2001) found that ADHD was consistently related to depression across four follow-up periods from childhood to young adulthood in their study of 976 children. Symptoms of depression are often elevated among clinical samples of children with ADHD (Jensen et al., 1997; Treuting & Hinshaw, 2001), with the highest levels occurring among those children having comorbid aggression or (ODD/CD).

Keeping in view such strong theoretical background, in the present research comorbidity between externalizing behaviour disorders i.e., ADHD, ODD, and CD and Internalizing behaviour disorders specifically anxiety and depression has also been studied.

Prevalence Rate of Externalizing Behaviour Disorder

The current consensus of expert opinion is that approximately 3–7% of the childhood population has ADHD (American Psychiatric Association, 2000). There is no doubt that the individual symptoms of ADHD, at least in mild form, can be found in a large percentage of non-clinic referred children and adolescents (Cuffe et al., 2001; DuPaul et al., 1998).

Prevalence rates for CD (7–12% in males) approximate those for ADHD (Faraone, Sergeant, Gillberg, & Biederman, 2003; Kratzer & Hodgins, 1997; Nock, Kazdin, Hiripi, & Kessler, 2006), but heritability estimates (about 40%) are more modest than for ADHD (Ehringer, Rhee, Young, Corley, & Hewitt, 2006). In a sample of children with “pure” ADHD, differing levels of hyperactivity might indeed reliably discriminate the ADHD - Combine group from their ADHD - Inattentive peers. But the fact is that 54 to 67% of children and adolescents with ADHD meet full

diagnostic criteria for ODD, and 20 to 56% of children and 44 to 50% of adolescents with ADHD fulfill diagnostic criteria for CD (see Barkley, 1998, for a review).

In fact, ODD alone declines significantly with age, while CD increases with age. It is only the combination of ODD with CD that is likely to explain the persistence of ODD into adolescence (Maughan, Rowe, Messer, Goodman, & Meltzer, 2004).

Researchers estimate that ODD is comorbid in 35 to 70% of children with ADHD (Abikoff & Klein, 1992; Hinshaw, 1987; Loney & Milich, 1982) and that it is more prevalent in children with combined type ADHD when compared to other children with ADHD (Baumgaertel, Wolraich, & Dietrich, 1995; Faraone et al., 1998). There is evidence that the two disorders have distinctive features (Hinshaw, 1987; Loney, 1987), with ADHD behaviour characterized by inattention, impulsivity, and over activity, and ODD behaviours characterized by defiance, arguing, and oppositional rule violations (Pillow, Pelham, Hoza, Molina, & Stultz, 1998).

Masood (2008) study for the identification of Behaviour Problems among School going children of Rawalpindi and Islamabad cities of Pakistan revealed gender differences in internalizing and externalizing problems. Findings showed that (Boys = 66.6%) and (Girls = 3.57%) were identified with externalizing behaviour. Where as, Girls scored higher on internalizing problems as (Girls = 23.8%) were identified with internalizing behaviour problems and only ten (Boys = 5.95%) were identified with internalizing behaviour problems.

Hussein (2008) carried out a study to determine the prevalence of conduct problems among children attending different school settings in Karachi, Pakistan. A total of seven private and eight community schools agreed to participate. Sample consisted of (N = 640) children from 1 to 5 classes. Based on Parent's rating on Strengths and Difficulties Questionnaire (SDQ), (Boys: n = 165, 48.7%) and (Girls: n = 106, 35.2%) were categorized as "abnormal" on the conduct problems subset.

Findings indicated high level of prevalence of conduct problems in boys as compared to girls.

Javed, Kundi, and Khan (1992) carried out a community study in Lahore, Pakistan to establish the prevalence of emotional and behavioural problems in school children. According to the findings, prevalence rate of 9.3% was found in children with antisocial problems.

During 70s, Werry and Quay (1971) also surveyed a large population of school children and found that teachers rated 30% of the boys and 12% of the girls as overactive, 49% of the boys and 27% of the girls as restless, and 43% of the boys and 25% of the girls as having a short attention span.

The early onset and persistence of CD symptoms, which often co-occur with ODD symptoms, are the hallmark of the unique group with comorbid ADHD having ODD/ CD. The available evidence suggests that ADHD is not so much a precursor to CD as a comorbidity with an early-onset and rather severe form of CD (Maughan et al., 2004; Newcorn & Halperin, 2000). ADHD comorbid with CD is a more severe subtype of ADHD in which the outcomes are often worse than is seen in ADHD alone (Barkley, Fischer, Smallish, & Fletcher, 2004). Unless signs of early aggressiveness or other CD features are present, children with ADHD do not seem to be more prone to developing CD or to greater antisocial activities in later life, even if they have ODD (Barkley et al., 2004; Lynam, 1998). Thus children with ADHD comorbid with CD (regardless of ODD status) are those who constitute a possibly unique group, not those with ADHD having ODD alone.

Waschbusch (2002) carried out a meta-analytic examination of comorbid hyperactive/impulsive/inattention problems and conduct problems and shared his findings. Those are: (a) The prevalence for the combination of disorders is higher than would be expected from simply the overlap of two separate disorders, and they co-occur more highly than would be expected by chance, (b) The group with ADHD comorbid with CD demonstrates more severe symptoms (at least on parent and

teacher ratings, but not lab measures) both of ADHD and of CD than are seen in either disorder alone, (c) Aggressive behaviour (particularly of the hostile, as opposed to instrumental form) in the group with ADHD comorbid with CD may be more evident and more persistent when provoked than is evident in either group alone, (d) Those with the combination show a wider range of antisocial activities than do those with either disorder alone, (e) Those with the combination have more severe problems with social functioning especially in peer relations, social cognition, and social rejection than are evident in either group alone, (f) Those with ADHD comorbid with CD are more likely to show early psychopathic traits, such as callousness and lack of empathy or emotion toward others (see also Lynam, 1998), and (g) Those with the combination are more likely to have both ADHD and CD at adult outcome than are those with either disorder alone.

As far as, gender differences in behavioural disorders are concerned, boys exhibit more externalizing behaviour problems as compared to girls and girls exhibit more internalizing behaviour problems as compared to boys. In the present research, gender differences in externalizing and internalizing behaviour between boys and girls are also studied. The relevant and supporting literature about gender differences has been presented in the subsequent section.

Gender Differences in Externalizing Behaviour Disorder

In general, males develop externalizing difficulties more often than females (e.g., Achenbach, Howell, Quay, & Conners, 1991; Keiley, Bates, Dodge, & Pettit, 2000). In contrast, being female is a risk for internalizing problems (e.g., Achenbach et al., 1991; Walden & Garber, 1994).

In both clinical and population samples, children diagnosed with ADHD and ODD are predominantly boys (Gaub & Carlson, 1997a; Biederman et al., 2002; Loeber et al., 2000). Boys are diagnosed with ADHD only about two to three times more frequently than girls in population-based samples (Szatmari et al., 1989; Taylor, Hepinstall, Sonuga-Barke, & Sandberg, 1998). Boys have been found to generate

consistently higher parent and teacher ratings of hyperactivity and inattentiveness than girls matched for age (Achenbach, 1991; Bauermeister, 1992; Brito, Pinto, & Lins, 1995; Trites, Blouin, & Laprade, 1980).

Gender has been identified as the most consistently documented risk factor for conduct disorder (Robins, 1991). During childhood, boys greatly outnumbered girls with respect to diagnosis of conduct disorder, with ratios of 4:1 commonly reported by American Psychiatric Association (APA, 1987).

Children who display early-onset conduct disorder are at greater risk for persistent difficulties, and they are also more likely to have troubled peer relationships and academic problems. Conduct disorder is more common among boys than girls, with studies indicating that the rate among boys in the general population ranges from 6 to 16 per cent while rate among girls ranges from 2 to 9 per cent (NMHA, 2001).

Abikoff et al. (2002) collected normative data on the average classroom behaviour of 1st to 4th grade children in a national six-site study of ADHD (Combined Type). Each child diagnosed with ADHD was paired with a comparison classmate identified by the teacher as unremarkable in behaviour. The Classroom Observation Code (COC: Abikoff & Gittelman, 1985) was used to quantify child behaviour along 12 mutually exclusive dimensions. Boys as opposed to girls with ADHD exhibited significantly more symptoms (interference, total aggression, gross motor movements, and overall ADHD features) with fewer intervals of normal behaviour. Girls diagnosed with ADHD showed less severe disruptive externalizing behaviour than boys with the disorder. Rates of interference and total aggression among boys with ADHD were double that of girls with the same disorder.

The population-based study by Costello et al. (2003) found a stronger link between ODD and ADHD and CD among girls than among boys. In addition, it was found that the longitudinal link of ADHD predicting the onset of ODD was found only in females. Moreover, Lahey et al. (2000) reported that the association between ADHD and CD was rendered into insignificance after controlling for ODD in boys.

However, among girls, ADHD remained a significant predictor of CD, even when controlling for ODD. Therefore, although there is ample evidence for a link between ADHD and CD, it is not clear whether this link survives after controlling for the association between ODD and ADHD, and whether such findings are consistent among males and females.

Males are more involved in delinquent behaviour than females. One of the explanations of the higher level of delinquency in males than in females is that the etiology of delinquency may differ for males and females. Males may be more vulnerable to risk factors for delinquency such as inadequate parenting than females (Moffitt et al., 2001). Another hypothesis is that risk factors for delinquency are the same for males and females (Moffitt et al., 2001) but that males are exposed to risk factors more than females.

Gender differences in behavioural problems: A Pakistani context. Loona and Kamal (2002) studied gender differences in ADHD girls and ADHD boys through Diagnostic Scale for Attention Deficit Hyperactivity Scale (DS-ADHD) by Loona and Kamal (2002) and found significant gender differences on Hyperactivity subscale of DS-ADHD. Findings indicated boys are more hyperactive as compared to girls, however, there were non significant differences on Inattention, Impulsivity, and ADHD combined type.

Masood (2008) focused on the identification of behaviour problems that exist in the private school going children from cities of Rawalpindi and Islamabad in Pakistan. The sample of the study was comprised of 500 students of the 5th grade having age range of 9-11 years. Sample was taken from six private schools of Rawalpindi and Islamabad. Children Problem Checklist (CPCL) developed by Tariq and Hanif (2007) was used to identify the children exhibiting behavioural problems. Alpha reliability of the scale is .97. The results showed that out of 500 contacted children 168 (33.6%) children were identified with behavioural problems. There were 122 (Boys = 72.6%) and only 46 (Girls = 27.3%) in the total 168 identified children. Ratio of boys was significantly higher than girls.

However, Rubab (2005) studied relationship between self esteem and behaviour problems in children. The findings supported the hypothesis that there are non significant differences in children with respect to behaviour problems.

Qureshi (2007) compared the Emotional Expression and Behavioural problems among adolescents from broken and intact families. Results regarding gender differences on behavioural problems showed that boys exhibit more externalizing behaviour problems as compared to girls. Where as, girls show more internalizing behaviour problems as compared to boys. There was no significant gender difference on somatic problems subscale among adolescents of intact and broken families.

Awan (2007) conducted Epidemiological study of symptoms of ADHD in cities of Islamabad and Rawalpindi, Pakistan. Total sample was (N = 500) and screened out cases with problematic behaviour were (n = 44). Gender differences of screened out children indicated 81.8 per cent of boys were identified as problematic that was very high as compared to girls that was only 18.2 per cent. It means there is significant disparity in the number of reported cases between genders.

Malik, Gul, and Humphreys (2010) investigated whether the trauma of abuse reflects upon the behavioural and emotional pattern in children. Abused and Non abused children were selected from five cities of Punjab, Pakistan. Findings indicated that girls showed relatively high level of abuse especially emotional neglect than boys contrary to the assumption of the study and the existing research evidence states that boys show more behavioural problems than girls. Girls were high on the behavioural and emotional problems like inattention,-disorganization, reading problems, cognitive deficits, oppositional – conduct disorders, sluggish tempo, and anxiety, where as boys were high on motor – hyperactivity and social competence than girls.

Associated Characteristics of Disruptive Behaviour Disorders

In addition to the primary symptoms (i.e., Inattention, Hyperactivity, Impulsivity in ADHD; aggression to people or animals, property destruction, lying or theft, and serious rule violation in CD; and pattern of negativistic, hostile, and defiant behaviour in ODD) (APA, 1994) children with disruptive behaviour disorder often display other problems. In this section, problems commonly associated with ADHD, ODD, and CD will be presented. These problems usually include poor academic performance, Poor interpersonal relations, Peer Rejection, Social Incompetence, and Poor family relations.

Poor academic performance. ADHD is one of the most common and most studied disorders of childhood (Rowland, Lesesne, & Abramowitz, 2002; Tannock, 1998; Wolraich, 1999). ADHD is more closely related to academic failure and cognitive deficits (Fergusson, Horwood, & Lynskey, 1993). Long-term outcomes for individuals diagnosed with ADHD are varied but individuals diagnosed with the disorder often experience difficulties across many areas of functioning (e.g., academics, social functioning) (Mannuzza & Klein, 1999; Satterfield & Schell, 1997; Weiss & Hechtman, 1993).

One of the serious difficulties faced by ADHD children is poor academic achievement (Barry, Lyman, & Klinger, 2002; DuPaul et al., 2001; Faraone et al., 1993; Frick et al., 1991; Lonigan et al., 1999; McGee et al., 1986; Rapport et al., 1999; Zentall et al., 1994).

Children with ADHD show poor performance in schools and their performance is believed to be the result of their inattentive, impulsive, and restless behaviour in the classroom. (Barkley, 1977; Pelham, Bender, Caddell, Booth, & Moorer, 1985; Rapport, DuPaul, Stoner, & Jones, 1986). On various standardized achievement tests, including tests of reading, spelling, math, and reading comprehension, children with ADHD are also likely to show performances that are lower than their classmates' by as much as 10–30 standard score points (Barkley,

DuPaul, & McMurray, 1990; Brock & Knapp, 1996; Cantwell & Satterfield, 1978; Casey, Rourke, & Del Dotto, 1996; Dykman & Ackerman, 1992; Fischer et al., 1990; Semrud-Clikeman et al., 1992).

Loona and Kamal (2004) studied Academic performance and school social behaviour of ADHD and Non ADHD (N = 468) school going children from primary (3, 4, 5) and secondary (6, 7, 8) grades and found Non ADHD (comparison) group of children scoring significantly better academic performance than ADHD group.

Awais (2008) deigned a study to identify the children with behaviour problems and to compare their self esteem and locus of control with the non problematic group of children. Out of 300 children, 40 children were identified as having behaviour problems that also fall above the 67th percentile. Similarly, a matched comparative group of children was also identified from the children that fall below 33rd percentile. Sample included 40 problematic and 40 non problematic children within age range 11 to 13 years. Results of the study indicated that children with behaviour problems had lower self esteem as compared to children having no such problems. Moreover, Children with externalizing behaviour problems have lower self acceptance, self competence, and academic self competence as compared to children with internalizing behaviour problems. However, children with internalizing behaviour problems have higher academic self competence as compared to other domains of self esteem.

According to the findings of researches regarding deficits in academic skills, it is not surprising to find that as many as 56% of children with ADHD may require academic tutoring, that approximately 30% may repeat a grade in school, and that 30–40% may be placed in one or more special education programs. As many as 46% may be suspended from school, and 10–35% may drop out entirely and fail to complete high school (Barkley, DuPaul, & McMurray, 1990; Fischer et al., 1990; Brown & Borden, 1986; Faraone et al., 1993; Munir, Biederman, & Knee, 1987; Szatmari, Offord, & Boyle, 1989; Weiss & Hechtman, 1993).

Rafique (2007) explored the relevance of different psychological and social factors such as general mental ability, self esteem, family relations, and school social behaviour as concomitants of low academic performance of a sample of (N = 120) adolescent students selected from a secondary school in Islamabad, Pakistan. Findings indicated significant differences in the mean scores of low academic performers and high performers on Index of family relations. Low academic performers have high family problems in their homes as compared to high academic performers. There were significant differences between low academic performers and high academic performers on social competence and antisocial behaviour.

Rapport et al. (1999) found that teacher ratings of attention problems and hyperactivity predicted lower academic achievement in reading and mathematics 3–4 years later when controlling for both intelligence and teacher rated conduct problems. Similarly, Rabiner and Coie (2000) found that teacher ratings of attention problems, but not impulsivity–over activity predicted reading achievement in fifth grade in a school sample, controlling for early reading achievement and intelligence. Fergusson and Horwood (1995) examined the relation between adult ratings of attention problems and academic achievement in children from 10 to 12 years of age. They found some evidence that attention problems cause academic deficits, but no evidence that lower academic achievement caused attention problems.

ODD is also associated with impaired school and academic performance and problematic social relations with parents and peers (Greene et al., 2002). Youngsters with conduct problems display high rates of academic underachievement, grade retention, special education placement, school dropout, suspension, and expulsion (Hinshaw & Anderson, 1996).

Children with conduct problems are especially likely to experience academic underachievement in language and reading (Moffitt, 1993b). However, in the presence of co-occurring ADHD their performance becomes even worse. When ADHD is not present, children with conduct problems are no more likely to underachieve than other children (Frick et al., 1991; Hinshaw, 1992).

Keeping in view, literature based strong evidence regarding poor academic performance of children with disruptive behaviour disorder; assessment of academic performance of children with ADHD, ODD, CD and with comorbidity has also been done in the present research.

Poor social skills and peers rejection. Disruptive children often become unpopular with their peers and frequently have no long-term friendships. They usually display poor social skills with peers and adults, e.g. they have difficulty sustaining a game or promoting positive social interchanges. Nevertheless, there is limited evidence for a relatively small group of conduct disordered youngsters who do make enduring friendships, display altruistic behaviour, feel guilt or remorse, refrain from blaming others, and show concern for others (Goodman & Scott, 1997).

The overlapping subgroup with conduct problems and attention deficits/impulsivity displays a far more pernicious form of psychopathology than does either single diagnostic category. Such youngsters display more physical aggression, a greater range and greater persistence of antisocial activity, more severe academic underachievement, and higher rates of peer rejection (Hinshaw, 1992).

Children who are rejected by peers show more externalizing behaviour than those who are not rejected (e.g., Coie, Lochman, Terry, & Hyman, 1992; Keiley et al., 2000). Similarly, children who are rejected by peers have more internalizing symptoms than their non rejected peers (e.g., Coie et al., 1992; Panak & Garber, 1992). Some evidence exists that children who have been neglected by their peers are more likely to develop internalizing symptoms (e.g., Harrist, Zaia, Bates, Dodge, & Pettit, 1997). In terms of the relationship between peer problems and co-occurring externalizing and internalizing behaviours, Wright, Zakriski, and Drinkwater (1999) found that the co-occurring group (externalizing and internalizing) evidenced poor peer relations, and in ordinary peer conversations, showed elevated levels of both aggression and withdrawal. Rudolph, Hammen, and Burge (1994) found that children with co-occurring externalizing and internalizing problems had more ratings of peer

rejection than did the normal and pure internalizing groups, but equivalent to the pure externalizing group.

Evidence indicates that shy and withdrawn behaviour in reaction to social interactions with peers may manifest as internalizing problems in childhood (Biederman et al., 2001).

Children with ADHD are especially impaired in the area of peer relationships (Hoza, 2007; Milich & Landau, 1989; Pelham & Milich, 1984). Research shows that at least 50% of children with ADHD have peer relationship problems (Guevremont & Dumas, 1994; Hoza et al., 2005a; Milich & Landau, 1982; Stormont, 2001). These difficulties seem to be pervasive, as children with ADHD are often less liked by peers within days or even minutes of first meeting them (Hinshaw & Melnick, 1995; Pelham & Bender, 1982). Further, peer relationship problems in children with ADHD have proven to be unresponsive to many treatments, even when other important outcomes show significant improvement (Hoza et al., 2005b; Pelham & Bender, 1982). These findings are important because dysfunctional peer relations in childhood are one of the strongest predictors of poor outcomes in adolescence and adulthood (Cowen, Pederson, Babigian, Izzo, & Trost, 1973; Landau, Milich, & Diener, 1998; Parker & Asher, 1987).

Research has shown that children with ADHD have both knowledge deficits and performance deficits when engaging in social interactions (Guevremont & Dumas, 1994; Landau et al., 1998). That is, children with ADHD appear less knowledgeable than typically developing children about appropriate social behaviours and they are less likely to behave in socially appropriate ways when interacting with peers.

On the other hand, peer rejection and other negative indicators that may arise from problems with emotional skills occur most saliently in children with ADHD and an aggressive spectrum disorder (Hinshaw & Melnick, 1995). Noncompliance, interpersonal friction with adults, peer rejection, aggression, and school problems

comprise associated features and central impairments related to ADHD. Considerable evidence exists for long-term negative consequences resulting from both core symptomatology and such associated impairment (Hinshaw, 1999).

In addition to the frequent co-occurrence of other disruptive behaviour disorders, youngsters with conduct disorders commonly experience a variety of other difficulties. Younger aggressive children are frequently rejected by their peers (Newcomb, Bukowsi, & Pattee, 1993). Youngsters with persistent conduct disorders are also frequently described as having certain cognitive impairments and lower school achievement (Caspi & Moffitt, 1995; Maughan & Rutter, 1998).

Poor interpersonal relations. Difficulties in interpersonal relations have recurrently been found among conduct-disordered youth (Lochman, Whidby, & FitzGerald, 2000). Research indicates that aggressive children are often rejected by their peers (Coie, Belding, & Underwood, 1988). These rejected aggressive children suffer immediate social consequences, and they are also at risk for negative long-term outcomes such as delinquency, adult criminality, educational failure, and a variety of indices of adult psychological maladjustment (Parker & Asher, 1987; Rudolph & Asher, 2000).

Mushtaq (2007) studied relationship between aggression and social information processing styles among children with popular and rejected social status group. The total sample was of (N = 503) children of government schools between age range of 9 to 12 years. The findings revealed significant differences among aggressive and non aggressive children on aggression, prosocial behaviour, and social status group (popular/rejected). Aggressive children were lacking prosocial behaviour and faced more peer rejection as compared to non aggressive children.

Fergusson and Horwood (1998) explored linkages between early conduct problems in a longitudinal study of a group of children from New Zealand. They found that conduct problems at age eight were associated with poorer outcomes later in the life of these children, such as leaving school by age eighteen without

appropriate educational qualifications and a period of three months or more of unemployment. One of the factors that mediated the relationship between early aggression and later poor outcomes was the youngsters' peer affiliations. Youngsters between the ages of fourteen and sixteen had reported having friends who were delinquents or who used substances (e.g., alcohol, cannabis) were at greater risk for these negative outcomes.

Children with ADHD share many of the same social difficulties as aggressive children, ADHD children display inappropriate behaviour with peers (Milich, Landau, Kilby, & Whitten, 1982; Whalen et al., 1979), have poor social judgment (Melnick & Hinshaw, 1996; Whalen et al., 1990), and are often rejected by peers (Frankel & Feinberg, 2002; Henker & Whalen, 1999). Research findings suggests that behaviours associated with ADHD make distinctive contributions to understanding peer relationship problems, even after controlling for behaviours associated with aggression (Atkins Pelham, & Licht, 1989; Pope, Bierman, & Mumma, 1989; Waschbusch, 2002).

Loona and Kamal (2007) found ADHD combine type children scored highest on Antisocial behaviour subscale of Urdu School Social Behaviour Scale (SSBS) (Loona & Kamal, 2002) as compared to ADHD predominantly hyperactive/impulsive and predominantly inattentive type. ADHD combined type children were more hostile-irritable, disruptive-demanding and antisocial-aggressive as compared to children with ADHD-Inattentive and ADHD Hyperactive/Impulsive subtype.

Children with ADHD-only encode fewer social cues and generate fewer responses to social problems than controls, whereas children with oppositional defiant disorder or conduct disorder (ODD/CD) and children with both ADHD and ODD/CD are also more likely to display confidence in their ability to enact an aggressive response and to select an aggressive response when given a choice (Matthys, Cuperus, & Van Engeland, 1999). Specifically, with peers, children with ADHD engage in more negative verbal and physical behaviour towards peers, such as teasing and aggression (e.g., Whalen & Henker, 1992), and they are more rejected than children without ADHD (e.g., Hinshaw & Melnick, 1995; Hoza et al., 2005a).

Young children with conduct problems display verbal and physical aggression and poor social skills toward other children (Miller & Olson, 2000). As they grow older, most are rejected by their peers, although some may be quite popular (Rodkin, Farmer, Van Acker, & Van Acker, 2000). As they enter school, some children with conduct problems may become bullies, a pattern that is associated with continuing antisocial behaviour into adolescence and adulthood.

Children with conduct problems do make friends. Unfortunately, their friendships are often based on mutual attraction of like-minded antisocial individuals (Poulin, Dishion, & Haas, 1999; Vitaro, Brendgen, & Tremblay, 2000). The combination of early antisocial behaviour and associating with deviant peers is the single most powerful predictor of conduct problems during adolescence (Moffitt, 1993a; Patterson & Dishion, 1985). Involvement with antisocial peers becomes increasingly stable during childhood, and supports the transition to adolescent criminal acts such as stealing, truancy, or substance abuse (Patterson, 1996). In fact, about two thirds of all recorded youth offenses are committed in the company of two to three peers (Dishion, Andrews & Crosby, 1995). Involvement with peers also predicts accelerated autonomy and early sexual activity in adolescence (Dishion, Haas, & Poulin, 1997).

Health problems. Due to poor interpersonal relations, peer rejection, and aggressive tendencies, health problems in children with behavioural disorders seem very common. According to Kratzer and Hodgins (1997), young children with conduct problems engage in many behaviours that place them at high risk for personal injuries, illnesses, overdoes from drug abuse, and sexually transmitted diseases. Rates of premature death (before age 30) due to a range of causes (e.g., homicide, suicide, accidental poisoning, traffic accident, drug overdose) are 3 to 4 times higher in boys with conduct problems than in those without such problems. Antisocial behaviour is also associated with an early onset and persistent of sexual activity (Capaldi, Crosby, & Stoolmiller, 1996; Paul, Fitzjohn, Herbison, & Dickson, 2000).

Causes and Correlates of Disruptive Behaviour Disorders

The development of disruptive behaviour disorders ADHD, ODD, and CD may be affected by variety of influences. According to Mash and Wolfe (2002) ADHD may be affected by genetic influences, pregnancy, birth and early development, neurobiological influences, diet, allergy, lead, and family influences. Hill (2002) stated conduct-disorder and antisocial behaviour may be affected by a variety of influences. According to Mash and Barkley (1996), psychobiological factors, familial influences (especially family functioning and parent-child interaction), and wider contextual factors are important causal factors in CD and ODD. In the present study, familial influences especially with reference to parent child relationship and role of parenting styles in the prediction of childhood behavioural disorders have been focused.

Wider contextual factors. The larger contextual events surrounding the family, both internal and external to it, (e.g., daily hassles, negative life events, financial problems, family health problems) and parenting practices may create or contribute to increased risks for child defiant behaviour and aggression as well as later delinquency (Mann & MacKenzie, 1996; Patterson, 1982; Tschann et al., 1996; Wahler & Graves, 1983).

Malik (2002) stated larger families are important risk factors for child abuse in Pakistani context and the same has been identified as risk factor for child behavioural problems. The prevalence of CD is particularly high in deprived inner-city areas. CD is associated with lower socioeconomic status and large family size. Children with higher number of siblings showed high behaviour problems as compared to less no of children (Rubab, 2005).

For many years investigators have noted a clear link between measures of psychosocial adversity including impoverishment, high rates of crime in neighborhood, family crowding, parental psychopathology, deviant peer groups, and related factors and children's risk for antisocial behaviour. The risk for antisocial

activity is far higher in crowded, poverty stricken, inner city areas than in rural settings (Rutter, 1974). However, non significant differences between high income and low income groups on childhood behaviour problems were found in a research being carried out in Pakistan (Rubab, 2005).

In a research with a non-clinical sample, Richters and Martinez (1993) examined the role of children's exposure to community violence in predicting maladjustment. While such exposure to community violence predicted youths' self-reported symptomatology, the effects were lessened when indices of family stability were controlled statistically.

School and learning problems. Relationship processes are the immediate context in which development of a child occurs. Community contexts, behaviour and physical settings as larger social influencing factors also play an important role in which these relationships occur. Factors, such as classroom disruption, damage to school property, the teacher's skills in classroom management, model of behaviour he or she provides, the amount of rewards and encouragement, the granting of responsibilities to the students, the degree of academic emphasis, and general quality of school are related to an absence of acting out behaviour in the school,. Thus classes that are poorly organized, where expectations for achievement are low, where there is good deal of punishment and little praise, and where children are given little or no responsibility in planning activities are fitting to foster acting out behaviours (Wenar, 1994).

Schools play very important role in the psychological functioning of adolescents (Seroczynski, Cole, & Maxwell, 1997). Fear about school is common in children. However, children with behavioural problems exhibit excessive anxiety regarding school attendance. In these problem children complains somatic symptoms such as dizziness, stomach ache, and nausea that "keep" the child at home (Nelson & Israel, 2000).

Poor academic skills. Youngsters with poor academic skills are increasingly likely to lose interest in school and to associate with delinquent peers. By adolescence, the relationship between antisocial behaviour and underachievement is firmly established (Mash & Wolfe, 2002).

Many have poor achievements in terms of grade and level of work, and often have specific learning deficits. On testing, a third of children with CD have specific reading disorder (SRD), defined as being more than two standard deviations below the reading level expected for their age and intelligence. Conversely, a third of children with SRD have CD. The association between CD and SRD could be due to any of three possibilities. Firstly, disruptive behaviour may interfere with classroom learning. Secondly, children who do not have the ability to understand and participate in class may become frustrated and disruptive as a result. Thirdly, both disruptiveness and reading problems may stem from a third factor such as hyperactivity. Lower IQ is associated with CD but probably not as strongly as poor achievement (Goodman & Scott, 1997).

Although the frustration and demoralization associated with school failure can lead to antisocial behaviour in some children (Maughan & Rutter, 1998), there is no strong evidence that academic failure is the main reason of antisocial behaviour, particularly in early childhood. Since many young children display patterns of antisocial behaviour long before they enter school, it is more likely that a common underlying factor, such as neuropsychological or language deficit or socioeconomic disadvantage, underlies both conduct problems and school difficulties (Hinshaw, 1992).

Poor interpersonal skills. Aggressive youngsters often experience rejection by their peers, thereby increasing the risk for continued development of antisocial behaviour (Laird et al., 2001). Furthermore, Parents are often concerned about their child's being influenced by peers whose behaviour they view as "bad" or "dangerous". Such concern may be reasonable. Early exposure to aggressive peers may be one factor in initiating early aggressive and antisocial behaviour, and later

friendship with deviant peers can accelerate such behaviour (Fergusson & Horwood, 1998; Laird, Jordan, Dodge, Petit, & Bates, 2001).

Students with deficits in social skills frequently are not liked by their peers (Dodge, Cole, & Brakke, 1982; Parker & Asher, 1987) and rated as "not successful" by their teachers (Gresham & Elliot, 1990; Saborine & Kauffman, 1985; Saborine, Kauffman, & Cullinan, 1990).

Mushtaq (2007) conducted a research on aggressive children's status among peers and their information processing style. Results supported the hypothesis that aggressive rejected children display less social problem solving skills as compared to non aggressive popular children.

In another study, Aggressive children scored low on different styles of social problem solving styles (defensive, aggressive, active, problem solving, combination, authority intervention) as compared to non aggressive children but the difference was non significant (Azam, 2009).

Loona and Kamal (2002) found non significant gender differences in ADHD boys and ADHD girls with age range (7 to 12 years) (N = 187) on social competence subscale of Urdu SSBS translated by (Loona & Kamal, 2002). There were non significant differences on social competence subscales of SSBS. However, significant differences were found on the Antisocial Behaviour Subscale of SSBS; boys showed high hostile irritable, disruptive demanding, and antisocial behaviour as compared to girls.

Coie and Lenox (1994) provide important detail regarding the process by which aggressive children who are also rejected by their peers display a qualitatively distinct pattern of peer interaction that promotes further escalation of aggressive behaviour. In brief, rejected/aggressive children fail to heed social disapprobation for hostile activities, stigmatizing themselves and fueling social isolation. Overall, whereas peer rejection and antisocial behaviour are not inevitably linked (French,

1988), aggressive and antisocial children with peer rejection (who are quite likely to be those youngsters with comorbid ADHD) are at particularly strong risk for persistent antisocial activity (Coie & Lenox, 1994; Milich & Landau, 1988).

The likelihood that peer influences will contribute to the negative escalation of behaviour problems in school is increased in classroom that contains a high proportion of children with aggressive propensities (Kellam et al., 1991). The social demands in the school peer group setting differ from those of the parent-child relationship. Occasional positive peer interactions may directly precipitate or increase inadequacies in social adaptation. Peer responses can also become detrimental when these responses serve to reinforce or elicit aggressive or inappropriate behaviour. Peer may inadvertently reinforce aggressive behaviour, for example, by attending to it or complying with the aggressor's demands (Klein & Young, 1979). Negative peer responses can elicit and lead to escalations in aggressive interactions because aggressive children often believe that counter aggression will terminate aversive peer treatment (Asarnow & Callan, 1985).

Family influences. Several variables representing dysfunctional familial functioning comprising marital conflict, divorce, and child abuse have been associated in the onset and stability of antisocial behaviour in youth (e.g., Emery, 1982; Dodge, Bates, & Pettit, 1990). For example, effects of marital conflict and hostility on aggressive behaviour patterns are mediated by parental lack of availability and pessimism to the child (Olweus, 1979). Several indices of parent child interaction display moderate to strong relationships with children's aggressive and antisocial behaviour: (1) low levels of parental involvement in the activities of the child, (2) poor child supervision, and (3) strict and varying practices to discipline the child (Loeber & Stouthanmer-Loeber, 1986).

Azam (2006) explored the impact of parent's marital conflicts on adolescent's parental attachments and social competence. The sample of 325 adolescents, males (n = 146) and females (n = 179), belonging to Islamabad schools and colleges were randomly selected. The findings showed that perceived parental marital conflicts have

negative relationship with parental attachment and social competence of adolescents. Findings indicated non significant gender difference in the perception of parental marital conflicts, parental attachment and social competence.

There is widespread agreement that family influences play significant role in the beginning of conduct disordered behaviour. Numerous family variables have been implicated, including family socio-economic status, family size, marital disruption, poor-quality parenting and parental neglect, and parental psychopathology (Frick, 1994; Patterson, Reid, & Dishion, 1992; Waschbusch, 2002). Parental antisocial personality is strongly and specifically related to child CD (Faraone, Biederman, Keenan, & Tsuang, 1991; Lahey et al., 1988). This association is clear for fathers (Frick et al., 1992), as there is a link between parental substance abuse disorders and maternal histrionic personality configurations and child antisocial behaviour patterns (Lahey et al., 1988).

Parent-child relationship. According to research studies, repeatedly identified one of the major causes of non compliance, defiance, and social aggression is poor, ineffective, inconsistent, and indiscriminant child management methods being employed by parents. Often parents practice unusually harsh but inconsistent disciplinary methods and do poor monitoring of child activities (Farrington, 1995; Loeber, 1990; Olweus, 1980; Patterson, 1982; Patterson et al., 1992).

Parent-child interactions are key contributors to the emergence and maintenance of child disruptive behaviour. Researches characterizing the parent–child interactions of children with attentional and disruptive disorders consistently shows greater negative affect, less positive involvement and parenting responsiveness, more harsh and inconsistent discipline, and more coercive exchanges than in families of non problem children (Frick, 1994; Patterson, 2002). Negative parent–child interactions are particularly strongly associated with child oppositional or conduct problems, although families of children with ADHD also typically exhibit more of these difficulties than comparison families (Johnston & Mash, 2001).

Parent-child relationship in Pakistani context. Fatima and Sheikh (2009) investigated the role of perceived parent-child relationship quality in determining aggression in adolescents. The findings indicated that perceived quality of parent child relationship is significantly related to aggression in adolescents. It can be concluded that adolescents perceiving good relationship with parents show less aggression and those having poor relations show high aggression.

Akhtar (2008) studied the relationship between parenting styles and behaviour problems in children. Sample was consisted of (N = 200) couples of parents with children between age range of 8 to 12 years and their minimum level of education was matriculation. Correlation coefficients indicated that authoritative parenting style of both fathers and mothers was significantly negatively correlated with behaviour problems of children. Where as, authoritarian and permissive parenting styles of both mothers and fathers showed significant positive correlation with behaviour problems of children. Multiple regression analysis demonstrated only authoritarian parenting style as a significant predictor of childhood behaviour problems (Both internalizing and externalizing).

Altaf (2002) studied the relation of Pakistani adolescents' tendencies towards extremism with the parenting style of their parents. She found children of authoritarian parents to have more tendencies of extremism, than the children of non authoritarian parents. In addition, to this, these teenagers are often anxious about social companions, fail to initiate activity and have poor communication skills.

Imam and Hilal (2008) studied relationship between parental control and personality development of children. Findings indicated that parental firm control is associated with healthy personality organization of male children. The reason could be the fact that in structure of Pakistani family father is the bread earner and main authority and decision maker. Pakistani father exercises control over their children within the culturally prescribed role of instrumental leadership and head authority. It seems understandable, that, why Pakistani male children perceived paternal firm control as being accepting.

In Pakistan, child rearing practices and discipline involve little positive reinforcement and lay greater emphasis on the child not being bad or naughty rather than being good (Zaman, 1988). May be due to this male children perceive significantly more hostility in their mothers.

Ijaz and Mahmood (2009) investigated the relationship between perceived parenting styles and presence of Depression, Anxiety and Level of Frustration Tolerance (LFT) in female students' with age range 19-27 years. Results showed a weak positive relationship between parental authoritarianism and Depression and Anxiety but a strong relationship with LFT. In addition to maternal authoritarianism, mothers were also perceived as "controlling" and the control was found to have no relationship with depression, Anxiety and LFT. Moreover, results indicate a moderately significant relationship between parental permissiveness and depression, anxiety and LFT. No such relationship was found in case of maternal permissiveness.

Gilani and Altaf (2005) hypothesized that extremism will be low in the children of highly educated parents as compared to the children of less educated parents. The findings supported the hypothesis that children of highly educated parents (i.e., graduation, masters or equivalent) were less extremist as compared to children of less educated parents (i.e., matric and below). Results also suggested that the group of adolescents and post adolescents who scored high on extremism perceived their parents as more authoritarian and controlling as compared to the group scoring low on extremism.

Baumrind's classic work on parenting styles. Baumrind's (1971) seminal work on parenting styles provides a useful framework for examining parenting. Baumrind (1967, 1978, 1991) found that children whose parents have an ''authoritative'' style, both responsive to children's needs and demanding of mature behaviour have the best outcomes on a number of behavioural and psychological measures. Children whose parents are neither responsive nor demanding (an ''indifferent'' style) fare the worst. These findings have been replicated in a number of studies (Cohen & Rice, 1997; Dawson, 1996; Dornbusch et al., 1987; Lamborn et

al., 1991; Radziszewska, Richardson, Dent, & Flay, 1996; Shucksmith, Hendry, & Glendinning, 1995; Slicker, 1998).

Through observation studies with pre-school children (Baumrind, 1967), elementary school children (Baumrind, 1978), and adolescents (Baumrind, 1991), she identified two parenting dimensions-responsiveness and demandingness that are associated with positive child outcomes. Children whose parents were both responsive and demanding scored best on behaviours such as social responsibility (i.e., friendliness, cooperation), independence, and achievement orientation.

Baumrind coined the term ‘‘authoritative’’ to describe these parents: ‘‘The authoritative parent…attempts to direct the child’s activities in a rational issue-oriented manner. He or she encourages verbal give and take, shares with the child the reasoning behind parental policy, and solicits the child’s objections…such a parent affirms the child’s present qualities, but also sets standards for future conduct, using reason as well as power and shaping by regimen and reinforcement to achieve parental objectives’’ (1978, p. 245).

Authoritarian parenting is also characterized by high demandingness, but coupled with low responsiveness—authoritarian parents ‘‘[value] obedience as a virtue and [favor] punitive, forceful measures to curb self-will’’ (Baumrind, 1978, p. 244). This external imposition of authority can increase the likelihood that adolescents will rebel (Baumrind, 1978). In general, however, adolescent children of authoritarian parents have relatively low rates of problem behaviours and drug use, along with low social competence and self-esteem (Baumrind, 1991; Lamborn et al., 1991; Slicker, 1998). Their aspirations and grades are close to, but lower than, those of authoritatively reared children (Radziszewska et al., 1996; Slicker, 1998).

Indulgent-permissive parenting is characterized by low demandingness (minimal discipline, self-regulation by the child) and high responsiveness (warmth and attention). Adolescent children of permissive parents have been shown to have relatively high social competence and self-esteem, but relatively low achievement and

school engagement, and high rates of problem behaviours and drug use (Baumrind, 1991; Lamborn et al., 1991; Slicker, 1998).

In spite of their differences, authoritative, authoritarian, and permissive parents expend considerable effort in raising their children. In contrast, indifferent-neglectful parenting is characterized by minimal effort. These parents may be inconsistent in their affection, emotionally unavailable, or unaware of their child's development needs, and may neglect discipline altogether or use strict disciplinary practices sporadically (Maccoby & Martin, 1983). Not surprisingly, children of indifferent-neglecting parents have the worst outcomes on virtually any measure of social or cognitive competence, academic performance, psychological well-being, or problem behaviour (Baumrind, 1991; Lamborn et al., 1991; Radziszewska et al., 1996; Shucksmith et al., 1995; Slicker, 1998).

Children of authoritative parents have been shown to have higher social and cognitive competence, higher aspirations, better grades, better psychological well-being, and better behaviour compared to others, and this is equally true when measured at adolescence (Cohen & Rice, 1997; Dawson, 1996; Dornbusch et al., 1987; Lamborn et al., 1991; Radziszewska et al., 1996; Shucksmith et al., 1995; Slicker, 1998).

Patterns of parenting behaviours that are characteristic of responsiveness are parental approval of the child, synchrony of communication, affection, and noncoercive or authoritative control. Other parenting behaviours that exemplify responsiveness include sensitivity to the developmental requirements of a task and the ability to engage the child in joint problem-solving by using scaffolding, a non directive style of assistance that provides support for the child's autonomy and self-regulation (Winsler, 1998).

In the Western family literature, findings show that the authoritative style (both responsive and demanding) produces the best results on child behavioural outcomes and the indifferent style the worst results.

Childhood behaviour disorder and parent-child relationship. The three parenting style dimensions have each been shown to be associated with child and adolescent problem behaviours. For example, a high level of behavioural control is related to low levels of externalizing problems, such as antisocial behaviour and conduct disorders, both among adolescents (Barber & Olsen, 1997; Eccles, Early, Frasier, Belansky, & McCarthy, 1997; Pettit, Laird, Dodge, Bates, & Criss, 2001; Stice & Barrera, 1995) and among elementary school children (Barber, 1996; Lewis, 1981). These results have been ascribed to the fact that behavioural control fosters self-regulation and compliance (Hart, Newell, & Olsen, 2003; Lewis, 1981).

Although the greatest disturbances in parent–child interactions typically are associated with comorbid ADHD and oppositional behaviour in children (Anastopoulos, Guevremont, Shelton, & DuPaul, 1992; Paternite, Loney, & Roberts, 1995), in some studies, families of children with ADHD only also demonstrate more parent–child problems compared to families of nonproblem children. For example, Lindahl (1998) found that parents of children with ADHD and parents of children with comorbid ADHD and oppositional behaviour both displayed greater rejection-coercion than did parents of nonproblem children.

Johnston (1996) found that parents of children with comorbid ADHD and oppositional behaviour and parents of children with ADHD only both reported poorer parenting practices when compared to parents of nonproblem children. Similarly, Gomez and Sanson (1994) found that mothers of children with comorbid ADHD and oppositional behaviour had more negative interactions with their children compared to mothers of children with ADHD alone, who did not differ from mothers of nonproblem children. In summary, parent–child interactions and parenting behaviours appear most problematic among families of comorbid children, least problematic in families of nonproblem children, and families of children with ADHD only appear to fall in the mid-range, sometimes showing more problems than nonproblem families and sometimes not.

High parenting stress is an important environmental risk variable. It has been associated with numerous undesirable outcomes, including parent depression (Anastopoulos, Guevremont, Shelton, & DuPaul, 1993; Deater-Deckard, 1998; Hastings, Daley, Burns, & Beck, 2006), marital conflict (Kersh, Hedvat, Hauser-Cram, Warfield, 2006; Sua´rez & Baker, 1997), poorer physical health (Eisenhower, Baker, & Blacher, 2009; Oelofsen & Richardson, 2006), less effective parenting (Coldwell, Pike, & Dunn, 2006; Crnic, Gaze, & Hoffman, 2005), and, of most importance to the present study, increased child behavior problems (Baker et al., 2003; Briggs-Gowan, Carter, Skuban, & Horwitz, 2001; Donenberg & Baker, 1993; Johnson & Mash, 2001).

Child behavior problems are thought to be a causal agent of stress and, thus, are hypothesized to have a direct link to parents' level of stress. In contrast, the effect from parental stress to child behavior problems may be less direct. Parenting behavior is thought to be a stress reaction that mediates the relationship between stress and child behavior problems (Deater-Deckard, 1998). Parenting stress has been linked to less responsive, more authoritarian, and more neglectful parenting (Belsky, Woodward, & Crnic, 1996; Conger, Patterson, & Ge, 1995; Deater-Deckard & Scarr, 1996; McBride & Mills, 1993), which, in turn, has been associated with poorer developmental outcomes for the child (Rothbaum & Weisz, 1994). However, despite multiple studies supporting the associations among parental stress, parenting behavior, and child outcomes, little research has explicitly tested this full meditational model (Deater- Deckard & Scarr, 1996). This is an important direction for future research.

It is also well established that there is a strong association between parenting stress and child behaviour problems (Baxter, Cummins, & Yiolitis, 2000; Hodapp, Fidler, & Smith, 1998; Lecavalier et al., 2006; Stores, Stores, Fellows, & Buckley, 1998). Recent evidence suggests that high initial levels of parenting stress can lead to subsequent worsening of child behaviour problems (Lecavalier et al., 2006). In order to explain such findings, it has been proposed that high levels of parenting stress can have an impact on subsequent parenting behaviors, which, in

turn, impact on a child's behavior problems, and outcomes. For example, Osborne, McHugh, Saunders, & Reed (2008) noted that, in a longitudinal study over a 9–10-month period of time, parenting stress and certain parenting behaviors, namely, limit setting for the child, closely interacted bi-directionally with one another over time, and poor limit setting impacted negatively on child behavior problems.

Studies with ADHD children suggest that certain kinds of dysfunctional parenting, including maternal lack of responsiveness (Johnston & Mash, 2001; Johnston, Murray, Hinshaw, Pelham, & Hoza, 2002), lack of warmth and positive involvement, overly negative discipline (Kashdan et al., 2004), lax and inconsistent parenting, and a lack of cohesion among family members (Lindahl, 1998), are related to comorbid oppositional or conduct problems rather than ADHD per se. Negative parenting practices also predict persistence of comorbid ODD rather than ADHD (August, Realmuto, Joyce, & Hektner, 1999). However, Johnston, Murray, Hinshaw, Pelham, and Hoza (2002) reported that maternal responsiveness was negatively related to conduct problems, but not ADHD symptoms, among children with ADHD.

Capaldi, Pears, Patterson, and Owen (2003) also found that father antisocial behaviour was associated with externalizing problems in young children after controlling for father's parenting practices. Other studies suggest that parenting practices play a partial role (e.g., Frick & Loney, 2002; Smith & Farrington, 2004) or actually are the key factors in the development of primary conduct problems (Patterson et al., 1992). Parenting practices form a second set of family risk factors. Studies examining interaction patterns among families with children having ADHD have found parents to be more directive, commanding, and negative than parents of children without ADHD (Johnston & Mash, 2001). Dysfunctional parenting may partly be a reaction to the difficulties of raising a child with ADHD, but it may also serve an etiological role in the emergence of comorbid disruptive behaviour disorders among youth with ADHD (see Johnston & Mash, 2001).

Stormshak, Bierman, McMahon, and Lengua (2000) found that positive and negative parenting behaviours were relatively independent of one another, and that

punitive discipline by parents was a common risk factor among oppositional, aggressive, hyperactive and internalizing behaviours in children. Furthermore, physically aggressive punishment was specifically linked with child aggression, and low parental warmth or involvement was specifically linked with oppositionality (Stormshak et al., 2000). Socioeconomic and demographic factors have been found to have a complex relationship with both parenting behaviours and children's behavioural problems (Brody et al., 2003, McLoyd, 1998).

This may be particularly true in families of children with ADHD, where child difficulties with self regulation may render responsive parenting particularly important in protecting against the development of associated oppositional or conduct problems. In a reciprocal manner, if responsiveness is defined as including parents' ability to monitor and adapt to child behaviour, parents of children with ADHD may have particular difficulty using a responsive parenting style due to their child's disorganized and poorly-regulated behaviour (Johnston & Mash, 2001).

Drabick, Gadow, and Sprafkin (2006) also reported hostile, inconsistent, and detached parenting to be associated with CD symptoms in ADHD children. Consistent with this Hurtig et al. (2007) reported that adolescents with comorbid CD exhibited more severe symptoms of ADHD than those without CD, and were more likely to come from nonintact families with disaffected mothers. On the other hand the clinical findings of Schachar and Wachsmuth (1990) indicated that forms of ADHD with and without aggression were separate and distinct.

In the present study, besides other objectives one aim is to study Callous Unemotional (CU) traits in children with behaviour disorders i.e., ADHD, ODD, CD or comorbid disorders. As per literature, children exhibiting callous unemotional traits and disruptive behaviour disorders are at higher risk for developing delinquency in their adolescence. In the present research, assessment of callous unemotional traits in children with behavioural disorders will be carried out. Findings will indeed prove helpful in understanding role of callous unemotional traits in prediction of childhood behaviour disorders.

Callous Unemotional (CU) Traits

CU traits refer to a specific affective (e.g., absence of guilt, constricted display of emotion) and interpersonal (e.g., failure to show empathy, use of others for one's own gain) style that is characteristic of a subgroup of children with severe conduct problems (Christian, Frick, Hill, Tyler, & Frazer, 1997; Frick, Barry, & Bodin, 2000; Frick, O'Brien, Wootton, & McBurnett, 1994).

Pre-adolescent children who show conduct problems and CU traits, whether from a clinic-referred or community sample, appear to be at particularly high risk for showing delinquent behaviours and, thus, they should be the focus of interventions designed to reduce a child's involvement in illegal behaviours (Frick, 2001).

These traits have also been associated with a distinct temperamental style characterized by a deficit in arousal to threatening and emotionally distressing stimuli and a preference for novel and dangerous activities (see Frick & White, 2008 for a review). The childhood onset group has been shown to exhibit more severe conduct problems and they are more likely to show temperamental vulnerabilities, many theories have viewed CU traits as designating a distinct pathway within the childhood-onset group (Frick, 2006). However, this assumes that CU traits and the associated predisposing temperament would be more associated with the childhood-onset pattern but the evidence to support this assumption is fairly limited (Moffitt et al., 1996; Silverthorn et al., 2001).

According to Frick, Stickle, Dandreauz, Farrell, and Kimonis (2005), the presence of CU traits was associated with lower socioeconomic status, lower intelligence, and as compared to boys it exist in a lower percentage of girls. Moreover, both CU traits and conduct problems were associated with the number of impulsivity–hyperactivity symptoms of Attention Deficit Hyperactivity Disorder rated by parent and teacher at the screening.

Children with conduct problems who also show CU traits tend to be more thrill and adventure seeking (Frick et al., 2003; Frick, Lilienfeld, Ellis, Loney, & Silverthorn, 1999), are less sensitive to cues of punishment when a reward-oriented response set is primed (Fisher & Blair, 1998; Frick et al., 2003; O'Brien & Frick, 1996), and are less reactive to threatening and emotionally distressing stimuli (Blair, 1999; Frick et al., 2003; Loney, Frick, Clements, Ellis, & Kerlin, 2003).

The presence of CU traits may designate a particularly severe and aggressive pattern of conduct problems (Christian et al., 1997; Lynam, 1997) and it may enhance the prediction of later delinquency (Brandt et al., 1997; Forth, Hart, & Hare, 1990; Toupin et al., 1995). The predictive utility of these traits has been one of the most clinically useful aspects of the construct of psychopathy in research on antisocial adults (Hare, 1998; Hart & Hare, 1997) but such utility has not been extensively tested in youth (Edens, Skeem, Cruise, & Cauffman, 2001).

The callous, unemotional characteristics in children are more strongly associated with non-compliant, overt and covert anti-social behaviours in children than with ADHD (Loeber, Burke, & Lahey, 2002; Piatigorksi & Hinshaw, 2004).

Studies have not only linked persistent adult criminality to oppositional-defiant, aggressive and anti-social behaviour in childhood (Moffit, 1993a; Loeber, & Stouthamer-Loeber, 1998), but have also shown that callous, unemotional characteristics in childhood are associated with future anti-social behaviour (Loeber et al., 2002). This opens the door for prevention, as early detection and treatment of psychopathic tendencies in children may possibly combat the rise of serious and violent offending behaviour witnessed among youngsters in Western societies (Loeber & Farrington, 1998). This notion of prevention is particularly appealing because adult psychopathic criminals are barely willing for treatment (Ogloff, Wong, & Greenwood, 1990; Rice, Harris, & Cormier, 1992; Seto & Barbaree, 1999).

Not only this but to fulfill needs and services for children with ADHD and ODD/CD appropriately, clinicians must, not only assess the symptoms of the

disruptive behaviour problems correctly (Angold et al., 1999; Farmer, Compton, Burns, & Robertson, 2002), but also screen the narcissistic and callous-unemotional trait associated with psychopathy. Children with behaviour problems and also displaying CU traits need a different kind of treatment than children not showing these traits (Goldstein, Glick, & Gibbs, 1998).

The presence of CU traits in children with conduct problems may designate an important subgroup of conduct problem children. Previous research (see Frick, 1998; Frick et al., 2000; Frick & Ellis, 1999 for reviews), including a study conducted with the same sample of children (Frick et al., 2003), has largely focused on the different characteristics of children with conduct problems depending on the presence of CU traits, which could implicate different causal mechanisms in the development of problem behaviour.

Barry et al. (2000) found that callous-unemotional traits differentiated a group of children and adolescents with both ADHD and CD from those with only ADHD or CD. As expected, the group with the most extreme diagnostic profile (co-morbid CD-ADHD) had the most extreme personality profile and this finding held across gender and developmental period. Notably, the CD only and ADHD only groups did not differ significantly in their personality score patterns, but each group did differ from the control group, indicating a possible contribution of personality traits to either the development and/or maintenance of CD and ADHD.

Keeping in view, evidence provided by relevant researches on CU traits, in the Part II of present research, assessment of CU traits in children with disruptive behaviour disorders has been planned. The findings will help in understanding the nature of presence of CU traits in Children with Behavioural disorders and findings will also prove helpful for the practicing clinicians and child psychologists to assess this area as well while providing services to their ADHD, ODD, and CD clients. In case of presence of CU traits Clinicians are advised to implement a multimodal treatment that can resolve both problems in children and protect them from the risk of adult psychopathy.

In the present research, assessment of child's externalizing and internalizing behaviour disorders has been done via DBD rating scale through Parents and teachers ratings and additionally Parents also filled Child Behaviour Checklist (CBCL; Achenbach & Rescorla, 2001). Information regarding child's School Social Behaviour and Callous unemotional traits will also be gathered by using behaviour rating scale. Mothers and teachers will be approached for getting information about the child. The subsequent section highlights the significance of rating scales for assessment of childhood behaviour disorders.

Assessment of Disruptive Behaviour Disorder

Assessment of disruptive behaviour is likely to be a complex and multifaceted process. Multiple informants, including the youth, parents, other family members, teachers, and peers, are likely to be valuable sources of information. The various manifestations of conduct-disorder, attention deficit hyperactivity disorder, oppositional defiant disorder, anxiety and depression require assessment with the help of information provided by these multiple informants. It should be recognized that the assessment process may also include evaluation of other aspects of the presenting problems, the problems of other individuals, others' attitudes and skills (e.g., parenting), and ongoing life stresses (Frick & Loney, 2002; Lochman et al, 2000).

Behavioural rating scales. There are numerous methods for the assessment of childhood behaviour problems; however, the most wide-ranging approach is obtaining ratings of either parents or teachers or by both. Rating scales have been useful measures for assessing school or community-based samples (Baumgaertel, Wolraich, & Dietrich, 1995; Gaub & Carlson, 1997b; Wolraich, Hannah, Pinnock, Baumgaertel, & Brown, 1996).

There are a number of behavioural rating scales that are completed by adults or by the youngsters with behavioural problems (McMahon & Estes, 1997). The Achenbach instruments (Achenbach & Rescorla, 2001), Child Behaviour Checklist, Youth Self-Report, and Teacher Report Form can provide information about a broad

range of problem areas, including those of an externalizing nature. Information from multiple sources can be compared, and comparisons of each informant's response to age and gender-appropriate norms are possible.

Behavioural ratings scales are also available that focus specifically on disruptive behaviour disorders. The DBD parent and teacher rating scale (Pelham, Gnagy, Greenslade, & Milich, 1992), Conners parent and teacher rating scales revised (Conners et al., 1998a, 1998b), and the Eyberg Child Behaviour Inventory (ECBI), and the Sutter-Eyberg Student Behaviour Inventory (SESBI) are few examples (Eyberg, 1992). Although described as measures of conduct problems, the instruments do contain items sampling the range of "disruptive behaviour" problems that correspond to the DSM diagnoses of oppositional defiant disorder and Attention Deficit Hyperactivity Disorder (ADHD), as well as conduct disorder. Although the majority of items represent conduct problems rather than ADHD, children who exceed the cutoff may represent a heterogeneous group of children with disruptive behaviour problems (McMahon & Estes, 1997).

Kamphaus, Petoskey, and Rowe (2000) mentioned that assessment of child's mental health must incorporate multiple methods, together with parent and teacher completed behaviour rating scales, their interviews, observations. However, in the present research for assessment of children behaviour rating scales and a checklist has been used.

Teachers usually have considerable experience with the range of classroom behaviours and they are qualified to make a preliminary judgment concerning the child's classroom behaviour. They observe child behaviour for a significant period of time each day and in a variety of situations they also have a sizable group of children of same age as a comparison base for evaluating the intensity and frequency of problematic behaviours in children (Ross & Ross, 1982).

Ross (1980) suggested the diagnostic utility of teacher assessment of symptoms as an adjunct to the much more commonly used parental assessment of

child functioning. Data on non-referred school samples are necessary for the proper interpretation of teacher rated externalizing symptoms.

In context of Pakistan, assessment of disruptive behaviour disorders in children with reference to prevalence rate, academic performance, social competence, antisocial behaviour, externalizing behaviour disorders, internalizing behaviour disorders, and callous unemotional traits will prove useful in understanding this topic.

Rationale of the Present Research

The present research has focused Attention Deficit Hyperactivity Disorder (ADHD), Conduct Disorder (CD), and Oppositional Defiant Disorder (ODD) as per criteria of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association, 1994). All three behavioural disorders have specific diagnostic criteria that work as a standard for assessment of children. Disruptive behaviour disorders i.e., ADHD, ODD, and CD usually exist in a comorbid form in children and assessment of all three disorders is important for the complete information and proper diagnosis.

In Pakistani context, already available research work in the field of developmental psychopathology is scarce. Moreover, there is dearth of standardized scales for assessment of Disruptive Behaviour Disorders in Pakistan. The present research involves translation and standardization of three very important scales that are Disruptive Behaviour Disorder (DBD) Rating Scale, Spence Child Anxiety Scale (Parent version), and Inventory of Callous Unemotional Traits (Parent version) (ICU-P). These translated scales into Urdu language will prove useful in the assessment of DBD, Childhood Anxiety, and Callous Unemotional Traits. Moreover, these scales will also prove contributory in validation of future scales in the same area.

The present research is also distinctive because of focusing pervasiveness of DBD in Children. Teachers and parents both realize that children face familial, academic, social, and behavioural problems but root causes and relationship between

these problems are yet unexplored. In the present research, childhood behavioural problems are studied in the school setting then by focusing pervasiveness in the home and school settings together. One of the main objectives is to determine gender, grade and age wise prevalence rate of children displaying symptoms of disruptive behaviour disorders in the present sample. Comparison of findings regarding prevalence rate of children with symptoms of disruptive behaviour disorders with the findings of international researches will elucidate similarities and differences.

In the international literature, large scale studies to determine prevalence rate of children with disruptive behaviour disorders are available. Prevalence rates for ADHD are approximately 3–7% of the childhood population (American Psychiatric Association, 2000) and for CD 7–12% in boys (Faraone, Sergeant, Gillberg, & Biederman, 2003; Kratzer & Hodgins, 1997; Nock, Kazdin, Hiripi, & Kessler, 2006). In Pakistan, there is unavailability of exact prevalence rate of ADHD, ODD, and CD in children. The current research will also prove contributory in unfolding prevalence rates of DBD in sample of Pakistani children.

Children with symptoms of DBD show poor academic performance in schools (Barkley, 1977; Pelham, Bender, Caddell, Booth, & Moorer, 1985; Rapport, DuPaul, Stoner, & Jones, 1986). As per literature, children with behavioural problems suffer poor academic performance, face difficulties in peer relations, they are aggressive, and they are socially less competent as their counterparts without behavioural problems (see Barkley, 1998; Hinshaw, 1994, for reviews). The findings of present research will prove useful for primary school teachers in understanding the psychological aspects related to children's academic problems and performance.

Loona and Kamal (2004) studied academic performance and school social behaviour of ADHD and comparison group of school going children from primary (3, 4, 5) and secondary (6, 7, 8) grades and found comparison group of children scoring significantly better academic performance than ADHD group (N = 468). In the Part I of the present research, screening of children with symptoms of disruptive behaviour disorders in the three academic groups (i.e., high scorers, middle scorers, & low

scorers); and assessment of social competence and antisocial behaviour of screened out children will provide valuable information regarding interrelationship of DBD symptoms and academic performance with social competence and antisocial behaviour.

In the school setting, children within age range 7 to 12 years spend significant amount of time and they interact with their teachers and peers. In school, besides learning the process of socialization also takes place; children learn many things besides memorizing lessons in the text books. They meet and make new friends, they learn to live together; they learn sharing and tolerating things. But for a child with behaviour problems these activities become bothersome. They fight, overreact, become aggressive and most of the times suffer academic failure. These problems are not only troublesome for teachers but are also pain striking for their parents. In case of complaints and academic failure of child, parents not only suffer emotionally but also face economic setback. Therefore, to know behavioural problems and its associated features i.e., academic failure, interpersonal problems, antisocial behaviour, school setting has been focused. The findings will prove useful for teachers, academicians and parents to understand children with behavioural problems and devise a better teaching strategy to bring them back into the main stream.

As far as causal factors of disruptive behaviour disorders are concerned, the role of familial influences is very crucial. There is enormous amount of literature that has emphasized the significance of parent child relationship. Interaction between parents and children are significant contributors to the occurrence and maintenance of childhood disruptive behaviour disorders. Researches describing the parent–child interactions of children with attention and behavioural disorders consistently indicated existence of greater negative affect, less positive involvement and more harsh and inconsistent discipline in families of problem children (Frick, 1994; Patterson, 2002).

Therefore, present research aims to study perceived parenting style of children and its role in prediction of childhood behaviour problems. The findings of present research will prove helpful in understanding how these children perceive their

parents' parenting style. As literature suggests, children of authoritative parents show higher social and cognitive competence, higher aspirations, better grades, better psychological well-being, and better behaviour as compared to others, and this is equally true when measured at adolescence (Cohen & Rice, 1997; Dawson, 1996; Dornbusch et al., 1987; Lamborn et al., 1991; Radziszewska et al., 1996; Shucksmith et al., 1995; Slicker, 1998). Thus findings of the present study will prove helpful in understanding the relationship between parenting styles and behaviour problems of children.

Part II of the present research has been planned to focus disruptive behaviour disorders in the home and school setting both. This will address the issue of pervasiveness in behavioural disorders. The issue of pervasiveness is very crucial while making diagnosis of disruptive behaviour disorders as per DSM–IV (APA, 1994) criteria. Pervasiveness is the requirement that the symptoms must be present in at least two of three settings (home, school, work), with sources of information (parent, teacher, or employer). Moreover, assessment of comorbidities and differential diagnosis by assessing anxiety and depressive symptoms will provide details about the internalizing problems in children with behavioural problems. Comorbidity is pervasive and it has worse developmental outcomes than single-form disorders (see review by Nottelman & Jensen, 1995).

Lastly, in the Part II of present study, callous unemotional traits have been studied in children with disruptive behaviour disorders. Callous, unemotional characteristics in childhood are associated with future anti-social behaviour (Loeber et al., 2002). In case children with behaviour problems show callous unemotional traits; there are increased chances that they might develop delinquent personalities in their adolescence. To obtain thorough information about the child, assessment of callous unemotional traits is equally important; this will facilitate prevention and planning suitable treatment of children. In Pakistani society mostly children with behaviour problems remain unidentified and eventually they turn into a problematic personality later it their life.

Findings of present research will prove useful to understand disruptive behaviour disorders in Pakistani context. These findings can prove helpful for psychologists working in the area of child psychology and developmental psychopathology to devise treatment plans to combat the rise of serious and violent antisocial behaviour in children. This research will open new avenues and queries for further exploration in field of developmental psychopathology, clinical, developmental, and educational psychology.

Childhood behaviour disorders have the potential to disturb social and psychological aspect of the child's functioning including their community, educational, and family life. Present research in the area of developmental psychopathology will facilitate understanding the psychosocial functioning of these children.

Chapter - II

RESEARCH DESIGN

The present research is consisted of two main parts. The Part I have been exclusively carried out in the school setting and aims at screening children with behavioural problems through teacher's ratings on Disruptive Behaviour Disorders (DBD) Rating Scale (Urdu version) and studying their school social behaviour. Moreover, Part I investigates perceived parenting style and its relation with disruptive behaviour problems in screened out children. Part II addresses the issues of pervasiveness and situational variability of disruptive behaviour disorders specifically in home and school settings via mothers' and teachers' ratings. Moreover, study of Callous Unemotional Traits in children with disruptive behaviour disorders has been planned.

Part I

In the present research, Part I is consisted of three studies. Study I involved translation of DBD rating scale into Urdu language. Study II included teachers' ratings on DBD rating scale to screen out children with disruptive behaviour problems as per DSM-IV (APA, 1994) criteria and assessment of their school social behaviour by studying Social Competence and Antisocial Behaviour. The Study III assessed perceived parenting styles of screened out children and its relation with behavioural problems of the children.

The details of the three studies are as follows.

Study I: Translation of Disruptive Behaviour Disorder (DBD) Rating Scale; and establishing psychometric properties of DBD Rating scale and SSBS. In order to empirically investigate childhood behavioural disorders in Pakistani children it is necessary to have reliable and valid diagnostic scale in Urdu language. Study I of the present research has been specifically conducted to prepare a diagnostic scale in Urdu

language for the assessment of children exhibiting childhood behaviour disorders i.e., ADHD, CD, ODD, and Comorbid disorders. The DSM-IV (APA, 1994) includes the diagnostic categories of Attention Deficit Hyperactivity Disorder (ADHD) and two other diagnoses, i.e., Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD) within the category of childhood behaviour disorders.

Therefore, Urdu translation of Disruptive Behaviour Disorder (DBD) rating scale has been done in the Study I of the present research.

Objectives. Study I was designed with the following objectives.

1. To translate Disruptive Behaviour Disorder (DBD) rating scale by Pelham, Gnagy, Greenslade, and Milich (1992) into Urdu.
2. To determine psychometric properties of DBD rating scale.
3. To determine psychometric properties of SSBS (Urdu version).

(See Chapter III and page 60 for details regarding the translation of DBD)

Study II: Screening of Children with Disruptive Behaviour Disorders in the School setting and Assessment of their School Social Behaviour. Study II aims at screening of children with symptoms of ADHD, CD, ODD and comorbid symptoms in school setting according to DSM-IV (1994) criteria via teachers rating on DBD rating scale. Teachers usually have considerable experience with the range of classroom behaviour and they are qualified to make a preliminary judgment concerning the child's classroom behaviour. They observe child behaviour for several hours each day and in variety of situations, they also have a sizable group of children of same age as a comparison base for evaluating the intensity and frequency of problematic behaviour in children (Ross & Ross, 1982).

Study II also purports to investigate gender differences in boys and girls on school social behaviour.

Objectives. The objectives of Study II are as follows.

1. To screen out children from school setting with symptoms of childhood behaviour disorders i.e., ADHD, CD, and ODD as per DSM-IV (1994) criteria through DBD Rating scale (Urdu Version).
2. To assess comorbidity of ADHD and its subtypes with CD, and ODD in children screened out by teachers on DBD Rating scale (Urdu version).
3. To assess gender wise, age and grade wise prevalence rate in children screened out through teacher's rating on DBD Rating scale (Urdu version).
4. To assess influence of academic performance and childhood behaviour problems on Social Competence and Antisocial Behaviour of children screened out with symptoms of either ADHD, ODD, CD or comorbid disorders as compared to the comparison group of children.
5. To assess gender differences in children screened out through DBD Rating scale on SSBS and its subscales.
6. To assess grade wise differences in children screened out with ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and Comorbid group on SSBS and its subscales.
7. To assess grade wise differences in comparison group of children on SSBS and its subscales.

Study III: Role of Parenting Styles and Familial Factors in Prediction of Childhood Behaviour Problems. Family problems are among the strongest and most consistent correlates of antisocial behaviour (Carlson, Tamm, & Hogan, 1999; Patterson, Reid, & Dishion, 1992).

Objectives. The objectives of Study III are as follows.

1. To explore the role of family/demographic variables such as parents marital status, number of siblings, birth order, father's education, father's profession, father's income, mother's education, mother's profession, and family system (Nuclear or Joint) in shaping up childhood behaviour problems.
2. To explore authoritarian and permissive parenting style as predictor of childhood externalizing behaviour problems.

3. To explore alpha reliability coefficients and interscale correlations of PAQ (Urdu version) (Babree, 1997) for the present sample.

Part II

Part II of the present research is consisted of four studies, the details are as following.

Study I: Translation of Spence Child Anxiety Scale (SCAS-P) (Parent Version) (Spence, 1999) into Urdu language.

***Objectives*.** Study I was designed with the following objectives.

1. To translate Spence Child Anxiety Scale (SCAS-P) (Parent Version) (Spence, 1999) into Urdu language.
2. To determine psychometric properties of SCAS-P.

(See Chapter IV, page 214 for details regarding the translation of SCAS-P).

Study II: Assessment of Externalizing and Internalizing Behaviour Disorders: Pervasiveness of DBD in Home and School settings. Pervasiveness is the requirement that the symptoms must be present in at least two of three settings (home, school, work), with sources of information (parent, teacher, or employer).

Objectives. The objectives of Study II are as following.

1. To study differences of ADHD (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders in home and school settings via Mothers and Teachers ratings.
2. To study gender and class wise prevalence rate of children with (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders.
3. To study gender differences in children with (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders on DBD, SSBS, SCAS-P and CBCL.
4. To study role of demographic/familial factors in prediction of childhood behaviour problems.

5. To assess School Social Behaviour of children with ADHD (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders through SSBS.
6. To study manifest anxiety of children with ADHD (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders via SCAS-P (Urdu version).
7. To determine psychometric properties of Child Behaviour Checklist (CBCL) (Urdu version) by Khan and Awan (2011).
8. To assess children with (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders through CBCL DSM oriented and Syndrome scales.
9. To determine alpha reliability coefficients and interscale correlation for DBD Rating scale (Urdu version) specifically via Mothers and Teachers ratings together.

Study III: Validation of Disruptive Behaviour Disorder (DBD) Rating scale (Urdu version) and Spence Child Anxiety Scale (Urdu version) with Child Behaviour Checklist/6-18 (Urdu version). Objectives of Study III of present research are as following.

Objectives.

1. To carry out convergent validation of DBD Rating subscales (ADHD, ODD, and CD) with CBCL DSM Oriented Scales i.e., Conduct Problems, ADHD Problems, and Oppositional Problems.
2. To carry out convergent validation of DBD subscales (ADHD, ODD, and CD) with CBCL syndrome scales i.e., Attention Problems, Rule Breaking Behaviour, Aggressive Behaviour, Externalizing Problems.
3. To carry out convergent validation of SCAS-P subscales (Separation Anxiety Disorder, Social Phobia, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, and Physical Injury fears) with CBCL DSM Oriented Scales i.e., Anxiety Problems, Affect Problem, and Somatic Problems.
4. To carry out convergent validation of SCAS-P subscales (separation anxiety disorder, Social Phobia, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, and Physical Injury fears) with CBCL syndrome scales i.e., Anxious

Depressed, Withdrawn Depressed, Somatic Problems and Internalizing Problems).

5. To carry out discriminant validation of SCAS-P subscales (separation anxiety disorder, Social Phobia, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, and Physical Injury fears) with CBCL syndrome scales i.e., Rule breaking behaviour, Aggressive behaviour subscales of Externalizing Problems subscale).

Study IV: Assessment of Callous Unemotional Traits in children with Disruptive Behaviour Disorders. Objectives of Study IV are mentioned as following.

Objectives.

1. To study differences in callous unemotional traits in children with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders via ICU-P (Frick, 2004).
2. To assess gender differences of children with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders on ICU-P (Frick, 2004).
3. To assess gender differences in comparison group of children on ICU-P (Frick, 2004).
4. To assess grade wise differences of children with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders and comparison group of children on ICU-P (Frick, 2004).
5. To predict childhood behaviour disorders through callous unemotional traits in the total sample.
6. To predict childhood behaviour disorders through callous unemotional traits specifically in DBD children i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders on ICU-P (Frick, 2004).
7. Translation of Inventory of Callous Unemotional Traits (ICU-P) (Parent Report) (Frick, 2004) 24-items into Urdu language and establishing its psychometric properties.

   (See Chapter IV, page 336 for details regarding the translation of ICU-P).

Chapter - III

PART I: SCREENING CHILDREN WITH BEHAVIOURAL PROBLEMS IN THE SCHOOL SETTING AND STUDYING THEIR ACADEMIC PERFORMANCE AND SCHOOL SOCIAL BEHAVIOUR

Part I of the present research was designed to screen out children with symptoms of childhood behaviour disorders in the school settings through class teachers' ratings on Disruptive Behaviour Disorder (DBD) Rating scale. The study also focused on academic performance and School Social Behaviour i.e., Social Competence and Antisocial Behaviour of children. Moreover, Part I also explored comorbidities among symptoms of childhood behaviour disorders i.e., Attention Deficit Hyperactivity Disorder (ADHD), Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD) besides exploring gender and grade wise prevalence rate in the present sample. School Social Behaviour Scale (SSBS) Urdu version by (Loona & Kamal, 2002) was used for assessment of School Social Behaviour. SSBS has well established psychometric properties with Pakistani samples (See e.g., Bashir, 2009; Iqbal, 2008; Loona & Kamal, 2002). Whereas, for the screening and assessment of the childhood behaviour problems; Disruptive Behaviour Disorder (DBD) Rating scale by Pelham, Gnagy, Greenslade, and Milich (1992) has been used after translating into Urdu language. Urdu being a National language of Pakistan is most easily understandable language for the target population.

In addition, Part I also explored the role of parenting styles and familial/demographic factors in the prediction of childhood behaviour problems. To explore perceived parenting style of screened out children of this study; Parental Authority Questionnaire (PAQ) (Urdu version) by (Babree, 1997) having well established psychometric properties with Pakistani samples (See e.g., Akhtar, 2000; Aqsa, 2003; Hayauddin, 2005; Rehna, 2006; Saeed, 2008; Zulfiqar, 2007) was administered.

As written earlier, for Part I, SSBS (Urdu version: Loona & Kamal, 2002), PAQ (Urdu version: Babree, 1997) and DBD Rating scale (Pelham et al., 1992) were selected. Study I aimed at translation of DBD Rating scale into Urdu language and to perform confirmatory factor analysis of the Urdu version of the scale. Moreover, in Study I psychometric properties of SSBS (Urdu version: Loona & Kamal, 2002), in terms of alpha reliability coefficients, interscale correlations and split half reliability coefficients were determined for the sample of the present study.

Study – I: Translation of Disruptive Behaviour Disorder (DBD) Rating Scale; and establishing psychometric properties of DBD Rating scale and SSBS

To identify children with childhood behaviour problems specifically ADHD, CD, and ODD Urdu translation of Disruptive Behaviour Disorder (DBD) Rating Scale by Pelham et al. (1992) was carried out in the Study I of the present research. The scale is consisted of 42 items and it has been widely used in various researches (See e.g., Fabiano et al., 2006; Flannagan & Pillow, 2002; Oosterlaan, Scheres, & Sergeant, 2005). DBD Rating scale is a measure of Diagnostic and Statistical Manual of Mental Disorders (3rd ed., rev.; APA, 1987) and DSM–IV (APA, 1994) symptoms of Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD). ADHD is a disorder involving inattentiveness and hyperactivity-impulsivity. Inattention is the inability to sustain attention or responding to tasks or play activities for a long time. Hyperactive impulsive behaviour includes difficulty in inhibition behaviour and difficulty in controlling impulses. It is manifested in fidgetiness, staying seated when required, moving about, running and climbing more than other children, playing noisily, interrupting others activities and being less able than others to wait in line or take turn in games (American Psychiatric Association, 1994).

Conduct Disorder is repetitive and persistent pattern of behaviour in children and adolescents, in which, the rights of others or basic social rules and norms are violated (APA, 1994). Oppositional Defiant Disorder (ODD) is described as a pattern

of negativistic, hostile, and defiant behaviour, refuses to comply and deliberately annoys others (APA, 1994).

Objectives.

Study I was designed with the following objectives.

1. To translate Disruptive Behaviour Disorder (DBD) Rating Scale by Pelham et al. (1992) into Urdu language.
2. To determine psychometric properties of DBD Rating scale (Urdu version).
3. To determine psychometric properties of SSBS (Urdu version).

In order to empirically study childhood behaviour disorders in Pakistani children it was necessary to have a reliable and valid diagnostic scale in Urdu language, therefore, DBD Rating scale was translated. At present, there was no already available rating scale in Urdu language to assess childhood behaviour disorders namely ADHD, ODD, and CD. Loona and Kamal (2002) prepared a Diagnostic Scale for assessment of ADHD (DS-ADHD) in Urdu language following the DSM-IV (1994) criteria; however, there was no existing scale in Urdu for assessment of CD and ODD.

Therefore, in the Part I of present research translation of a rating scale for assessment of Disruptive Behaviour Disorders in national language "Urdu" was performed. In Pakistan, because of low literacy rate comprehension of English language is limited for common people. In the present research, Urdu translation was required for the facilitation of mothers of children to respond on the scales. Rating scale in Urdu language will facilitate comprehension of items specifically for mothers participating in the present study. Moreover, DBD Rating scale can be used in the school and home settings to obtain ratings of teachers and parents for the diagnosis of children.

Study I of present research consisted of following phases.

Phase I: Translation of DBD Rating Scale into Urdu language.
Phase II: Selection of best translated items in Urdu Language by Committee of experts.
Phase III: Back translation of Urdu translated DBD Rating scale.
Phase IV: Evaluation of Back translated items by committee of experts.
Phase V: Determination of psychometric properties of DBD Rating scale (Urdu version).

In addition, psychometric properties of SSBS (Urdu version) by (Loona & Kamal, 2002) were also determined.

Details of the five phases of Study I are mentioned in the subsequent section.

Phase I: Translation of DBD Rating Scale into Urdu language. Phase I consisted of translation of DBD Rating scale into Urdu language by eight bilinguals having complete understanding and knowledge of Urdu and English language. The qualification of the bilinguals were Masters in Urdu, English, and other Social Sciences including two M.Phil in the area of Psychology. Bilinguals were instructed to translate items of the scale from English into Urdu without missing any item in the original scale (See Appendix A for instructions) and (See Appendix B for the original DBD Rating scale).

Phase II: Selection of best translated items in Urdu Language by Committee of Experts. Committee of experts consisted of a Professor in National Institute of Psychology, Quaid-i-Azam University, Islamabad and two Ph.D Scholars of Psychology thoroughly analyzed all translated items in Urdu. Proficient committee members evaluated the translated items with reference to the context, grammar, and wordings and selected best translated item by keeping content equivalence between English and Urdu versions (See Appendix C). After completing the process of

selection of the most appropriately translated Urdu items, these items were enlisted and given to the bilinguals for back translation.

Phase III: Back translation of Urdu translated Items of DBD Rating scale. Back Translation of the Urdu translated items of DBD Rating scale was done by nine highly qualified expert bilinguals with qualification of Masters and M.Phil in the subject of Urdu and English. It was kept in consideration to select only those bilinguals for Back translation phase who had not participated in the translation phase and they were not familiar with the content of items of English DBD Rating scale. Bilinguals were instructed to back translate the Urdu translated items into English.

Phase IV: Evaluation of Back translated items by committee of experts. The back translated DBD Rating scale was critically evaluated by the same committee of experts. They made a critical assessment of back translated items (See Appendix D) with reference to the context, grammar, and wordings and selected final items for DBD Rating scale (Urdu version). Since Back translation method is a standardized translation procedure it helped in assessing the accuracy of the translation.

Phase V: Determination of psychometric properties of DBD Rating Scale (Urdu version). Psychometric of DBD Rating scale (Urdu version: See Appendix E) were determined in terms of confirmatory factor analysis, alpha reliability coefficients, split half reliability, and item total correlation.

Sample

The class teachers of children of 3 to 5 grades were approached to get their rating about children. The age range of children was 9 to 13 years (N = 280; Mean age: 9.65; SD = 1.29) including (boys n = 179; Mean age: 9.98; SD = 1.00) and (girls n = 101; Mean age: 9.70; SD = 1.50). Only those class teachers were selected who taught these children for at least last one year. Teachers were requested to rate three high scorers, three middle scorers, and three low scorers from their class. There were (high scorers, n = 150; Grade 3rd, n = 40; Grade 4th, n = 52; Grade 5th, n = 58);

(Middle scorers, *n* = 72; Grade 3rd, *n* = 18; Grade 4th, *n* = 23; Grade 5th, *n* = 31); and (Low scorers, *n* = 58; Grade 3rd, *n* = 17; Grade 4th, *n* = 19; Grade 5th, *n* = 22). Though it was expected that as per instructions teachers rate equal number of High, Middle, and Low scorer children from their classes but teachers rated higher scorer children more as compared to middle and low scorers. Sample was selected from Model, F.G., and Bahria schools located in the vicinity of Islamabad and Rawalpindi e.g., (IMCB F-8/4, G-6/3, I-10/1, IMCG F-7/2, F-11/3, F-6/2, I-10/4).

Instruments

Disruptive Behaviour Disorder (DBD) Rating Scale (Urdu Version). The scale is consisted of 42 items that are scored on a four point Likert scale ranging from 0 (*not at all*) to 3 (*very much*). Its subscales can be used for assessing ADHD and its subtypes, predominantly inattentive (Item no 9, 18, 23, 27, 29, 34, 37, 42, 44), predominantly hyperactive/impulsive (Item no 1, 7, 12, 19, 22, 25, 30, 33, 35), and combined subtype (9, 18, 23, 27, 29, 34, 37, 42, 44, 1, 7, 12, 19, 22, 25, 30, 33, 35). Moreover, the scale also assesses symptoms of ODD (Item no 3, 13, 15, 17, 24, 26, 28, 39) and CD (Item no 5, 6, 20, 31, 32, 36, 40, 45, 16, 41, 4, 8, 43, 2, 11, 38). DBD rating scale is widely used in research and should be familiar to clinicians who work with behavioural disorders. DBD Rating scale can readily assist in evaluating DSM-IV diagnosis of ADHD, ODD, and CD (Pelham et al., 2005).

If 6 or more items are endorsed for Attention-Deficit/Hyperactivity Disorder - inattention and 6 or more items are endorsed for Attention-Deficit/Hyperactivity Disorder-hyperactivity/impulsivity, then criteria is met for Attention-Deficit/Hyperactivity Disorder, Combined Type. The six items may be endorsed on the teacher DBD, the parent DBD, or can be a combination of items from both rating scales (e.g., 4 symptoms endorsed on the teacher DBD and 2 separate symptoms endorsed on the parent DBD). The same symptom should not be counted twice if it appears on both versions (parent and teacher) of the rating scale. For giving diagnosis of ADHD some impairment from the symptoms must be present in two or more settings (e.g., school, home) (Pelham, Gnagy, Greenslade, & Milich, 1992).

Furthermore, DBD Rating scale also measures Oppositional Defiant Disorder (ODD) (item no 3, 13, 15, 17, 24, 26, 28, 39), its diagnosis requires a total of 4 or more items measuring ODD must be endorsed as "pretty much" or "very much" on either the parent or the teacher DBD to meet criteria for ODD. The third subscale of DBD Rating scale (Urdu version) measures Conduct Disorder (item no, 5, 6, 20, 31, 32, 36, 40, 45, 16, 41, 4, 8, 43, 2, 11, 38); it has four categories that are aggression to people and animals, destruction of property, deceitfulness or theft, serious violation of rules. A total of 3 or more items in any category or any combination of categories endorsed as "pretty much" or "very much" on either the parent or the teacher DBD are required to meet criteria for Conduct Disorder.

Item number 10, 14, and 21 were from DSM-III-R (APA, 1987) therefore these were excluded in in the present research by following the DSM-IV (APA, 1994) diagnostic criteria (See Appendix D for items 10, 14, & 21).

School Social Behaviour Scale (SSBS: Urdu version). Loona and Kamal (2002) translated School Social Behaviour Scale by Merrell (1993) into Urdu language (See Appendix G) and determined the reliabilities. The reliability coefficient of the actual scale for Social Competence determined by Merrell (1993) is .96 and for Antisocial Behaviour it is .97. The Alpha coefficient for Social Competence subscale (Urdu version) was .96 and for Antisocial Behaviour subscale (Urdu version) it was again .96. The alpha coefficients for Interpersonal Skills, Self Management Skills, and Academic Skills were .95, .92, and .94 respectively. For subscales i.e., Hostile Irritable, Antisocial Aggressive and Disruptive Demanding it were .91, .94, and .88. SSBS has five point rating scale. (Never = 1; Rarely = 2; Often = 3; Very often = 4; and Always = 5). SSBS was consisted of total 65 questions. Scores on the first subscale could range from minimum 32 to maximum 160. Scores on the second subscale could range from minimum 33 to maximum 165. SSBS (Urdu version) has been widely used in Pakistani researches (See e.g., Bashir, 2009; Iqbal, 2008; Loona & Kamal, 2002; Rafique, 2007).

Procedure

Only those teachers were requested to make their ratings on DBD Rating scale (Urdu version: See Appendix E) and SSBS (Urdu version: See Appendix G) who taught selected children for at least last one year and were familiar with them. These teachers were approached after taking institutional approval (See Appendix Y) and after obtaining their consent (See Appendix F). Teachers were instructed to rate children on the 42 item DBD Rating scale (Urdu version) keeping in view their behaviour during the last six months in the classroom and school setting. Teachers were quite familiar with the behaviour of their class children; therefore they found no difficulty in rating children on the DBD Rating scale (Urdu version).

Results

To establish psychometric properties of the scale confirmatory factorial validity of the translated DBD Rating scale was assessed. Confirmatory factor analysis (CFA) is increasingly used to evaluate different models for the organization of the symptoms of Attention-Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Conduct Disorder (CD) (See e.g., Burns, Walsh, Owen, & Snell, 1997; Burns et al., 1997; Pillow, Pelham, Hoza, Molina, & Stultz, 1998; Wolraich, Feurer, Hannah, Baumgaertel, & Pinnock, 1998).

The primary objective of a CFA is to determine the ability of a predefined factor model to fit an observed set of data. In CFA, the pre-stated model is expressed as a set of equations in order to determine how well the model fits the data. Root Mean Square Error of Approximation (RMSEA) values less than 0.08, and Comparative Fit Index (CFI) values of 0.90 and higher show acceptable model fit (Byrne, 1998). Besides CFA, the inter-scale correlation, alpha internal consistency, and split half reliability of the DBD Rating scale (Urdu version) were also determined.

Factorial validity. The confirmatory factor analysis (CFA) of 42 items of the DBD Rating scale was conducted to confirm the underling factor structure of translated DBD Rating scale in Urdu language by using AMOS (Version 18).

Table 1

Confirmatory factor analysis: Factor loadings (completely Standardized regression weights) for four correlated factors (N = 280)

Items	Factor I ADHD-I	Factor II ADHD-HI	Factor III ODD	Factor IV CD
9	.54			
18	.64			
23	.65			
27	.72			
29	.62			
34	.63			
37	.64			
42	.61			
44	.58			
1		.43		
7		.62		
12		.52		
19		.57		
22		.35		
25		.60		
30		.63		
33		.61		
35		.97		
3			.57	
13			.57	
15			.67	
17			.62	

Continued…

Items	Factor I ADHD-I	Factor II ADHD-HI	Factor III ODD	Factor IV CD
24			.58	
26			.56	
28			.66	
39			.69	
5				.67
6				.64
20				.57
31				.39
32				.60
36				.75
40				.73
45				.69
16				.66
41				.71
4				.73
8				.76
43				.71
2				.57
11				.66
38				.72

Note. ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder.

The Confirmatory Factor Analysis (CFA) was conducted on the 42 items of Urdu translated DBD Rating scale. The model containing 42 items presented a good model fit with item loadings ranging from .35 to .97 The primary objective of CFA is to determine the ability of a predefined factor model to fit an observed set of data. In

the DBD model First Factor included twelve items of "inattention" subtype of Attention Deficit Hyperactivity Disorder (ADHD) that are regarding child's inability to concentrate on tasks and sustaining attention in various activities. Second Factor consisted eight items of hyperactivity/impulsivity disorder. Hyperactive impulsive children apply least effort and take the least amount of time to perform boring or unpleasant tasks (Barkley, 1995). Third Factor consisted of seven items of Oppositional defiant disorder (ODD) that is characterized by pattern of negativistic, hostile, and defiant behaviour. Fourth Factor included 18 items related to conduct problems in children.

All four factors were designed into one model, and error co-variances were allowed. The covariance path was added which resulted in significantly improved fit of the data.

Confirmatory Factor Analysis (Indices of Model Fit).

Table 2

Confirmatory Factor Analysis of DBD Rating Scale (Indices of Model Fit) (N = 280)

Model in CFA	χ^2	*Df*	CFI	RMSEA
Default Model	791.609	685	.980	.024

Note. CFI = Comparative fit Index; RMSEA = Root Mean Square Error of Approximation.

The χ^2 test yields a value of 791.609 (df = 685); which does not reject the null hypothesis of an overall good fit (p = .003). The RMSEA .024 and CFI .980 indicate that this model fits the data well.

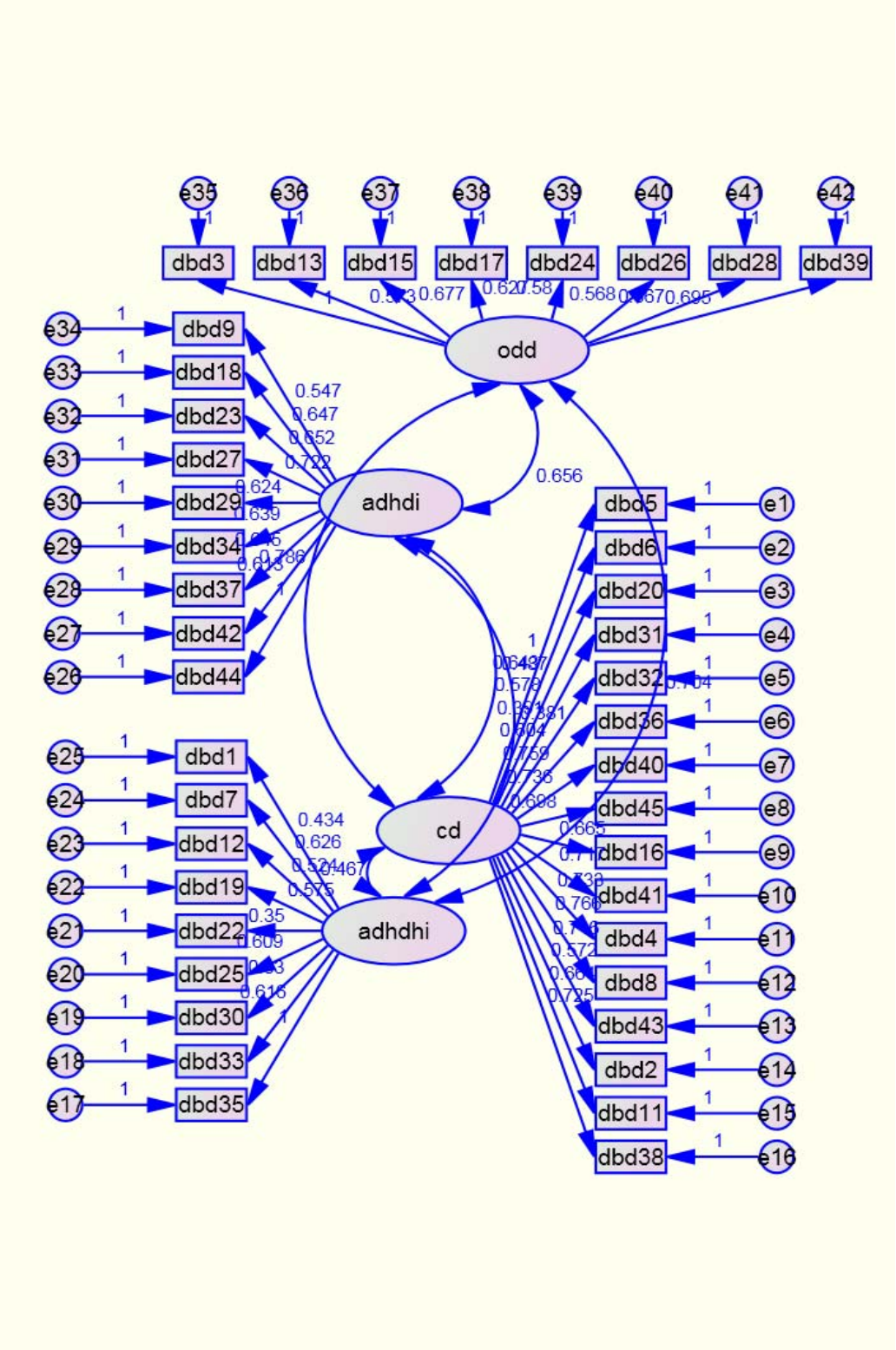

Figure 1. Default Model for CFA

Alpha Reliability Coefficients of DBD Rating Scale. For determination of reliability of DBD Rating scale (Urdu version) and its subscales Cronbach alpha reliability coefficients, split half reliability coefficients, and interscale correlations were calculated.

Table 3

Alpha Reliability Coefficients of Total and Subscales of DBD Rating Scale (N = 280)

Subscales	No. of Items	Alpha Coefficient (Urdu version)	Alpha Coefficients (English original version)
ADHD-I	9	.85	.92
ADHD-HI	9	.80	.91
ADHD-C	18	.86	.92
ODD	8	.84	.87
CD	16	.91	.70
DBD	42	.94	-

Note. ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder. (Source for alpha coefficients of English original version, Massetti et al., 2003).

Initial psychometric analysis, using Cronbach's alpha coefficients yielded an internal consistency coefficient of .94 for the entire 42 items of DBD Rating scale (Urdu version). Item number 10, 14, and 21 were from DSM-III-R (APA, 1987) therefore these were not included in the analysis by following the DSM-IV (APA, 1994) diagnostic criteria; these items were excluded in the present research (See Appendix D for items 10, 14, & 21).

Cronbach's alpha reliability coefficients ranged from .80 to .91 for the four subscales of DBD Rating scale (Urdu version). The alpha coefficients of subscales were as follows, ADHD-I (α = .85), ADHD-HI (α = .80), ADHD-C (α = .86), ODD (α = .84), and CD (α = .91). Findings of Table 3 indicated highly satisfactory alpha reliability coefficients of the total DBD and its subscales. These findings indicated

high internal consistency, homogeneity of items and the accuracy and precision of a measuring instrument (Kerlinger, 1976).

Split-half reliability coefficient of DBD (Urdu version). Split-half reliability coefficient of DBD Rating Scale Urdu version and its subscales was also determined. Split half reliability coefficient is often called a coefficient of internal consistency (Anastasi, 1982).

Table 4

Split-Half Reliability Coefficients for DBD Rating Scale and its subscales (N = 280)

Subscales	No. of Items	Split-half Correlation	Spearman-Brown Correlation
ADHD-I	9	.84	.85
ADHD-HI	9	.78	.78
ADHD-C	18	.61	.61
ODD	8	.81	.82
CD	16	.89	.89
DBD	42	.91	.92

Note. ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder.

Table 4 showed split-half reliability coefficients for the DBD Rating Scale (Urdu version) and its subscales. A split-half reliability for the 42 items yielded .91 split-half reliability, corrected to .92 by the Spearman-Brown formula. This shows that the total DBD and its subscales have highly satisfactory split-half reliability coefficients that further confirm internal consistency of the scale.

Interscale correlation coefficients, means, and standard deviations of DBD Rating Scale (Urdu version). To establish construct validity of DBD Rating Scale (Urdu version) (See Appendix E) interscale correlation among total and subscales was also calculated. Construct validity of the test is the extent to which the test measures a theoretical construct or trait (Anastasi, 1982). Moreover, mean values and standard

deviations were also determined. Mean values represent a simple statistical model of the distribution of scores. It is a hypothetical estimate of the typical score (Field, 2005). Standard deviations are an estimate of the average variability (spread) of a set of data measured in the same units of measurement as the original data. It is the square root of variance (Field, 2005).

Table 5

Interscale Correlation Coefficients, Means, and Standard Deviations of Disruptive Behaviour Disorder (DBD) Rating Scale (N = 280)

	Subscales	1	2	3	4	5	6
1	ADHD-I	-					
2	ADHD-HI	.44**	-				
3	ADHD-C	.86**	.83**	-			
4	ODD	.56**	.66**	.72**	-		
5	CD	.45**	.41**	.51**	.70**	-	
6	DBD	.76**	.74**	.88**	.89**	.82**	-
	M	7.26	7.46	14.72	5.05	4.97	26.96
	SD	5.31	4.86	8.64	4.29	6.60	18.61

Note. ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder.

**$p < .01$

Table 5 showed inter scale correlations between the total and subscales of DBD Rating Scale (Urdu version). There was positive and significant interscale correlation among, ADHD-I, ADHD-HI, ADHD-C, ODD, and CD with total DBD scores that further proved internal consistency of the scale. Mean scores and standard deviation (*SD*) of present sample ($N = 280$) on ADHD-I, ADHD-HI, ADHD-C, ODD, CD and total DBD were relatively low. These mean values indicated that mostly children in the present sample displayed behavioural problems with less severity.

Item-total score correlation. To further validate DBD Ratings scale (Urdu version) item total correlations were determined for the 42 items.

Table 6

Item-total Correlation of DBD Rating Scale (N = 280)

Item No	*r*	Item No	*r*	Item No	*r*
1	.28**	17	.65**	32	.60**
2	.49**	18	.53**	33	.42**
3	.53**	19	.43**	34	.58**
4	.65**	20	.46**	35	.62**
5	.60**	22	.48**	36	.56**
6	.55**	23	.46**	37	.51**
7	.43**	24	.60**	38	.56**
8	.57**	25	.54**	39	.67**
9	.47**	26	.58**	40	.61**
11	.55**	27	.52**	41	.56**
12	.52**	28	.62**	42	.50**
13	.57**	29	.60**	43	.56**
15	.68**	30	.45**	44	.49**
16	.60**	31	.31**	45	.57**

Note. Item number 10, 14, and 21 were from DSM-III-R (APA, 1987) therefore these were excluded by following the DSM-IV (1994) diagnostic criteria (Massetti et al., 2003). See appendix – D for items 10, 14, and 21.

**$p < .01$

Item total score correlation for the 42 items DBD Rating Scale (Urdu version) was calculated (N = 280) it ranged from .28 to .68 as shown in Table 6. Findings indicated each item of DBD Rating scale (Urdu version) positively and significantly correlated with the sum of all 42 items. Thus, each item may be regarded as a valid indicator of ADHD-I, ADHD-HI, ADHD-C, ODD, CD assessed by DBD Rating scale (Urdu version).

Determination of psychometric properties of SSBS (Urdu version). SSBS (Urdu version) was used for hypothesis testing in the subsequent studies of present research. It was deemed necessary to determine its psychometric properties for the current sample before further analysis. Psychometric properties of SSBS (Urdu version: See Appendix G) by Loona and Kamal (2002) were determined in terms of alpha reliability coefficients, split half reliability coefficients and interscale correlations.

Alpha reliability coefficients of SSBS (Urdu Version). In order to establish the internal consistency of SSBS (Urdu version), alpha reliability coefficients were calculated.

Table 7

Alpha Reliability Coefficients of Total and Subscales of SSBS (N = 280)

Subscales	No. of Items	Alpha Coefficients
Interpersonal Skills	14	.94
Self Management Skills	10	.90
Academic Skills	8	.93
Social Competence	32	.96
Hostile-Irritable	14	.88
Antisocial Aggressive	10	.93
Disruptive Demanding	9	.79
Antisocial Behaviour	33	.94

Findings of Table 7 indicated highly satisfactory Cronbach's alpha reliability coefficients for the SSBS and its subscales ranging from .79 to .96 (N = 280). These findings provided evidence for the internal consistency and overall coherence of the scale.

Split-half reliability coefficients of SSBS (Urdu version). The internal consistency of SSBS was further evaluated by computing split-half reliability.

Table 8

The Correlation Coefficients for Split-Half Reliability of SSBS (N = 280)

Subscales	No. of Items	Split-Half Correlation	Spearman-Brown Correlation
Interpersonal Skills	14	.91	.91
Self Management Skills	10	.85	.85
Academic Skills	8	.92	.92
Social Competence	32	.84	.84
Hostile-Irritable	14	.81	.81
Antisocial Aggressive	10	.91	.91
Disruptive Demanding	9	.64	.64
Antisocial Behaviour	33	.90	.90

Findings of Table 8 indicated 32 items of Social Competence subscale yielded .84 split half reliability coefficients and remained unchanged .84 with the Spearman-Brown formula. Whereas, 33 items of antisocial behaviour subscale yielded .90 split-half reliability coefficients and by using Spearman-Brown formula it was again .90. These findings indicated that SSBS (Urdu version) proved quite reliable measure to be used in the subsequent studies of present research.

Interscale correlation coefficients of SSBS (Urdu version). The internal consistency of School Social Behaviour Scale was further determined by calculating interscale correlation for total and subscales of SSBS.

Table 9

Interscale Correlation, Means, and Standard Deviations of the subscales of SSBS (N = 280)

	Subscales	1	2	3	4	5	6	7	8
1	Interpersonal Skills	-							
2	Self Management Skills	.61**	-						
3	Academic Skills	.72**	.70**	-					
4	Social Competence	.91**	.84**	.89**	-				
5	Hostile-Irritable	.02	-.26**	-.04	-.08	-			
6	Antisocial Aggressive	-.12*	-.33**	-.23**	-.24**	.80**	-		
7	Disruptive Demanding	-.17**	-.25**	-.27**	-.25**	.66**	.71**	-	
8	Antisocial Behaviour	-.08	-.31**	-.18**	-.20**	.93**	.93**	.84**	-
	M	42.10	33.19	26.98	102.28	27.85	16.54	17.88	62.28
	SD	11.88	7.96	7.83	24.63	9.22	7.86	5.82	20.85

***p* < .01, * *p*< .05

Findings of Table 9 represented interscale correlations of the subscales of SSBS i.e., Social Competence and Antisocial Behaviour. Subscales of Social Competence i.e., Interpersonal Skills, Self Management Skills, and Academic Skills were positively and significantly related with each other. Subscales of Antisocial Behaviour subscale i.e., Hostile-Irritable, Antisocial-Aggressive, and Disruptive-Demanding were negatively correlated with subscales of Social Competence. The pattern of correlations was in the expected direction. The pattern of correlations suggested relative conceptual independence among the subscales. It indicated that children with high Social Competence will be more likely to have low scorers on the Antisocial Behaviour and those scoring high on Antisocial Behaviour will have poor Social Competence skills. The mean values and standard deviation also represented relatively high mean scores of children of the present sample on total social competence scores and its subscales. Thus mean scores of Antisocial Behaviour total and its subscales were relatively low that indicated children having high Social Competence will score low on Antisocial Behaviour.

DISCUSSION

The present research was designed to screen out children with childhood behaviour disorders in the school settings only. In the DSM-IV (APA, 1994), the disruptive behaviour disorders (DBD) consist Of Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Conduct Disorder (CD). Most children with ADHD develop a comorbid disruptive behaviour disorder (DBD; Jensen, Martin, & Cantwell, 1997). A high number of children with ADHD comorbid with ODD, characterized by chronic argumentativeness, defiance and anger and with CD that involves serious violations of societal norms (Barkley, DuPaul, & McMurray, 1990; Biederman, Newcorn, & Sprich, 1991; Szatmari, Boyle, & Offord, 1989).

ADHD and externalizing disorders such as CD and ODD is estimated to range from 55 to 75% of children (Angold et al., 1999). In Pakistani context, as per research findings of Masood (2008) there were (boys = 66.6%) and (girls = 3.57%) identified with externalizing behaviour problems. In another study, Loona and Kamal (2002) screened out (boys = 23%) and (girls = 16.6%) with symptoms of ADHD from the schools of Islamabad. Therefore, Part I was planned to screen out children with childhood behaviour problems from the school setting to know the gender and grade wise prevalence rate of children in schools. Moreover, academic performance and School Social Behaviour i.e., Social Competence and Antisocial Behaviour of screened out children was also studied.

Study I of Part I attempted to translate a scale in Urdu language for the assessment of disruptive behaviour disorders among school children of Islamabad and Rawalpindi, Pakistan. For the assessment of childhood behaviour disorders a suitable rating scale was required in Urdu, the national language of Pakistan. The requirement was of an all-encompassing scale through which assessment of ADHD, CD, and ODD can be made together. There was an already available Rating scale in Urdu language by (Loona & Kamal, 2002) that was based on DSM-IV (1994) criteria for the assessment of Attention Deficit Hyperactivity Disorder. However, for CD and ODD scales in national language Urdu were not available. The language issue was considered important because in Pakistan despite the fact that English is taught at

schools but people feel more comfortable in communicating in their mother or national language.

Although there are numerous measures specifically focusing disruptive behaviour disorders but in the present research, DBD Rating scale by (Pelham, Gnagy, Greenslade, & Milich, 1992) was selected. DBD Rating scale is a measure of Diagnostic and Statistical Manual of Mental Disorders (3rd ed., revised; APA, 1987) and DSM–IV (1994) symptoms of ADHD, ODD and CD. The scale has been widely used in various researches (See e.g., Fabiano et al., 2006; Flannagan & Pillow, 2002; Oosterlaan, Scheres, & Sergeant, 2005). In the present research, DBD Rating scale was found most appropriate for the assessment of children with disruptive behaviour disorders i.e., ADHD, ODD, and CD because it is a reliable and valid measure and through it teachers' and mothers' ratings can be obtained regarding school and home situations.

In the study I of Part I, translation of DBD Rating Scale into Urdu language was carried out by following guidelines and standardized procedure of forward and back translation (Brislin, 1976). The guidelines were consisted of maximizing the content similarity between the original and target language version, maintaining the relatively simple language level of the original text and translating the text without substitution or elimination of any item. Moreover, psychometric properties of the DBD Rating scale (Urdu version) were also determined.

To establish the psychometric properties of the DBD Rating scale (Urdu version) confirmatory factorial validity, alpha reliability coefficients, interscale correlation and split half reliability of the scale was determined. Findings of CFA represented the χ^2 test yields a value of 791.609 (df = 685); which does not reject the null hypothesis of an overall good fit. The RMSEA .024 and CFI .980 indicate that this model fits the data well (See Table 2). Initial psychometric analysis, using Cronbach's alpha coefficients yielded an internal consistency coefficient of .94 for the entire 42 items of DBD Rating scale (Urdu version) (See Table 3). This considerably high alpha internal consistency reliability estimate of 42 items that was .94 indicated that the degree of homogeneity among the items was consistent with the degree of homogeneity theoretically expected for the construct of disruptive behaviour disorder. Item number 10, 14, and 21 were from DSM-III-R (APA, 1987) therefore these items

were not included in the analysis by following the DSM-IV (APA, 1994) diagnostic criteria; these items were excluded in the present research (See Appendix D for items 10, 14, & 21).

In future researches, DBD Rating scale (Urdu version) will prove useful for screening children from the school and home settings and for investigating childhood behavioural disorders in Pakistani context.

The DBD Rating scale (Urdu version) after well-established psychometric properties was ready for use in the subsequent sections of the research. In the Study II of Part I, assessment of School Social Behaviour of children including their Social Competence and Antisocial Behaviour were also planned. Therefore, in the Study I, besides determining psychometric properties of DBD Rating scale, alpha reliability coefficients of the School Social Behaviour Scale (SSBS: Urdu version) by (Loona & Kamal, 2002) was also assessed on the present sample. The Cronbach's alpha of SSBS and its subscales (N = 280) was satisfactorily high, i.e., ranging from .79 to .96.

In Pakistan, childhood behaviour problems are very common but in most of the cases these problems remain undiagnosed. Due to these problems children suffer variety of other problems such as academic underachievement, interpersonal problems, peer conflicts and aggression. DBD Rating scale (Urdu version) and SSBS (Urdu version) will be used in the subsequent studies of present research for screening of children.

Study I was in a way a prerequisite step for the next study i.e., Study II. The main objectives of study II were to screen out children with symptoms of disruptive behaviour disorders from the three academic performance groups i.e., high, middle, and low scorers. Moreover, to study the gender and grade wise prevalence rate of screened out children with symptoms of disruptive behaviour disorders. School setting was focused in the study II, because it was the best place for studying diverse behaviour of children that depict their psychosocial functioning. However, study II primarily focused on Social Competence including, Interpersonal Skills, Self-Management Skills, and Academic Skills of children. Moreover, Antisocial Behaviour i.e., Hostile Irritable, Disruptive Demanding, and Antisocial Aggressive behaviour was studied.

Study II: Screening of Children with Disruptive Behaviour Disorders in the School setting and Assessment of their School Social Behaviour

Study II was carried out to screen out children in the school setting via teachers' ratings with significant symptoms of childhood behaviour problems through DBD Rating scale (Urdu version: See Appendix E). Teachers usually have considerable experience with the range of classroom behaviour and are qualified to make a preliminary judgment concerning the child's classroom behaviour. They observe child behaviour for a long period of time each day and in a variety of situations they also have a sizable group of children of same age as a comparison base for evaluating the intensity and frequency of problematic behaviour in children (Ross & Ross, 1982).

Besides screening children with symptoms of childhood behaviour disorders, assessment of their School Social Behaviour was also carried out for getting information regarding their social behaviour specifically inside school where children spend significant amount of time daily. School Social Behaviour covered two aspects that are Social Competence and Antisocial Behaviour. Children with conduct disorder and behaviour problems usually have deficits in social skills with peers. They lack positive communication skills such as knowing how to approach others and join in groups of children (Putallaz & Wasserman, 1990), how to get a conversation going or how to give positive rather than negative feedback (Coie, Dodge, & Kupersmidt, 1990; Coie & Kupersmidt, 1983; Dodge, 1983). Moreover, gender differences on the DBD rating scale (Urdu version) and SSBS (Urdu version: See Appendix G) were also explored.

Main Objectives

Study II attempts to explore following Main objectives.

1. To screen out children from school setting with symptoms of childhood behaviour disorders i.e., ADHD, CD, and ODD as per DSM-IV (1994) criteria through DBD Rating scale (Urdu Version).

2. To assess comorbidity of ADHD and its subtypes with CD, and ODD in children screened out by teachers on DBD Rating scale (Urdu version).
3. To assess gender, age and grade wise prevalence rate in children screened out through teacher's rating on DBD Rating scale (Urdu version).
4. To assess influence of academic performance and childhood behaviour problems on Social Competence and Antisocial Behaviour of children screened out with symptoms of either ADHD, ODD, CD or comorbid disorders as compared to the comparison group of children.
5. To assess gender differences in children screened out through DBD Rating scale on SSBS and its subscales.
6. To assess grade wise differences in children screened out with ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and Comorbid group on SSBS and its subscales.
7. To assess grade wise differences in comparison group of children on SSBS and its subscales.

Hypotheses

Keeping in consideration main objectives, following hypothesis were formulated in the present research.

1. Boys will have high prevalence rate as compared to girls as per teachers rating on DBD Rating scale (Urdu version).
2. Children screened out either with ADHD, ODD, CD, or comorbid symptoms having low academic records/grades will have low Social Competence as compared to comparison group of children.
3. Children screened out either with ADHD, ODD, CD, or comorbid symptoms having low academic records/grades will have high Antisocial Behaviour as compared to comparison group of children.
4. Children screened out either with ADHD, ODD, CD or comorbid symptoms will score low on total and subscales of Social Competence as compared to comparison group of children.

5. Children screened out either with ADHD, ODD, CD, or comorbid symptoms will score high on total and subscales of Antisocial Behaviour scale of SSBS as compared to comparison group of children.
6. Boys screened out with symptoms of ADHD-I will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls.
7. Boys screened out with symptoms of ADHD-HI will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls.
8. Boys screened out with symptoms of ADHD-C will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls.
9. Boys screened out with symptoms of ODD will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls.
10. Boys screened out with symptoms of CD will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls.
11. Boys screened out with Comorbid symptoms will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls.
12. Comparison group of boys will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls.
13. Boys will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls while considering the overall sample.
14. Children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of Social Competence.

15. Children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of Antisocial Behaviour.
16. Children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Social Competence.
17. Children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Antisocial Behaviour.

Operational Definition of the Variables

The variables of the Study II were defined as following:

Attention deficit hyperactivity disorder. Attention deficit hyperactivity disorder (ADHD) is a disorder involving inattentiveness and hyperactivity-impulsivity. Inattention is the inability to sustain attention or responding to tasks or play activities for a long time. Hyperactive impulsive behaviour includes difficulty in inhibition behaviour and difficulty in controlling impulses. It is manifested in fidgetiness, staying seated when required, moving about, running and climbing more than other children, playing while making noise, interrupting others activities and being less able than others to wait in line or take turn in games (American Psychiatric Association, 1994).

Conduct disorder. Conduct Disorder is repetitive and persistent pattern of behaviour in children and adolescents, in which, the rights of others or basic social rules and norms are violated (APA, 1994). The child or adolescent usually exhibits these behaviour patterns in a variety of settings e.g., at home, at school, and in social situations and they cause significant impairment in his or her social, academic, and family functioning (NMHA, 2001).

Oppositional defiant disorder (ODD). Oppositional Defiant Disorder (ODD) is described as a pattern of negativistic, hostile, and defiant behaviour, refuses to comply and deliberately annoys others (APA, 1994).

School social behaviour. School Social Behaviour includes Social Competence and Antisocial Behaviour (Merrell, 1993).

Social competence. Social Competence reflects social judgment about the general quality of an individual's performance in a given situation. Social Competence is the characteristics of responsiveness, flexibility, empathy, caring, communication skills, and a sense of humor (Benard, 1993). From a functional perspective, "Social Competence is a summary term, which reflects social judgment about the general quality of an individual's performance in a given situation" (Merrell, 1993, p.19).

Social Competence further includes Interpersonal skills, Self management Skills and Academic skills.

Interpersonal skills. Interpersonal Skills include positive social relationships, peer acceptance, effective school adjustment, and coping skills for dealing with immediate and larger environments (Walker et al., 1983).

Self management skills. Self-Management includes abilities such as self assessment, self planning, self direction, self monitoring, and self evaluation. In other words, self management is the ability to manage one's own behaviour and life tasks (Alberto & Troutman, 1995; Martin & Pear, 1996).

Academic skills. Academic Skills includes some executive functions which are also likely to be involved in the academic achievement i.e., working memory, mental arithmetic or spelling, internalization of speech and reading comprehension, verbal fluency, and oral narratives and written reports (Mariani & Barkley, 1995).

Antisocial behaviour. Antisocial behaviour can be defined as recurrent violation of socially prescribed patterns of behaviour and can be characterized by hostility to others, aggressive behaviour, defiance of authority and violation of social norms and customs. Antisocial behaviour can also be defined as behaviour that

impedes adequate socialization and produces negative social outcomes (Coleman, 1996).

Hostile Irritable. Hostile Irritable behaviour includes unsocialized aggressive behaviour; Children manifest such characteristics as overt or covert hostility, disobedience, physical and verbal aggressiveness, lying, solitary, stealing and temper tantrums (Coleman, 1996).

Antisocial Aggressive, Antisocial Aggressive behaviour includes physical and verbal aggression intended to hurt some one such as attacking/hitting others, fighting, threatening, and throwing tantrums (Coleman, 1996).

Disruptive Demanding. Disruptive and demanding behaviour includes noncompliance, disruptive behaviour with negative social interactions.

Comparison group. Comparison group was consisted of those screened out children who do not meet symptoms of ADHD, ODD, and CD as per DSM-IV (APA, 1994) criteria through DBD Rating scale (Urdu version).

DBD group. DBD group was consisted of those screened out children who met symptoms of either ADHD, ODD, and CD or comorbidity as per DSM-IV (APA, 1994) criteria through DBD Rating scale (Urdu version).

Comorbid group. Comorbid group was consisted of those screened out children who met simultaneously two or more symptoms criteria of ADHD, ODD, or CD as per DSM-IV (APA, 1994) through DBD Rating scale (Urdu version).

Sample

In the Study II of Part I, sample included children of 3rd, 4th, and 5th grades between age range 8 to 13 years (N = 806; Mean age = 9.55, SD = 1.27) including (boys n = 453; Mean age = 9.65, SD = 1.19) and (girls n = 353; Mean age = 9.43, SD = 1.35) from different schools of Islamabad and Rawalpindi. In the present research, a

cross sectional research design was used in which one or more samples are selected and information is collected from the samples at one time (Shaughnessy & Zechmeister, 1994). Moreover, interrelationships among variables within a population can also be studied through cross sectional design.

DBD Rating scale (Urdu version: See Appendix E) and SSBS (Urdu version: See Appendix G) along with Consent Form (See Appendix F) were presented to the respective class teachers of selected children after getting institutional approval (See Appendix Y). Only those class teachers who taught these children for at least last one year were requested to rate three high scorers, three middle scorers, and three low scorers from their class. Though it was expected that as per instructions teachers rate equal number of High, Middle, and Low scorer children from their classes but teachers rated higher scorer children more as compared to middle and low scorers.

In the present sample, there were (high scorers, n = 438; from Grade 3, n = 138; Grade 4, n = 149; Grade 5, n = 151); (Middle scorers, n = 202; from Grade 3, n = 59; Grade 4, n = 85; Grade 5, n = 58); and (Low scorers, n = 166; from Grade 3, n = 52; Grade 4, n = 67; Grade 5, n = 47). High scorers were those students who scored A and A+ in last annual examination. Whereas, Middle scorers were scoring B and B+ grades and low scorers were C+, C and D. Total 1200 forms keeping in view 400 for each grade were distributed in various schools but due to data loss by the teachers 350 forms were not returned and about 50 incomplete forms were discarded. Overall response rate of forms was 67 per cent that is considered good (Babbie, 1992).

Sample was selected from the following schools located in the vicinity of Islamabad and Rawalpindi.

Table 10

Number of children from the selected schools (N = 806)

Name of Schools	*N*
Islamabad Model College for Girls F-6/2, Islamabad	66
Islamabad Model College for Girls I-10/1, Islamabad	44
Islamabad Model College for Girls I-8/4, Islamabad	82
Islamabad Model College for Girls F-8/1, Islamabad	35
Islamabad Model College for Boys F-8/4, Islamabad	52
Islamabad College for Boys G-6/3, Islamabad	141
Islamabad Model College for Girls I-10/4, Islamabad	52
Islamabad Model College for Boys F-11/3, Islamabad	30
Federal Government Junior Model School F-7/2, Islamabad	50
Al-Azeem Model School, Rawalpindi	25
Islamabad Model College for Boys F-10/3, Islamabad	80
Federal Government Junior Model School No: 54, E-9, Islamabad	59
Bahria School E-9, Islamabad	66
The City School, Satellite Town, Rawalpindi	24
Total	806

Table 10 showed number of children from all selected schools of Islamabad and Rawalpindi. Mostly children belonging to Middle and Lower middle class socioeconomic status study in these schools. There were (n = 456) children with father's income less than 15,000 representing lower socioeconomic class. There were (n = 324) children with father's income ranging from 16,000 to 50, 000 Pakistani rupees representing middle socioeconomic class, and only (n = 26) children represented the upper socioeconomic class with father's income between 51,000 to 99,000 Pakistani Rupees.

Instruments

Details regarding Instruments used in the Study II are as follows.

DBD Rating Scale (Urdu version). DBD Rating scale (Urdu version) is 42 items scale that can be rated by Parents and Teachers to assess Attention-Deficit/Hyperactivity Disorder, including Inattention, and Hyperactivity/impulsivity, Oppositional Defiant Disorder, and Conduct Disorder (See details of the scale on page 64 of Part I).

School Social Behaviour Scale (SSBS) (Urdu version). To assess Social Competence and Antisocial Behaviour of children School Social Behaviour Scale (Urdu version) by Loona and Kamal (2002) was used (See details about SSBS on page 65 of Part I). The alpha coefficients established in Part I of present research were; for interpersonal skills, self management skills, and academic skills were .94, .90 and .93 respectively. For hostile irritable, antisocial aggressive and disruptive demanding these were .88, .93 and .79. The alpha coefficient for the subscale of Social Competence was .96 and for Antisocial behaviour subscale it was .94.

Procedure

The teachers were approached after taking institutional approval and after obtaining their consent. Teachers were instructed to rate three high scorers, three middle scorers, and three low scorer children of their class keeping in view child's behaviour during the last six months in the classroom and school setting. In the present study, class teachers (N = 133) were presented forms to rate children, however, only (N = 89) class teachers returned duly completed forms for (N = 806) children. Teachers were quite familiar with the behaviour of their class children; therefore they found no difficulty in rating children on DBD Rating scale (Urdu version) and SSBS (Urdu version).

Results

In the present sample assessment of grade, gender, and age wise prevalence rate of screened out children through teachers' ratings on DBD Rating scale was carried out. Findings are as follows.

Table 11

Grade wise prevalence rate of screened out children via Teachers' ratings on DBD Rating Scale in the School Setting only (N = 806)

	Grades			
	3rd	4th	5th	Total
Groups	*n* (%)	*n* (%)	*n* (%)	*n* (%)
ADHD-I	17 (2.1)	23 (2.9)	15 (1.9)	55 (6.8)
ADHD-HI	5 (.6)	14 (1.7)	7 (.9)	26 (3.2)
ADHD-C	3 (.4)	4 (.5)	6 (.7)	13 (1.6)
ODD	3 (.4)	4 (.5)	4 (.5)	11 (1.4)
CD	19 (2.4)	26 (3.2)	13 (1.6)	58 (7.2)
Comorbid	16 (2.0)	35 (4.3)	21 (2.6)	72 (8.9)
Total DBD groups	63 (7.9)	106 (13.1)	66 (8.2)	235 (29.1)
Comparison group	186 (23.1)	195 (24.2)	190 (23.6)	571 (70.8)
Total	249 (30.9)	301(37.3)	256 (31.8)	806 (100)

Note. (Percentages in Parentheses) ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder.

Findings of Table 11 showed grade wise prevalence rate of children with childhood behaviour problems in the current sample (N = 806). Findings indicated higher prevalence of children with symptoms of DBD in 4th grade (n = 106; 13.1 %) as compared to grade 3rd and 5th. Moreover, there was high prevalence rate of comorbid group (n = 35; 4.3 %) as compared to other DBD groups i.e., ADHD-I,

ADHD-HI, and CD in grade 4th. So as compared to grade 3rd and 5th children of grade 4th exhibit more behavioural problems.

Table 12

Gender wise prevalence rate of children screened out via Teachers' ratings on DBD Rating Scale in School Setting Only (N = 806)

	Gender		
	Boys	Girls	Total
Groups	*n* (%)	*n* (%)	*n* (%)
ADHD-I	28 (3.5)	27 (3.3)	55 (6.8)
ADHD-HI	17 (2.1)	9 (1.1)	26 (3.2)
ADHD-C	8 (1.0)	5 (.6)	13 (1.6)
ODD	8 (1.0)	3 (.4)	11 (1.4)
CD	39 (4.8)	19 (2.4)	58 (7.2)
Comorbid	41 (5.1)	31 (3.8)	72 (8.9)
Total DBD groups	141 (17.5)	94 (11.6)	235 (29.1)
Comparison group	312 (38.7)	259 (32.1)	571 (70.8)
Total	453 (56.2)	353 (43.8)	806 (100)

Note. (Percentages in Parentheses) ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder.

Table 12 showed gender wise prevalence rate of screened out children with symptoms of ADHD, ODD, and CD in the school settings. Findings indicated prevalence rate of boys (*n* = 141) was higher as compared to girls (*n* = 94) on Total DBD groups that represented total number of children of ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbid group. These findings were in accordance with literature that suggested higher rate of boys with externalizing behaviour disorders as compared to girls. Masood (2008) studied the identification of Behaviour Problems among School going children of Rawalpindi and Islamabad cities of Pakistan and revealed (Boys = 66.6%) and (Girls = 3.57%) were identified with externalizing

behaviour. Moreover, hypothesis no. 1 of present study; Boys will have high gender wise prevalence rate as compared to girls as per teachers rating on DBD Rating scale (Urdu version) proved significant.

Table 13

Age wise prevalence rate of children screened out via Teachers' ratings on DBD Rating Scale in School Setting Only (N = 806)

	Age in Years							
	7	8	9	10	11	12	13	Total
Groups	*n* (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)
ADHD-I	1 (.1%)	16 (2.0%)	17 (2.1%)	15 (1.9%)	4 (.5%)	2(.2%)	0 (.0%)	55 (6.8%)
ADHD-HI	0(.0%)	1(.1%)	14 (1.7%)	5 (.6%)	4 (.5%)	0 (.0%)	0 (.0%)	26(3.2%)
ADHD-C	0(.0%)	1(.1%)	3(.4%)	3(.4%)	4(.5%)	2 (.2%)	0(.0%)	13(1.6%)
ODD	0(.0%)	4 (.5%)	2 (.2%)	4(.5%)	1(.1%)	0(.0%)	0(.0%)	11(1.4%)
CD	0(.0%)	11(1.4%)	12(1.5%)	17 (2.1%)	7(.9%)	5 (.6%)	6(.7%)	58(7.2%)
Comorbid	0(.0%)	14 (1.7%)	21(2.6%)	19(2.4%)	6(.7%)	7(.9%)	5 (.6%)	72(8.9%)
Total DBD groups	1(.0%)	47(6.0%)	69(8.5%)	63(7.8%)	26(3.2%)	16(1.9%)	13(1.6%)	235(29.1%)
Comparison group	10(1.2%)	113(14%)	186(23.1%)	155(19.2%)	77(9.6%)	17(2.1%)	13(1.6%)	571(70.8%)
Total	11(1.4%)	160(19.9%)	255(31.6%)	218(27.0%)	103(12.8%)	33(4.1%)	26(3.2%)	806(100%)

Note. (Percentages in Parentheses) ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder.

Table 13 showed age wise prevalence rate of screened out children with symptoms of ADHD, ODD, and CD in the school settings. Findings indicated prevalence rate of DBD children is high in 9 and 10 years of age.

Assessment of simultaneous influence of DBD symptoms and academic performance on Social Competence of children. As per literature, poor academic performance and childhood behaviour disorders both can create impairment in the Social Competence of child, therefore, Univariate Analysis of variance has been performed to see how two independent variables influence an outcome variable that is Social Competence.

Table 14

Between Subjects Factors of Children Screened out via Teachers' ratings on DBD Rating Scale (N = 806)

	Groups	*N*
Marks Groups	HIGH SCORER	438
	MIDDLE SCORER	202
	LOW SCORER	166
Screened out Groups	ADHD-I	55
	ADHD-HI	26
	ADHD-C	13
	ODD	11
	CD	58
	Comorbid	72
	Comparison	571

Note. ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder.

Table 14 represented between subjects factors of children screened out through teachers ratings on DBD Rating scale (Urdu version). Screened Groups consisted of ADHD-I, ADHD-HI, ADHD-C, ODD, CD, Comorbid, and comparison group of children. Whereas, Marks groups included three academic groups selected from the class that were high scorers, middle scorers, and low scorers.

Table 15

Means and Standard Deviations on Social Competence subscale of SSBS for Children Screened out via Teachers' ratings on DBD Rating scale; with their respective High, Middle, and Low Academic performance (N = 806)

Marks Groups	High Scorers			Middle Scorers			Low Scorers		
Screened Groups	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*N*
ADHD-I	77.50	14.15	4	83.11	26.91	18	80.82	20.98	33
ADHD-HI	110.00	24.73	4	102.38	22.09	8	100.93	26.64	14
ODD	112.67	18.61	3	106.00	19.78	4	94.00	25.04	4
CD	105.25	37.52	4	86.33	22.49	21	86.67	15.91	33
ADHD-C	104.00	33.94	2	81.67	27.11	6	71.60	24.70	5
Comorbid	112.80	17.61	5	87.24	24.31	25	80.19	20.91	42
Comparison	111.38	25.61	416	98.33	24.46	120	89.34	25.35	35
Total	110.99	25.62	438	94.17	24.92	202	85.36	22.37	166

Note. ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder; comparison = comparison group; Acad group = Academic group.

Findings of Table 15 indicated mean differences of children with symptoms of ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbidity with respect to their academic performance. Findings showed higher number of children with symptoms of DBD falling in the academically low scoring group. These findings also supported the findings of literature that suggested children with symptoms of DBD show poor academic performance in schools (See e.g., Barkley, 1977; Pelham, Bender, Caddell, Booth, & Moorer, 1985; Rapport, DuPaul, Stoner, & Jones, 1986).

Table 16

Tests of Between-Subjects Effects on Social Competence subscale of SSBS (N = 806)

Source	Type III Sum of Squares	*df*	Mean Square	*F*	*P*
Corrected Model	114259.01a	20	5712.95	9.46	.000
Intercept	1262024.17	1	1262024.17	2091.18	.000
Marks group	7035.69	2	3517.84	5.82	.003
Screened group	12884.69	6	2147.44	3.55	.002
Marks_grp * Sc_grp	4098.91	12	341.57	.56	.870
Error	473744.47	785	603.49		
Total	8891008.00	806			
Corrected Total	588003.48	805			

Note. a.R Squared = .194 (Adjusted R Squared = .174).

**$p < .01$

Table 16 represented between subjects effects of children screened out with behaviour problems along with their academic performance on Social Competence subscale of SSBS. Findings indicated there is significant influence of academic performance and DBD symptoms on Social Competence of children. However, the interaction effect of both independent variables proved nonsignificant. It indicated relative independence of both variables.

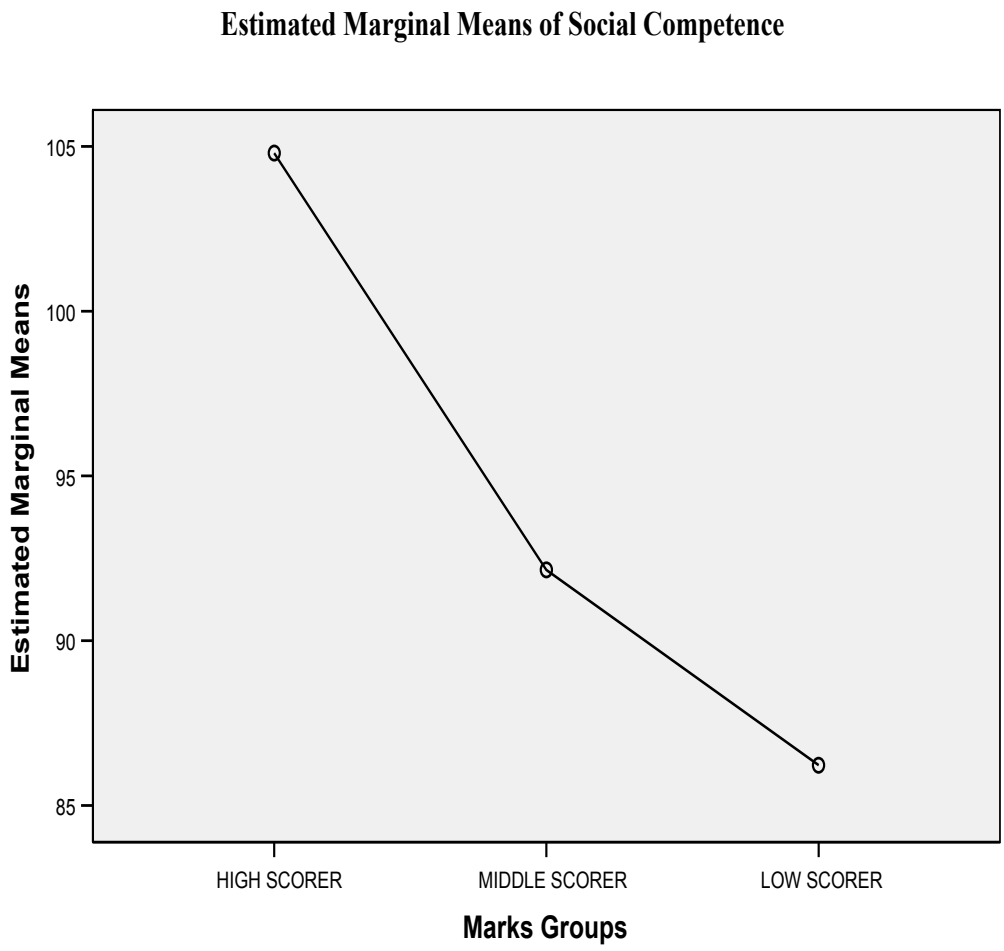

Figure 2. Means of three academic performance groups on Social Competence subscale of SSBS.

The Figure 2 clearly indicated that low scorers have significantly low mean on Social Competence as compared to middle scorers and high scorers. Higher scorers showed high mean on Social Competence subscale as compared to other two groups.

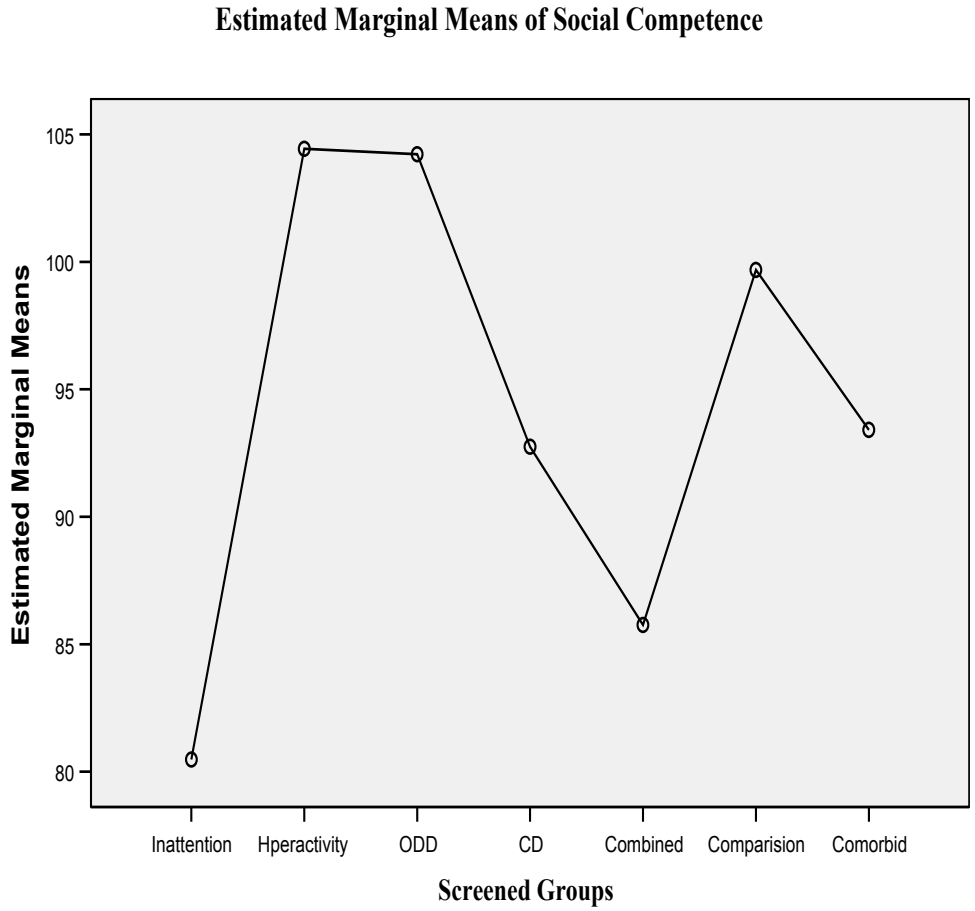

Figure 3. Mean differences on Social Competence Subscale of SSBS between children screened out with symptoms of DBD and comparison group.

Figure 3 indicated mean differences between comparison group and children screened out with symptoms of ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbidity on Social Competence subscale of SSBS. ADHD-I group showed lowest mean on Social Competence subscale as compared to all other groups. Whereas, ADHD-HI and ODD groups showed high Mean on Social Competence. According to the present findings it seems Social Competence of ADHD-HI and ODD children remains high regardless of low academic performance and behavioural problems. However, according to literature hyperactive children are more likely to have poor school achievement, specific learning disabilities, and a higher incidence of conduct disorders. Hyperactive children, especially those who are also aggressive, may have serious disturbances in their peer relations (Pelham & Milich, 1984). Mean scores of

comparison group on Social Competence were higher as compared to ADHD-I, ADHD-C, CD, and Comorbid group. So hypothesis no. 2 of present study that children screened out either with ADHD, ODD, CD, or comorbid symptoms having low academic records/grades will have low Social Competence as compared to comparison group of children proved partially significant.

Assessment of simultaneous influence of DBD symptoms and academic performance on Antisocial Behaviour of children. As per literature, poor academic performance and childhood behaviour disorders both contribute in the rise of Antisocial Behaviour of children, therefore, Univariate Analysis of variance was performed to assess how two independent variables influence an outcome variable that is Antisocial Behaviour.

Table 17

Means and Standard Deviations on Antisocial Behaviour Subscale of SSBS for Children Screened out via Teachers' ratings and with their respective High, Middle, and Low Academic performance (N = 806)

Marks Groups	High Scorers			Middle Scorers			Low Scorers		
Screened Groups	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*N*
ADHD-I	79.50	9.950	4	57.50	11.703	18	63.58	14.494	33
ADHD-HI	76.00	34.264	4	62.13	13.389	8	69.29	17.139	14
ODD	55.33	7.572	3	68.25	18.572	4	75.00	26.064	4
CD	65.25	15.628	4	75.48	17.862	21	81.27	15.306	33
ADHD-C	60.50	17.678	2	72.00	9.879	6	88.20	19.715	5
Comorbid	83.20	21.183	5	90.68	17.305	25	85.29	18.852	42
Comparison	52.19	15.449	416	57.33	14.463	120	53.26	14.286	35
Total	53.19	16.314	438	64.20	18.755	202	71.91	20.520	166

Note. ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder; comparison = comparison group.

Table 17 represented mean differences of screened out children on Antisocial Behaviour subscale of SSBS. Moreover, findings of Table 17 also showed means of respective academic performance groups i.e., High scorers, Middle scorers, and Low scorers on Antisocial Behaviour subscale of SSBS. Findings indicated children with middle and low academic performance scored high on Antisocial Behaviour subscale of SSBS as compared to high scorer group. Secondly, number of screened out children with behavioural problems was significantly low in the high academic performance group i.e., (ADHD-I, *n* = 4; ADHD-HI, *n* = 4; ADHD-C, *n* = 2, ODD, *n* = 3; CD, *n* = 4; Comorbid, *n* = 5).

Table 18

Tests of Between-Subjects Effects on Antisocial Behaviour Subscale of SSBS (N = 806)

Source	Type III Sum of Squares	*df*	Mean Square	*F*	*p*
Corrected Model	111354.94a	20	5567.74	22.70	.000
Intercept	695225.94	1	695225.94	2834.57	.000
Marks groups	1176.40	2	588.20	2.39	.092
Screened groups	41119.43	6	6853.23	27.94	.000
Marks_grp * Sc_grp	6300.82	12	525.06	2.14	.013
Error	192534.08	785	245.26		
Total	3186560.00	806			
Corrected Total	303889.02	805			

Note. a. R Squared = .366 (Adjusted R Squared = .350)

**$p < .01$

Table 18 represented between subjects effects on Antisocial Behaviour subscale of SSBS. Findings indicated academic performance groups i.e., High, Middle, and Low scorers proved nonsignificant in increasing Antisocial Behaviour. Whereas, symptoms of childhood behaviour disorders significantly influenced Antisocial Behaviour of children. The interaction effect of both independent variables i.e., academic performance and DBD symptoms also proved significant that indicated

if children exhibit behavioural problems along with low academic performance then outcome will be increase in Antisocial Behaviour.

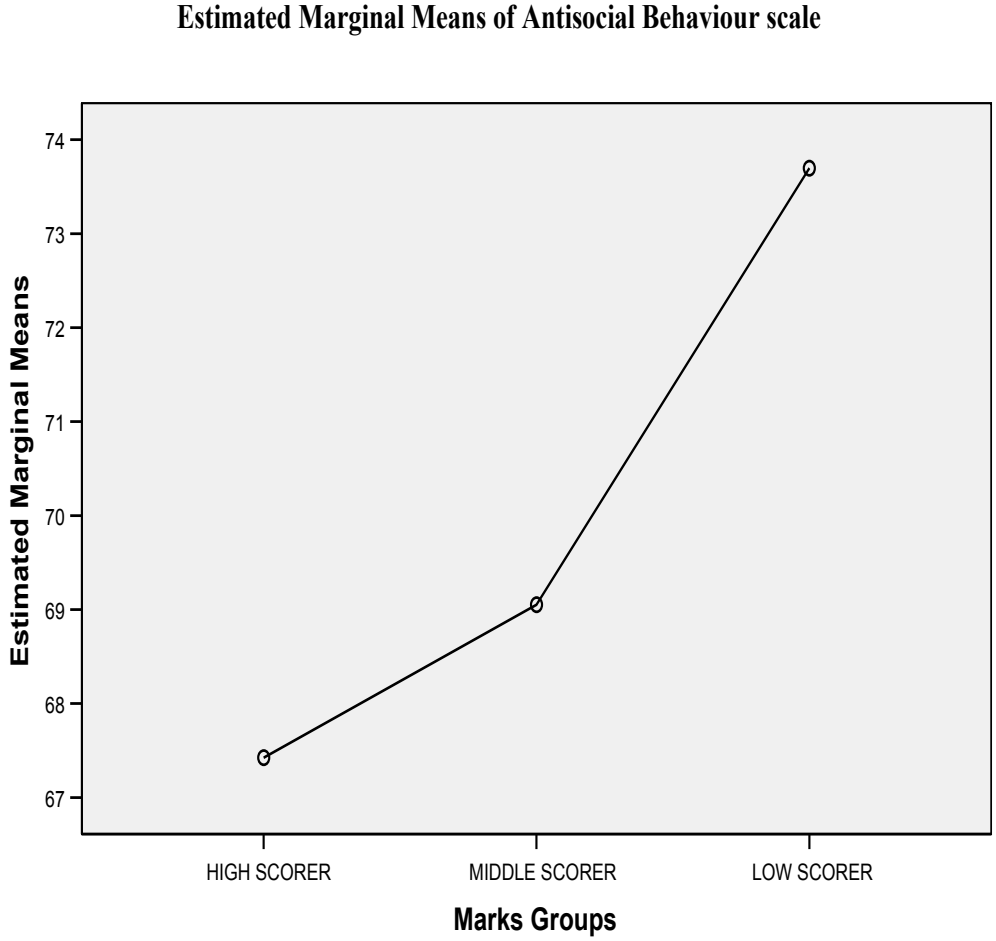

Figure 4. Mean differences on Antisocial Behaviour Subscale of SSBS between children belonging to High, Middle, and Low academic performance.

Figure 4 indicated High scorer children showed lowest mean on Antisocial Behaviour subscale of SSBS. Whereas, children with Low scores on academic performance showed high mean on Antisocial Behaviour subscale. These findings supported hypothesis no. 3 that children screened out either with ADHD, ODD, CD or comorbid symptoms having low academic performance will have high Antisocial Behaviour as compared to comparison group of children.

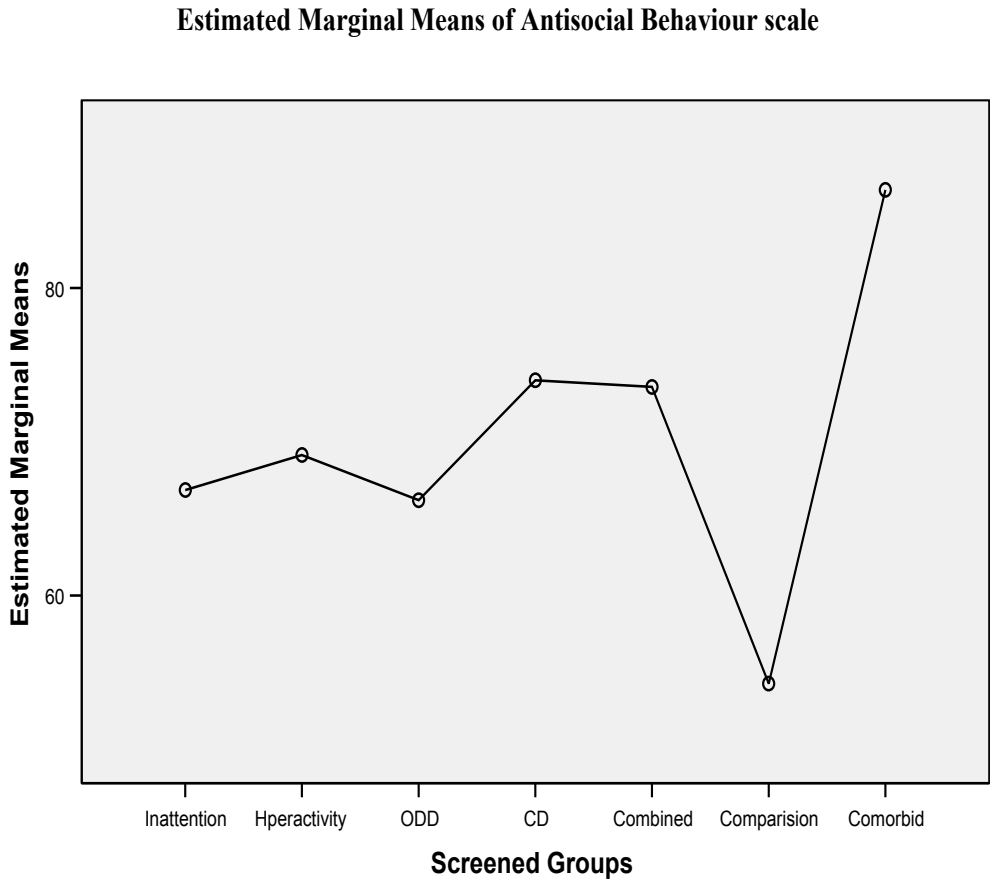

Figure 5. Mean differences on Antisocial Behaviour Subscale of SSBS between children screened out with symptoms of DBD and comparison group.

Figure 5 indicated Comparison group of children scored lowest mean on Antisocial Behaviour subscale of SSBS. Whereas, the comorbid group scored high mean on Antisocial Behaviour.

Differences between DBD Groups and Comparison group on subscales of SSBS. To assess differences between children screened out with symptoms of childhood behaviour disorders and comparison group, One Way ANOVA was carried out on subscales of SSBS.

Table 19

Means, Standard Deviations and F value for Screened out Children on Interpersonal Skills Subscale of SSBS (N = 806)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
ADHD-I	55	32.04	(12.48)	28.66	35.41	13.21	.000
ADHD-HI	26	43.81	(14.52)	37.94	49.67		
ADHD-C	13	33.69	(13.43)	34.33	50.22		
ODD	11	42.27	(11.82)	35.36	40.37		
CD	58	37.86	(9.53)	25.58	41.81		
Comorbid	72	36.74	(13.18)	43.42	45.55		
Comparison	571	44.49	(12.94)	33.64	39.83		
Total	806	42.24	(13.33)	41.32	43.16		

Between groups $df = 6$; within groups $df = 799$; total $df = 805$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder.

$^{**}p < .01$

Findings of Table 19 showed that Inattention group scored lowest mean on Interpersonal Skills as compared to other DBD groups and comparison group. It provided evidence that children suffering from inattention problems may suffer difficulties in managing interpersonal relations. Findings showed significant differences between screened out children on Interpersonal Skills subscale. Results indicated children with symptoms of ADHD-I, ADHD-HI, ADHD-C, ODD, CD and comorbid symptoms scored low mean on Interpersonal Skills subscale. So findings supported the hypothesis no. 4 that children screened out either with ADHD, ODD, CD or comorbid symptoms will score low on total and subscales of Social Competence as compared to children of comparison group.

To further explore significant differences between DBD groups and comparison group as mentioned in the Table 19, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 20

Tukey's Honestly Significant Difference (HSD) Post Hoc Test for Interpersonal Skills Subscale of Social Competence (N = 806)

					95% CI	
I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison	ADHD-I	12.44*	1.80	.000	7.12	17.78
	CD	6.62*	1.75	.003	1.42	11.82
	ADHD-C	10.79*	3.58	.04	.21	21.37
	Comorbid	7.74*	1.59	.000	3.03	12.47

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; DBD = disruptive behaviour disorder; comparison = comparison group.

* $p < .05$

Findings of Table 20 indicated significant differences between DBD groups and comparison group on Interpersonal Skills subscale of Social Competence. Literature review also suggested that disruptive children often become unpopular with their peers and frequently make no enduring friends. They commonly show poor social skills with peers and adults, e.g., they have difficulty sustaining a game or promoting positive social interchanges. Poor peer relationships predict an unfavourable outcome. In clinical practice, the great majority of children with conduct disorder do have impaired peer relationships. Nevertheless, there is limited evidence from cluster analytic studies for a relatively small group of conduct disordered youngsters who do make enduring friendships, display altruistic behaviour, feel guilt or remorse, refrain from blaming others, and show concern for others (Goodman & Scott, 1997).

Table 21

Means, Standard Deviations, and F value for Screened out children on Self-Management Subscale of SSBS (N = 806)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
ADHD-I	55	31.69	(6.98)	29.80	33.58	13.21	.000
ADHD-HI	26	39.77	(5.27)	29.64	33.90		
ADHD-C	13	27.15	(8.45)	30.54	37.27		
ODD	11	33.91	(5.01)	25.54	29.21		
CD	58	27.38	(6.98)	22.04	32.26		
Comorbid	72	27.60	(6.44)	33.85	35.23		
Comparison	571	34.54	(8.44)	26.08	29.11		
Total	806	32.99	(8.39)	32.41	33.57		

Between groups $df = 6$; within groups $df = 799$; total $df = 805$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder; comparison = comparison group.

**$p < .01$

Findings of Table 21 showed mean scores of DBD groups i.e., ADHD-I, ADHD-HI, ADHD-C, ODD, CD, comorbid and comparison group of children on self-management skills subscale of SSBS. Findings indicated children of ADHD-C and Comorbid group scored lowest mean on self management subscale as compared to comparison group of children and other DBD groups. Low mean scores of DBD groups as compared to comparison group indicated that behaviour problems of children influence their self management skills. Finding of the Table 21 supported the hypothesis no. 4 that children screened out either with ADHD, ODD, CD or comorbid symptoms will score low on total and subscales of Social Competence as compared to children of comparison group.

To further explore significant differences between DBD groups and comparison group as mentioned in the Table 21, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 22

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on *Self management Skills Subscale of Social Competence (N = 806)*

					95% CI	
I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison	CD	7.160*	1.09	.000	3.91	10.41
	ADHD-C	7.386*	2.23	.01	.77	14.00
	Comorbid	6.942*	.99	.000	3.99	9.89

Note. CI = confidence interval; LL = lower limit; UL = upper limit; CD = conduct disorder; ADHD-C = attention deficit hyperactivity disorder – combined type.

* $p < .05$

Findings of Table 22 indicated significant differences between DBD groups i.e., CD, ADHD-C, and Comorbid group with comparison group. Thus findings suggested that children with ADHD-C, CD, and Comorbid symptoms specifically lack ability to manage own behaviour and life tasks (Alberto & Troutman, 1995; Martin & Pear, 1996). However, comparison group and other DBD groups showed relatively high self-management skills.

Table 23

Means, Standard Deviations and F value for Screened out Children on Academic Skills Subscale of SSBS (N = 806)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
ADHD-I	55	17.60	(5.40)	16.14	19.06	30.41	.000
ADHD-HI	26	27.19	(6.87)	24.42	29.97		
ADHD-C	13	20.38	(6.67)	23.45	31.10		
ODD	11	27.27	(5.69)	20.89	24.28		
CD	58	22.59	(6.46)	16.36	24.41		
Comorbid	72	20.57	(6.40)	27.62	28.90		
Comparison	571	28.26	(7.83)	19.06	22.07		
Total	806	26.26	(8.18)	25.70	26.83		

Between groups $df = 6$; within groups $df = 799$; total $df = 805$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder.

$^{**}p < .01$

Table 23 showed that ADHD-I group scored lowest mean on Academic Skills subscale of SSBS as compared to other groups. ADHD-I group also scored lowest mean on interpersonal skills, these findings provided evidence that children suffering from inattention also face difficulties in managing interpersonal relations and utilizing their academic skills. Comparison between DBD groups and comparison group indicated significant differences in their academic skills. So the findings supported the hypothesis no. 4 that children screened out either with ADHD, ODD, CD or comorbid symptoms will score low on Academic Skills subscale of Social Competence as compared to children of comparison group. Findings showed significant differences between screened out DBD groups of children and comparison group on Academic Skills subscale of Social Competence. Findings indicated comparison group scored high mean score on Academic Skills as compared to ADHD-I, ADHD-HI, ADHD-C, ODD, and CD.

Moreover, literature also suggested that youngsters with poor Academic Skills are increasingly likely to lose interest in school and to associate with delinquent peers. By adolescence, the relationship between antisocial behaviour and underachievement is firmly established (Mash & Wolfe, 2002).

To further explore significant differences between DBD groups and comparison group as mentioned in the Table 23, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 24

Tukey's Honestly Significant Difference (HSD) Post Hoc Test for Academic Skills Subscale of Social Competence (N = 806)

					95% CI	
I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	LL	UL
ADHD-I	ADHD-HI	-9.59*	1.76	.000	-14.80	-4.38
	ODD	-9.67*	2.44	.002	-16.90	-2.44
	CD	-4.98*	1.39	.007	-9.11	-.87
Comparison	ADHD-I	10.66*	1.04	.000	7.57	13.75
	CD	5.67*	1.02	.000	2.66	8.69
	ADHD-C	7.87*	2.07	.003	1.74	14.02
	Comorbid	7.69*	.92	.000	4.95	10.43
Comorbid	ADHD-HI	-6.62*	1.69	.002	-11.63	-1.61

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder.

** $p < .01$

Findings of Table 24 indicated significant differences between ADHD-I group with ADHD-HI, ODD, and CD group on academic skills. Whereas, Comparison group significantly differed from ADHD-I, CD, ADHD-C and Comorbid groups. Another significant difference was found between comorbid and ADHD-HI group. ADHD-I group scored lowest on all subscales of Social Competence that proved literature based findings that children with symptoms of inattention make careless

mistakes in school work or other tasks and their work is often messy and performed carelessly and without considered thought (DSM-IV; APA, 1994).

Table 25

Means, Standard Deviations and F value for Screened out Children on Social Competence Scale of SSBS (N = 806)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
ADHD-I	55	81.33	(22.42)	75.27	87.39	20.24	.000
ADHD-HI	26	102.77	(24.28)	92.96	112.58		
ADHD-C	13	81.23	(27.04)	89.38	117.53		
ODD	11	103.45	(20.94)	82.46	93.20		
CD	58	87.83	(20.42)	64.89	97.57		
Comorbid	72	84.90	(23.23)	105.13	109.44		
Comparison	571	107.86	(26.27)	79.44	90.36		
Total	806	101.50	(27.03)	99.63	103.36		

Between groups $df = 6$; within groups $df = 799$; total $df = 805$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder.

** $p < .01$

Findings of Table 25 showed that ADHD-I and ADHD-C scored lowest mean on Social Competence subscale of SSBS; ADHD-I also scored lowest Mean on Academic Skills and Interpersonal Skills. Findings provided understandable evidence that children suffering from inattention had low Social Competence and they suffer difficulties in managing interpersonal relations and using their academic skills. Comparison between DBD groups and comparison group indicated significant difference in the level of Social Competence. Therefore the findings supported the hypothesis no. 4 that children screened out either with ADHD, ODD, CD or comorbid symptoms will score low on total and subscales of Social Competence as compared to children of comparison group.

In middle school, aggressive behaviour of conduct disorder children makes them unattractive to peers, who reject them at a time in their lives when peer relationships are becoming critically important. If these children continue to exhibit aggressive and noncompliant behaviour in the classroom, teachers and other school staff also may reject them. Interestingly, parents of a child with conduct disorder may have negative interactions with school staff because of the child's behaviour which leads parents to further reject the child and have little interest in the child's activities, friends, and accomplishments as adolescence is reached (Tynan, 2004).

To further explore significant differences as mentioned in the Table 25, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 26

Tukey's Honestly Significant Difference (HSD) Post Hoc Test for Social Competence Subscale of SSBS (N = 806)

I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
ADHD-I	ADHD-HI	-21.44*	6.01	.007	-39.22	-3.66
Comparison	ADHD-I	25.95*	3.56	.000	15.41	36.51
	CD	19.45*	3.48	.000	9.16	29.75
	ADHD-C	26.05*	7.08	.005	5.10	47.01
	Comorbid	22.38*	3.16	.000	13.04	31.73
Comorbid	ADHD-HI	-17.86*	5.78	.03	-34.96	-.77

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; comparison = comparison group, comorbid = comorbid group.

* $p < .05$

Findings of Table 26 indicated significant differences on Social Competence subscale between DBD groups i.e., ADHD-I, ADHD-C, CD, and Comorbid group

with comparison group. Moreover, ADHD-HI group showed significant differences with ADHD-I and comorbid group.

Table 27

Means, Standard Deviations and F value for Screened out Children on Hostile-Irritable Subscale of SSBS (N = 806)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
ADHD-I	55	24.64	(8.53)	22.33	26.94	40.94	.000
ADHD-HI	26	32.27	(9.60)	28.39	36.15		
ADHD-C	13	31.46	(6.09)	24.57	36.70		
ODD	11	30.64	(9.03)	31.11	35.23		
CD	58	33.17	(7.84)	27.78	35.14		
Comorbid	72	37.31	(9.42)	23.72	24.96		
Comparison	571	24.34	(7.51)	35.09	39.52		
Total	806	26.61	(8.96)	25.99	27.23		

Between groups $df = 6$; within groups $df = 799$; total $df = 805$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; comorbid = comorbid group; comparison = comparison group.

$^{**}p < .01$

Table 27 showed mean differences in children with behavioural problems on Hostile-Irritable subscale of Antisocial Behaviour. Children screened out with Comorbid symptoms scored high on Hostile Irritable subscale of Antisocial Behaviour of SSBS. Comparison between mean scores of DBD groups and comparison group indicated significant difference on Hostile Irritable subscale. So findings supported hypothesis no. 5 that Children either with ADHD, ODD, CD, and comorbid symptoms will score high on total and subscales of Antisocial Behaviour subscale as compared to children of comparison group. However, ADHD-I group was the only DBD group that scored low mean scores on Hostile Irritable subscale.

To further explore significant differences between groups as mentioned in the Table 27, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 28

Tukey's Honestly Significant Difference (HSD) Post Hoc Test for Hostile Irritable Subscale of Antisocial Behaviour (N = 806)

					95% CI	
I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	LL	UL
ADHD-I	ADHD-HI	-7.63*	1.87	.001	-13.17	-2.10
	CD	-8.53*	1.48	.000	-12.91	-4.16
	Comorbid	-12.66*	1.40	.000	-16.83	-8.50
Comparison	ADHD-HI	-7.92*	1.57	.000	-12.59	-3.27
	CD	-8.83*	1.08	.000	-12.04	-5.63
	ADHD-C	-7.12*	2.20	.02	-13.64	-.60
	Comorbid	-12.96*	.98	.000	-15.87	-10.06
Comorbid	CD	4.13*	1.38	.04	.03	8.24

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; comorbid = comorbid group; comparison = comparison group.

* $p < .05$

Findings of Table 28 indicated significant differences of ADHD-I group with ADHD-HI, CD, and Comorbid group, ADHD-I proved a DBD group with lowest hostile tendencies. Moreover, comparison group significantly differed from ADHD-HI, CD, ADHD-C, and Comorbid group. Comorbid group also differed significantly from CD group; these findings also provided evidence that comorbidity of symptoms causes more severe antisocial tendencies as compared to symptoms of a single form disorder (see review by Nottelman & Jensen, 1995).

Table 29

Means Standard Deviations and F value for Screened out Children on Antisocial Aggressive Subscale of SSBS (N = 806)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
ADHD-I	55	16.35	(4.67)	15.08	17.61	65.81	.000
ADHD-HI	26	16.27	(7.37)	13.30	19.24		
ADHD-C	13	20.62	(6.73)	14.17	20.01		
ODD	11	17.09	(4.35)	20.81	24.50		
CD	58	22.66	(7.03)	16.55	24.68		
Comorbid	72	24.92	(7.45)	13.02	13.86		
Comparison	571	13.44	(5.07)	23.17	26.67		
Total	806	15.58	(6.77)	15.12	16.05		

Between groups $df = 6$; within groups $df = 799$; total $df = 805$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; comorbid = comorbid group; comparison = comparison group.

** $p < .01$

Findings of Table 29 showed mean differences in children with symptoms of ADHD-I, ADHD-HI, ADHD-C, CD, ODD and comorbid group on Antisocial Aggressive Subscale of SSBS. Comparison between mean scores of DBD groups and comparison group indicated significant difference on Antisocial Aggressive subscale; Children screened out with Comorbid symptoms scored high as compared to other DBD groups and comparison group. Findings indicated significant difference between groups. So findings supported the hypothesis no. 5 that children either with ADHD, ODD, CD, and comorbid symptoms will score high on total and subscales of Antisocial Behaviour subscale as compared to children of comparison group.

To further explore significant differences between groups as mentioned in the Table 29, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 30

Tukey's Honestly Significant Difference (HSD) Post Hoc Test for Antisocial Aggressive subscale of Antisocial Behaviour (N = 806)

					95% CI	
I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	LL	UL
ADHD-I	CD	-6.31*	1.04	.000	-9.40	-3.22
	Comorbid	-8.57*	.99	.000	-11.51	-5.63
ADHD-HI	CD	-6.38*	1.31	.000	-10.26	-2.51
	Comorbid	-8.64*	1.27	.000	-12.41	-4.89
ODD	Comorbid	-7.82*	1.79	.000	-13.14	-2.51
CD	ODD	5.56*	1.82	.03	.16	10.97
Comparison	ADHD-I	-2.90*	.78	.004	-5.23	-.59
	ADHD-C	-7.17*	1.55	.000	-11.78	-2.57
	CD	-9.21*	.76	.000	-11.48	-6.95
	Comorbid	-11.47*	.695	.000	-13.53	-9.42

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; comorbid = comorbid group; comparison = comparison group.

* $p < .05$

Findings of Table 30 indicated significant differences between DBD groups i.e., CD, ADHD-I, ADHD-C, CD, and Comorbid group with comparison group. Findings also indicated that significant difference also exist between DBD groups, for instance ADHD-I and ADHD-HI groups showed significant differences with CD and Comorbid groups. ODD group significantly differed from Comorbid group; and CD from ODD group. Overall, these findings indicated that not only DBD groups and comparison group experience varied levels of Antisocial Aggressive behaviour but within DBD groups differences also exist. Comorbid group and CD group exhibited

high Antisocial Aggressive behaviour. So findings supported the hypothesis no. 5 that Children either with ADHD, ODD, CD, or comorbid symptoms will score high on Antisocial Aggressive subscale of Antisocial Behaviour as compared to children of comparison group.

Table 31

Means, Standard Deviations and F value for Screened out Children on Disruptive Demanding Subscale of Antisocial Behaviour (N = 806)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
ADHD-I	55	21.76	(3.43)	20.84	22.69	60.80	.000
ADHD-HI	26	19.58	(4.18)	17.89	21.26		
ADHD-C	13	24.38	(8.33)	14.39	24.52		
ODD	11	19.45	(7.54)	20.86	23.62		
CD	58	22.24	(5.25)	19.35	29.42		
Comorbid	72	24.79	(5.28)	15.15	15.96		
Comparison	571	15.56	(4.92)	23.55	26.03		
Total	806	17.61	(5.99)	17.20	18.02		

Between groups $df = 6$; within groups $df = 799$; total $df = 805$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; comorbid = comorbid group; comparison = comparison group.

** $p < .01$

Findings of Table 31 showed mean differences in children with symptoms of Inattention, Hyperactivity/Impulsivity, Conduct Problems, ODD and Comorbidity on Disruptive Demanding Subscale of Antisocial Behaviour. Children screened out with Comorbid symptoms and ADHD-C scored high on Disruptive Demanding subscale of antisocial behaviour. Comorbid group also scored high mean scores on Hostile Irritable and Antisocial Aggressive subscales of Antisocial behaviour scale of SSBS. Findings indicated significant difference between DBD groups and comparison group on Disruptive Demanding subscale. So findings supported the hypothesis no. 5 that

Children either with ADHD, ODD, CD, and comorbid symptoms will score high on total and subscales of Antisocial Behaviour subscale as compared to children of comparison group.

To further explore significant differences between groups as mentioned in the Table 31, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 32

Tukey's Honestly Significant Difference (HSD) Post Hoc Test for Disruptive Demanding Subscale of Antisocial Behaviour (N = 806)

					95% CI	
I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison	ADHD-I	-6.20*	.70	.000	-8.29	-4.13
	ADHD-HI	-4.02*	.99	.001	-6.97	-1.07
	ADHD-C	-8.82*	1.39	.000	-12.96	-4.70
	CD	-6.68*	.68	.000	-8.72	-4.66
	Comorbid	-9.23*	.62	.000	-11.08	-7.40
Comorbid	ADHD-I	3.02*	.89	.01	.39	5.66
	ADHD-HI	5.21*	1.14	.000	1.85	8.58
	ODD	5.33*	1.61	.01	.57	10.10

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; comorbid = comorbid group; comparison = comparison group.

* $p < .05$

Table 32 showed significant differences between DBD groups and comparison group. Findings indicated comparison group significantly differed from DBD groups i.e., ADHD-I, ADHD-HI, ADHD-C, CD, and comorbid group on Disruptive Demanding behaviour. Children in comparison group scored low mean on this subscale. Moreover, within DBD groups comorbid group being high on Disruptive

Demanding behaviour showed significant differences from ADHD-I, ADHD-HI, and ODD groups.

Table 33

Means, Standard Deviations, and F value for Screened out Children on Antisocial Behaviour Subscale of SSBS (N = 806)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
ADHD-I	55	62.75	(14.26)	58.89	66.60	68.31	.000
ADHD-HI	26	68.12	(19.13)	60.39	75.84		
ADHD-C	13	76.46	(17.50)	53.99	80.38		
ODD	11	67.18	(19.64)	73.70	82.44		
CD	58	78.07	(16.62)	65.89	87.03		
Comorbid	72	87.01	(18.42)	52.08	54.59		
Comparison	571	53.33	(15.30)	82.69	91.34		
Total	806	59.80	(19.43)	58.46	61.15		

Between groups $df = 6$; within groups $df = 799$; total $df = 805$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; comorbid = comorbid group; comparison = comparison group.

** $p < .01$

Table 33 showed mean differences in children with symptoms of Inattention, Hyperactivity/Impulsivity, Conduct Problems, ODD, and Comorbidity on Antisocial Behaviour Subscale of SSBS. Children screened out with Comorbid symptoms scored high on Antisocial Behaviour subscale of antisocial behaviour. Comorbid group also scored high mean scores on Hostile Irritable, Antisocial Aggressive, and Disruptive Demanding subscales of Antisocial Behaviour scale of SSBS. Findings indicated significant difference between comparison group and screened out group of DBD children. Children in DBD groups showed high mean on Antisocial Behaviour subscale of SSBS as compared to comparison group. Within DBD groups comorbid group scored high on the Antisocial behaviour subscale of SSBS. Literature also

suggested that overlapping conduct problems and attention deficits/impulsivity displays a far more pernicious form of psychopathology than does either single diagnostic category. Such youngsters display more physical aggression, a greater range and greater persistence of antisocial activity, more severe academic underachievement, and higher rates of peer rejection (Hinshaw, 1992).

To further explore significant differences between groups as mentioned in the Table 33, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 34

Tukey's Honestly Significant Difference (HSD) Post Hoc Test for Antisocial Behaviour subscale (N = 806)

					95% CI	
I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison	ADHD-I	-9.41*	2.23	.001	-16.03	-2.79
	ADHD-HI	-14.78*	3.17	.000	-24.18	-5.38
	ADHD-C	-23.12*	4.44	.000	-36.27	-9.98
	CD	-24.73*	2.18	.000	-31.19	-18.28
	Comorbid	-33.67*	1.98	.000	-39.54	-27.82
Comorbid	ADHD-I	24.26*	2.83	.000	15.88	32.66
	ADHD-HI	18.89*	3.62	.000	8.18	29.62
	ODD	19.83*	5.13	.002	4.66	35.00
	CD	8.94*	2.79	.02	.68	17.21
ADHD-I	CD	-15.32*	2.98	.000	-24.14	-6.50

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; comorbid = comorbid group; comparison = comparison group.

* $p < .05$

Findings of Table 34 indicated significant differences between comparison group and DBD groups i.e., ADHD-I, ADHD-HI, ADHD-C, CD, and Comorbid

groups. So the findings supported the hypothesis no. 5 that Children either with ADHD, ODD, CD, and comorbid symptoms will score high on total and subscales of Antisocial Behaviour subscale as compared to children of comparison group. Moreover, within DBD groups comorbid group showed significant difference from DBD groups that are ADHD-I, ADHD-HI, ODD and CD.

Gender Differences on SSBS and its Subscales. To explore gender differences on the total and subscales of School Social Behaviour Scale (SSBS) independent samples *t* - test was performed.

Table 35

Gender Differences in Children Screened out with symptoms of ADHD-I (Inattention) on SSBS and its subscales (N = 55)

	Gender						
	Boys (*n* = 28)		Girls (*n* = 27)				Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (55)*	*p*	*d*
Interpersonal Skills	30.61	10.63	33.52	14.20	.86	.39	-.23
Self-Management Skills	30.82	6.12	32.59	7.79	.93	.35	-.25
Academic Skills	17.11	4.60	18.11	6.18	.68	.49	-.18
Social Competence	78.54	17.84	84.22	26.38	.94	.35	-.25
Hostile Irritable	26.22	8.91	22.96	7.93	1.44	.15	.38
Antisocial Aggressive	17.43	5.06	15.22	4.04	1.78	.08	.48
Disruptive Demanding	22.75	3.92	20.74	2.52	2.25	.02	.60
Antisocial Behaviour	66.43	15.76	58.93	11.62	2.00	.05	.10

*$p < .05$

Table 35 showed gender differences on SSBS and its subscales in children screened out with Inattention problem ($N = 55$) including (boys: $n = 28$) and (girls: $n = 27$) through DBD Rating Scale (See page no 91 for gender wise prevalence). Findings of Table 35 indicated nonsignificant differences between boys and girls on Social Competence and its subscales i.e., interpersonal skills, self management skills, and academic skills. So hypothesis no. 6 that boys screened out with symptoms of

ADHD-I will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved nonsignificant.

Table 36

Gender Differences in Children Screened out with symptoms of ADHD-HI (Hyperactivity/Impulsivity) on SSBS and its subscales (N = 26)

	Gender						
	Boys (n = 17)		Girls (n = 9)				Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (26)*	*p*	*d*
Interpersonal Skills	47.47	14.24	36.89	13.07	1.85	.07	.77
Self-Management Skills	32.41	5.37	30.56	5.15	.84	.40	.35
Academic Skills	29.18	6.89	23.44	5.32	2.16	.04	.93
Social Competence	109.06	24.78	90.89	19.28	1.90	.06	.81
Hostile Irritable	35.06	9.15	27.00	8.51	2.18	.03	.91
Antisocial Aggressive	18.59	8.12	11.89	2.09	2.41	.02	1.13
Disruptive Demanding	20.59	4.32	17.67	3.32	1.76	.09	.75
Antisocial Behaviour	74.24	19.86	56.56	11.17	2.45	.02	1.09

*$p < .05$

Table 36 showed gender differences on SSBS and its subscales in children screened out with symptoms of ADHD-HI (Hyperactivity/Impulsivity) (N = 26) through DBD Rating Scale (See page no 91 for gender wise prevalence). There was significant difference between boys and girls on Academic Skills subscales of Social Competence. Boys showed relatively high Academic Skills as compared to girls. So hypothesis no. 7 that boys screened out with symptoms of ADHD-HI will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved partially significant. On Academic Skills subscale of Social Competence boys scored higher mean as compared to girls. However, on Antisocial Behaviour subscale there were significant gender differences on Hostile Irritable, Antisocial Aggressive and Antisocial behaviour subscale. Boys scored significantly high mean as compared to girls that indicated higher tendencies of Antisocial Behaviour in boys as compared to girls that proved the hypothesis.

Table 37

Gender Differences in Children Screened out with symptoms of ADHD-C (Combined) on SSBS and its subscales (N = 13)

	Gender						
	Boys (n = 8)		Girls (n = 5)				Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (13)*	*p*	*d*
Interpersonal Skills	27.75	3.62	43.20	18.29	2.37	.03	-1.17
Self-Management Skills	24.63	7.54	31.20	9.04	1.42	.18	-.78
Academic Skills	18.50	4.57	23.40	8.85	1.33	.21	-.69
Social Competence	70.88	15.22	97.80	35.07	1.93	.07	-.99
Hostile Irritable	31.63	4.50	31.20	8.70	.11	.90	-.06
Antisocial Aggressive	19.63	3.78	22.20	10.28	-.65	.52	-.33
Disruptive Demanding	25.00	9.10	23.40	7.83	.32	.75	.18
Antisocial Behaviour	76.25	13.65	76.80	24.36	-.05	.95	-.02

*$p < .05$

Table 37 showed gender differences on SSBS and its subscales in children screened out with ADHD Combined symptoms (N = 13) through DBD Rating Scale (See page no 91 for gender wise prevalence). There was nonsignificant difference between boys and girls on Social Competence and its subscales i.e., Self Management Skills, and Academic Skills. However, there was significant gender difference on Interpersonal Skills subscale of Social Competence. Girls showed significantly high Interpersonal Skills as compared to boys. So hypothesis no. 8 that boys screened out with symptoms of ADHD-C will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved nonsignificant. However, only on Interpersonal Skills subscale of Social Competence the hypothesis proved significant. On Antisocial behaviour and its subscales, i.e., Hostile Irritable, Antisocial Aggressive, and Disruptive Demanding there was nonsignificant difference between boys and girls.

Table 38

Gender Differences in Children Screened out with symptoms of ODD on SSBS and its subscales (N = 11)

	Gender						
	Boys (*n* = 8)		Girls (*n* = 3)				Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (11)*	*p*	*d*
Interpersonal Skills	45.13	9.00	24.66	17.21	1.36	.20	1.49
Self-Management Skills	34.13	4.79	33.33	6.66	.22	.82	.13
Academic Skills	27.88	4.52	25.67	9.24	.55	.59	.30
Social Competence	107.13	17.37	93.67	30.66	.94	.37	.54
Hostile Irritable	33.00	9.07	24.33	6.11	1.50	.16	1.12
Antisocial Aggressive	17.50	4.93	16.00	2.65	.49	.63	.37
Disruptive Demanding	21.25	7.79	14.67	5.03	1.34	.21	1.00
Antisocial Behaviour	71.75	20.38	55.00	13.00	1.30	.22	.97

Table 38 showed gender differences on SSBS and its subscales in children screened out with ODD symptoms (N = 11) through DBD Rating Scale (See page no 91 for gender wise prevalence). There were nonsignificant differences between boys and girls on Social Competence and its subscales i.e., Interpersonal Skills, Self Management, and Academic Skills. So hypothesis no. 9 that boys screened out with symptoms of ODD will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved nonsignificant. On Antisocial behaviour and its subscales, Hostile Irritable, Antisocial Aggressive, and Disruptive Demanding there were nonsignificant gender differences between boys and girls.

Table 39

Gender Differences in Children Screened out with symptoms of CD on SSBS and its subscales (N = 58)

	Gender						
	Boys (*n* =39)		Girls (*n* =19)				Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (58)*	*p*	*d*
Interpersonal Skills	38.26	9.44	37.05	9.91	.44	.65	.12
Self-Management Skills	26.56	6.32	29.05	8.09	1.28	.20	-.34
Academic Skills	22.85	6.06	22.05	7.35	.43	.66	.11
Social Competence	87.67	19.75	88.16	22.29	.08	.93	-.02
Hostile Irritable	33.28	7.33	32.95	9.02	.15	.88	.04
Antisocial Aggressive	22.23	6.28	23.53	8.50	.65	.51	-.17
Disruptive Demanding	22.33	4.75	22.05	6.28	.19	.85	.05
Antisocial Behaviour	77.85	14.41	78.53	20.88	.14	.88	-.03

Table 39 showed gender differences on SSBS and its subscales in children screened out with CD symptoms (*N* = 58) through DBD Rating Scale (See page no 91 for gender wise prevalence). There were nonsignificant difference between boys and girls on Social Competence and its subscales i.e., Interpersonal Skills, Self Management Skills, and Academic Skills. On Antisocial behaviour and its subscales, Hostile Irritable, Antisocial Aggressive, and Disruptive Demanding again there were nonsignificant difference between both groups. So hypothesis no. 10 that boys screened out with symptoms of CD will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved nonsignificant.

Table 40

Gender Differences in Children Screened out with Comorbid Symptoms on SSBS and its subscales (N = 72)

	Gender						
	Boys (*n* = 41)		Girls (*n* = 31)				Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (72)*	*p*	*d*
Interpersonal Skills	33.95	10.85	40.42	15.15	2.11	.03	-.49
Self-Management Skills	25.73	5.84	30.06	6.45	2.98	.004	-.70
Academic Skills	19.20	5.69	22.39	6.92	2.14	.03	-.50
Social Competence	78.88	19.78	92.87	25.30	2.63	.01	-.61
Hostile Irritable	37.37	8.74	37.26	10.41	.06	.95	.01
Antisocial Aggressive	26.27	6.98	23.13	7.78	1.79	.07	.42
Disruptive Demanding	25.85	5.25	23.39	5.07	2.00	.04	.47
Antisocial Behaviour	89.49	17.00	83.74	19.95	1.31	.19	.31

*$p < .05$

Table 40 showed gender differences on SSBS and its subscales in children screened out with comorbid symptoms ($N = 72$) through DBD Rating Scale (See page no 91 for gender wise prevalence). There were significant difference between boys and girls on Social Competence and its subscales i.e., Interpersonal Skills, Self Management Skills, and Academic Skills. On Antisocial behaviour and its subscales, Hostile Irritable, Antisocial Aggressive, there was nonsignificant difference between both groups. The only significant gender difference was found on Disruptive Demanding subscale. So hypothesis no. 11 that boys screened out with comorbid symptoms will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved nonsignificant.

Table 41

Gender Differences in Comparison group of Children on SSBS and its subscales (N =571)

	Gender						
	Boys (n = 312)		Girls (n = 259)				Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (571)*	*p*	*d*
Interpersonal Skills	44.50	11.90	44.47	14.11	.02	.98	.002
Self-Management Skills	34.43	8.57	34.67	8.30	.34	.73	-.02
Academic Skills	28.44	7.24	28.05	8.49	.58	.55	.04
Social Competence	107.36	24.96	107.19	27.81	.07	.93	.006
Hostile Irritable	25.28	6.92	23.21	8.03	3.30	.001	.27
Antisocial Aggressive	13.75	4.79	13.75	5.79	1.62	.10	-.05
Disruptive Demanding	15.89	4.83	15.89	5.01	1.79	.07	0
Antisocial Behaviour	54.92	14.36	51.42	16.17	2.73	.006	.22

*$p < .05$

Table 41 showed gender differences on SSBS and its subscales in Comparison group of children (N =571) (See page no 91 for gender wise prevalence). There was nonsignificant difference between boys and girls on Social Competence and its subscales i.e., Interpersonal Skills, Self Management Skills, and Academic Skills. On second subscale of SSBS i.e., Antisocial behaviour and its subscales, Disruptive Demanding, Antisocial Aggressive, there was nonsignificant difference between both groups. So hypothesis no. 12 that comparison group of boys will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved nonsignificant. The significant gender differences were found on Hostile Irritable, and Antisocial Behaviour subscale that proved the hypothesis no. 12 significant on these subscales. It indicated that as compared to girls of the same age comparison group boys were relatively more Hostile Irritable and antisocial. In Pakistani context, these findings also proved general perception regarding boys and girls. Girls are expected to be more submission and obedient, whereas boys usually indulge into hostility and antisocial acts.

Table 42

Gender Differences on the total and Subscales of SSBS in total sample of boys and girls (N = 806)

	Gender						
	Boys (*n* = 453)		Girls (*n* = 353)				Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (806)*	*p*	*d*
Interpersonal Skills	41.97	12.45	42.58	14.39	.64	.52	-.04
Self-Management Skills	32.88	8.52	33.64	8.19	1.93	.05	-.09
Academic Skills	26.26	7.81	26.27	8.64	.01	.99	-.001
Social Competence	100.72	28.13	102.49	28.13	.92	.35	-.06
Hostile Irritable	27.74	8.47	25.16	9.38	4.08	.000	.28
Antisocial Aggressive	16.19	6.70	14.80	6.79	2.91	.000	.20
Disruptive Demanding	18.20	6.09	16.85	5.78	3.20	.001	.22
Antisocial Behaviour	62.13	18.97	56.81	19.62	3.89	.000	.27

*$p < .05$

Table 42 showed gender differences on SSBS and its subscales in total sample of children (N = 806). There was nonsignificant difference between boys and girls on Social Competence and its subscales i.e., interpersonal skills, and academic skills. The only significant difference was found on self management skills. On Antisocial behaviour and its subscales, i.e., Hostile Irritable, Antisocial Aggressive, and Disruptive Demanding there were significant differences between boys and girls. So hypothesis no. 13 that boys will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved partially significant.

Assessment of Grade wise differences among children of 3rd, 4th, and 5th on total and subscales of SSBS. To assess grade wise differences between children of 3rd, 4th, & 5th grades screened out with symptoms of childhood behaviour disorders (i.e., ADHD-I, ADHD-HI, ADHD-C, ODD, CD, Comorbid symptoms) and comparison group, One Way ANOVA was carried out on total and subscales of SSBS.

Table 43

Means, Standard Deviation, and F-value for Children Screened out with symptoms of ADHD-I on Interpersonal Skills Subscale of Social Competence (N = 55)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	17	29.29	(13.82)	22.18	36.40	.62	.53
4th Grade	23	32.78	(12.88)	27.21	38.36		
5th Grade	15	34.00	(10.34)	28.27	39.73		
Total	55	32.04	(12.48)	28.66	35.41		

Between groups *df* = 2; within groups *df* = 52; groups total *df* = 54

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 43 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-I on Interpersonal Skills subscale of SSBS. Findings indicated children screened out with symptoms of ADHD-I from grade 5th showed high mean (*M* = 34.00) on Interpersonal Skills subscale as compared to children of grade 3rd and 4th. However, *p* value showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 44

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-I on Self Management Skills Subscale of Social Competence (N = 55)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	17	29.53	(8.04)	25.40	33.66	1.36	.26
4th Grade	23	32.13	(6.99)	29.11	35.16		
5th Grade	15	33.47	(5.29)	30.54	36.40		
Total	55	31.69	(6.98)	29.80	33.58		

Between groups *df* = 2; within groups *df* = 52; groups total *df* = 54

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 44 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades having symptoms of ADHD-I on Self Management Skills subscale of SSBS. Findings indicated that children screened out with symptoms of ADHD-I from grade 5th showed relatively high mean (*M* = 33.47) as compared to children of grade 3rd and 4th on Self Management Skills subscale. However, findings indicated nonsignificant grade wise differences among children of 3rd, 4th, and 5th on Self Management Skills subscale. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 45

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-I on Academic Skills Subscale of Social Competence (N = 55)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	17	15.53	(5.23)	12.84	18.22	2.11	.13
4th Grade	23	19.00	(5.47)	16.63	21.37		
5th Grade	15	17.80	(5.07)	14.99	20.61		
Total	55	17.60	(5.40)	16.14	19.06		

Between groups $df = 2$; within groups $df = 52$; groups total $df = 54$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 45 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-I on Academic Skills subscale of SSBS. Findings indicated relatively high mean scores (M = 19.00) for children screened out with symptoms of ADHD-I from grade 4th as compared to grade 3rd and 5th on Academic Skills subscale. However, findings showed nonsignificant grade wise differences among children screened out with symptoms of ADHD-I from grades 3rd, 4th, and 5th on Academic Skills subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 46

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-I on Social Competence Subscale of SSBS (N = 55)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	17	74.35	(25.30)	61.34	87.36	1.21	.30
4th Grade	23	83.91	(22.38)	74.23	93.59		
5th Grade	15	85.27	(18.22)	75.18	95.36		
Total	55	81.33	(22.41)	75.27	87.39		

Between groups *df* = 2; within groups *df* = 52; groups total *df* = 54

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 46 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-I on Social Competence subscale of SSBS. Findings indicated relatively high mean scores (*M* = 85.27) for children screened out with symptoms of ADHD-I from grade 5th as compared to children of grade 3rd and 4th on Social Competence subscale of SSBS. However, findings indicated nonsignificant grade wise differences on Social Competence Subscale of SSBS. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 47

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-I on Hostile Irritable Subscale of Antisocial Behaviour (N = 55)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	17	20.41	(6.11)	17.27	23.56	5.08	.01
4th Grade	23	28.39	(9.16)	24.43	32.35		
5th Grade	15	23.67	(7.73)	19.38	27.95		
Total	55	24.64	(8.52)	22.33	26.94		

Between groups *df* = 2; within groups *df* = 52; groups total *df* = 54

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

** $p < .01$

Findings of Table 47 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-I on Hostile Irritable Subscale of Antisocial Behaviour. Findings indicated relatively high mean scores (*M* = 28.39) for children screened out with symptoms of ADHD-I from grade 4th as compared to grade 3rd and 5th on Hostile Irritable Subscale. Findings showed significant grade wise differences among children screened out with symptoms of ADHD-I on Hostile Irritable Subscale of Antisocial Behaviour. So hypothesis no. 15 that Children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of Antisocial Behaviour proved significant.

To further explore significant differences among screened out children with symptoms of ADHD-I from grades 3rd, 4th, and 5th on Hostile Irritable Subscale of Antisocial Behaviour Tukey's Honestly Significant Difference (HSD) Post Hoc Test was performed.

Table 48

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Hostile Irritable Subscale of Antisocial Behaviour (N = 55)

I (ADHD-I)	J (ADHD-I)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
3rd Grade	4th Grade	-7.98	2.54	.008*	-14.11	-1.85

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

** $p < .01$

Table 48 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Hostile Irritable Subscale of Antisocial Behaviour. Findings indicated children of grades 3rd and 4th showed significant differences on Hostile Irritable behaviour. Children screened out with symptoms of ADHD-I from grade 4th were relatively more Hostile Irritable as compared to children of grade 3rd.

Table 49

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-I on Antisocial Aggressive Subscale of Antisocial Behaviour (N = 55)

Grades	*n*	*M*	*(SD)*	95% CI		*F*	*p*
				LL	UL		
3rd Grade	17	15.47	(3.79)	13.52	17.42	1.57	.21
4th Grade	23	17.65	(5.21)	15.40	19.91		
5th Grade	15	15.33	(4.51)	12.83	17.83		
Total	55	16.35	(4.67)	15.08	17.61		

Between groups $df = 2$; within groups $df = 52$; groups total $df = 54$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 49 indicated mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-I on Antisocial Aggressive Subscale of Antisocial Behaviour scale. Findings indicated relatively high mean scores ($M = 17.65$) of children screened out with symptoms of ADHD-I from

grade 4th as compared to grade 3rd and 5th on Antisocial Aggressive Subscale. However, findings of Table 49 showed nonsignificant grade wise differences among children screened out with symptoms of ADHD-I from grades 3rd, 4th, and 5th on Antisocial Aggressive Subscale of Antisocial Behaviour. So hypothesis no. 15 that Children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 50

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-I on Disruptive Demanding Subscale of Antisocial Behaviour (N = 55)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	17	21.00	(3.02)	19.45	22.55	.60	.55
4th Grade	23	22.13	(3.91)	20.44	23.82		
5th Grade	15	22.07	(3.15)	20.32	23.81		
Total	55	21.76	(3.43)	20.84	22.69		

Between groups *df* = 2; within groups *df* = 52; groups total *df* = 54

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 50 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-I on Disruptive Demanding Subscale of Antisocial Behaviour scale. Findings indicated relatively high mean scores (*M* = 22.07) for children screened out with symptoms of ADHD-I from grade 4th as compared to children of grade 3rd and 5th on Disruptive Demanding Subscale. However, findings of Table 50 showed nonsignificant grade wise differences among children screened out with symptoms of ADHD-I from grades 3rd, 4th, and 5th on Disruptive Demanding Subscale of Antisocial Behaviour. So hypothesis no. 15 that Children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 51

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-I on Antisocial Behaviour subscale of SSBS (N = 55)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	17	56.88	(10.52)	51.47	62.30	3.50	.03
4th Grade	23	68.17	(15.37)	61.52	74.82		
5th Grade	15	61.07	(13.91)	53.36	68.77		
Total	55	62.75	(14.26)	58.89	66.60		

Between groups $df = 2$; within groups $df = 52$; groups total $df = 54$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

* $p < .05$

Findings of Table 51 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-I on Antisocial Behaviour subscale of SSBS. Findings indicated high mean (M = 68.17) for children screened out with symptoms of ADHD-I from grade 4th as compared to grade 3rd and 5th on Antisocial Behaviour subscale of SSBS. It indicated ADHD-I children of grade 4th exhibited relatively more Antisocial Behaviour as compared to children of 3rd and 5th grades. Earlier, children of grade 4th also showed higher mean on Hostile Irritable, Antisocial Aggressive, and Disruptive Demanding subscale of Antisocial Behaviour subscale. Findings of Table 51 showed significant grade wise differences among children screened out with symptoms of ADHD-I from grades 3rd, 4th, and 5th on Antisocial Behaviour Subscale of SSBS. So hypothesis no. 15 that Children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total of Antisocial Behaviour proved significant.

To further explore significant differences among screened out children with symptoms of ADHD-I from grades 3rd, 4th, and 5th on Antisocial Behaviour Subscale of SSBS Tukey's Honestly Significant Difference (HSD) Post Hoc Test was performed.

Table 52

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Antisocial Behaviour of SSBS (N = 55)

					95% CI	
I (ADHD-I)	J (ADHD-I)	Mean Diff (I - J)	St Error	*p*	LL	UL
3rd Grade	4th Grade	-11.29*	4.36	.03	-21.82	-.76

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

* $p < .05$

Table 52 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Antisocial Behaviour Subscale of SSBS. Findings indicated children of grades 3rd and 4th showed significant differences on Antisocial Behaviour. findings indicated that children screened out with symptoms of ADHD-I from grade 4th showed relatively high Antisocial Behaviour as compared to children of grade 3rd.

Table 53

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-HI on Interpersonal Skills Subscale of Social Competence (N = 26)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	5	52.40	(10.28)	39.63	65.17	3.08	.06
4th Grade	14	45.71	(12.08)	38.74	52.69		
5th Grade	7	33.86	(17.47)	17.69	50.02		
Total	26	43.81	(14.51)	37.94	49.67		

Between groups $df = 2$; within groups $df = 23$; groups total $df = 25$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 53 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-HI on Interpersonal Skills subscale of Social Competence. Findings indicated high mean (M = 52.40) for children screened out with symptoms of ADHD-HI from 3rd grade as compared to

children of grade 4th and 5th on Interpersonal Skills subscale of Social Competence. However, findings of Table 53 showed nonsignificant grade wise differences among children that were screened out with symptoms of ADHD-HI on Interpersonal Skills subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 54

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-HI on Self Management Skills Subscale of Social Competence (N = 26)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	5	32.60	(2.60)	29.36	35.84	4.55	.02
4th Grade	14	33.71	(3.64)	31.61	35.82		
5th Grade	7	27.29	(7.04)	20.77	33.80		
Total	26	31.77	(5.27)	29.64	33.90		

Between groups *df* = 2; within groups *df* = 23; groups total *df* = 25

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 54 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-HI on Self Management Skills subscale of Social Competence. Findings indicated high mean (*M* = 33.71) for children screened out with symptoms of ADHD-HI from grade 4th as compared to children of grade 3rd and 5th on Self Management Skills subscale of Social Competence. It indicated ADHD-HI children of grade 4th showed relatively high Self Management Skills as compared to children of 3rd and 5th grades.

Findings of Table 54 showed significant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-HI on Self Management Skills subscale of Social Competence. So hypothesis no. 14 that

children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved significant for self Management subscale.

To further explore significant differences among screened out children with symptoms of ADHD-HI from grades 3rd, 4th, and 5th on Self Management Skills subscale of Social Competence Tukey's Honestly Significant Difference (HSD) Post Hoc Test was performed.

Table 55

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Self Management Skills Subscale of SSBS (N = 26)

					95% CI	
		Mean Diff			LL	UL
I (ADHD-I)	J (ADHD-I)	(I - J)	St Error	*p*		
4th Grade	5th Grade	6.42	2.15	.01*	1.04	11.82

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

** $p < .01$

Table 55 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Self Management Skills subscale of Social Competence. Findings indicated children of grades 3rd and 4th showed significant differences on Self Management Skills subscale. Children screened out with symptoms of ADHD-HI from grade 4th showed relatively high Self Management Skills as compared to children of grade 5th.

Table 56

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-HI on Academic Skills Subscale of Social Competence (N = 26)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	5	29.60	(2.30)	26.74	32.46	1.35	.27
4th Grade	14	28.07	(7.86)	23.53	32.61		
5th Grade	7	23.71	(6.18)	18.00	29.43		
Total	26	27.19	(6.87)	24.42	29.97		

Between groups *df* = 2; within groups *df* = 23; groups total *df* = 25

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 56 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-HI on Academic Skills subscale of Social Competence. Findings indicated high mean (*M* = 29.60) for children screened out with symptoms of ADHD-HI from 3rd grade as compared to children of grade 4th and 5th on Academic Skills subscale of Social Competence. It indicated ADHD-HI children of 3rd grade showed relatively high Academic Skills as compared to children of 4th and 5th grades.

Findings of Table 56 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-HI on Academic Skills subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant for Academic Skills subscale.

Table 57

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-HI on Social Competence Subscale of SSBS (N = 26)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	5	114.60	(11.58)	100.21	128.99	3.26	.056
4th Grade	14	107.50	(21.00)	95.37	119.63		
5th Grade	7	84.86	(29.45)	57.62	112.10		
Total	26	102.77	(24.28)	92.96	112.58		

Between groups *df* = 2; within groups *df* = 23; groups total *df* = 25

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 57 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-HI on Social Competence Subscale of SSBS. Findings indicated high mean (*M* = 114.60) for children screened out with symptoms of ADHD-HI from 3rd grade as compared to children of grade 4th and 5th on Academic Skills subscale of Social Competence. However, findings of Table 57 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-HI on Social Competence subscale of SSBS. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 58

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-HI on Hostile Irritable Subscale of Antisocial Behaviour (N = 26)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	5	35.40	(12.74)	19.58	51.22	.48	.62
4th Grade	14	30.64	(9.03)	25.43	35.86		
5th Grade	7	33.29	(9.12)	24.85	41.72		
Total	26	32.27	(9.59)	28.39	36.15		

Between groups $df = 2$; within groups $df = 23$; groups total $df = 25$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 58 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-HI on Hostile Irritable Subscale of Antisocial Behaviour. Findings indicated high mean (M = 35.40) for children screened out with symptoms of ADHD-HI from 3rd grade as compared to children of grade 4th and 5th on Hostile Irritable Subscale of Antisocial Behaviour. However, findings of Table 58 showed nonsignificant grade wise differences among children screened out with symptoms of ADHD-HI on Hostile Irritable Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour scale proved nonsignificant.

Table 59

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-HI on Antisocial Aggressive Subscale of Antisocial Behaviour (N = 26)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	5	19.60	(12.05)	4.63	34.57	1.64	.21
4th Grade	14	13.93	(3.97)	11.64	16.22		
5th Grade	7	18.57	(8.14)	11.04	26.10		
Total	26	16.27	(7.35)	13.30	19.24		

Between groups $df = 2$; within groups $df = 23$; groups total $df = 25$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 59 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-HI on Antisocial Aggressive Subscale of Antisocial Behaviour. Findings indicated high mean (M = 19.60) for children screened out with symptoms of ADHD-HI from 3rd grade as compared to children of grade 4th and 5th on Antisocial Aggressive Subscale of Antisocial Behaviour. However, findings of Table 59 showed nonsignificant grade wise differences among children screened out with symptoms of ADHD-HI on Hostile Irritable Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour scale proved nonsignificant.

Table 60

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-HI on Disruptive Demanding Subscale of Antisocial Behaviour (N = 26)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	5	18.80	(5.58)	11.86	25.74	.93	.40
4th Grade	14	18.93	(3.24)	17.05	20.80		
5th Grade	7	21.43	(4.86)	16.93	25.92		
Total	26	19.58	(4.17)	17.89	21.26		

Between groups *df* = 2; within groups *df* = 23; groups total *df* = 25

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 60 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-HI on Disruptive Demanding subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 21.43) for children screened out with symptoms of ADHD-HI from grade 5th as compared to children of grade 3rd and 4th on Disruptive Demanding subscale of Antisocial Behaviour. However, Findings of Table 60 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-HI on Disruptive Demanding Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour scale proved nonsignificant.

Table 61

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-HI on Antisocial Behaviour of SSBS (N = 26)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	5	73.80	(29.80)	36.80	110.80	.87	.43
4th Grade	14	63.50	(13.82)	55.52	71.48		
5th Grade	7	73.29	(20.27)	54.53	92.04		
Total	26	68.12	(19.13)	60.39	75.84		

Between groups *df* = 2; within groups *df* = 23; groups total *df* = 25

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 61 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-HI on Disruptive Demanding subscale of Antisocial Behaviour. Findings indicated high mean for children screened out with symptoms of ADHD-HI from 3rd grade (*M* = 73.80) and for children of grade 5th (*M* = 73.29) as compared to children of 4th on Antisocial Behaviour subscale of SSBS. However, findings of Table 61 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-HI on Antisocial Behaviour Subscale of SSBS. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour scale proved nonsignificant.

Table 62

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-C on Interpersonal Skills Subscale of Social Competence (N = 13)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	37.00	(20.88)	-14.87	88.87	.76	.49
4th Grade	4	38.75	(14.36)	15.90	61.60		
5th Grade	6	28.67	(8.80)	19.43	37.90		
Total	13	33.69	(13.43)	25.58	41.81		

Between groups *df* = 2; within groups *df* = 10; groups total *df* = 12

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 62 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-C on Interpersonal Skills subscale of Social Competence. Findings indicated high mean (*M* = 38.75) for children screened out with symptoms of ADHD-C from grade 4th as compared to children of grade 3rd and 5th on Interpersonal Skills subscale of Social Competence. Findings of Table 62 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-C on Interpersonal Skills Subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 63

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-C on Self Management Skills Subscale of Social Competence (N = 13)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	29.33	(9.71)	5.21	53.46	.23	.79
4th Grade	4	28.25	(11.52)	9.90	46.60		
5th Grade	6	25.33	(6.80)	18.20	32.47		
Total	13	27.15	(8.45)	22.04	32.26		

Between groups *df* = 2; within groups *df* = 10; groups total *df* = 12

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 63 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-C on Self Management Skills subscale of Social Competence. Findings indicated high mean (*M* = 29.33) for children screened out with symptoms of ADHD-C from 3rd grade as compared to children of grades 4th and 5th on Self Management Skills subscale of Social Competence. However, findings of Table 63 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-C on Self Management Skills Subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 64

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-C on Academic Skills Subscale of Social Competence (N = 13)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	22.67	(9.07)	.13	45.21	.58	.57
4th Grade	4	22.00	(7.87)	9.47	34.53		
5th Grade	6	18.17	(5.03)	12.88	23.45		
Total	13	20.38	(6.66)	16.36	24.41		

Between groups *df* = 2; within groups *df* = 10; groups total *df* = 12

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 64 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-C on Academic Skills subscale of Social Competence. Findings indicated high mean (*M* = 22.67) for children screened out with symptoms of ADHD-C from 3rd grade as compared to children of grades 4th and 5th on Academic Skills subscale of Social Competence. However, findings of Table 64 showed nonsignificant grade wise differences among children screened out with symptoms of ADHD-C on Academic Skills Subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 65

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-C on Social Competence Subscale of SSBS (N = 13)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	89.00	(39.50)	-9.15	187.15	.58	.57
4th Grade	4	89.00	(33.32)	35.97	142.03		
5th Grade	6	72.17	(16.75)	54.59	89.74		
Total	13	81.23	(27.03)	64.89	97.57		

Between groups $df = 2$; within groups $df = 10$; groups total $df = 12$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 65 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-C on Social Competence Subscale of SSBS. Findings indicated high mean (M = 89.00) for children screened out with symptoms of ADHD-C from 3rd and 4th grade as compared to children of 5th on Social Competence Subscale of SSBS. Findings of Table 65 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-C on Social Competence Subscale of SSBS. It indicated ADHD-C screened out children belonging to 3rd, 4th, and 5th grades experience similar Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 66

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-C on Hostile Irritable Subscale of Antisocial Behaviour (N = 13)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	29.33	(6.35)	13.56	45.11	.27	.76
4th Grade	4	33.00	(8.36)	19.69	46.31		
5th Grade	6	31.50	(5.12)	26.12	36.88		
Total	13	31.46	(6.09)	27.78	35.14		

Between groups *df* = 2; within groups *df* = 10; groups total *df* = 12

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 66 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-C on Hostile Irritable Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 33.00) for children screened out with symptoms of ADHD-C from 4th grade as compared to children of 3rd and 5th grades on Hostile Irritable Subscale of Antisocial Behaviour. However, findings of Table 66 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-C on Hostile Irritable Subscale of Antisocial Behaviour. It indicated ADHD-C screened out children showed similar hostile irritable behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 67

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-C on Antisocial Aggressive Subscale of Antisocial Behaviour (N = 13)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	20.67	(2.88)	13.50	27.84	.69	.52
4th Grade	4	23.75	(11.58)	5.31	42.19		
5th Grade	6	18.50	(3.39)	14.94	22.06		
Total	13	20.62	(6.72)	16.55	24.68		

Between groups *df* = 2; within groups *df* = 10; groups total *df* = 12

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 67 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-C on Antisocial Aggressive Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 23.75) for children screened out with symptoms of ADHD-C from 4th grade as compared to children of 3rd and 5th grades on Antisocial Aggressive Subscale of Antisocial Behaviour. Findings of Table 67 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-C on Antisocial Aggressive Subscale of Antisocial Behaviour. It indicated ADHD-C screened out children belonging to grade 3rd, 4th, and 5th experience similar antisocial aggressive behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 68

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-C on Disruptive Demanding Subscale of Antisocial Behaviour (N = 13)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	27.00	(5.56)	13.17	40.83	.42	.66
4th Grade	4	26.00	(14.58)	2.80	49.20		
5th Grade	6	22.00	(3.68)	18.13	25.87		
Total	13	24.38	(8.33)	19.35	29.42		

Between groups *df* = 2; within groups *df* = 10; groups total *df* = 12

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 68 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-C on Disruptive Demanding Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 27.00) for children screened out with symptoms of ADHD-C from 3rd grade as compared to children of 4th and 5th grades on Disruptive Demanding Subscale of Antisocial Behaviour. Findings of Table 68 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-C on Disruptive Demanding Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 69

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ADHD-C on Antisocial Behaviour subscale of SSBS (N = 13)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	77.00	(10.58)	50.71	103.29	.41	.67
4th Grade	4	82.75	(30.34)	34.46	131.04		
5th Grade	6	72.00	(9.03)	62.52	81.48		
Total	13	76.46	(17.49)	65.89	87.03		

Between groups *df* = 2; within groups *df* = 10; groups total *df* = 12

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 69 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ADHD-C on Antisocial Behaviour subscale of SSBS. Findings indicated high mean (*M* = 82.75) for children screened out with symptoms of ADHD-C from 4th grade as compared to children of 3rd and 5th grades on Antisocial Behaviour subscale of SSBS. Findings of Table 69 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ADHD-C on Antisocial Behaviour Subscale of SSBS. It indicated ADHD-C screened out children belonging to grade 3rd, 4th, and 5th experience similar antisocial behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 70

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ODD on Interpersonal Skills Subscale of Social Competence (N = 11)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	40.00	(14.17)	4.78	75.22	.71	.51
4th Grade	4	38.25	(13.88)	16.15	60.35		
5th Grade	4	48.00	(8.28)	34.81	61.19		
Total	11	42.27	(11.82)	34.33	50.22		

Between groups $df = 2$; within groups $df = 8$; groups total $df = 10$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 70 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ODD on Interpersonal Skills subscale of Social Competence. Findings indicated high mean (M = 48.00) for children screened out with symptoms of ODD from grade 5th as compared to children of grade 3rd and 4th on Interpersonal Skills subscale of Social Competence. It indicated ODD children of grade 5th showed relatively high Interpersonal Skills as compared to children of 3rd and 4th grades. Findings of Table 70 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ODD on Interpersonal Skills Subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 71

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ODD on Self Management Skills Subscale of Social Competence (N = 11)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	33.67	(4.04)	23.63	43.71	.31	.73
4th Grade	4	32.50	(5.74)	23.36	41.64		
5th Grade	4	35.50	(5.80)	26.27	44.73		
Total	11	33.91	(5.00)	30.54	37.27		

Between groups *df* = 2; within groups *df* = 8; groups total *df* = 10

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 71 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ODD on Self Management Skills subscale of Social Competence. Findings indicated high mean (*M* = 35.50) for children screened out with symptoms of ODD from grade 5th as compared to children of grade 3rd and 4th on Self Management Skills subscale of Social Competence. Findings of Table 71 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ODD on Self Management Skills Subscale of Social Competence. It indicated ODD screened out children belonging to grade 3rd, 4th, and 5th experience similar self management skills. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 72

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ODD on Academic Skills Subscale of Social Competence (N = 11)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	29.33	(3.78)	19.93	38.74	2.21	.17
4th Grade	4	23.00	(6.73)	12.29	33.71		
5th Grade	4	30.00	(3.83)	23.91	36.09		
Total	11	27.27	(5.69)	23.45	31.10		

Between groups $df = 2$; within groups $df = 8$; groups total $df = 10$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 72 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ODD on Academic Skills subscale of Social Competence. Findings indicated high mean (M = 30.00) for children screened out with symptoms of ODD from grade 5th as compared to children of grade 3rd and 4th on Academic Skills subscale of Social Competence. Findings of Table 72 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ODD on Academic Skills Subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 73

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ODD on Social Competence Subscale of SSBS (N = 11)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	103.00	(19.97)	53.38	152.62	.86	.45
4th Grade	4	93.75	(25.10)	53.80	133.70		
5th Grade	4	113.50	(17.48)	85.68	141.32		
Total	11	103.45	(20.94)	89.38	117.53		

Between groups *df* = 2; within groups *df* = 8; groups total *df* = 10

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 73 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ODD on Social Competence subscale of SSBS. Findings indicated high mean (*M* = 113.50) for children screened out with symptoms of ODD from grade 5th as compared to children of grade 3rd and 4th on Social Competence subscale of SSBS. It indicated ODD children of grade 5th showed relatively high Social Competence as compared to children of 3rd and 4th grades. Findings of Table 73 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of ODD on Social Competence Subscale of SSBS. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 74

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ODD on Hostile Irritable Subscale of Antisocial Behaviour (N = 11)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	34.00	(14.73)	-2.59	70.59	.24	.78
4th Grade	4	29.75	(10.30)	13.35	46.15		
5th Grade	4	29.00	(2.16)	25.56	32.44		
Total	11	30.64	(9.02)	24.57	36.70		

Between groups *df* = 2; within groups *df* = 8; groups total *df* = 10

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 74 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ODD on Hostile Irritable subscale of Antisocial Behaviour scale. Findings indicated high mean (*M* = 34.00) for children screened out with symptoms of ODD from 3rd grade as compared to children of grade 4th and 5th on Hostile Irritable subscale of Antisocial Behaviour scale. However, findings of Table 74 showed nonsignificant grade wise differences among children screened out with symptoms of ODD on Hostile Irritable Subscale of Antisocial Behaviour. It indicated ODD screened out children belonging to grade 3rd, 4th, and 5th showed nonsignificant grade wise differences on Hostile Irritable Subscale. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 75

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ODD on Antisocial Aggressive Subscale of Antisocial Behaviour (N = 11)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	20.33	(7.09)	2.71	37.96	1.23	.34
4th Grade	4	16.25	(2.21)	12.72	19.78		
5th Grade	4	15.50	(3.10)	10.55	20.45		
Total	11	17.09	(4.34)	14.17	20.01		

Between groups *df* = 2; within groups *df* = 8; groups total *df* = 10

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 75 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ODD on Antisocial Aggressive subscale of Antisocial Behaviour scale. Findings indicated high mean (*M* = 20.33) for children screened out with symptoms of ODD from 3rd grade as compared to children of grade 4th and 5th on Antisocial Aggressive subscale. Findings of Table 75 showed nonsignificant grade wise differences among children screened out with symptoms of ODD on Antisocial Aggressive Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 76

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ODD on Disruptive Demanding Subscale of Antisocial Behaviour (N = 11)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	22.33	(8.73)	.63	44.04	.30	.74
4th Grade	4	19.25	(10.50)	2.54	35.96		
5th Grade	4	17.50	(3.87)	11.34	23.66		
Total	11	19.45	(7.54)	14.39	24.52		

Between groups *df* = 2; within groups *df* = 8; groups total *df* = 10

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 76 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ODD on Disruptive Demanding subscale of Antisocial Behaviour scale. Findings indicated high mean (*M* = 22.33) for children screened out with symptoms of ODD from 3rd grade as compared to children of grade 4th and 5th on Disruptive Demanding subscale. Findings of Table 76 indicated nonsignificant grade wise differences among children screened out with symptoms of ODD on Disruptive Demanding Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 77

Means, Standard Deviations, and F-value for Children Screened out with symptoms of ODD on Antisocial Behaviour of SSBS (N = 11)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	3	76.67	(30.55)	.78	152.56	.45	.65
4th Grade	4	65.25	(22.06)	30.14	100.36		
5th Grade	4	62.00	(6.78)	51.21	72.79		
Total	11	67.18	(19.64)	53.99	80.38		

Between groups *df* = 2; within groups *df* = 8; groups total *df* = 10

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 77 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of ODD on Antisocial Behaviour subscale of SSBS. Findings indicated high mean (*M* = 76.67) for children screened out with symptoms of ODD from 3rd grade as compared to children of grade 4th and 5th on Antisocial Behaviour subscale. Findings of Table 76 showed nonsignificant grade wise differences among children screened out with symptoms of ODD on Antisocial Behaviour Subscale of SSBS. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 78

Means, Standard Deviations, and F-value for Children Screened out with symptoms of CD on Interpersonal Skills Subscale of Social Competence (N = 58)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	19	33.00	(8.55)	28.88	37.12	7.52	.001
4th Grade	26	37.85	(8.17)	34.55	41.15		
5th Grade	13	45.00	(9.46)	39.28	50.72		
Total	58	37.86	(9.52)	35.36	40.37		

Between groups *df* = 2; within groups *df* = 55; groups total *df* = 57

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 78 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of CD on Interpersonal Skills subscale of Social Competence. Findings indicated high mean (*M* = 45.00) for children screened out with symptoms of CD from grade 5th as compared to children of grade 3rd and 4th on Interpersonal Skills subscale of Social Competence. It indicated CD children of grade 5th showed relatively high Interpersonal Skills as compared to children of 3rd and 4th grades. Findings of Table 78 showed significant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of CD on Interpersonal Skills Subscale of Social Competence. It indicated CD screened out children belonging to grade 3rd, 4th, and 5th showed significant grade wise differences on Interpersonal Skills Subscale. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved significant for Interpersonal Skills Subscale.

To further explore significant differences among screened out children with symptoms of CD from grades 3rd, 4th, and 5th on Interpersonal Skills Subscale of Social Competence Tukey's Honestly Significant Difference (HSD) Post Hoc Test was performed.

Table 79

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Interpersonal Skills Subscale of Social Competence (N = 58)

I (ADHD-I)	J (ADHD-I)	Mean Diff (I - J)	St Error	*p*	95% CI LL	95% CI UL
5th Grade	3rd Grade	12.00*	3.09	.001	4.55	19.45
	4th Grade	7.15*	2.91	.04	.12	14.18

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

* $p < .05$

Table 79 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Interpersonal Skills Subscale of Social Competence. Findings indicated that grade 5th screened out children with symptoms of CD showed significant differences from children of 3rd and 4th grades on Interpersonal Skills Subscale. Children screened out with symptoms of CD from grade 5th showed relatively high Interpersonal Skills as compared to children of grade 3rd and 4th.

Table 80

Means, Standard Deviations, and F-value for Children Screened out with symptoms of CD on Self Management Skills Subscale of Social Competence (N = 58)

Grades	*n*	*M*	*(SD)*	95% CI LL	95% CI UL	*F*	*p*
3rd Grade	19	25.47	(6.38)	22.40	28.55	3.79	.02
4th Grade	26	26.58	(6.58)	23.92	29.23		
5th Grade	13	31.77	(7.21)	27.41	36.13		
Total	58	27.38	(6.97)	25.54	29.21		

Between groups $df = 2$; within groups $df = 55$; groups total $df = 57$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

* $p < .05$

Findings of Table 80 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of CD on Self Management Skills subscale of Social Competence. Findings indicated high mean (M = 31.77) for

children screened out with symptoms of CD from grade 5th as compared to children of grade 3rd and 4th on Self Management Skills subscale of Social Competence. It indicated CD children of grade 5th showed relatively high Self Management Skills as compared to children of 3rd and 4th grades. Findings of Table 80 showed significant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of CD on Self Management Skills Subscale of Social Competence. It indicated CD screened out children belonging to grade 5th showed significant grade wise differences on Self Management Skills Subscale as compared to grade 3rd and 4th.. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved significant for Self Management Skills Subscale.

To further explore significant differences among screened out children with symptoms of CD from grades 3rd, 4th, and 5th on Self Management Skills Subscale of Social Competence Tukey's Honestly Significant Difference (HSD) Post Hoc Test was performed.

Table 81

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Self Management Skills Subscale of Social Competence (N = 58)

					95% CI	
I (ADHD-I)	J (ADHD-I)	Mean Diff (I - J)	St Error	*p*	LL	UL
3rd Grade	5th Grade	-6.29*	2.39	.030	-12.07	-.52

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

* $p < .05$

Table 81 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Self Management Skills Subscale of Social Competence. Findings indicated that 3rd grade screened out children with symptoms of CD showed significant differences from children of grade 5th on Self Management Skills Subscale. Children screened out with symptoms of CD from grade 5th showed relatively high Self Management Skills as compared to children of grade 3rd.

Table 82

Means, Standard Deviations, and F-value for Children Screened out with symptoms of CD on Academic Skills Subscale of Social Competence (N = 58)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	19	20.63	(5.69)	17.89	23.38	4.29	.01
4th Grade	26	21.88	(5.53)	19.65	24.12		
5th Grade	13	26.85	(7.66)	22.21	31.48		
Total	58	22.59	(6.45)	20.89	24.28		

Between groups $df = 2$; within groups $df = 55$; groups total $df = 57$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

**$p < .01$

Findings of Table 82 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of CD on Academic Skills subscale of Social Competence. Findings indicated high mean (M = 26.85) for children screened out with symptoms of CD from grade 5th as compared to children of grade 3rd and 4th on Academic Skills subscale of Social Competence. It indicated CD children of grade 5th showed relatively high Academic Skills as compared to children of 3rd and 4th grades. Findings of Table 82 showed significant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of CD on Academic Skills Subscale of Social Competence. It indicated CD screened out children belonging to grade 3rd, 4th, and 5th showed significant grade wise differences on Academic Skills Subscale. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved significant for Academic Skills Subscale.

To further explore significant differences among screened out children with symptoms of CD from grades 3rd, 4th, and 5th on Academic Skills Subscale of Social Competence Tukey's Honestly Significant Difference (HSD) Post Hoc Test was performed.

Table 83

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Academic Skills subscale of Social Competence (N = 58)

					95% CI	
I (ADHD-I)	J (ADHD-I)	Mean Diff (I - J)	St Error	*p*	LL	UL
5th Grade	3rd Grade	6.21*	2.20	.01	.91	11.52

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

**$p < .01$

Table 83 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Academic Skills subscale of Social Competence. Findings indicated that grade 5th screened out children with symptoms of CD showed significant differences from children of grade 3rd on Academic Skills subscale. Children screened out with symptoms of CD from grade 5th showed relatively high Academic Skills as compared to children of grade 3rd.

Table 84

Means, Standard Deviations, and F-value for Children Screened out with symptoms of CD on Social Competence Subscale of SSBS (N = 58)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	19	79.11	(18.41)	70.23	87.98	6.86	.002
4th Grade	26	86.31	(17.66)	79.17	93.44		
5th Grade	13	103.62	(20.64)	91.14	116.09		
Total	58	87.83	(20.41)	82.46	93.20		

Between groups $df = 2$; within groups $df = 55$; groups total $df = 57$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

** $p < .01$

Findings of Table 84 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of CD on Social Competence

subscale of SSBS. Findings indicated high mean (M = 103.62) for children screened out with symptoms of CD from grade 5th as compared to children of grade 3rd and 4th on Social Competence subscale of SSBS. It indicated CD children of grade 5th showed relatively high Social Competence as compared to children of 3rd and 4th grades. Findings of Table 84 showed significant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of CD on Social Competence Subscale of SSBS. It indicated CD screened out children belonging to grade 3rd, 4th, and 5th showed significant grade wise differences on Social Competence Subscale. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved significant.

To further explore significant differences among screened out children with symptoms of CD from grades 3rd, 4th, and 5th on Social Competence Subscale of SSBS Tukey's Honestly Significant Difference (HSD) Post Hoc Test was performed.

Table 85

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Social Competence Subscale of SSBS (N = 58)

					95% CI	
I (ADHD-I)	J (ADHD-I)	Mean Diff (I - J)	St Error	*p*	LL	UL
5th Grade	3rd Grade	24.51*	6.69	.002	8.39	40.63
	4th Grade	17.30*	6.31	.02	2.09	32.52

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

* $p < .05$

Table 85 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Social Competence Subscale of SSBS. Findings indicated that grade 5th screened out children with symptoms of CD showed significant differences from children of grade 3rd and 4th on Social Competence Subscale of SSBS. Children

screened out with symptoms of CD from grade 5th showed relatively high Social Competence as compared to children of grade 3rd and 4th.

Table 86

Means, Standard Deviations, and F-value for Children Screened out with symptoms of CD on Hostile Irritable Subscale of Antisocial Behaviour (N = 58)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	19	34.58	(6.24)	31.57	37.59	1.48	.23
4th Grade	26	31.23	(6.91)	28.44	34.02		
5th Grade	13	35.00	(10.91)	28.40	41.60		
Total	58	33.17	(7.84)	31.11	35.23		

Between groups *df* = 2; within groups *df* = 55; groups total *df* = 57

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 86 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of CD on Hostile Irritable Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 35.00) for children screened out with symptoms of CD from grade 5th as compared to children of grade 3rd and 4th on Hostile Irritable Subscale of Antisocial Behaviour. Findings of Table 86 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of CD on Hostile Irritable Subscale of Antisocial Behaviour. It indicated CD screened out children belonging to grade 3rd, 4th, and 5th showed similar hostile irritable behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 87

Means, Standard Deviations, and F-value for Children Screened out with symptoms of CD on Antisocial Aggressive Subscale of Antisocial Behaviour (N = 58)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	19	25.21	(5.51)	22.55	27.87	2.43	.09
4th Grade	26	20.65	(7.14)	17.77	23.54		
5th Grade	13	22.92	(7.99)	18.09	27.75		
Total	58	22.66	(7.03)	20.81	24.50		

Between groups *df* = 2; within groups *df* = 55; groups total *df* = 57

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 87 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of CD on Antisocial Aggressive Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 25.21) for children screened out with symptoms of CD from grade 5th as compared to children of grade 3rd and 4th on Antisocial Aggressive Subscale of Antisocial Behaviour. Findings of Table 87 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of CD on Antisocial Aggressive Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 88

Means, Standard Deviations, and F-value for Children Screened out with symptoms of CD on Disruptive Demanding Subscale of Antisocial Behaviour (N = 58)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	19	24.16	(4.28)	22.09	26.22	2.09	.13
4th Grade	26	21.00	(5.60)	18.74	23.26		
5th Grade	13	21.92	(5.34)	18.69	25.15		
Total	58	22.24	(5.24)	20.86	23.62		

Between groups $df = 2$; within groups $df = 55$; groups total $df = 57$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 88 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of CD on Disruptive Demanding Subscale of Antisocial Behaviour. Findings indicated high mean (M = 24.16) for children screened out with symptoms of CD from 3rd grade as compared to children of grade 4th and 5th on Disruptive Demanding Subscale of Antisocial Behaviour. Findings of Table 88 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of CD on Disruptive Demanding Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 89

Means, Standard Deviations, and F-value for Children Screened out with symptoms of CD on Antisocial Behaviour subscale of SSBS (N = 58)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	19	83.95	(13.27)	77.55	90.35	2.67	.07
4th Grade	26	72.88	(15.59)	66.59	79.18		
5th Grade	13	79.85	(20.61)	67.39	92.30		
Total	58	78.07	(16.62)	73.70	82.44		

Between groups *df* = 2; within groups *df* = 55; groups total *df* = 57

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 89 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with symptoms of CD on Antisocial Behaviour subscale of SSBS. Findings indicated high mean (*M* = 83.95) for children screened out with symptoms of CD from 3rd grade as compared to children of grade 4th and 5th on Antisocial Behaviour subscale of SSBS. Findings of Table 88 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with symptoms of CD on Antisocial Behaviour Subscale of SSBS. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 90

Means, Standard Deviations, and F-value for Children Screened out with symptoms of Comorbidity on Interpersonal Skills Subscale of Social Competence (N = 72)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	16	40.38	(14.89)	32.44	48.31	.96	.38
4th Grade	35	34.89	(12.78)	30.49	39.28		
5th Grade	21	37.05	(12.47)	31.37	42.72		
Total	72	36.74	(13.17)	33.64	39.83		

Between groups *df* = 2; within groups *df* = 69; groups total *df* = 71

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 90 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with comorbid symptoms on Interpersonal Skills Subscale of Social Competence. Findings indicated high mean (*M* = 40.38) for children screened out with comorbid symptoms from 3rd grade as compared to children of grade 4th and 5th on Interpersonal Skills Subscale of Social Competence. Findings of Table 90 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with Comorbid symptoms on Interpersonal Skills Subscale of Social Competence. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 91

Means, Standard Deviations, and F-value for Children Screened out with symptoms of Comorbidity on Self Management Skills Subscale of Social Competence (N = 72)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	16	30.00	(6.33)	26.62	33.38	1.45	.24
4th Grade	35	26.86	(6.19)	24.73	28.99		
5th Grade	21	27.00	(6.76)	23.92	30.08		
Total	72	27.60	(6.43)	26.08	29.11		

Between groups *df* = 2; within groups *df* = 69; groups total *df* = 71

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 91 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with comorbid symptoms on Self Management Skills Subscale of Social Competence. Findings indicated high mean (*M* = 30.00) for children screened out with comorbid symptoms from 3rd grade as compared to children of grade 4th and 5th on Self Management Subscale of Social Competence. Findings of Table 91 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with Comorbid symptoms on Self Management Skills Subscale of Social Competence. It indicated screened out children with Comorbid symptoms belonging to 3rd, 4th, and 5th grades showed similar self management skills. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 92

Means, Standard Deviations, and F-value for Children Screened out with symptoms of Comorbidity on Academic Skills Subscale of Social Competence (N = 72)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	16	20.06	(6.83)	16.42	23.71	.21	.80
4th Grade	35	20.34	(5.87)	18.33	22.36		
5th Grade	21	21.33	(7.14)	18.08	24.59		
Total	72	20.57	(6.40)	19.06	22.07		

Between groups *df* = 2; within groups *df* = 69; groups total *df* = 71

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 92 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with comorbid symptoms on Academic Skills Subscale of Social Competence. Findings indicated high mean (*M* = 21.33) for children screened out with comorbid symptoms from grade 5th as compared to children of grade 3rd and 4th on Academic Skills subscale of Social Competence. Findings of Table 92 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with Comorbid symptoms on Academic Skills Subscale of Social Competence. It indicated screened out children with Comorbid symptoms belonging to 3rd, 4th, and 5th grades showed relatively similar Academic Skills. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 93

Means, Standard Deviations, and F-value for Children Screened out with symptoms of Comorbidity on Social Competence Subscale of SSBS (N = 72)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	16	90.44	(25.35)	76.93	103.95	.71	.49
4th Grade	35	82.09	(21.83)	74.59	89.59		
5th Grade	21	85.38	(24.18)	74.37	96.39		
Total	72	84.90	(23.23)	79.44	90.36		

Between groups *df* = 2; within groups *df* = 69; groups total *df* = 71

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 93 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with comorbid symptoms on Social Competence Subscale of SSBS. Findings indicated high mean (*M* = 90.44) for children screened out with comorbid symptoms from 3rd grade as compared to children of grade 4th and 5th on Social Competence Subscale of SSBS. Findings of Table 93 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with Comorbid symptoms on Social Competence Subscale of SSBS. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Social Competence proved nonsignificant.

Table 94

Means, Standard Deviations, and F-value for Children Screened out with symptoms of Comorbidity on Hostile Irritable Subscale of Antisocial Behaviour (N = 72)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	16	37.63	(10.87)	31.83	43.42	.67	.51
4th Grade	35	38.34	(8.39)	35.46	41.23		
5th Grade	21	35.33	(10.04)	30.76	39.90		
Total	72	37.31	(9.42)	35.09	39.52		

Between groups *df* = 2; within groups *df* = 69; groups total *df* = 71

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 94 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with comorbid symptoms on Hostile Irritable Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 38.34) for children screened out with comorbid symptoms from 4th grade as compared to children of grade 3rd and 5th on Hostile Irritable Subscale. However, findings of Table 94 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with Comorbid symptoms on Hostile Irritable Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 95

Means, Standard Deviations, and F-value for Children Screened out with symptoms of Comorbidity on Antisocial Aggressive Subscale of Antisocial Behaviour (N = 72)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	16	25.19	(6.63)	21.65	28.72	1.74	.18
4th Grade	35	26.26	(7.50)	23.68	28.84		
5th Grade	21	22.48	(7.65)	18.99	25.96		
Total	72	24.92	(7.44)	23.17	26.67		

Between groups *df* = 2; within groups *df* = 69; groups total *df* = 71

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 95 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with comorbid symptoms on Antisocial Aggressive Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 26.26) for children screened out with comorbid symptoms from 4th grade as compared to children of grade 3rd and 5th on Antisocial Aggressive Subscale. Findings of Table 95 indicated nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with Comorbid symptoms on Antisocial Aggressive Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 96

Means, Standard Deviations, and F-value for Children Screened out with symptoms of Comorbidity on Disruptive Demanding Subscale of Antisocial Behaviour (N = 72)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	16	25.63	(5.60)	22.64	28.61	.36	.69
4th Grade	35	24.29	(5.28)	22.47	26.10		
5th Grade	21	25.00	(5.19)	22.63	27.37		
Total	72	24.79	(5.28)	23.55	26.03		

Between groups *df* = 2; within groups *df* = 69; groups total *df* = 71

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 96 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with comorbid symptoms on Disruptive Demanding Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 25.63) for children screened out with comorbid symptoms from 3rd grade as compared to children of grade 4th and 5th on Antisocial Aggressive Subscale. Findings of Table 96 showed nonsignificant grade wise differences among children of 3rd, 4th, and 5th grades that were screened out with Comorbid symptoms on Disruptive Demanding Subscale of Antisocial Behaviour. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 97

Means, Standard Deviations, and F-value for Children Screened out with symptoms of Comorbidity on Antisocial Behaviour subscale of SSBS (N = 72)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	16	88.44	(20.01)	77.77	99.10	.77	.46
4th Grade	35	88.89	(17.29)	82.95	94.83		
5th Grade	21	82.81	(19.21)	74.06	91.56		
Total	72	87.01	(18.41)	82.69	91.34		

Between groups $df = 2$; within groups $df = 69$; groups total $df = 71$

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 97 showed mean and standard deviations for screened out children of 3rd, 4th, and 5th grades with comorbid symptoms on Antisocial Behaviour subscale of SSBS. Findings indicated children screened out with comorbid symptoms from 4th grade ($M = 88.89$) and 3rd grade ($M = 88.44$) scored high mean on Antisocial Behaviour subscale of SSBS. Findings of Table 97 showed nonsignificant grade wise differences among children screened out with Comorbid symptoms on Antisocial Behaviour Subscale of SSBS. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant grade wise differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 98

Means, Standard Deviations, and F-value for Comparison group of Children on Interpersonal Skills Subscale of Social Competence (N = 571)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	186	45.65	(14.03)	43.61	47.68	1.92	.14
4th Grade	195	43.10	(11.48)	41.48	44.72		
5th Grade	190	44.77	(13.16)	42.89	46.66		
Total	571	44.49	(12.93)	43.42	45.55		

Between groups *df* = 2; within groups *df* = 568; groups total *df* = 570

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 98 showed mean and standard deviations for comparison group of children of 3rd, 4th, and 5th grades on Interpersonal Skills Subscale of Social Competence. Findings indicated high mean (*M* = 45.65) for children from 3rd grade as compared to children of grade 4th and 5th on Interpersonal Skills Subscale of Social Competence. Findings indicated that screened out children of comparison group belonging to 3rd, 4th, and 5th grades showed nonsignificant grade wise differences on Interpersonal Skills Subscale. So hypothesis no. 16 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Social Competence proved nonsignificant.

Table 99

Means, Standard Deviations, and F-value for Comparison group of Children on Self Management Skills Subscale of Social Competence (N = 571)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	186	34.45	(8.88)	33.16	35.73	.04	.95
4th Grade	195	34.49	(8.18)	33.33	35.64		
5th Grade	190	34.68	(8.30)	33.50	35.87		
Total	571	34.54	(8.44)	33.85	35.23		

Between groups *df* = 2; within groups *df* = 568; groups total *df* = 570

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 99 showed mean and standard deviations for comparison group of children of 3rd, 4th, and 5th grades on Self Management Skills Subscale of Social Competence. Findings indicated that children in comparison group showed almost similar mean scores on Self Management Skills Subscale of Social Competence. Findings indicated comparison group of screened out children showed nonsignificant grade wise differences on Self Management Skills Subscale. So hypothesis no. 16 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Social Competence proved nonsignificant.

Table 100

Means, Standard Deviations, and F-value for Comparison group of Children on Academic Skills Subscale of Social Competence (N = 571)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*P*
3rd Grade	186	28.53	(7.98)	27.37	29.68	.16	.85
4th Grade	195	28.10	(7.41)	27.05	29.14		
5th Grade	190	28.17	(8.11)	27.01	29.33		
Total	571	28.26	(7.82)	27.62	28.90		

Between groups *df* = 2; within groups *df* = 568; groups total *df* = 570

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 100 showed mean and standard deviations for comparison group of children of 3rd, 4th, and 5th grades on Academic Skills Subscale of Social Competence. Findings indicated that children in comparison group showed almost similar mean scores on Academic Skills Subscale of Social Competence. So hypothesis no. 16 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Social Competence proved nonsignificant.

Table 101

Means, Standard Deviations, and F-value for Comparison group of Children on Social Competence Subscale of SSBS (N = 571)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	186	108.62	(27.56)	104.63	112.61	.61	.53
4th Grade	195	105.68	(24.19)	102.27	109.10		
5th Grade	190	107.63	(27.05)	103.75	111.50		
Total	571	107.29	(26.26)	105.13	109.44		

Between groups *df* = 2; within groups *df* = 568; groups total *df* = 570

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 101 showed mean and standard deviations for comparison group of children of 3rd, 4th, and 5th grades on Social Competence Subscale of SSBS. Findings indicated high mean (*M* = 108.62) for children from 3rd grade as compared to children of grade 4th and 5th on Social Competence Subscale of SSBS. Findings indicated comparison group of screened out children showed nonsignificant grade wise differences on Social Competence. So hypothesis no. 16 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Social Competence proved nonsignificant.

Table 102

Means, Standard Deviations, and F-value for Comparison group of Children on Hostile Irritable Subscale of Antisocial Behaviour (N = 571)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	186	24.19	(6.88)	23.20	25.19	1.81	.16
4th Grade	195	25.12	(8.41)	23.93	26.31		
5th Grade	190	23.68	(7.06)	22.67	24.70		
Total	571	24.34	(7.51)	23.72	24.96		

Between groups *df* = 2; within groups *df* = 568; groups total *df* = 570

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 102 showed mean and standard deviations for comparison group of children of 3rd, 4th, and 5th grades on Hostile Irritable Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 25.12) for children of grade 4th as compared to children of grade 3rd and 5th on Hostile Irritable Subscale. however, findings of Table 102 showed nonsignificant grade wise differences among comparison group of children of 3rd, 4th, and 5th grades on Hostile Irritable Subscale of Antisocial Behaviour. So hypothesis no. 17 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 103

Means, Standard Deviations, and F-value for Comparison group of Children on Antisocial Aggressive Subscale of Antisocial Behaviour (N = 571)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	186	13.06	(4.30)	12.44	13.69	3.31	.07
4th Grade	195	14.19	(6.23)	13.31	15.08		
5th Grade	190	13.03	(4.30)	12.42	13.65		
Total	571	13.44	(5.06)	13.02	13.86		

Between groups *df* = 2; within groups *df* = 568; groups total *df* = 570

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 103 showed mean and standard deviations for comparison group of children of 3rd, 4th, and 5th grades on Antisocial Aggressive Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 14.19) for children of grade 4th as compared to children of grade 3rd and 5th on Antisocial Aggressive Subscale. It indicated that comparison group of children of grade 4th showed relatively high Antisocial Aggressive behaviour as compared to children of 3rd and 5th grades. However, hypothesis no. 17 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Antisocial Behaviour proved nonsignificant.

Table 104

Means, Standard Deviations, and F-value for Comparison group of Children on Disruptive Demanding Subscale of Antisocial Behaviour (N = 571)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	186	14.82	(4.60)	14.16	15.49	3.37	.03
4th Grade	195	16.10	(5.44)	15.33	16.87		
5th Grade	190	15.72	(4.57)	15.06	16.37		
Total	571	15.56	(4.92)	15.15	15.96		

Between groups *df* = 2; within groups *df* = 568; groups total *df* = 570

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

*$p < .05$

Findings of Table 104 showed mean and standard deviations for comparison group of children of 3rd, 4th, and 5th grades on Disruptive Demanding Subscale of Antisocial Behaviour. Findings indicated high mean (*M* = 16.10) for children of grade 4th as compared to children of grade 3rd and 5th on Disruptive Demanding Subscale. It indicated that comparison group of children of grade 4th showed relatively high Disruptive Demanding behaviour as compared to children of 3rd and 5th grades. So hypothesis no. 17 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Antisocial Behaviour proved significant.

To further explore significant differences among screened out children of comparison group from grades 3rd, 4th, and 5th on Disruptive Demanding Subscale of Antisocial Behaviour Tukey's Honestly Significant Difference (HSD) Post Hoc Test was performed.

Table 105

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Disruptive Demanding Subscale of Antisocial Behaviour (N = 571)

					95% CI	
I (ADHD-I)	J (ADHD-I)	Mean Diff (I - J)	St Error	*p*	LL	UL
3rd Grade	4th Grade	-1.27*	.50	.03	-2.46	-.09

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

* $p < .05$

Table 105 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Disruptive Demanding subscale of Antisocial Behaviour. Findings indicated that grade 4th comparison group of children showed significant differences from children of grade 3rd on Disruptive Demanding subscale. Children of grade 4th showed relatively high Disruptive Demanding behaviour as compared to comparison group of children of grade 3rd.

Table 106

Means, Standard Deviations, and F-value for Comparison group of Children on Antisocial Behaviour subscale of SSBS (N = 571)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	186	52.08	(13.61)	50.11	54.05	2.76	.06
4th Grade	195	55.41	(18.07)	52.86	57.96		
5th Grade	190	52.43	(13.48)	50.50	54.36		
Total	571	53.33	(15.29)	52.08	54.59		

Between groups *df* = 2; within groups *df* = 568; groups total *df* = 570

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 106 showed mean and standard deviations for comparison group of children of 3rd, 4th, and 5th grades on Antisocial Behaviour subscale of SSBS. Findings indicated high mean (*M* = 55.41) for children of grade 4th as compared to children of grade 3rd and 5th on Antisocial Behaviour Subscale. Findings of Table 106 showed nonsignificant grade wise differences among comparison group of children of 3rd, 4th, and 5th grades on Antisocial Behaviour Subscale of SSBS. So hypothesis no. 17 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Antisocial Behaviour proved nonsignificant.

DISCUSSION

The Study II primarily focused on screening of children with symptoms of childhood behaviour disorders and assessment of their Social Competence, and Antisocial Behaviour. DBD Rating scale (Urdu version) and SSBS (Urdu version) were used to assess symptoms of childhood behaviour disorders and to investigate School Social Behaviour. School setting was specifically focused in the Study II, because schools provide an opportunity to get rich information regarding child's social activities, academic performance, and overall conduct.

As per literature, childhood behaviour problems significantly influence child's academic performance. Loona and Kamal (2004) studied academic performance and School Social Behaviour of screened out Attention Deficit Hyperactivity Disorder (ADHD) (n = 187) and comparison group of school going children (n = 281) from primary (3^{rd}, 4^{th}, 5^{th}) and secondary (6^{th}, 7^{th}, 8^{th}) grades and found comparison group of children scoring significantly high academic performance as compared to ADHD group.

Besides ADHD, Oppositional defiant disorder (ODD) is also associated with impaired school and academic performance and problematic social relations with parents and peers (Greene et al., 2002). Furthermore, youngsters with conduct problems also display high rates of academic underachievement, grade retention, special education placement, school dropout, suspension, and expulsion (Hinshaw & Anderson, 1996).

In case children with behaviour problems and academic problems are placed in the same classroom, the risk for persistent behaviour and academic problems increases. ODD behaviour of children may escalate and result into serious antisocial actions or can lead to the diagnosis of conduct disorder (Tynan, 2004).

In the Study II, children of primary grades i.e., (3^{rd}, 4^{th}, & 5^{th}) were selected from three academic performance groups i.e., high, middle, and low scorers. Literature suggested that usually children with disruptive behaviour disorders suffer

low academic performance (Barkley, DuPaul, & McMurray, 1990; Brock & Knapp, 1996; Cantwell & Satterfield, 1978; Casey, Rourke, & Del Dotto, 1996; Dykman & Ackerman, 1992; Fischer et al., 1990; Semrud-Clikeman et al., 1992). However, to investigate academic performance and childhood behaviour disorders in the Pakistani context, all three academic performance groups i.e., high scorers, middle scorers, and low scorers were selected. Findings of Table 14 of Study II represented that children screened out with symptoms of childhood behaviour disorders were mostly from the academically low performance group.

As per literature, ADHD tends to be more closely related to academic failure and cognitive deficits (Fergusson, Horwood, & Lynskey, 1993). ODD is associated with compromised social relations with parents and peers and impaired school and academic performance (Greene et al., 2002). Children with conduct problems who are unable to maintain social relationships (undersocialized) tend to be more aggressive, have a poorer prognosis, and respond less well to treatment compared to socialized antisocial children (Rogeness, Javors, & Pliszka, 1992).

Study II also aimed at investigating the grade wise and gender prevalence rate of children screened out with childhood behaviour disorders. Grade wise differences indicated (See Table 11) that higher number of children of grade 4th (n = 106, 13.1%) exhibited symptoms of DBD as compared to children of grade 3rd (n = 63, 7.9%) and 5th (n = 66, 8.2%). So according to the findings of Table 11 it can be concluded that children of 4th grade exhibit more behaviour problems as compared to grade 3rdand 5th.

As per literature review, prevalence rate of boys was higher as compared to girls. Boys have been found to generate consistently higher parent and teacher ratings of hyperactivity and inattentiveness than girls of matched age group (Achenbach, 1991; Bauermeister, 1992; Brito, Pinto, & Lins, 1995; Trites, Blouin, & Laprade, 1980). Boys also have been diagnosed more frequently with Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) than girls (APA, 2002). Findings of Table 12 showed the percentage of gender wise prevalence ratio for ADHD-I (Boys = 3.5% and Girls 3.3%), ADHD-HI (Boys = 2.1% and Girls 1.1%), ADHD-C (Boys =

1.0% and Girls .6%), ODD (Boys = 1.0% and Girls .4%), CD (Boys = 4.8% and Girls 2.4%), and Comorbid group (Boys = 5.1% and Girls 3.8%). Gender wise differences in the prevalence rate showed (boys: *n* = 141, 17.5%) and (girls: *n* = 94, 11.6%) were screened out by teachers with DBD symptoms. Findings of Table 12 showed higher prevalence rate of boys as compared to girls that proved the hypothesis no. 1 significant that boys will have high prevalence rate as compared to girls.

In both clinical and community samples, children diagnosed with ADHD and ODD were predominantly boys (Gaub & Carlson, 1997a; Biederman et al., 2002; Loeber et al., 2000). Boys were diagnosed with ADHD only about two to three times more frequently than girls in population-based samples (Szatmari et al., 1989; Taylor, Hepinstall, Sonuga-Barke, & Sandberg, 1998). Boys have been found to generate consistently higher parent and teacher ratings of hyperactivity and inattentiveness than girls matched for age (Achenbach, 1991; Bauermeister, 1992; Brito, Pinto, & Lins, 1995; Trites, Blouin, & Laprade, 1980). Similarly, findings of Table 11 also indicated higher prevalence rate of screened out boys as compared to girls with DBD symptoms.

Findings of Table 12 regarding prevalence rate of children screened out via teachers' ratings on DBD Rating scale from the total sample (*N* = 806) indicated 6.8% children exhibited symptoms of ADHD-I in the school setting. Whereas, for ADHD-HI = 3.2%, ADHD-C = 1.6%, ODD = 1.4%, CD = 7.2%, and Comorbid symptoms = 8.9%, children were screened out. There were almost 70.8% children in the present sample that represented comparison group, who did not shown significant exhibition of symptoms on any of the childhood behaviour disorders as per DSM-IV (APA, 1994) criteria. Out of total sample (*N* = 806) about (*n* = 235, 29.1%) children were screened out with symptoms of behaviour disorders.

The prevalence of ADHD ranged from 5 to 10% in the western world (Adewuya & Famuyiwa, 2007). While the prevalence rates for CD ranged from 7 to 12% in males (Kratzer & Hodgins, 1997; Faraone et al., 2003; Nock et al., 2006). According to Tynan (2004), prevalence rates for CD are estimated at 2 to 9%, according to various nonclinical samples and prevalence rates for ODD are estimated

to be 6 to 10% in surveys of nonclinical, nonreferred samples on the basis of parents' reports. Lahey et al. (2000) reported prevalence rates of 2.6 to 15.6% for ODD across childhood and adolescence. Comparison of findings of present research with western literature indicated that there is no huge difference in the prevalence ratio of childhood behaviour disorders.

Assessment of Social Competence and Antisocial Behaviour was performed through SSBS (Urdu version) (Loona & Kamal, 2002). Children with conduct disorder and behaviour problems usually have deficits in social skills with peers. They lack positive communication skills such as knowing how to approach others and join in groups of children (Putallaz & Wasserman, 1990), how to get a conversation going or how to give positive rather than negative feedback (Coie, Dodge, & Kupersmidt, 1990; Coie & Kupersmidt, 1983; Dodge, 1983).

Assessment of simultaneous influence of DBD symptoms and academic performance on Social Competence of children was assessed. Findings of Univariate analysis of variance (See Table 16) indicated that academic performance and symptoms of childhood behaviour disorders significantly influence Social Competence of the children. However, the interaction effect of both academic performance and symptoms of behavioural disorders proved nonsignificant. Findings (See Figure 2) clearly indicated that low scorers showed significantly low mean on Social Competence as compared to middle scorers and high scorers. Children with high academic performance have significantly high Social Competence and children belonging to low academic performance have significantly low Social Competence.

Whereas findings (See Figure 3) indicated ADHD-HI group and ODD group showed high mean on Social Competence that was contrary to the hypothesis. However, all other DBD groups showed low mean scores on Social Competence as compared to comparison group of children. So hypothesis no. 2 of present study that children screened out either with ADHD, ODD, CD, or comorbid symptoms having low academic records/grades will have low Social Competence as compared to comparison group of children proved partially significant. Rafiq (2007) also described that there were significant differences between low academic performers and high

academic performers on Social Competence and Antisocial Behaviour. Miller and Olson (2000) also stated that children with conduct problems display verbal and physical aggression and poor social skills toward other children.

Similarly, assessment of simultaneous influence of childhood behaviour problems and academic performance on Antisocial Behaviour was studied. Findings of (Table 18) indicated that DBD symptoms significantly increased the Antisocial Behaviour of children. The interaction effect of both independent variables was also significant. These findings supported hypothesis no. 3 that children screened out either with ADHD, ODD, CD or comorbid symptoms having low academic performance will have high Antisocial Behaviour as compared to comparison group of children. However, findings indicated that academic performance based groups (high, middle, low) showed nonsignificant difference on Antisocial Behaviour subscale. These findings indicated that academic performance either higher, middle, or low alone did not cause increase in the Antisocial Behaviour but in case of presence of behaviour problems in children; increase in the Antisocial Behaviour can be expected.

Loona and Kamal (2002) found ADHD group scored significantly high on antisocial behaviour and its subscales as compared to comparison group of children. Findings of present study (See Figure 5) also indicated that children of DBD groups were showing higher Antisocial Behaviour as compared to comparison group of children.

Differences between screened out DBD groups and comparison group of children on Social Competence and its subscales were examined. Results indicated that Inattention group scored lowest on Interpersonal Skills (M = 32.04), Academic Skills (M = 17.60) and on total Social Competence subscale (M = 81.33) as compared to other DBD groups. It provided evidence that children with symptoms of ADHD-predominantly inattentive type usually suffer difficulties in managing interpersonal relations, Academic Skills and they were significantly low on Social Competence. Whereas, comparison group of children showed high mean scores on total and subscales of Social Competence. It can be concluded that children without behaviour

problems have high Social Competence as compared to children with childhood behaviour disorders. So hypothesis no. 4 that children screened out either with ADHD, ODD, CD or comorbid symptoms will score low on total and subscales of Social Competence as compared to children of comparison group proved significant.

Between groups differences on Antisocial Behaviour subscale indicated that comorbid group scored high mean (M = 87.01) on Antisocial Behaviour and it subscales i.e., Hostile-Irritable (M = 37.31), Disruptive-Demanding (M = 24.79), and Antisocial-Aggressive (M = 24.92) subscale as compared to other DBD groups. Mean differences in children with symptoms of behaviour disorders and comparison group were also significantly different. So the findings supported the hypothesis no. 5 that children screened out either with ADHD, ODD, CD, and comorbid symptoms will score high on total and subscales of antisocial behaviour subscale as compared to children of comparison group. It can be concluded from these findings that behaviour problems further escalate Antisocial Behaviour, and specifically comorbidity of disorders lead to severe outcome as compared to any single disorder.

Gender differences between ADHD-I, ADHD-HI, ADHD-C, ODD, CD and comorbid group on Social Competence and its subscales, i.e., interpersonal skills, self Management skills, and Academic Skills were also studied. Findings indicated nonsignificant differences between ADHD-I boys and girls on total and subscales of Social Competence thus rejecting the hypothesis no. 6 that boys screened out with symptoms of ADHD-I will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls. Findings indicated that boys and girls with symptoms of ADHD-I exhibit similar level of Social Competence and Antisocial Behaviour.

ADHD-HI screened out boys and girls also showed nonsignificant differences on all subscales and total of Social Competence besides the Academic Skills subscale. Boys of ADHD-HI group showed high Academic Skills as compared to girls. On Antisocial Behaviour subscales and total, ADHD-HI group showed significant gender differences on all subscales except Disruptive Demanding subscale. These findings indicated that boys screened out with ADHD-HI had higher tendencies of Antisocial

Behaviour as compared to girls. According to Hinshaw, Heller, and Mchale (1992), boys with ADHD tend to display more covert antisocial behaviour such as stealing, destroying, and cheating that carry high risk of delinquency. So hypothesis no. 7 that boys screened out with symptoms of ADHD-HI will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved partially significant.

ADHD-C group showed only significant difference on Interpersonal Skills subscale, findings of Table 44 indicated that girls showed significantly high mean (M = 43.20) as compared to boys (M = 27.75). These findings indicated that ADHD-C girls were having high Interpersonal Skills as compared to boys of the same group. However, on the other subscales of Social Competence and Antisocial Behaviour subscale nonsignificant gender differences were found. These findings showed that ADHD-C screened out group of children experience similar level of Social Competence and Antisocial Behaviour. So hypothesis no. 8 that boys screened out with symptoms of ADHD-C will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved nonsignificant.

There were nonsignificant gender differences in screened out children of ODD and CD groups on total and subscales of Social Competence and Antisocial Behaviour. These findings indicated that boys and girls showed similar behaviour on these constructs. So hypothesis no. 9 and 10 that boys screened out with symptoms of ODD/CD will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved nonsignificant.

Children in the comorbid group showed significant gender differences on Social Competence and its subscales, interpersonal skills, self Management skills, and academic skills. Girls showed higher scores as compared to boys on all subscales showing relatively high Social Competence as compared to boys of the same group. On the total and subscales of Antisocial Behaviour i.e., Hostile Irritable, and Antisocial Aggressive comorbid group showed nonsignificant gender difference.

However, on Disruptive Demanding subscale significant differences were found. So findings supported the hypothesis no. 11 that boys screened out with comorbid symptoms will score low on Social Competence and its subscales, whereas, on Antisocial Behaviour and its subscales hypothesis proved significant only for Disruptive Demanding subscale. These findings indicated that comorbid boys have more Disruptive Demanding behaviour as compared to girls.

As far as, the comparison group was concerned nonsignificant gender differences were found on Social Competence and its subscales. On Antisocial Behaviour and its subscales boys differed significantly from girls except on Disruptive Demanding subscale. Thus hypothesis no. 12 that comparison group of boys will score low on Social Competence and its subscales proved nonsignificant, however, on Antisocial Behaviour and its subscales boys scored significantly high as compared to girls. On overall sample (N = 806) findings indicated that boys were scoring high as compared to girls on Antisocial Behaviour and its subscales. However, on Social Competence and its subscales nonsignificant differences were found except on Self Management Skills subscale. So hypothesis no. 13 that boys will score low on Social Competence and its subscales and high on Antisocial Behaviour and its subscales as compared to girls proved significant only for Antisocial Behaviour and its subscales.

Assessment of grade wise differences of screened out children of 3rd, 4th, and 5th grades were also performed. Children screened out with ADHD-I from all three grades showed nonsignificant differences on Social Competence and its subscales. So hypothesis no. 14 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of Social Competence proved nonsignificant. On Antisocial Behaviour and its subscales significant differences were found only on Hostile Irritable and Antisocial Behaviour subscale of SSBS. Children of grade 4th were scoring high on these subscales as compared to children of 3rd and 5th. So hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of

Antisocial Behaviour proved significant for Hostile Irritable and total Antisocial Behaviour.

As far as ADHD-HI screened out group of children was concerned findings indicated nonsignificant differences between children of 3rd, 4th, and 5th grades thus proving hypothesis no. 14 and 15 nonsignificant. Only significant difference was found on self Management subscale of Social Competence where screened out children with ADHD-HI from grade 4th scored high mean as compared to grade 3rd and 5th.

ADHD-C, ODD, and comorbid screened out children of 3rd, 4th, and 5th grades also showed nonsignificant differences on Social Competence total and its subscales and Antisocial Behaviour total and its subscales consequently rejecting the hypothesis no. 14 and 15. Previous research findings also suggested that ODD behaviour have high stability from preschool through school age and early adolescence (Lavigne et al., 2001).

To the extent that CD screened out children were concerned, children of grade 5th showed significantly higher scores on Social Competence and its subscales as compared to children of 3rd and 4th grades. These findings proved the hypothesis no. 14 significant that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of Social Competence. However, on Antisocial Behaviour total and its subscales grade differences were found nonsignificant that rejected hypothesis no. 15 that children of 3rd, 4th and 5th grades screened out either with ADHD, ODD, CD, or comorbid symptoms will show significant differences on total and subscales of Antisocial Behaviour.

Comparison group of children (N = 571) showed nonsignificant differences on total and subscales of Social Competence thus rejecting the hypothesis no. 16 that children of 3rd, 4th and 5th grades in comparison group will show significant differences on total and subscales of Social Competence. However, on Antisocial

Behaviour total and subscales significant differences were found on Antisocial Aggressive and Disruptive Demanding subscales. Children of grade 4th scored significantly high on these subscales. So hypothesis no. 17 that children of 3rd, 4th and 5th grades in Comparison group will show significant differences on total and subscales of Antisocial Behaviour proved significant for Antisocial Aggressive and Disruptive Demanding subscales.

Findings regarding grade wise differences in screened out DBD group of children i.e., ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and Comorbid symptoms indicated nonsignificant differences on Social Competence. However, children of grade 4th were scoring relatively high on Antisocial Behaviour and its subscales. So children of grade 4th were relatively high on Hostile Irritable, Antisocial Aggressive, Disruptive Demanding and total Antisocial Behaviour as compared to children of 3rd and 4th grade.

Overall, findings of Study II indicated higher prevalence rate of childhood behaviour problems in boys as compared to girls. Grade wise prevalence rate was high in children of grade 4th as compared to children of grade 3rd and 5th. These findings will prove helpful in understanding prevalence rate of children with disruptive behaviour disorders in the Pakistani context. On Social Competence and its subscales children with behavioural problems scored low except ODD and ADHD-HI group. On Antisocial behaviour and its subscales screened out children with comorbid symptoms scored high; these findings also proved useful in understanding these constructs in Pakistani context.

The study II investigated academic performance, School Social Behaviour i.e., Social Competence and Antisocial Behaviour of screened out children with symptoms of childhood behaviour disorders. The next study, Study III was planned to assess role of perceived parenting styles and demographic/familial factors in the prediction of childhood behaviour disorders. Study III, was carried out with screened out children of Study II to explore its objectives.

Study III: Role of Parenting Styles and Familial Factors in Prediction of Childhood Behaviour Problems

Study III of Part I attempted to explore role of family/demographic variables and perceived parenting styles in prediction of childhood behaviour problems. Family variables included marital status of parents (both parents, and single by death or divorce), family system (nuclear or joint), father's education, mother's education, father's income, number of children, child's birth order, etc. Family problems are among the strongest and most consistent correlates of antisocial behaviour (Patterson, Reid, & Dishion, 1992). As per literature, all these variables create a profound impact on the child's behaviour (Brody et al., 2003; McLoyd, 1998).

Moreover, role of parenting style is very vital in the upbringing of the children. Drabick et al. (2006) described hostile, inconsistent, and detached parenting to be associated with CD symptoms in ADHD children. Baumrind (1967, 1978, 1991) found that children whose parents have an ''authoritative'' style, both responsive to children's needs and demanding of mature behaviour have the best outcomes on a number of behavioural and psychological measures. Adolescent children of permissive parents have been shown to have relatively high Social Competence and self-esteem, but relatively low achievement and school engagement, and high rates of problem behaviours and drug use (Baumrind, 1991; Lamborn et al., 1991; Slicker, 1998).

Authoritarian parenting is characterized by high demandingness, but coupled with low responsiveness, this external imposition of authority can increase the likelihood that adolescents will rebel (Baumrind, 1978). Akhtar (2008) studied the relationship between parenting styles and behaviour problems in children. Correlation coefficients indicated that authoritative parenting style of both fathers and mothers was significantly negatively correlated with behaviour problems of children. Whereas, authoritarian and permissive parenting styles of both mothers and fathers showed significant positive correlation with behaviour problems of children. In another study, Imam and Hilal (2008) studied relationship between parental control and personality

development of children. Findings indicated that parental firm control is associated with healthy personality organization of male children. The reason could be the fact that in Pakistani family structure father is the bread earner and main authority and decision maker. Pakistani father exercises control over their children within the culturally prescribed role of instrumental leadership and head authority. Therefore, Pakistani male children perceived paternal firm control as being accepting.

Therefore, Study III examined role of demographic variables and perceived parenting style in prediction of childhood behaviour problems. For the assessment of demographic variables "Child Demographic Information Sheet" (See Appendix V) and for perceived parenting style, Parental Authority Questionnaire (Urdu version) (Babree, 1997) was used.

Objectives

Study III of the present research was carried out to explore following objectives.

1. To explore the role of family/demographic variables such as parents marital status, number of siblings, birth order, father's education, father's profession, father's income, mother's education, mother's profession, and family system (Nuclear or Joint) in shaping up childhood behaviour problems.
2. To explore authoritarian and permissive parenting style as predictor of childhood externalizing behaviour problems.
3. To explore alpha reliability coefficients and interscale correlations of PAQ (Urdu version) (Babree, 1997) (See Appendix H) for the present sample.

Hypothesis

1. Authoritarian perceived parenting style will prove a significant predictor for childhood behaviour problems.
2. Permissive perceived parenting style will prove a significant predictor for childhood behaviour problems.

3. Authoritative perceived parenting style will not prove a significant predictor for childhood behaviour problems.

Operational Definition of Variables

The variables of the Study III were defined as following:

Parenting styles. Parenting styles have profound impact on the development of children. Parenting styles are thought to influence the effectiveness of parents' socialization attempts by providing a context from which the children are parented and develop over time (Darling & Steinberg, 1993).

Authoritarian parenting. Authoritarian parenting is characterized by high demandingness, but coupled with low responsiveness. Authoritarian parents "value obedience as a virtue and favor punitive, forceful measures to curb self-will" (Baumrind, 1978, p. 244).

Authoritative parenting. Authoritative parenting is characterized by high demandingness (high standards for behaviour and firm enforcement of rules) and high responsiveness (warmth, open communication, and respect for the developmental needs of the child) (Baumrind, 1978, p. 244).

Permissive parenting. Permissive parenting is characterized by low demandingness (minimal discipline, self-regulation by the child) and high responsiveness (warmth and attention) (Baumrind, 1991).

Sample

Sample of Study III was consisted of only those screened out children of Study II who were falling within age range of 9 to 13 years; children below 9 years were excluded from the sample (See Table no 11 for screened out children of Study II). This exemption was made due to the logic that Parental Authority Questionnaire

(Urdu version: See Appendix H) can be administered on children of 9 years and above only. Table 107 represented the details of children included in the present sample. In Study III, sample included children of 3rd to 5th grades (*N* = 635; Mean age: 9.99, *SD* = 1.06) including (boys *n* = 379; Mean age = 9.98, *SD* = 1.00) and (girls *n* = 256; Mean age = 10.00, *SD* = 1.15).

Table 107

Screened out Children selected for Study III with age range 9 to 13 years (N = 635)

	Gender		
	Boys	Girls	Total
Subscales	*n* (%)	*n* (%)	*n* (%)
ADHD-I	23(3.6)	15 (2.4)	38 (6.0)
ADHD-HI	17 (2.7)	8 (1.3)	25 (3.9)
ADHD-C	7 (1.1)	5 (.8)	12 (1.9)
ODD	6 (.9)	1 (.2)	7 (1.1)
CD	33 (5.2)	14 (2.2)	47 (7.4)
Comorbid	35 (5.5)	23 (3.6)	58 (9.1)
Total DBD	121 (19)	66 (10.5)	187 (29.4)
Comparison	258 (40.6)	190 (29.9)	448 (70.6)
Overall Total	379 (59.7)	256 (40.3)	635 (100)

Note. (Percentages in Parentheses)

ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; ADHD-HI = attention deficit hyperactivity disorder – predominantly hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; DBD = disruptive behaviour disorder.

Table 107 showed details of children selected for study III with age range 9-13 years. These children were screened out through Disruptive Behavior Disorder (DBD) Rating Scale in the Study II of Part I. For Study III screened out children of 9 years and above were selected because PAQ can be administered on children of 9 years and above. There were (boys: *n* = 379; 59.7%) and (girls: *n* = 256; 40.3%) selected for the Study III.

Instruments

Parental Authority Questionnaire (PAQ) (Urdu version). To assess perceived parenting style of children PAQ (Urdu version) by (Babree, 1997) was used in the present research. PAQ (Buri, 1991) was consisted of two parts and each part was comprised of 30 items. First part measured perceived paternal permissiveness, authoritative, and authoritarian styles. Where as, the second part of PAQ measured perceived maternal permissiveness, authoritative and authoritarian parenting styles. PAQ had five response categories ranging from strongly disagree = 1 to strongly agree = 5. The scores of each child on each subscale could range from 10 to 50 and for each total i.e., maternal and paternal the scores can range from 30 to 150. PAQ (Urdu version) by (Babree, 1997) has well established psychometric properties with Pakistani samples (See e.g., Akhtar, 2000; Aqsa, 2003; Hayauddin, 2005; Rehna, 2006; Saeed, 2008; Zulfiqar, 2007).

Procedure

Parental Authority Questionnaire (PAQ Urdu version: Babree, 1997) was administered on (N = 635) children of 3 to 5 grades. These children were approached after taking institutional approval (See Appendix Y) and after obtaining their consent (See Appendix H). Children were provided with complete instructions about filling up PAQ (Urdu version) therefore they found no difficulty in comprehending and responding to items. Information regarding demographic/familiar factors was obtained through mothers on child demographic information sheet (See Appendix V).

Results

To determine psychometric properties of PAQ (Urdu version: Babree, 1997) for the present sample of children alpha reliability coefficients, and interscale correlations were determined.

Alpha Reliability Coefficients of Parental Authority Questionnaire (Urdu version) (Babree, 1997)

Table 108

Alpha Reliability Coefficient of Subscales of Parental Authority Questionnaire (N = 635)

Subscales	No. of Items	Alpha Coefficients
Paternal Permissiveness	10	.60
Paternal Authoritative	10	.73
Paternal Authoritarian	10	.61
Paternal Total	30	.67
Maternal Permissiveness	10	.68
Maternal Authoritative	10	.76
Maternal Authoritarian	10	.66
Maternal Total	30	.69

Table 108 showed alpha reliability coefficients for paternal and maternal subscales of Parental Authority Questionnaire (PAQ) (Urdu version). Findings indicated alpha reliability coefficients ranged from .60 to .76 for subscales of PAQ that indicated internal consistency of the measure.

Interscale Correlation Coefficients of Parental Authority Questionnaire. The internal consistency of Parental Authority Questionnaire (PAQ) was further determined by calculating interscale correlation between total and subscales of PAQ.

Table 109

Interscale Correlation Coefficients, Means, and Standard Deviations for Paternal subscales and total of Parental Authority Questionnaire (N = 635)

	Paternal Subscales	1	2	3	4
1	Paternal Permissiveness	-			
2	Paternal Authoritative	.11**	-		
3	Paternal Authoritarian	-.04	.17**	-	
4	Paternal Total	.62**	.66**	.55**	-
	M	28.15	41.01	39.31	107.31
	SD	7.09	6.38	6.26	12.40

**$p<.01$

Findings of Table 109 showed interscale correlations between subscales and total scores of Paternal PAQ. Findings indicated significant correlation between paternal permissiveness with paternal authoritative style and total. However, there was a negative nonsignificant correlation between paternal authoritarian and permissive parenting style. Paternal authoritative style showed significant correlation with paternal authoritarian and total paternal scores. Mean scores of paternal permissive style was comparatively low as compared to paternal authoritarian and authoritative styles. These findings indicated that children perceived their paternal parenting style closer to authoritative and authoritarian parenting style as compared to permissive parenting style.

Table 110

Interscale Correlation Coefficients, Means, and Standard Deviations for Maternal subscales and total of Parental Authority Questionnaire (N = 635)

	Maternal Subscales	1	2	3	4
1	Maternal Permissiveness	-			
2	Maternal Authoritative	-.02	-		
3	Maternal Authoritarian	.02	.15**	-	
4	Maternal Total	.59**	.60**	.62**	-
	M	27.69	40.61	37.74	106.05
	SD	7.56	6.85	6.78	12.86

**$p<.01$

Findings of Table 110 showed interscale correlations between scores of maternal total and subscales. Findings indicated nonsignificant correlation between maternal permissiveness with maternal authoritarian and authoritative parenting style. However, maternal permissiveness showed positive correlation with the total maternal scores. Maternal Authoritative and maternal authoritarian subscales also have positive significant correlation with the total maternal scores. Maternal authoritative scores showed significant positive correlation with maternal authoritarian subscale. Mean scores of maternal permissiveness were comparatively low as compared to maternal authoritarian and authoritative parenting styles. Moreover, mean scores indicated that children perceived maternal authoritative and authoritarian parenting styles more as compared to maternal permissive parenting styles.

Assessment of Familial/Demographic factors in prediction of childhood behaviour problems. To study role of familial/demographic factors in the prediction of childhood behaviour disorders binary logistic regression was calculated with dummy coding of categorical variables. Logistic regression is used to predict a categorical (usually dichotomous) variable from a set of predictor variables. With a categorical dependent variable, discriminant function analysis is usually employed if all of the predictors are continuous and nicely distributed; logit analysis is usually employed if all of the predictors are categorical; and logistic regression is often chosen if the predictor variables are a mix of continuous and categorical variables and/or if they are not nicely distributed (logistic regression makes no assumptions

about the distributions of the predictor variables) (Field, 2005). Table 111 is presenting detail outcome of the analysis.

Table 111

Familial Factors as predictor for Childhood Behaviour Disorders (N = 635)

Predictors	B	Wald	p	Exp (B)	95% CI	
					LL	UL
no_sib	-.06	.61	.43	.93	.79	1.10
sib_no	.002	.000	.98	1.00	.84	1.18
f_income	.01	1.98	.15	1.01	.99	1.02
fath_matric	-.16	.10	.74	.84	.31	2.29
fath_fa	.13	.05	.80	1.14	.39	3.31
fath_ba	.004	.00	.99	1.004	.35	2.87
fath_ma	.38	.48	.48	1.47	.49	4.37
fath_priv	-.17	.53	.46	.83	.51	1.35
fath_busin	.30	1.76	.18	1.35	.86	2.11
m_matric	.07	.06	.79	1.07	.62	1.84
m_fa	.23	.49	.48	1.26	.65	2.44
m_ba	.50	2.24	.13	1.66	.85	3.24
m_ma	.57	1.90	.16	1.77	.78	4.01
marital_single	.99	4.02	.04*	2.71	1.02	7.19
f_system	-.14	.50	.47	.86	.58	1.28

Note. CI = confidence interval; LL = lower limit; UL = upper limit; no_sib = No of siblings; sib_no = birth order; f_income = father income; fath_matric = father matric; fath_ba = father BA; fath_ma = Father MA; fath_priv = father private job; fath_busin = father business; m_matric = mother education matric; m_fa = mother FA; m_ba = Mother Bachelors; m_ma = Mother Masters; marital_single = Marital status single; f_system = family system.

*p<.05

Assessment of familial/demographic factors in the prediction of childhood behaviour disorders was performed through binary logistic regression. Logistic regression is a version of multiple regression in which the outcome is dichotomous (Field, 2005). Demographic variables under study included both continuous independent variables and categorical independent variables. The dependent variable

was dichotomous, one which can take on one of two values. In the present study, dependent variable is either presence of DBD symptoms or absence of DBD symptoms in children. So we assigned value of 0 to DBD children and value of 1 to Comparison group. Findings of the Table 111 indicated that only one predictor variable i.e., marital status predicted outcome variable significantly. Children of single parents (by death and divorce) are more prone to childhood behaviour disorders as compared to both parents. However, all other familial factors proved nonsignificant for predicting childhood behaviour disorders.

Table 112

Perceived Parenting Style as Predictor of Childhood Behaviour Disorders in the total sample (635)

		Childhood behaviour disorders	
		Model 2	
Variables	Model 1 B	B	95 % CI
(Constant)	50.12**	54.32**	[39.59, 69.04]
Per_f	-.01	.03	[-.25, .31]
Auth_f	-.50**	-.20	[-.49, .09]
Authn_f	-.04	-.31*	[-.61, -.01]
Per_m		-.12	[-.39, .13]
Auth_m		-.56**	[-.83, -.29]
Authn_m		.51**	[.24, .79]
R^2	.02	.07	
F	5.79**	8.01**	
ΔR^2		.06	
Δ F		9.98	

Note. N = 635. CI = Confidence Interval; Per_f = permissive father; Auth_f = authoritative father; Authn_f = authoritarian father; Per_m = permissive mother; Auth_m = authoritative mother; Authn_m = authoritarian mother.

*p<.05. **p<.01.

Table 112 showed findings of multiple linear regression for the assessment of perceived parenting styles as predictor of childhood behaviour problems. Linear regression estimates the coefficients of the linear equation, involving one or more independent variables that best predict the value of the dependent variable.

Findings indicated paternal authoritarian perceived parenting style significantly predicted the outcome variable i.e., childhood behaviour problems. Whereas, for maternal perceived parenting styles; findings revealed maternal authoritative and maternal authoritarian perceived parenting styles significantly predicted childhood behaviour disorders. So hypothesis no. 1 that Authoritarian perceived parenting style will prove a significant predictor for childhood behaviour problems proved significant. Whereas hypothesis no. 2 that Permissive perceived parenting style will prove a significant predictor for childhood behaviour problems proved nonsignificant.

Table 113

Perceived Parenting Style as Predictor of DBD Symptoms in the screened out children with DBD symptoms (n = 187)

	DBD Symptoms		
		Model 2	
Variables	Model 1 B	B	95 % CI
(Constant)	76.36	84.76	[62.84, 106.69]
Per_f	-.47*	-.39	[-.81, .02]
Auth_f	-.28	.07	[-.33, .49]
Authn_f	-.03	.006	[-.45, .46]
Per_m		-.15	[-.53, .23]
Auth_m		-.57*	[-.93, -.20]
Authn_m		.002	[-.44, .44]
R^2	.05	.10	
F	3.59	3.57	
ΔR^2		.07	
Δ F		3.41	

Note. *N* = 187, CI = Confidence Interval; Per_f = permissive father; Auth_f = authoritative father; Authn_f = authoritarian father; Per_m = permissive mother; Auth_m = authoritative mother; Authn_m = authoritarian mother.

*p<.05

Table 113 showed findings of multiple linear regression for the assessment of perceived parenting styles as predictors of outcome variable i.e., childhood behaviour

problems for screened out children with DBD symptoms. Findings indicated that paternal Authoritarian, Authoritative, and Permissive perceived parenting style proved nonsignificant predictors of childhood behaviour problems. Whereas, for maternal perceived parenting styles; findings revealed maternal authoritative perceived parenting styles proved significant predictor for childhood behaviour disorders thus rejecting hypothesis no. 3. Maternal authoritarian and permissive style proved nonsignificant predictors for childhood behaviour disorders. So hypothesis no. 1 that Authoritarian perceived parenting style will prove a significant predictor for childhood behaviour problems proved nonsignificant. Similarly, hypothesis no. 2 that Permissive perceived parenting style will prove a significant predictor for childhood behaviour problems also proved nonsignificant.

DISCUSSION

Study III was planned to investigate role of demographic/family variables and perceived parenting style in the prediction of childhood behaviour problems. For this purpose child demographic information sheet (See Appendix V) was responded by respective mothers' and PAQ (Urdu version) (Babree, 1997) (See Appendix - H) was administered on the selected children. Alpha reliability coefficients of PAQ (Urdu version) were determined for the present sample before hypothesis testing. Findings of Table 108 showed alpha reliability coefficients of PAQ (Urdu version) that ranged from .61 to .76 that indicated the internal consistency of the measure.

According to literature review, parenting practices may create or contribute to increased risks for child defiant behaviour and aggression as well as later delinquency (Mann & MacKenzie, 1996; Patterson, 1982; Tschann et al., 1996; Wahler & Graves, 1983). Baumrind's (1971) significant contribution in the area of parenting styles provided a useful framework for exploring impact of parenting styles. The three parenting styles i.e., authoritative, authoritarian, and permissive were studied in Study III to assess its resultant role in prediction of childhood behaviour problems. Authoritative parenting styles characterize highly supportive, communicative and good relationship with the children. Authoritative parents do not use physical punishment and they effectively supervise and discipline their children. However, authoritarian parents display high level of supervision and physical punishment to control their children. In permissive parenting, parents lack control and make few demands on children, they are mostly warm and responsive (Pettit, Bates, & Dodge, 1997).

In the Study III, firstly role of demographic/familial factors in prediction of childhood behaviour disorders was investigated through applying binary logistic regression. Findings of Table 111 indicated that among familial/demographic factors only significant predictor was parents' marital status (either both parents or single by death or divorce) that significantly contributed in the prediction of childhood behaviour disorders. Children from single parent families were at greater risk for

developing behaviour problems as compared to children of both parents. All other familial/demographic factors including education of mother and father, number of siblings, birth order of child, and father's monthly income proved nonsignificant predictors for behaviour problems.

According to Rubab (2005), children with higher number of siblings showed high behaviour problems as compared to less number of children. However, present findings showed nonsignificant influence of number of children on childhood behaviour problems. Furthermore, Rubab (2005) found nonsignificant differences between high income and low income groups on childhood behaviour problems. Findings of Table 111 also showed that father monthly income proved nonsignificant predictor of childhood behaviour problems. However, Malik (2002) stated that conduct disorder was associated with lower socioeconomic status and large family size.

However, numerous studies have found that children from lower socioeconomic status (SES) tend to have more externalizing symptoms than children from higher levels of SES (Achenbach et al., 1991; Dodge, Pettit, Bates, & Valente, 1995; Nottelman & Jensen, 1995). Low SES has also been related to internalizing problems in children and adolescents (e.g., Keiley et al., 2000; Nottelman & Jensen, 1995).

The second objective of study III was to evaluate role of perceived parenting styles in the prediction of childhood behaviour problems (N = 635). Findings of multiple regression analysis (See Table 112) indicated father (paternal) authoritarian style, and mother (maternal) authoritative and authoritarian styles proved significant predictors of childhood behaviour problems. So hypothesis no. 1 that authoritarian perceived parenting style will prove a significant predictor for childhood behaviour problems proved significant. However, hypothesis no. 2 that permissive perceived parenting style will prove a significant predictor for childhood behaviour problems proved nonsignificant.

Akhtar (2008) found authoritarian and permissive parenting styles of both mothers and fathers showed significant positive correlation with behaviour problems

of children. In Pakistan, child rearing practices and discipline involve little positive reinforcement and place greater emphasis on the child not being bad or naughty rather than being good. May be due to this male children perceive significantly more hostility in their mothers (Zaman, 1988).

As far as exclusively screened out children with DBD symptoms were concerned ($N = 187$), multiple linear regression analysis was performed to study parenting styles as predictors of childhood behaviour problems. Findings of Table 113 indicated that paternal authoritarian, authoritative, and permissive perceived parenting style proved nonsignificant predictors of childhood behaviour problems. Whereas, for maternal perceived parenting styles; findings revealed maternal authoritative perceived parenting styles proved significant predictor for childhood behaviour disorders. However, maternal authoritarian and permissive style proved nonsignificant predictors for childhood behaviour disorders. So hypothesis no. 1 that Authoritarian perceived parenting style will prove a significant predictor for childhood behaviour problems proved nonsignificant. Similarly, hypothesis no. 2 that Permissive perceived parenting style will prove a significant predictor for childhood behaviour problems also proved nonsignificant.

Keeping in view findings of Table 113, it can be concluded that in Pakistani culture strict hold of children can produce effective control on childhood behaviour problems. As per literature, Authoritative parenting emphasized parental control within an ethos of warm, responsive parenting that explains reasons, values the child as an individual and aims to encourage the child towards independence (Pettit et al. 1997). Contrary to the literature, findings of Table 113 indicated that maternal authoritative parenting style proved significant predictor for childhood behaviour problems.

Stormshak et al. (2000) found that positive and negative parenting behaviours were relatively independent of one another, and that punitive discipline by parents was a common risk factor among oppositional, aggressive, hyperactive and internalizing behaviours in children. Furthermore, physically aggressive punishment

was specifically linked with child aggression, and low parental warmth or involvement was specifically linked with oppositionality (Stormshak et al., 2000). Socioeconomic and demographic factors have been found to have a complex relationship with both parenting behaviours and children's behavioural problems (Brody et al., 2003; McLoyd, 1998).

Studies with ADHD children suggest that certain kinds of dysfunctional parenting, including maternal lack of responsiveness (Johnston & Mash, 2001; Johnston, Murray, Hinshaw, Pelham, & Hoza, 2002), lack of warmth and positive involvement, overly negative discipline (Kashdan et al., 2004), negligent and inconsistent parenting, and a lack of cohesion among family members (Lindahl, 1998), are related to comorbid oppositional or conduct problems rather than ADHD per se. Negative parenting practices also predict persistence of comorbid ODD rather than ADHD (August, Realmuto, Joyce, & Hektner, 1999). However, Johnston, Murray, Hinshaw, Pelham, and Hoza (2002) reported that maternal responsiveness was negatively related to conduct problems, but not ADHD symptoms, among children with ADHD.

Capaldi, Pears, Patterson, and Owen (2003) also found that father antisocial behaviour was associated with externalizing problems in young children after controlling for father's parenting practices. Other studies suggest that parenting practices play a partial role (e.g., Frick & Loney, 2002; Smith & Farrington, 2004) or actually are the key factors in the development of primary conduct problems (Patterson et al., 1992). Parenting practices form a second set of family risk factors. Studies examining interaction patterns among families with children having ADHD have found parents to be more directive, commanding, and negative than parents of children without ADHD (Johnston & Mash, 2001). Dysfunctional parenting may partly be a reaction to the difficulties of raising a child with ADHD, but it may also serve an etiological role in the emergence of comorbid disruptive behaviour disorders among youth with ADHD (see Johnston & Mash, 2001).

Keeping in view literature based evidence and own research findings, it can be concluded that parenting style is one of the most important causal factor for the onset of childhood behaviour problems. In Pakistan, father's overly controlling behaviour and mother's strict discipline can become reason of behavioural problems of children. Not, only this but mother's authoritative style also proved significant predictor, may be this is because giving freedom of expression or listening to child's point of view in Pakistani context makes situation beyond control of parents.

Limitations and Suggetions

The present study was based on a cross sectional design that tests different age groups at the same point in time (McBurney, 2001). To study the direction of causality among child behavioural problems and parenting styles longitudinal studies are required. In future, researches based on time series design or longitudinal design may be planned to carryout in depth analysis through applying time lagged correlation.

Keeping in view that above mentioned limitation it is suggested to the future researchers to carryout longitudinal studies to explore childhood behaviour disorders and role of parenting styles.

Chapter – IV

PART II: ASSESSMENT OF EXTERNALIZING AND INTERNALIZING BEHAVIOUR DISORDERS: PERVASIVENESS ACROSS HOME AND SCHOOL SETTINGS

Part II was designed to assess pervasiveness of disruptive behaviour disorders in the home and school settings together. Study I of Part II primarily focused on translation of Spence Child Anxiety Scale (SCAS-P) (Spence, 1999) into Urdu language and determining its psychometric properties. Study II aimed at investigating pervasiveness of disruptive behaviour disorders in children through mothers and teachers' ratings on DBD Rating scale (Urdu version) (See Appendix E). Earlier in Part I of present research, DBD Rating scale has been translated into Urdu language by following standardized translation procedure of forward (See Appendix B) and back translation (See Appendix D). Study II also assessed school social behaviour of screened out children through teachers' ratings on SSBS (Urdu version) by Loona and Kamal (2002) (See Appendix G). For the differential diagnosis of internalizing behaviour disorders (i.e., Anxiety and Depression) two additional instruments were required, therefore, SCAS-P (Spence, 1999) (Urdu version) and Child Behaviour Checklist (Achenbach & Rescorla, 2001) (CBCL/6-18: Urdu version) translated by (Khan & Awan, 2011) were used. Study III was designed to validate DBD rating scale (Urdu version) and SCAS-P (Urdu version) with the DSM oriented and Syndrome scales of CBCL/6-18 (Urdu version) (Khan & Awan, 2011).

Lastly, Study IV of Part II investigated callous unemotional traits of children with childhood behaviour disorders via Inventory of Callous Unemotional Traits (ICU-P) (Frick, 2004) (Urdu version). Assessment of Callous Unemotional Traits in children with behaviour disorders was considered important because callous unemotional traits along with disruptive behaviour disorders may enhance the prediction of later delinquency (Brandt et al., 1997; Forth et al., 1990; Toupin et al., 1995).

In a nutshell, four studies of Part II focused on pervasiveness of DBD symptoms across home and school settings together, internalizing behaviour disorders in screened out children, validation of DBD Rating scale (Urdu version) and Spence child anxiety scale (SCAS-P) (Urdu version) with Child Behaviour Checklist (Urdu version) (Khan & Awan, 2011) and lastly, investigating callous unemotional traits in screened out children.

Study I mainly focused on translation of SCAS-P into Urdu language and determining its psychometric properties.

Study – I: Translation of Spence Child Anxiety Scale (SCAS-P) (Parent Version) (Spence, 1999) in Urdu language.

Children with behaviour disorders are at increased risk for manifesting variety of other behaviour disorders and adjustment problems. These include various internalizing disorders, such as anxiety and depressive disorders and somatization disorder (e.g., Loeber & Keenan, 1994); substance abuse disorders; psychopathy (Frick, O'Brien, Wootton, & McBurnett, 1994); and academic underachievement (Hinshaw, 1992). Most generally anxiety is a vague unpleasant emotional state with qualities of apprehension, dread, distress and uneasiness (Reber, 1995). Separation Anxiety Disorder is excessive anxiety concerning separation from the home or from those to whom the person is attached (DSM-IV; APA, 1994). Social Phobia is fear of unfamiliar people or social security (Kring, Johnson, Davison, & Neale, 2010). Social Phobia is characterized by clinically significant anxiety provoked by exposure to certain types of social and performance situations, often leading to avoidance behaviour (DSM-IV; APA, 1994). Generalized Anxiety Disorder is uncontrollable worry for at least six months (Kring, Johnson, Davison, & Neale, 2010). Whereas, Panic/Agoraphobia is anxiety about recurrent panic attacks; sometimes accompanied by agoraphobia, a fear of being in place where panic attacks could occur (Kring, Johnson, Davison, & Neale, 2010).

Obsessions are uncontrollable thoughts, impulses or images (Kring, Johnson, Davison, & Neale, 2010). Obsessive compulsive disorder is characterized by obsessions (which cause marked anxiety or distress) and/or by compulsions (which serve to neutralize anxiety) (DSM-IV; APA, 1994).

In the present study SCAS-P (Spence, 1999) has been used for the assessment of anxiety in children with disruptive behaviour disorders. Subscales of SCAS-P measure Separation Anxiety Disorder, Social Phobia, Generalized Anxiety Disorder, Panic/Agoraphobia, Obsessive Compulsive Disorder, and Physical Injury Fears. SCAS-P provides an overall measure of anxiety together with scores on six sub-scales each exploring a specific aspect of child anxiety.

Objectives

Study I was designed with the following objectives.

1. To translate Spence Child Anxiety Scale (SCAS-P) (Parent Version) (Spence, 1999) into Urdu language.
2. To determine psychometric properties of SCAS-P.

Study I was consisted of following phases.

Phase I: Translation of Spence Child Anxiety Scale (Parent Version) (Spence, 1999) into Urdu language.

Phase II: Selection of best translated items in Urdu Language by Committee of experts.

Phase III: Back translation of Urdu translated Spence Child Anxiety Scale SCAS-P (Parent Version) (Spence, 1999).

Phase IV: Evaluation of Back translated items and finalization of most appropriate translated items into Urdu language by committee of experts.

***Phase V*:** Determination of psychometric properties of Spence Child Anxiety Scale (SCAS-P: Urdu version) (Spence, 1999).

Details of the five phases of Study I are mentioned in the subsequent section.

Phase I: Translation of Spence Child Anxiety Scale (Parent Version) (Spence, 1999) into Urdu language. Phase I consisted of translation of SCAS-P (Spence, 1999) in Urdu language. Bilinguals were instructed to translate every item of the English SCAS-P into Urdu language without any item in the original scale (See Appendix I). The original scale in English language was given to nine bilinguals having complete understanding and knowledge of Urdu and English language (See Appendix J). The qualification of bilinguals was M.Phil in Urdu and Psychology, and Masters in Education.

Phase II: Selection of best translated items in Urdu Language. The second phase consisted of expert evaluation of the content, grammatical structure, and wordings of the Urdu translated items of SCAS-P by the Committee of experts. Proficient committee members evaluated all translated items and selected best translated item for the next phase of Back translation. Item No 3, 9, 11, 13 15, 18, 23, 24, 32 34, and 36 were recommended to be translated again by the proficient committee members. Six new bilinguals with M.Phil in English and Sociology were approached again. Retranslated items were evaluated again and best translations were selected for back translation. The committee of experts in the present phase consisted of a Professor in National Institute of Psychology, Quaid-i-Azam University, Islamabad and two Ph.D Scholars. After completing the process of selection of the most appropriately translated Urdu items (See Appendix K), these items were enlisted and given to the bilinguals for back translation.

Phase III: Back translation of Urdu translated Spence Child Anxiety Scale SCAS-P (Parent Version) (Spence, 1999). The third phase included Back translation of the selected Urdu items of SCAS-P into English language. The Urdu translated list of items (See Appendix K) was given to nine bilinguals with M.Phil in Urdu and English literature. In the Back translation phase only those bilinguals were included who were unfamiliar with the content of items and they had not participated

in the first phase of Urdu translation. Bilinguals were instructed to back translate all Urdu translated items into English language.

Phase IV: Evaluation of Back translated items by committee of experts. The back translated items of SCAS-P were critically evaluated by the same committee of experts. After critical assessment and selection of back translated items with reference to the context, and grammar (See Appendix L) selection of final items for SCAS-P (Urdu version) was made (See Appendix M). Since Back translation method is a standardized translation procedure it helped in assessing the accuracy of the translation.

Phase V: Determination of psychometric properties of SCAS-P (Urdu version). After finalizing items for SCAS-P (Urdu version) (See Appendix M) psychometric properties of the scale were determined in terms of alpha reliability, inter scale correlation, and Item total correlation.

Sample

SCAS-P (Urdu version) was presented to respective mothers of academically low performing children within age range of 7 to 13 years (N = 100, mean age = 9.83, SD = 1.64) including (girls: n = 38, mean age = 9.16, SD = 1.26) and (boys: n = 62, mean age = 10.24, SD = 1.71) from 3 to 5 grades. The age range of mothers was between 26 to 49 years (N = 100, mean age = 36.10, SD = 4.90), they were approached through the school administration. Later on, these selected mothers were also included in the Study II of present research. SCAS-P (Urdu version) (See Appendix M) along with the consent form (See Appendix U) were sent to their homes.

Instrument

Spence Child Anxiety Scale-Parent Version (SCAS-P). SCAS-P (Spence, 1999) has 38 anxiety items with one open ended non scored item. It has six subscales

that measure Separation Anxiety Disorder (Item no, 5, 8, 11, 14, 38, 15), Social Phobia (Item no, 6, 7, 9, 10, 26, 31), Generalized Anxiety Disorder (Item no, 1, 3, 4, 18, 20, 22), Panic/Agoraphobia (Item no, 12, 19, 25, 27, 28, 30, 32, 33, 34), Obsessive Compulsive Disorder (Item no, 13, 17, 24, 35, 36, 37), and Physical Injury Fears (Item no, 2, 16, 21, 23, 29). Mothers were asked to rate the child on a four-point scale with response categories (Never, 0; Sometimes, 1; 0ften, 2; and Always, 3) that how often each of the items happened to their child. There was no set time period over which the ratings have to be made. However, in the present research mothers responded on the scale keeping in view the last six months behaviour of the child. Nauta et al. (2004) used SCAS-P in their study titled a parent report measure of children's anxiety: psychometric properties and comparison with child report in a clinic and community sample.

Procedure

SCAS-P (Urdu version) (See Appendix M) along with consent form (See Appendix U) form was sent to the respective mothers to rate their child on the 38 items scale keeping in view their child's behaviour. Complete instructions regarding scale and response categories were mentioned. Most of the Mothers took keen interest in filling up the scale and found no difficulty in understanding items.

Results

For determination of reliability of Spence Children Anxiety Scale (SCAS-P) (Urdu version) and its subscales Cronbach alpha reliability coefficients and interscale correlations were performed.

Table 114

Alpha Reliability Coefficients of Total and Subscales of SCAS-P (N = 100)

Subscales	No. of Items	Cronbach Alpha Coefficient Urdu SCAS-P	Cronbach Alpha coefficients English SCAS-P (*n* = 745)	Cronbach Alpha with corrected Spearman Brown coefficients English SCAS-P (*n* = 745)
Separation Anxiety Disorder	6	.80	.76	.91
Social Phobia	6	.75	.77	.92
Generalized Anxiety Disorder	6	.74	.75	.91
Panic/Agoraphobia	9	.70	.81	.92
Obsessive Compulsive Dis	6	.81	.78	.92
Physical Injury Fears	5	.68	.61	.83
Total SCAS-P	38	.92	.89	.89

Note. Source for English SCAS-P (Nauta et al., 2004); Item 39 was an open ended non scored item.

Initial psychometric analysis, using Cronbach's alpha coefficients yielded an internal consistency coefficient of .92 for the 38 items of SCAS-P. Findings of Table 114 indicated Cronbach's alpha coefficients for the six subscales of SCAS-P that ranged from .68 to .81. These values indicated relatively high internal consistency of the subscales. However, Physical injury subscale had marginal alpha reliability.

Table 115

Interscale Correlation Coefficients, Means, and Standard Deviations of Total and Subscales of SCAS-P (N = 100)

	Subscales	1	2	3	4	5	6	7
1	SAD	-						
2	Soph	.61**	-					
3	GAD	.52**	.59**	-				
4	Panic	.55**	.51**	.67**	-			
5	OCD	.55**	.58**	.41**	.54**	-		
6	Phyinj	.56**	.34**	.49**	.44**	.38**	-	
7	Total SCAS-P	.84**	.78**	.77**	.78**	.76**	.69**	-
	M	7.22	5.71	3.75	2.69	4.47	5.04	28.88
	SD	4.38	3.65	3.18	3.02	3.98	3.52	16.89

Note. SAD = separation anxiety disorder; Soph = social phobia; GAD = generalized anxiety disorder; Panic = panic/agoraphobia; OCD = obsessive compulsive disorder; Phyinj = physical injury fears.
**$p < .01$

The internal consistency of SCAS-P was further determined by calculating interscale correlation among total and subscales of SCAS-P. Findings of Table 115 indicated a positive and significant interscale correlation between subscales of SCAS-P that was significant at ($p < .01$) level. Overall mean scores and standard deviations on total and subscale of SCAS-P indicated that children scored relatively low mean on anxiety. These findings showed children displayed low level of anxiety in the present sample.

Item-total Score Correlation. Item total score correlation for the 38 items of SCAS-P (Urdu version) were determined ($N = 100$) that ranged from .22 (*$p < .05$) to .72 (**$p < .01$). The significant item total correlation further established the internal consistency of SCAS-P (Urdu version).

DISCUSSION

Part II of present research aimed at investigating the pervasiveness of childhood behaviour disorders in the home and schools settings; and to explore comorbidity of externalizing and internalizing behaviour disorders. DBD Rating scale (Urdu version) was available for assessment of childhood behaviour disorders with satisfactory alpha reliabilities established in Study I of Part I (See Table 3). However, for assessment of internalizing behaviour disorders specifically Anxiety and Depression; and to investigate comorbidity of internalizing behaviour disorders with externalizing behaviour disorders i.e., Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) specific instruments were required. Therefore, Spence Child Anxiety Scale (SCAS-P) (Parent Report) by Spence (1999) and Child Behaviour Checklist (Urdu version) (CBCL/6-18) translated by (Khan & Awan, 2011) were selected. CBCL/6-18 was already available in Urdu language; however, Urdu translation of SCAS-P (Spence, 1999) was required. So, in Study I of Part II translation of SCAS-P into Urdu language and analysis of its psychometric properties was performed.

Spence (1999) developed a reliable and valid measure as screening instrument on the normal population i.e., known as Spence Child Anxiety Scale (SCAS-P). There was another scale known as the Screen for Child Anxiety Related Emotional Disorders (SCARED) developed on the clinical population by (Birmaher et al., 1997). Present study was planned with the non referred children from the community sample specifically schools; therefore, SCAS-P was selected for the present research.

As per literature, internalizing behaviour problems in early childhood were risk factors for teenage and adult depression, anxiety, and suicide, while externalizing behaviour problems were risk factors for later juvenile delinquency, adult crime, and violence (Farrington, 1989; Moffitt, 1993a; Raine, 2002). Therefore, identification of early childhood behaviour problems was considered extremely necessary for understanding and preventing the development of problem behaviours later in life

(Liu & Wuerker, 2005). For that reason, Part II focused on studying externalizing and internalizing behaviour disorders together.

According to Nauta et al. (2004), the internal consistency for the subscales of SCAS-P (English version) in the two different samples was satisfactory to excellent for most subscales. Psychometric properties of SCAS-P (English version) were determined on the anxiety disordered group and on the normal control group. The alpha .89 for the total scale was equally high in both groups, which indicated high internal homogeneity (Nauta et al., 2004).

In the Study I of Part II, translation of SCAS-P into Urdu language was carried out by using the standardized procedure of forward and back translation with the help of guidelines provided by (Brislin, 1976). The guidelines were consisted of maximizing the content similarity between the original and target language version, maintaining the relatively simple language level of the original text and translating the text without substitution or elimination of any item. Committee of expert bilinguals critically analyzed every item and selected the most appropriately translated items for SCAS-P (Urdu version). To establish the psychometric properties of the SCAS-P (Urdu version) alpha reliability coefficients and interscale correlation of the scale was determined. Initial psychometric analysis, using Cronbach's alpha coefficients yielded an internal consistency coefficient of .92 for the entire 38 items of SCAS-P. Item 39 was an open ended non scored item; mostly mothers in the present sample left it unfilled.

Findings of alpha reliability coefficients (See Table 114) for the six subscales of SCAS-P (Urdu version) ranged from .68 to .81. The alpha of SCAS-P subscales were as follows: Separation Anxiety Disorder (SAD) (α = .80), Social Phobia (Soph) (α = .75), Generalized Anxiety Disorder (GAD) (α = .74), Panic/Agoraphobia (α = .70), Obsessive Compulsive Disorder (OCD) (α = .81) and Physical Injury Fears (Phyinj) (α = .68). All subscales and total alpha reliability was satisfactory except Physical injury Fears that has marginal reliability.

SCAS-P (Urdu version) with well established psychometric properties was used in the subsequent study II to assess Anxiety Disorder in children with behaviour disorders. Loeber and Keenan (1994) reported that females with CD were more likely than males to experience a comorbid diagnosis of anxiety or depression, while males experienced higher rates of substance use disorders and ADHD. Studies however, agreed that oppositional defiant disorder (ODD), conduct disorder (CD) and anxiety/depression are highly comorbid with ADHD.ADHD-C type children tend to exhibit more internalizing behaviour, such as anxiety and depression, than do children in either one or both of the other subtypes (Faraone, Biederman, Weber, & Russell, 1998; Ostrander, Weinfurt, Yarnold, & August, 1998; Wolraich, Hannah, Pinnock, Baumgaertel, & Brown, 1996).

Wilens et al. (2002) found that 28% of preschoolers and 33% of school-age children had at least two or more anxiety disorders (one of which was typically a phobia), with the age at onset of the anxiety disorders being 2.6 to 3.0 years. SCAS-P (Urdu version) can be used in future researches focusing anxiety disorders in children from the school settings. In Study I, psychometric properties of SCAS-P (Urdu version) were established through mothers' ratings regarding their children that were selected from the schools. However, in future researches SCAS-P can be standardized on children selected from the clinical settings as well, children who are clinically referred and undergoing treatment. Future researches can also incorporate mothers and fathers' ratings both to get detailed information regarding children.

The subsequent section of Part II represented the details regarding the Study II, SCAS-P (Urdu version) was used for the assessment of anxiety disorders in screened out children.

Study II: Assessment of Externalizing and Internalizing Behaviour Disorders: Pervasiveness of DBD in Home and School settings

Study II focused on differential diagnosis of children with externalizing behaviour disorders that are Attention Deficit Hyperactivity Disorder (ADHD), Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD) with Internalizing behaviour disorders specifically Anxiety and Depression. In the Study I of Part II, SCAS-P (Spence, 1999) was translated into Urdu language (See Appendix M) and its psychometric properties were determined. Study II investigated level of Anxiety and Depression in children screened out with ADHD, ODD, CD and with comorbidity of these disorders through SCAS-P (Urdu version) and CBCL/6-18 (Urdu version) (Khan & Awan, 2011) (See Appendix N) respectively. Moreover, alpha reliability coefficients of CBCL (Urdu version) (Khan & Awan, 2011) were also determined.

In the present study, DBD Rating scale (Urdu version) (See Appendix E) will be used to assess childhood behaviour problems by taking mothers and teachers ratings. Home and School settings will be helpful in assessing pervasiveness of ADHD, CD, ODD and comorbid disorders. Differences in the ratings of mothers and teachers will prove useful in exploring situational variability of behavioural problems of children in home and school.

Main Objectives

Study II was designed with following main objectives.

1. To study differences of ADHD (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders in home and school settings via Mothers and Teachers ratings.
2. To study gender and class wise prevalence rate of children with (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders.
3. To study gender differences in children with (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders on DBD, SSBS, SCAS-P and CBCL.

4. To study role of demographic/familial factors in prediction of childhood behaviour problems.
5. To assess School Social Behaviour of children with ADHD (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders through SSBS.
6. To study manifest anxiety of children with ADHD (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders via SCAS-P (Urdu version).
7. To determine psychometric properties of Child Behaviour Checklist (CBCL) (Urdu version) by Khan and Awan (2011).
8. To assess children with (ADHD-I, ADHD-HI, ADHD-C), ODD, CD, and comorbid disorders through CBCL DSM oriented and Syndrome scales.
9. To determine alpha reliability coefficients and interscale correlation for DBD Rating scale (Urdu version) specifically via Mothers and Teachers ratings together.

To achieve Objectives of Study II following research hypothesis were formulated.

Hypotheses

1. Teachers' ratings will be comparatively higher as compared to mothers on DBD ratings scale (Urdu version).
2. Boys will show higher prevalence rate of disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders as compared to girls.
3. Boys will score high as compared to girls on total and subscales of DBD Rating scale.
4. Children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score low on Social Competence and its subscales as compared to comparison group of children.
5. Children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Antisocial behaviour subscale of SSBS as compared to comparison group of children.

6. Boys in DBD group and comparison group will score high as compared to girls on antisocial behaviour subscale and low on social competence subscale of SSBS.
7. Children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children.
8. Girls in DBD group and Comparison group will score high on total and subscales of SCAS-P as compared to boys.
9. Children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on DSM Oriented scales of CBCL as compared to comparison group of children.
10. Boys in DBD group and comparison group will score high on DSM Oriented scales of CBCL as compared to girls.
11. Children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscales of Syndrome scales of CBCL as compared to comparison group of children.
12. Boys in DBD group and comparison group will score high on total and subscales of Syndrome scales of CBCL as compared to girls.

Operational Definition of the Variables

Variables of Study II were defined as following.

Depression. Depression is a mood state characterized by a sense of inadequacy, a feeling of hopelessness, a decrease in activity, pessimism, sadness and related symptoms (Reber, 1995).

The variables of the Study II included similar variables that have already been defined in Part I (See page no. 92 for operational definitions of the variables).

Sample

Sample for the Study II included (*N* = 245; mean age = 9.68, *SD* = 1.56) academically low performing children within age range 7 to 13 years from various schools in the vicinity of Islamabad and Sheikhupura. There were (girls: *n* = 75; mean age = 9.32, *SD* = 1.25) and (boys: *n* = 170; mean age = 9.84, *SD* = 1.65) from 3 to 5 grades. DBD Rating scale (Urdu version), SCAS-P (Urdu version), and CBCL (Urdu version) (Khan & Awan, 2011) along with the consent form were presented to their respective mothers with age range 26 to 55 years (*N* = 245; mean age = 35.96, *SD* = 4.87) through School administration. Same children were also rated by their respective class teachers who taught them for at least last one year. Each class teacher was requested to rate three low performing students of her class. Low performer students were selected because of two reasons. First, as per literature children with disruptive behaviour disorders usually suffer poor academic performance (Barry et al., 2002; DuPaul et al., 2001; Faraone et al., 1993; Frick et al., 1991; Lonigan et al., 1999; McGee et al., 1986; Rapport et al., 1999; Zentall et al., 1994). Secondly, findings of Study II of Part I also suggested that mostly children with symptoms of childhood behaviour disorders were falling in the academically low performance group (See Table 13). Therefore, for Part II sample of children with low academic performance were selected. Teachers also made their ratings on the School Social Behaviour Scale (SSBS) (Urdu version) (See Appendix G) by (Loona & Kamal, 2002).

Most of the Mothers took keen interest in filling up the scales, however, out of total 400 distributed forms only 245 duly filled forms were returned (*N=245*). The response rate of duly filled forms was 61 per cent. McBurney (2001) stated drop-off administration of questionnaires may have very low rates of responding, that are often less than 50 per cent. However, response rate of present study that is 61 per cent is considered adequate. According to the School administration two basic reasons of low return rate by mothers was illiteracy and secondly due to their lack of interest in participating such activities. On part of the teachers their busy school schedule was reason of low response rate of forms.

Table 116

Number of children from the selected Schools (N = 245)

Name of Schools	*n*
Punjab Public School, Sheikhupura	58
Islamabad Model College for Boys F-8/4, Islamabad.	19
Islamabad College for Boys G-6/3 Islamabad.	58
Islamabad Model College for Girls I-10/4 Islamabad.	18
Islamabad Model College for Boys F-11/3 Islamabad.	5
Islamabad Model College for Girls F-7/4 Islamabad.	39
Islamabad Model College for Boys F-10/3 Islamabad.	33
F.G Junior Model School No: 2, G-9 Islamabad.	15
Total	245

Instruments

Details regarding Instruments used in the Study II are as follows.

DBD Rating Scale (Urdu version). DBD Rating scale (Urdu version) is 42 items scale that can be rated by Parents and Teachers to assess Attention-Deficit/Hyperactivity Disorder, including Inattention, and Hyperactivity/impulsivity, Oppositional Defiant Disorder, and Conduct Disorder (See details of the scale on page 64 of Part I).

Initial psychometric analysis of DBD Rating scale (Urdu version) in the Part I, using Cronbach alpha reliability coefficients yielded an internal consistency coefficient of .94 for the entire 42 items. Cronbach's alpha coefficients ranged from .80 to .91 for the four subscales of DBD Rating Scale (Urdu version). The alpha of subscales of DBD rating scale (Urdu version) were as follows, ADHD-I (α = .85), ADHD-HI (α = .80), ADHD-C (α = .86), ODD (α = .84), and CD (α = .91).

Spence Child Anxiety Scale (SCAS-P) (Urdu version) (Parent version). SCAS-P (Urdu version) (See Appendix M) having 38 anxiety items with one open

ended non scored item was used in the present study. It has six subscales that measure Separation Anxiety Disorder, Social Phobia, Generalized Anxiety Disorder, Panic/Agoraphobia, Obsessive Compulsive Disorder, and Physical Injury Fears (See details of the scale on page 217 of Study I of Part II).

Child Behaviour Checklist (CBCL) (Urdu version). The CBCL is widely used in mental health services, schools, medical settings, child and family services, public health agencies, child guidance, and training programs (Achenbach, 2009a) and it has been used in over 6,500 published scholarly articles (Achenbach, 2009b). Khan and Awan (2011) translated CBCL/6-18 by (Achenbach & Rescorla, 2001) into Urdu language (See Appendix N). The CBCL/6-18 obtains reports from parents, other close relatives, and/or guardians regarding children's competencies and behavioural/ emotional problems. Parents provide information for 20 competence items covering their child's activities, social relations, and school performance. The CBCL/6-18 has 118 items that describe specific behavioural and emotional problems, plus two open-ended items for reporting additional problems. Parents rate their child for how true each item is now or within the past 6 months using the following scale: 0 = not true (as far as you know); 1 = somewhat or sometimes true; 2 = very true or often true (Achenbach & Rescorla, 2001).

In the present research, five items were excluded from behavioural/emotional problems scale of CBCL with permission of author, those items were 2, 56h, 59, 60, and 113 (See Appendix Z-2). Item No 2 is culturally irrelevant to Muslim society (about alcohol use), Items 59 and 60 were sex related items, and item no 56h and 113 were open ended questions.

School Social Behaviour Scale (SSBS) (Urdu version). To assess Social Competence and Antisocial Behaviour of children School Social Behaviour Scale (Urdu version) by Loona and Kamal (2002) was used (See details about SSBS on page 65 of Part I). In the Part I of present research, alpha reliability coefficients of SSBS were established. The alpha coefficients established in Part I of present research were; for interpersonal skills, self management skills, and academic skills were .94,

.90 and .93 respectively. For hostile irritable, antisocial aggressive and disruptive demanding these were .88, .93 and .79. The alpha coefficient for the subscale of Social Competence was .96 and for Antisocial behaviour subscale it was .94.

Procedure

DBD Rating scale (Urdu version: See Appendix E), SCAS-P (Urdu version: See Appendix M) and CBCL (Urdu version: See Appendix N) along with Informed Consent (See Appendix T) was sent to mothers of academically low performing children of 3 to 5 grades. Class teachers were also presented a consent form (See Appendix F) along with DBD Rating scale (Urdu version) and SSBS (Urdu version) to rate their students' behaviour. These teachers were approached after taking institutional approval (See Appendix Y). Teachers were instructed to rate selected children on the 42 item DBD Rating scale (Urdu version) keeping in view their behaviour during the last six months in the classroom and school setting. Teachers were quite familiar with the behaviour of their class children; therefore they found no difficulty in rating children on the DBD Rating scale (Urdu version) and SSBS (Urdu version). Complete instructions about filling up the scale and response categories were mentioned on the scales for mothers and teachers. Most of the mothers took keen interest in filling up the scales and found no difficulty in understanding items. Similarly teachers reported no problem with the item comprehension.

Results

To determine reliability of DBD Rating scale (Urdu version) and its subscales through mothers and teachers ratings together, Cronbach alpha reliability coefficients and interscale correlation were calculated.

Alpha Reliability Coefficients of DBD Rating Scale.

Table 117

Alpha Reliability Coefficients of Total and Subscales of DBD Rating Scale via Mothers (n = 245) and Teachers (n = 82) ratings together

Subscales	No. of Items	Alpha Coefficients
ADHD-I	9	.87
ADHD-HI	9	.83
ADHD-C	18	.90
CD	16	.80
ODD	8	.83
Total DBD	42	.93

Note. ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; ODD = oppositional defiant Disorder; DBD = disruptive behaviour disorder.

Findings of Table 117 indicated Cronbach's alpha coefficients yielded an internal consistency coefficient of .93 for the entire 42 items of DBD Rating Scale (Urdu version). The alpha of subscales of DBD rating scale (Urdu version) were as follows, ADHD-I (α = .87), ADHD-HI (α = .83), ADHD-C (α = .90), ODD (α = .83), and CD (α = .80). Findings indicated high internal consistency of the total DBD Rating scale and its subscales on the basis of mothers' and teachers' ratings together.

In the Part I of present research, psychometric properties of DBD Rating scale were determined on the basis of teachers' ratings only. Initial psychometric analysis, using Cronbach's alpha coefficients yielded an internal consistency coefficient of .94 for the entire 42 items of DBD Rating Scale. The alphas of subscales of DBD rating scale were as follows, ADHD-I (α = .85), ADHD-HI (α = .80), ADHD-C (α = .86), ODD (α = .84), and CD (α = .91). Therefore, in the present study it was deemed important to evaluate Cronbach's alpha coefficients on the basis of mother and teachers ratings together.

Interscale Correlation Coefficients, Means, and Standard Deviations of DBD Rating Scale (Urdu version). To establish construct validity of DBD Rating Scale (Urdu version) (See Appendix E) on the basis of mothers and teachers ratings together interscale correlation among total and subscales were also calculated (See Table 118).

Findings of Table 118 indicated positive and significant interscale correlation among, mothers and teachers ratings on ADHD-I, ADHD-HI, ADHD-C, ODD, and CD and total of DBD rating scale. Mean scores and standard deviation (*SD*) on ADHD-I, ADHD-HI, ADHD-C, ODD, CD and total DBD were quite low that indicated only few children exhibited number of symptoms as per requirement of DSM-IV (APA, 1994) criteria.

Table 118

Interscale correlations, Means, and Standard Deviations of mothers (N = 245) and teachers (N = 82) ratings on subscales of DBD rating scale

	Subscales	1	2	3	4	5	6	7	8	9	10	11	12
1	ADHD-I - M	-											
2	ADHD-HI-M	.61**	-										
3	ADHD-C-M	.90**	.89**	-									
4	ODD-M	.58**	.65**	.68**	-								
5	CD-M	.57**	.60**	.65**	.67**	-							
6	Total_DBD_M	.88**	.88**	.98**	.79**	.76**	-						
7	ADHD-I-T	.27**	.15*	.24**	.12**	.14*	.22**	-					
8	ADHD-HI-T	.19**	.20**	.22**	.10**	.13*	.20**	.60**	-				
9	ADHD-C-T	.26**	.19**	.25**	.13**	.15*	.24**	.90**	.88**	-			
10	ODD-T	.18**	.17**	.20**	.19**	.20**	.21**	.58**	.78**	.75**	-		
11	CD-T	.14	.13*	.13*	.08	.21**	.15*	.47**	.64**	.62**	.78**	-	
12	Total_DBD_T	.24**	.19**	.24**	.14*	.18**	.24**	.85**	.89**	.97**	.86**	.76**	-
	M	8.99	8.24	17.23	5.63	4.62	44.71	12.31	9.22	21.53	6.60	5.22	54.88
	SD	5.58	5.11	9.62	4.05	3.82	25.03	6.72	6.00	11.40	5.06	5.16	30.57

Note. ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; ODD = oppositional defiant Disorder; DBD = disruptive behaviour disorder.

**$p < .01$, *$p < .05$

Table 119

Differences in the ratings of mothers and teachers on the total and subscales of DBD rating scale (N = 245)

	Child Rater's category								
	Mothers (n = 245)		Teachers (n = 82)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (245)*	*p*	*LL*	*UL*	*d*
ADHD-I	8.99	5.58	12.31	6.72	6.95	.000	-4.25	-2.37	-.53
ADHD-HI	8.24	5.11	9.22	5.58	2.19	.02	-1.87	-.103	-.18
ADHD-C	17.23	9.62	21.53	11.40	5.22	.000	-5.92	-2.68	-.40
ODD	5.63	4.05	6.60	5.06	2.58	.01	-1.69	-.230	-.21
CD	4.62	3.82	5.22	5.16	1.64	.10	-1.32	.120	-.13
Total DBD	44.71	25.03	54.88	30.57	4.61	.000	-14.50	-.5.82	-.25

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; ODD = oppositional defiant Disorder; DBD = disruptive behaviour disorder.

*$p < .05$

Table 119 showed the mean differences between mothers' *(n = 245)* and teachers' *(n = 82)* ratings on DBD Rating Scale (Urdu version) regarding children of the present sample (N = 245). Results indicated that mean scores of mothers' ratings were comparatively low as compared to mean scores of teachers' ratings. Low mean scores via mother's ratings could be due to two reasons firstly the emotional factor. Secondly, it could be due to the differences in exhibition of child's behaviour in the home or school situation. The only nonsignificant mean difference between mothers and teachers ratings was on Conduct Problems that indicated common perception of mothers and teachers with reference to conduct problems. Teachers' high mean scores

on ADHD-I, ADHD-HI, ADHD-C and ODD subscales indicated that children exhibit behaviour problems more in the school setting as compared to home. So findings of Table 119 proved the hypothesis no. 1 significant that teacher ratings will be comparatively higher as compared to mothers on DBD ratings scale (Urdu version).

Differences of ADHD (ADHD-I, ADHD-HI, ADHD-C), ODD, CD and comorbid disorders in home and school settings via Mothers and Teachers ratings were also presented through bar charts.

Variability of Behaviour Disorders via ratings of Mothers, Teachers, and Mothers/Teachers together *(N = 245)*

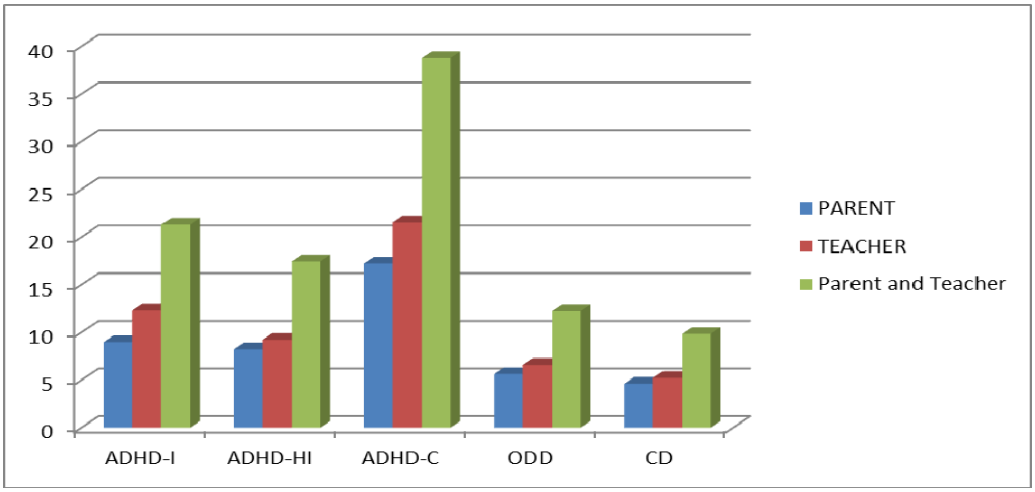

Figure 6. Mean differences in ratings of mothers, teachers and mothers-teachers together (Pervasiveness across Home and School situations) on DBD rating scale *(N=245)*.

Figure 6 showed mean differences in ratings of mothers, teachers and mothers-teachers together (Pervasiveness across home and school situations) on DBD rating scale *(N=245)*. Bars represented mothers' means scores were comparatively low as compared to teachers. Whereas assessment of mother-teachers ratings together indicated relatively high mean as compared to mother only and teacher only rating.

Variability of Behaviour Disorders via ratings of Mothers, Teachers and Mothers/Teachers together while considering the comorbidities *(N = 245)*

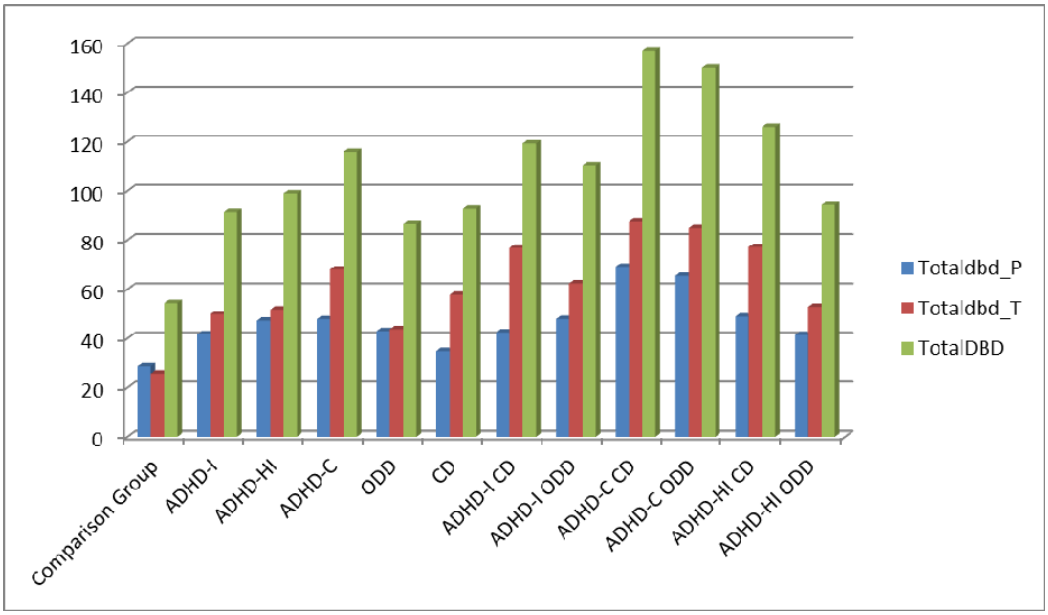

Figure 7. Bars representing differences in ratings of Mothers, Teachers and Mothers/Teachers together on DBD Rating scale (Urdu version) while considering the comorbidities according to the DSM-IV (APA, 1994) criteria *(N=245)*.

Figure 7 showed mean differences in ratings of mothers, teachers and mothers-teachers together on DBD rating scale (Urdu version) while considering comorbidities as per DSM–IV (APA, 1994) criteria (*N* = 245). Bars represented mothers' means scores were comparatively low as compared to teachers. Assessment of comorbidities through mothers-teachers ratings together indicated relatively high mean on DBD rating scale as compared to separate ratings of mothers and teachers.

Gender wise and grade wise prevalence rate of children with disruptive behaviour disorders was assessed. As per literature, boys develop externalizing difficulties more as compared to girls (e.g., Achenbach, Howell, Quay, & Conners, 1991; Keiley, Bates, Dodge, & Pettit, 2000).

Table 120

Gender wise Prevalence rate of Children with Childhood Behaviour Disorders via Mothers' and Teachers' ratings on DBD Rating Scale (N = 245)

	Gender		
	Boys	Girls	Total
Groups	*n* (%)	*n* (%)	*n* (%)
Comparison group	48 (19.6)	32 (13.1)	80 (32.7)
ADHD-I	31 (12.7)	11 (4.5)	42 (17.1)
ADHD-HI	4 (1.6)	1 (.4)	5 (2.0)
ADHD-C	8 (3.3)	3 (1.2)	11 (4.5)
ODD	4(1.6)	0 (.0)	4 (1.6)
CD	8 (3.3)	0 (.0)	8 (3.3)
ADHD-I CD	7 (2.9)	6 (2.4)	13(5.3)
ADHD-I ODD	6 (2.4)	1 (.4)	7 (2.9)
ADHD-C CD	34 (13.7)	10 (4.1)	44 (18.0)
ADHD-C ODD	14 (5.7)	4 (1.6)	18 (7.3)
ADHD-HI CD	5 (2.0)	1 (.4)	6 (2.4)
ADHD-HI ODD	1 (.4)	6 (2.4)	7 (2.9)
Total DBD	122 (49.8)	43 (17.5)	165 (68)
Overall Total	170 (69.4)	75 (30.6)	245 (100.0)

Note. (Percentage in Parenthesis). ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; ODD = oppositional defiant Disorder; DBD = disruptive behaviour disorder.

Findings of the Table 120 showed higher prevalence rate of boys with childhood behaviour disorders as compared to girls. DBD groups i.e., ADHD-I, ADHD-HI, ODD, CD, ADHD-C, and comorbid groups displayed significant differences in the prevalence rate. Girls surpassed boys only on the group ADHD-HI comorbid with ODD. According to literature, conduct disorders are more commonly diagnosed in boys than in girls; a ratio of about 3:1 or 4:1 is typically cited (Loeber, Burke, Lahey, Winters, & Zera, 2000). However, ODD and CD are still relatively common diagnoses for girls in clinical settings and are associated with a variety of negative outcomes, such as early pregnancy and criminal records. So findings of Table 120 supported the hypothesis no. 2 that boys will show higher prevalence rate

of disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders as compared to girls.

In the Study II of Part II sample was consisted of children of 3rd, 4th, and 5th grades from different schools. Grade wise prevalence rate of children with disruptive behaviour disorders was assessed with the help of teachers and mothers ratings on DBD Rating scale (Urdu version).

Table 121

Grade wise Prevalence rate of Children with Childhood Behaviour Disorders via Mothers' and Teachers' ratings on DBD Rating Scale (N = 245)

	Grades			
	3rd	4th	5th	Total
Groups	*n* (%)	*n* (%)	*n* (%)	*N* (%)
Comparison group	16 (6.5)	28 (11.4)	36 (14.7)	80 (32.0)
ADHD-I	10 (4.1)	14 (5.7)	18 (7.3)	42 (17.1)
ADHD-HI	4 (1.6)	1 (.4)	0 (.0)	5 (2.0)
ADHD-C	3 (1.2)	5 (2.0)	3 (1.2)	11 (4.5)
ODD	2 (.8)	0 (.0)	2 (.8)	4 (1.6)
CD	2 (.8)	5 (2.0)	1 (.4)	8 (3.3)
ADHD-I CD	5 (2.0)	4 (1.6)	4 (1.6)	13 (5.3)
ADHD-I ODD	2 (.8)	1 (.4)	4 (1.6)	7 (2.9)
ADHD-C CD	17 (6.9)	10 (4.1)	17 (6.9)	44 (18.0)
ADHD-C ODD	8 (3.3)	5 (2.0)	5 (2.0)	18 (7.3)
ADHD-HI CD	2 (.8)	3 (1.2)	1 (.4)	6 (2.4)
ADHD-HI ODD	4 (1.6)	2 (.8)	1 (.4)	7 (2.9)
Total DBD	59 (24.1)	50 (20.4)	56 (22.9)	165 (68)
Overall Total	75 (30.6)	78 (31.8)	92 (37.6)	245 (100)

Note. (Percentage in Parenthesis). ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; ODD = oppositional defiant Disorder; DBD = disruptive behaviour disorder.

Table 121 represented grade wise prevalence rate of children in the sample under study. Over all, there were 75 per cent children from grade 3rd, 78 per cent from

grade 4th, and 92 per cent were from grade 5th. Among DBD groups ADHD-C CD comorbid group had the highest prevalence rate representing 3rd, 4th, and 5th grades that was 18 per cent, where as, ADHD-I group had the second highest prevalence rate i.e., 17.1 per cent. Grade wise prevalence rate indicated about 24.1 per cent DBD children were from grade 3rd, 20.4 per cent were from grade 4th, and 22.9 per cent were from grade 5th.

Assessment of gender differences via ratings of Mothers, Teachers and Mothers/Teachers together on the DBD Rating scale (Urdu version). To examine gender differences between boys and girls on total and subscales of DBD Rating scale (Urdu version) independent sample *t*-test was used.

Table 122

Gender Differences of DBD groups via Mothers' ratings on the DBD Rating scale (Urdu version) (N = 165)

	Gender								
	Boys (*n* =122)		Girls (*n* = 43)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
ADHD-I	10.73	5.54	10.70	6.26	.03	16	-1.97	2.04	.005
ADHD-HI	9.90	5.30	8.12	5.22	1.90	.05	-.06	3.63	.33
ADHD-C	20.63	9.75	18.81	9.73	1.05	.29	-1.59	5.23	.18
ODD	6.65	4.28	6.49	4.49	.20	.83	-1.36	1.67	.03
CD	5.94	4.48	4.44	2.71	2.06	.04	.06	2.93	.40
Total DBD	53.85	25.73	48.56	24.22	1.17	.24	-3.58	14.17	.21

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Findings of Table 122 showed gender differences of DBD groups via mothers' ratings on the total and subscales of DBD Rating scale (Urdu version). There was nonsignificant gender difference between boys and girls on ADHD-I, ADHD-HI,

ADHD-C and ODD subscales. Only on the CD subscale of DBD rating scale boys showed significantly high mean (M = 5.94) as compared to girls (M = 4.44). Findings indicated that boys indulge in conduct problems more as compared to girls of the same age group. So hypothesis no. 3 that boys will score high as compared to girls on total and subscales of DBD Rating scale proved significant only for CD subscale.

Table 123

Gender Differences of DBD groups via Teachers' ratings on the DBD Rating scale (Urdu version) (N = 165)

	Gender								
	Boys (n =122)		Girls (n = 43)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
ADHD-I	15.28	5.59	15.47	6.17	.18	.85	-2.20	1.82	-.03
ADHD-HI	11.42	5.68	11.70	5.81	.27	.78	-2.28	1.72	-.04
ADHD-C	26.70	9.10	27.16	10.47	.27	.78	-3.78	2.85	-.04
ODD	8.51	4.79	8.53	5.27	.03	.97	-1.74	1.69	.10
CD	7.07	5.21	6.35	5.65	.76	.44	-1.14	2.59	.13
Total DBD	68.98	24.56	69.21	29.06	.05	.95	-9.26	8.80	-.008

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Findings of Table 123 showed gender differences of DBD groups on the DBD Rating scale (Urdu version) via teachers' ratings. There was nonsignificant difference between boys and girls on ADHD-I, ADHD-HI, ADHD-C, ODD and CD subscales of DBD rating scale (Urdu version). So hypothesis no. 3 that boys will score high as compared to girls on total and subscales of DBD Rating scale proved nonsignificant. Findings indicated boys and girls exhibited similar level of behaviour problems on the total and subscales of DBD Rating scale.

Table 124

Gender Differences of DBD groups via Mothers' and Teachers' ratings together on the DBD Rating scale (Urdu version) (N = 165)

	Gender								
	Boys (*n* =122)		Girls (*n* = 43)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
ADHD-I	26.01	7.85	26.16	8.53	.10	.91	-2.96	2.66	-.01
ADHD-HI	21.32	8.09	19.81	7.84	1.05	.29	-1.30	4.31	.18
ADHD-C	47.33	13.24	45.98	13.50	.57	.56	-3.31	6.01	.10
ODD	15.16	6.48	15.02	6.87	.11	.91	-2.17	2.43	.01
CD	13.02	7.28	10.79	5.60	1.82	.07	-.18	4.63	.34
Total DBD	122.83	34.44	117.77	35.53	.82	.41	-7.10	17.22	.14

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Finings of Table 124 showed gender differences of DBD groups on the DBD Rating scale (Urdu version) via mothers' and teachers ratings together. Findings indicated nonsignificant difference between boys and girls on ADHD-I, ADHD-HI, ADHD-C, ODD and CD subscales. So hypothesis no. 3 that boys will score high as compared to girls on total and subscales of DBD Rating scale proved nonsignificant.

Assessment of Demographic factors in prediction of childhood behaviour problems. To study role of demographic factors in the prediction of childhood behaviour disorders binary logistic regression was performed with dummy coding of categorical variables. Logistic regression is a version of multiple regression in which the outcome is dichotomous (Andy, 2005). Demographic variables under study included both continuous independent variables and categorical independent variables. The dependent variable was dichotomous; one which can take on one of two values. Table 125 is presenting the detailed out come of the analysis.

Table 125

Demographic Factors as predictor for Childhood Behaviour Disorders (N = 245)

					95 % CI	
Predictors	B	Wald	*p*	Exp (B)	LL	UL
gender2	.86	7.16	.007*	2.38	1.26	4.50
fath_FA	-1.28	9.05	.003*	.27	.12	.63
fath_BA	-.86	3.83	.050*	.42	.17	1.00
fath_MA	-.95	2.98	.084	.38	.12	1.13
father_prof	-.24	.58	.445	.78	.42	1.46
moth_FA	-.20	.21	.646	.81	.33	1.96
moth_BA	-.85	2.08	.149	.42	.13	1.35
moth_MA	-.23	.11	.737	.78	.19	3.16
moth_prof	-.85	1.87	.171	.42	.12	1.44
family_sys	-.41	1.88	.170	.66	.36	1.19
Age	.23	5.18	.023*	1.26	1.03	1.55
no_sib	.10	.48	.485	1.11	.82	1.51
sib_no	-.02	.03	.861	.97	.74	1.28
f_income	.10	1.16	.281	1.10	.91	1.33
Constant	-2.02	2.48	.115	.13		

Note. CI = confidence interval; LL = lower limit; UL = upper limit; Gender2 = Gender; fath_FA, = father FA; fath_BA = father BA; fath_MA = Father MA; father_prof = Father Profession; moth_FA = Mother FA; moth_BA = Mother BA; moth_MA = Mother MA; moth_prof = Mother profession; family_sys = family system; age = age; no_sib = no of siblings; sib_no = birth order of the child; f_income = father income.

*p<.05

Table 125 showed the findings of binary logistic regression for the assessment of demographic factors in the prediction of childhood behaviour disorders. Findings indicated that gender of child, child's age, father's education up to Matriculation, F.A (Intermediate) and B.A (Graduation) proved significant predictors of childhood behaviour problems. However, rest of demographic factors including father's income, mothers' education, family system, and marital status proved nonsignificant for predicting childhood behaviour disorders. So findings proved that education of parents specifically fathers' play extremely important role in the upbringing of the

child. Children with low paternal education suffer more behavioural problems as compared to highly educated fathers. Likewise, assessment of age and gender showed that children of younger age and boys were significant predictors for childhood behavioural disorders.

Differences in children with childhood behaviour disorders on SSBS. To study differences in children with childhood behaviour disorders and comparison group on SSBS and its subscales; One way ANOVA was performed. Findings in the subsequent section presented the details about the analysis.

Table 126

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Interpersonal Skills subscale of SSBS (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	37.93	(11.47)	35.37	40.48	1.92	.03
ADHD-I	42	32.62	(10.64)	29.30	35.93		
ADHD-HI	5	33.40	(4.66)	27.60	39.20		
ADHD-C	11	30.91	(10.50)	23.85	37.96		
ODD	4	45.00	(18.70)	15.23	74.77		
CD	8	33.13	(6.85)	27.39	38.86		
ADHD-I CD	13	29.54	(8.70)	24.28	34.80		
ADHD-I ODD	7	29.57	(12.47)	18.03	41.11		
ADHD-C CD	44	32.43	(10.06)	29.37	35.49		
ADHD-C ODD	18	33.61	(8.12)	29.57	37.65		
ADHD-HI CD	6	36.83	(9.60)	26.76	46.91		
ADHD-HI ODD	7	36.71	(16.08)	21.84	51.59		
Total	245	34.52	(10.97)	33.14	35.90		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Findings of Table 126 showed mean differences between DBD groups and comparison group of children on interpersonal skills subscale of Social Competence. ODD group scored the highest mean (M = 45.00) on interpersonal skills as compared to other DBD groups. Comparison group represented academically low performing children but they were not exhibiting behavioural disorders. Comparison group showed (M = 37.93) on interpersonal skills subscale that was relatively better as compared to other DBD groups besides ODD group. So hypothesis no. 4 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score low on Social Competence and its subscales as compared to comparison group of children proved significant for all DBD groups except ODD. The scores of comparison group were not considerably different from other DBD groups on interpersonal skills subscale because they were also representing academically low performing children. As per literature, children with low academic performance usually experience low social competence.

Table 126 showed significant differences in children with disruptive behaviour disorders and comparison group. Results indicated comorbid groups ADHD- I ODD and ADHD-I CD children have relatively low mean scores as compared to other groups.

To further explore significant differences between groups, Tukey Honestly Significant Difference (HSD) post hoc test was performed. However, findings of HSD revealed nonsignificant differences between all groups.

Table 127

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Self Management Skills subscale of SSBS (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	33.00	(8.10)	31.20	34.80	5.04	.000
ADHD-I	42	33.33	(7.07)	31.13	35.54		
ADHD-HI	5	28.40	(3.50)	24.05	32.75		
ADHD-C	11	29.91	(6.68)	25.42	34.40		
ODD	4	36.50	(7.50)	24.56	48.44		
CD	8	22.88	(7.45)	16.64	29.11		
ADHD-I CD	13	29.54	(6.22)	25.78	33.30		
ADHD-I ODD	7	29.71	(5.96)	24.20	35.23		
ADHD-C CD	44	25.70	(5.88)	23.92	27.49		
ADHD-C ODD	18	27.22	(4.71)	24.88	29.56		
ADHD-HI CD	6	26.67	(5.31)	21.09	32.25		
ADHD-HI ODD	7	29.29	(10.73)	19.36	39.21		
Total	245	30.28	(7.69)	29.31	31.25		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder, CD = conduct disorder.

**$p < .01$

Findings of Table 127 showed mean differences between DBD groups and comparison group of children on Self Management Skills subscale of SSBS. ODD group of children scored the highest mean on self management skills as compared to other DBD groups. CD group scored the lowest mean that indicated these children lack self management skills as compared to other DBD groups.

Table 127 showed significant differences between children with disruptive behaviour disorders and comparison group on Self Management Skills subscale of Social Competence. Findings indicated CD children showed relatively low mean scores as compared to other DBD groups. So hypothesis no. 4 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score low on Social Competence and its subscales as compared to comparison group of children proved significant excluding ODD and ADHD-I group. Children with externalizing problem behaviours have underdeveloped self-regulation skills, leading to under controlled behaviours (Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1996).

To further explore the significant findings as mentioned on Table 127 Tukey' Honestly Significant Difference (HSD) post hoc test was carried out.

Table 128

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Self Management Skills subscale of Social Competence (N = 245)

					95% CI	
I (Groups)	J (Groups)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison grp	CD	10.12*	2.62	.008	1.46	18.79
	ADHD-C CD	7.29*	1.32	.000	2.91	11.68
ADHD-I	CD	10.45*	2.73	.009	1.45	19.47
	ADHD-C CD	7.62*	1.52	.000	2.59	12.67

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – predominantly inattentive type; CD = conduct disorder; ADHD-C CD = attention deficit hyperactivity disorder – combined type comorbid with CD; comparison gp = comparison group.

** $p < .01$

Findings of Table 128 showed significant differences between comparison group and CD group with mean difference ($I - J = 10.12$). Moreover, comparison

group also significantly differed from comorbid group i.e., ADHD-C CD having mean difference (*I* – *J* = 7.29). Findings also indicated that ADHD-I group also significantly differed from DBD groups i.e., CD and ADHD-C CD.

Table 129

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Academic Skills subscale of SSBS (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	24.33	(7.55)	22.64	26.01	3.78	.000
ADHD-I	42	19.45	(7.79)	17.02	21.88		
ADHD-HI	5	19.00	(1.87)	16.68	21.32		
ADHD-C	11	21.00	(9.05)	14.92	27.08		
ODD	4	31.25	(7.32)	19.60	42.90		
CD	8	21.13	(5.05)	16.90	25.35		
ADHD-I CD	13	16.92	(6.99)	12.70	21.15		
ADHD-I ODD	7	19.29	(6.87)	12.93	25.64		
ADHD-C CD	44	17.84	(5.59)	16.14	19.54		
ADHD-C ODD	18	20.89	(6.23)	17.79	23.99		
ADHD-HI CD	6	22.33	(6.86)	15.13	29.53		
ADHD-HI ODD	7	20.14	(9.58)	11.28	29.00		
Total	245	21.12	(7.56)	20.17	22.07		

Between groups *df* = 11; within groups *df* = 233; groups total *df* = 244

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder, CD = conduct disorder.

**$p < .01$

Table 129 showed mean differences between DBD groups and Comparison group of children on Academic Skills subscale of SSBS. Comparison group of children have relatively high mean as compared to all DBD groups except ODD

group. ODD group scored the highest mean (M = 31.25) on Academic skills. Previously, ODD group also scored highest mean (M = 45.00) on Interpersonal Skills subscale. So excluding ODD group, findings supported the hypothesis that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score low on Social Competence and its subscales as compared to comparison group of children.

One of the serious difficulties faced by children who meet criteria for attention-deficit/hyperactivity disorder (ADHD) is poor academic achievement (Barry et al., 2002; DuPaul et al., 2001; Faraone et al., 1993; Frick et al., 1991; Lonigan et al., 1999; McGee et al., 1986; Rapport et al., 1999; Zentall et al., 1994).

Findings of Table 129 showed significant differences between children with disruptive behaviour disorders and Comparison group on Academic Skills subscale of Social Competence. ADHD tends to be more closely related to academic failure and cognitive deficits (Fergusson, Horwood, & Lynskey, 1993).

To further explore significant differences between groups as mentioned in the Table 129, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 130

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Academic Skills subscale of Social Competence (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	ADHD-I	4.87*	1.35	.02	.39	9.36
	ADHD-I CD	7.40*	2.13	.03	.36	14.44
	ADHD-C CD	6.48*	1.33	.000	2.07	10.90
ODD	ADHD-I CD	14.32*	4.07	.02	.87	27.79
	ADHD-C CD	13.40*	3.72	.01	1.12	25.70

Note. CI = confidence interval; LL = lower limit; UL = upper limit. ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD – C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder.

**$p < .01$

Table 130 showed findings of Tukey's Honestly Significant Difference (HSD) Test on Academic Skills subscale of Social Competence. Findings indicated comparison group significantly differed from DBD groups i.e., ADHD-I, ADHD-I CD, and ADHD-C CD. Literature also suggested that ADHD tends to be more closely related to academic failure and cognitive deficits (Fergusson, Horwood, & Lynskey, 1993). So according to the findings of Table 130 children in the comparison group showed better academic skills as compared to DBD groups. Moreover, ODD group also showed significant differences with ADHD-I CD and ADHD-C CD group.

Table 131

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Social Competence subscale of SSBS (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	95.25	(23.97)	89.91	100.59	3.21	.000
ADHD-I	42	85.40	(22.60)	78.36	92.45		
ADHD-HI	5	80.80	(5.40)	74.09	87.51		
ADHD-C	11	81.82	(22.63)	66.61	97.02		
ODD	4	112.75	(31.84)	62.07	163.43		
CD	8	77.13	(15.20)	64.41	89.84		
ADHD-I CD	13	76.00	(17.07)	65.68	86.32		
ADHD-I ODD	7	78.57	(22.21)	58.02	99.12		
ADHD-C CD	44	75.98	(19.52)	70.04	81.91		
ADHD-C ODD	18	81.72	(16.40)	73.56	89.88		
ADHD-HI CD	6	85.83	(19.67)	65.19	106.48		
ADHD-HI ODD	7	86.14	(34.40)	54.33	117.96		
Total	245	85.91	(23.07)	83.01	88.82		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

$^{**}p < .01$

Table 131 showed mean differences between DBD groups and comparison group of children on Social Competence subscale of SSBS. ODD group and comorbid group i.e., ADHD-HI ODD scored significantly high mean as compared to other DBD groups. Comparison group showed mean score ($M = 95.25$) that was relatively high as compared to all other DBD groups except ODD. Comparison group also represented academically low performing children therefore despite that they were not in DBD group their scores on interpersonal skills, self management skills and academic skills were not prominently different from DBD groups.

Table 131 showed significant differences between children with disruptive behaviour disorders and comparison group on Social Competence subscale of SSBS. To see in detail exactly how these differences exist in DBD groups Tukey's Honestly Significant Difference (HSD) was performed.

Table 132

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Social Competence subscale of SSBS (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison grp	ADHD-C CD	19.27*	4.12	.000	5.64	32.90

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; comparison grp = comparison group.
**$p < .01$

Table 132 indicated significant difference between comparison group and comorbid group i.e., ADHD-C CD on Social Competence subscale of SSBS (* $p <$ .000). However, differences between other groups proved nonsignificant. So hypothesis no. 4 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score low on Social Competence and its subscales as compared to comparison group of children proved significant for ADHD-C CD group only.

Table 133

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Hostile Irritable Subscale of Antisocial Behaviour (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	22.54	(6.93)	20.99	24.08	14.25	.000
ADHD-I	42	23.12	(5.49)	21.41	24.83		
ADHD-HI	5	28.80	(6.61)	20.59	37.01		
ADHD-C	11	26.27	(6.85)	21.67	30.88		
ODD	4	35.25	(16.29)	9.32	61.18		
CD	8	30.50	(9.84)	22.27	38.73		
ADHD-I CD	13	33.85	(8.11)	28.94	38.75		
ADHD-I ODD	7	31.43	(6.16)	25.73	37.13		
ADHD-C CD	44	37.82	(10.08)	34.75	40.88		
ADHD-C ODD	18	36.83	(10.75)	31.48	42.18		
ADHD-HI CD	6	35.17	(6.40)	28.45	41.88		
ADHD-HI ODD	7	24.43	(8.67)	16.40	32.45		
Total	245	28.41	(10.20)	27.13	29.70		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

$^{**}p < .01$

Findings of Table 133 showed mean differences between DBD groups and comparison group of children on Hostile Irritable Subscale of Antisocial Behaviour. Comparison group of children scored the lowest mean ($M = 22.54$) as compared to all DBD groups. ADHD-C CD group of children had the highest mean ($M = 37.82$) that indicated their higher involvement in the hostile irritable activates. Literature also suggested that externalizing behaviour including oppositionality, conduct disorder, and aggression tends to be most characteristic of the ADHD-C subtype as compared to ADHD-I, and ADHD-HI (Eiraldi et al., 1997; Faraone et al., 1998; Morgan, Hynd, Riccio, & Hall, 1996; Skansgaard & Burns, 1998).

Findings of Table 133 showed significant differences between children with disruptive behaviour disorders and comparison group on Hostile Irritable subscale of SSBS.

To further explore significant differences between groups as mentioned in the Table 133, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 134

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Hostile Irritable subscale of Antisocial Behaviour (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	ADHD-I CD	-11.30*	2.41	.000	-19.28	-3.34
	ADHD-C CD	-15.28*	1.51	.000	-20.28	-10.28
	ADHD-C ODD	-14.29*	2.10	.000	-21.25	-7.35
	ADHD-HI CD	-12.62*	3.41	.01	-23.91	-1.35
ADHD-I	ADHD-I CD	-10.72*	2.56	.002	-19.18	-2.27
	ADHD-C CD	-14.69*	1.74	.000	-20.45	-8.95
	ADHD-C ODD	-13.71*	2.27	.000	-21.22	-6.21
	ADHD-HI CD	-12.04*	3.52	.03	-23.68	-.42
ADHD-C	ADHD-C CD	-11.54*	2.72	.002	-20.53	-2.56
	ADHD-C ODD	-10.56*	3.08	.03	-20.76	-.36
ADHD-HI ODD	ADHD-C CD	-13.39*	3.28	.004	-24.23	-2.55
	ADHD-C ODD	-12.40*	3.59	.03	-24.27	-.54

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Findings of Table 134 indicated significant differences between DBD groups and comparison group on hostile irritable subscale. Comparison group was significantly low as compared to DBD groups. So findings supported hypothesis no. 5 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Antisocial behaviour subscale of SSBS as compared to comparison group of children.

Table 135

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Antisocial Aggressive Subscale of SSBS (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	13.30	(4.70)	12.25	14.35	12.44	.000
ADHD-I	42	14.95	(4.03)	13.69	16.21		
ADHD-HI	5	17.20	(3.70)	12.60	21.80		
ADHD-C	11	17.82	(7.64)	12.69	22.95		
ODD	4	20.75	(14.00)	-1.54	43.04		
CD	8	21.88	(10.78)	12.85	30.90		
ADHD-I CD	13	24.54	(5.23)	21.37	27.70		
ADHD-I ODD	7	19.86	(5.66)	14.61	25.10		
ADHD-C CD	44	25.30	(9.14)	22.51	28.08		
ADHD-C ODD	18	22.44	(8.86)	18.04	26.85		
ADHD-HI CD	6	24.83	(7.46)	17.00	32.67		
ADHD-HI ODD	7	13.29	(3.03)	10.47	16.10		
Total	245	18.16	(8.16)	17.13	19.19		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Table 135 showed mean differences between DBD groups and comparison group of children on Antisocial Aggressive subscale of Antisocial Behaviour. Comparison group of children (M = 13.30) and ADHD-HI ODD comorbid group (M = 13.29) scored significantly low mean on Antisocial Aggressive subscale as compared to all DBD groups. ADHD-C CD group of children again scored the highest mean (M = 25.30) as compared to other DBD groups. It indicated their higher involvement in the Antisocial Aggressive activities. Adolescents with CD only or co-morbid CD and ADHD showed increased levels of antisocial behaviour compared to adolescents with ADHD only (Biederman, Mick, Faraone, & Burbank, 2001).

Findings of Table 135 showed significant differences between children with disruptive behaviour disorders and comparison group on Antisocial Aggressive subscale of Antisocial Behaviour. So findings supported hypothesis no. 5 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Antisocial behaviour subscale of SSBS as compared to comparison group of children.

To further explore significant differences between groups as mentioned in the Table 135, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 136

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Antisocial Aggressive subscale of Antisocial Behaviour (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	CD	-8.57*	2.45	.028	-16.69	-.46
	ADHD-I CD	-11.23*	1.98	.000	-17.79	-4.69
	ADHD-C CD	-11.99*	1.24	.000	-16.10	-7.89
	ADHD-C ODD	-9.14*	1.73	.000	-14.86	-3.43
	ADHD-HI CD	-11.53*	2.80	.003	-20.80	-2.27
ADHD-I	ADHD-I CD	-9.58*	2.10	.001	-16.53	-2.64
	ADHD-C CD	-10.34*	1.43	.000	-15.07	-5.62
	ADHD-C ODD	-7.49*	1.86	.005	-13.66	-1.32
	ADHD-HI CD	-9.88*	2.89	.036	-19.44	-.33
ADHD-C	ADHD-C CD	-7.47*	2.23	.044	-14.86	-.10
ADHD-HI ODD	ADHD-I CD	-11.25*	3.10	.018	-21.52	-.99
	ADHD-C CD	-12.01*	2.69	.001	-20.92	-3.10

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Findings of Table 136 indicated significant differences between comparison group and DBD groups i.e., CD, ADHD-I CD, ADHD-C CD, ADHD-C, and ODD on antisocial aggressive subscale of Antisocial Behaviour.

Table 137

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Disruptive Demanding Subscale of SSBS (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	17.35	(5.07)	16.22	18.48	10.30	.000
ADHD-I	42	22.00	(4.88)	20.48	23.52		
ADHD-HI	5	23.80	(1.09)	22.44	25.16		
ADHD-C	11	23.64	(5.67)	19.82	27.45		
ODD	4	22.25	(10.37)	5.75	38.75		
CD	8	21.13	(9.21)	13.42	28.83		
ADHD-I CD	13	26.15	(4.79)	23.26	29.05		
ADHD-I ODD	7	22.43	(6.87)	16.07	28.79		
ADHD-C CD	44	27.61	(6.12)	25.75	29.48		
ADHD-C ODD	18	24.94	(5.48)	22.22	27.67		
ADHD-HI CD	6	24.67	(7.68)	16.60	32.73		
ADHD-HI ODD	7	20.00	(5.85)	14.58	25.42		
Total	245	22.03	(6.73)	21.19	22.88		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

**$p < .01$

Findings of Table 137 indicated mean differences between DBD groups and comparison group of children on disruptive demanding subscale of Antisocial Behaviour scale. Comparison group of children showed significantly low mean on disruptive demanding subscale (M = 17.35) as compared to all DBD groups. The highest mean (M = 27.61) on disruptive demanding subscale was of ADHD-C CD group of children that indicated their higher involvement in the disruptive activities.

Findings of Table 137 showed significant differences between DBD children and comparison group of children on disruptive demanding subscale of Antisocial Behaviour scale. So findings supported hypothesis no. 5 that children with

behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Antisocial behaviour subscale of SSBS as compared to comparison group of children.

To further explore significant differences between groups as mentioned in the Table 137, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 138

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Disruptive Demanding subscale of Antisocial Behaviour scale (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	ADHD-I	-4.65*	1.07	.001	-8.21	-1.09
	ADHD-C	-6.28*	1.81	.03	-12.29	-.29
	ADHD-I CD	-8.80*	1.69	.000	-14.38	-3.22
	ADHD-C CD	-10.26*	1.06	.000	-13.77	-6.76
	ADHD-C ODD	-7.59*	1.47	.000	-12.46	-2.73
ADHD-C CD	ADHD-I	5.61*	1.21	.000	1.59	9.64
	ADHD-HI ODD	7.61*	2.30	.04	.02	15.21

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Findings of Table 138 indicated significant differences between comparison group and DBD groups i.e., ADHD-I, ADHD-C, ADHD-I CD, ADHD-C CD, ADHD-C ODD on disruptive demanding subscale. Moreover, ADHD-C CD that scored the highest mean (M = 27.61) also significantly differed from DBD group ADHD-I and comorbid group ADHD-HI ODD.

Table 139

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Antisocial Behaviour Subscale of SSBS (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	53.19	(14.30)	50.00	56.37	15.33	.000
ADHD-I	42	60.07	(11.02)	56.64	63.51		
ADHD-HI	5	69.80	(9.62)	57.85	81.75		
ADHD-C	11	67.73	(18.05)	55.60	79.85		
ODD	4	78.25	(40.39)	13.98	142.52		
CD	8	73.50	(27.79)	50.27	96.73		
ADHD-I CD	13	84.54	(15.41)	75.22	93.85		
ADHD-I ODD	7	73.71	(14.43)	60.37	87.06		
ADHD-C CD	44	90.73	(23.26)	83.66	97.80		
ADHD-C ODD	18	84.22	(23.82)	72.37	96.07		
ADHD-HI CD	6	84.67	(18.55)	65.19	104.14		
ADHD-HI ODD	7	57.71	(15.21)	43.64	71.79		
Total	245	68.60	(23.05)	65.70	71.50		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

**$p < .01$

Table 139 showed mean differences between DBD groups and comparison group of children on Antisocial Behaviour Subscale of SSBS. Comparison group of children scored significantly low mean (M = 53.19) as compared to all DBD groups. Findings indicated that comparison group of children despite their academic low performance were not hostile irritable, antisocial aggressive, disruptive demanding as compared to academically low performing children with behavioural disorders. ADHD-C CD group of children scored highest mean (M = 90.73) as compared to other DBD groups. It indicated higher involvement of ADHD-C CD group in the Antisocial Behaviour.

Findings of Table 139 indicated significant differences between children with disruptive behaviour disorders and comparison group on Antisocial Behaviour subscale of SSBS. Children with both impulsive/hyperactive behaviour and conduct problems, compared to those with only one of these problems, tend to be at risk for having more severe and persistent antisocial behaviour (Lynam, 1997). So findings supported hypothesis no. 5 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Antisocial behaviour subscale of SSBS as compared to comparison group of children.

To further explore significant differences between groups as mentioned in the Table 139, Tukey Honestly Significant Difference (HSD) post hoc comparison was performed.

Table 140

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Antisocial Behaviour subscale of SSBS (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	ADHD-I CD	-31.35*	5.37	.000	-49.09	-13.61
	ADHD-C CD	-37.54*	3.37	.000	-48.67	-26.41
	ADHD-C ODD	-31.03*	4.68	.000	-46.51	-15.56
	ADHD-HI CD	-31.47*	7.60	.003	-56.59	-6.37
ADHD-I	ADHD-I CD	-24.46*	5.70	.002	-43.29	-5.64
	ADHD-C CD	-30.65*	3.87	.000	-43.45	-17.86
	ADHD-C ODD	-24.15*	5.06	.000	-40.86	-7.44
ADHD-C	ADHD-C CD	-23.00*	6.05	.01	-43.00	-3.00
ADHD-HI ODD	ADHD-C CD	-33.01*	7.31	.001	-57.15	-8.88
	ADHD-C ODD	-26.50*	8.00	.04	-52.93	-.09

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Table 140 showed significant differences between comparison group and DBD groups. Findings indicated comparison group showed significant differences with ADHD-I CD, ADHD-C CD, ADHD-C ODD, and ADHD-HI CD. Moreover, DBD groups ADHD-I, ADHD-C, and ODD also showed significant differences between groups.

Gender Differences of DBD groups and Comparison group on SSBS. Gender differences in DBD groups were studied by assembling all children of DBD groups together; this was done because ODD and CD groups had no girls and ADHD-HI, ADHD-I ODD, and ADHD-HI CD groups had only one girl. Therefore gender differences were evaluated by assembling all DBD groups together.

Table 141

Gender Differences of DBD children on the total and Subscales of SSBS via Teachers' ratings (N = 165)

	Gender								
	Boys (*n*=122)		Girls (*n* = 43)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
Interp Skills	33.21	9.84	31.88	11.78	0.72	.47	-2.30	4.96	.12
Self Mnag	29.13	6.60	28.47	8.57	0.52	.60	-1.84	3.17	.14
Acadic Skills	20.20	6.89	17.74	7.35	1.97	.05	.003	4.91	.34
TotalSC	82.55	19.68	78.09	25.14	1.18	.23	-2.97	11.89	.19
HostileIrri	31.66	9.83	30.14	11.66	.827	.40	-2.10	5.13	.14
Antosoci	20.83	8.28	19.63	8.94	.800	.42	-1.76	4.16	.13
Disruptiv	24.50	5.91	23.74	7.19	.680	.49	-1.44	2.95	.11
Total AS	76.98	21.61	73.51	25.97	.858	.39	-4.51	11.46	.14

Note. CI = confidence interval; LL = lower limit; UL = upper limit; Interp Skills = Interpersonal Skills; Self Mnag = Self Management Skills; Acadic Skills = Academic Skills; TotalSC = Total Social Competence; HostileIrri = Hostile Irritable; Antosoci = Antisocial Aggressive; Disruptiv Disruptive = Demanding; Total AS = Total Antisocial Behaviour.

Table 141 showed gender differences of children in DBD groups (all combine) on the total and subscales of SSBS via teachers' ratings. There was nonsignificant

gender difference between boys and girls on total and subscales of Social Competence subscale and Antisocial behaviour subscale. Only significant gender difference was found on Academic Skills subscale. Boys with symptoms of DBD showed higher Academic skills as compared to girls with DBD. So hypothesis no. 6 that boys in DBD group will score high as compared to girls on antisocial behaviour subscale and low on social competence subscale of SSBS proved nonsignificant.

Table 142

Gender Differences of Comparison group of Children on the total and Subscales of SSBS (N = 80)

	Gender								
	Boys (*n* = 48)		Girls (*n* = 32)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
Interp Skills	38.58	10.53	36.94	12.85	.62	.53	-3.58	6.87	.13
Self Mnag	34.10	6.45	31.34	9.96	1.50	.13	-.89	6.41	.32
Acadic Skills	24.04	6.74	24.75	8.73	-.40	.68	-4.16	2.74	-.09
TotalSC	96.73	20.50	93.03	28.62	.67	.50	-7.23	14.63	.14
HostileIrri	23.04	7.79	21.78	5.42	.79	.42	-1.89	4.41	.18
Antosoci	13.96	5.59	12.31	2.66	1.54	.12	-.47	3.76	.37
Disruptiv	18.10	5.54	16.22	4.10	1.64	.14	-.39	4.16	.38
TotalAS	55.10	16.50	50.31	9.72	1.47	.14	-1.66	11.24	.35

Note. CI = confidence interval; LL = lower limit; UL = upper limit; Interp Skills = Interpersonal Skills; Self Mnag = Self Management Skills; Acadic Skills = Academic Skills; TotalSC = Total Social Competence; HostileIrri = Hostile Irritable; Antosoci = Antisocial Aggressive; Disruptiv Disruptive = Demanding; Total AS = Total Antisocial Behaviour.

Table 142 showed gender differences of comparison group of children on the total and subscales of SSBS. There was nonsignificant difference between boys and girls on total and subscales of SSBS. So hypothesis no. 6 that boys in comparison group will score high as compared to girls on antisocial behaviour subscale and low on social competence subscale of SSBS proved nonsignificant. Comparison group was consisted of academically low performing boys and girls therefore nonsignificant difference on SSBS and its subscales was found.

Differences of Screened out Children on SCAS-P. To carry out differential diagnosis and assessment of level of anxiety in children with childhood behaviour disorders and comparison group, One Way ANOVA was performed. Tables in the subsequent section presented the details of the findings on SCAS-P and its subscales i.e., Separation Anxiety Disorder, Social Phobia, Generalized Anxiety Disorder, Panic Disorder, Obsessive Compulsive Disorder, and Physical Injury Fears.

Table 143

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Separation Anxiety Disorder subscale of SCAS-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	5.21	(4.17)	4.28	6.14	1.00	.44
ADHD-I	42	3.40	(3.20)	2.40	4.40		
ADHD-HI	5	3.80	(1.78)	1.58	6.02		
ADHD-C	11	4.73	(6.46)	.38	9.07		
ODD	4	6.00	(4.76)	-1.58	13.58		
CD	8	5.75	(4.33)	2.13	9.37		
ADHD-I CD	13	5.15	(4.10)	2.68	7.63		
ADHD-I ODD	7	2.57	(1.81)	.90	4.25		
ADHD-C CD	44	4.43	(3.76)	3.29	5.58		
ADHD-C ODD	18	4.67	(2.93)	3.21	6.12		
ADHD-HI CD	6	5.67	(5.20)	.21	11.13		
ADHD-HI ODD	7	6.29	(3.30)	3.23	9.34		
Total	245	4.67	(3.93)	4.17	5.16		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 143 showed mean differences between DBD groups and comparison group of children on Separation Anxiety Disorder subscale of SCAS-P. ADHD-HI

ODD group had the highest mean (M = 6.29) as compared to other DBD groups. Findings indicated nonsignificant differences in the level of anxiety between all DBD groups and comparison group. Spence (1999) described norms for SCAS-P on the basis of research findings by Nauta et al. (2004) to measure psychometric properties of SCAS-P. Nauta et al. (2004) reported mean for anxiety disordered children (M = 6.0) and (M = 2.6) for normal controls. Findings of Table 143 indicated that children in the comparison group and DBD groups showed mean scores that were high as compared to mean scores described by Nauta et al. (2004) for the normal control group of children. So findings indicated that children with low performance either in DBD groups or comparison group do experience separation anxiety. However, there was nonsignificant difference between comparison and DBD groups on separation anxiety disorder subscale.

Table 143 showed nonsignificant differences between children with disruptive behaviour disorders and comparison group on Separation Anxiety Disorder subscale of SCAS-P. So hypothesis no. 7 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children proved nonsignificant.

Table 144

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Social Phobia subscale of SCAS-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	5.89	(3.30)	5.15	6.62	.50	.89
ADHD-I	42	5.55	(3.77)	4.37	6.72		
ADHD-HI	5	5.00	(2.55)	1.83	8.17		
ADHD-C	11	6.64	(4.98)	3.29	9.99		
ODD	4	5.75	(3.86)	-.40	11.90		
CD	8	5.63	(4.24)	2.08	9.17		
ADHD-I CD	13	4.38	(3.45)	2.30	6.47		
ADHD-I ODD	7	7.00	(3.74)	3.54	10.46		
ADHD-C CD	44	6.16	(3.64)	5.05	7.27		
ADHD-C ODD	18	5.28	(3.28)	3.64	6.91		
ADHD-HI CD	6	5.67	(3.07)	2.44	8.90		
ADHD-HI ODD	7	7.00	(3.05)	4.17	9.83		
Total	245	5.82	(3.53)	5.37	6.26		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 144 showed mean differences between DBD groups and comparison group of children on Social Phobia subscale of SCAS-P. ADHD-I ODD and ADHD-HI ODD scored the highest (mean = 7.00) as compared to other DBD groups. As per norms described by Spence (1999) on the basis of research findings by Nauta et al. (2004) for Social Phobia subscale of SCAS-P; mean for anxiety disordered children on Social Phobia subscale was ($M = 7.7$) and ($M = 4.2$) for normal controls. Findings of Table 144 indicated that children in DBD groups and comparison group of children experience social phobia relatively high as compared to norms described by Nauta el al (2004) for the normal controls.

Table 144 showed nonsignificant differences between children with disruptive behaviour disorders and comparison group of children on Social Phobia subscale of SCAS-P. So hypothesis no. 7 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children proved nonsignificant.

Table 145

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Generalized Anxiety Disorder subscale of SCAS-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	3.76	(3.03)	3.09	4.44	.69	.74
ADHD-I	42	3.81	(4.06)	2.54	5.08		
ADHD-HI	5	1.20	(.83)	.16	2.24		
ADHD-C	11	4.82	(2.44)	3.18	6.46		
ODD	4	3.25	(2.21)	-.28	6.78		
CD	8	3.00	(2.33)	1.05	4.95		
ADHD-I CD	13	3.69	(3.01)	1.87	5.51		
ADHD-I ODD	7	4.14	(5.24)	-.70	8.99		
ADHD-C CD	44	4.61	(4.01)	3.39	5.83		
ADHD-C ODD	18	4.06	(2.10)	3.01	5.10		
ADHD-HI CD	6	3.00	(1.26)	1.67	4.33		
ADHD-HI ODD	7	4.14	(2.34)	1.98	6.31		
Total	245	3.91	(3.32)	3.49	4.32		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 145 showed mean differences between DBD groups and comparison group of children on Generalized Anxiety Disorder subscale of SCAS-P. Comorbid

group i.e., ADHD-C CD scored the highest mean (M = 4.82) as compared to other DBD groups. As per norms described by Spence (1999) on the basis of research findings by Nauta et al. (2004) for Generalized Anxiety Disorder subscale of SCAS-P; mean for anxiety disordered children on Generalized Anxiety Disorder subscale was (M = 6.6) and (M = 2.7) for normal controls. Findings of Table 145 indicated that children in DBD groups and comparison group of children do experience Generalized Anxiety relatively high as compared to norms described by Nauta el al. (2004) for the normal controls. However, mean scores of present sample were relatively low as compared to mean scores of anxiety disordered children as mentioned in the norms.

Table 145 showed nonsignificant differences between children with disruptive behaviour disorders and comparison group on Generalized Anxiety Disorder subscale of SCAS-P. So hypothesis no. 7 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children proved nonsignificant.

Table 146

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Panic Disorder subscale of SCAS-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	2.69	(2.83)	2.06	3.32	.90	.53
ADHD-I	42	2.24	(3.14)	1.26	3.22		
ADHD-HI	5	.20	(.44)	-.36	.76		
ADHD-C	11	3.27	(4.36)	.34	6.20		
ODD	4	1.25	(1.89)	-1.76	4.26		
CD	8	2.25	(1.83)	.72	3.78		
ADHD-I CD	13	2.23	(1.87)	1.10	3.37		
ADHD-I ODD	7	1.14	(1.34)	-.10	2.39		
ADHD-C CD	44	2.61	(2.78)	1.77	3.46		
ADHD-C ODD	18	1.56	(1.61)	.75	2.36		
ADHD-HI CD	6	1.83	(1.83)	-.09	3.76		
ADHD-HI ODD	7	1.86	(2.54)	-.50	4.21		
Total	245	2.34	(2.73)	1.99	2.68		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 146 showed mean differences between DBD groups and comparison group of children on Panic Disorder subscale of SCAS-P. DBD group ADHD-C has the highest mean (M = 3.27) as compared to other DBD groups. As per norms described by Spence (1999) on the basis of research findings by Nauta et al. (2004) for Panic Disorder subscale of SCAS-P, mean for anxiety disordered children on Panic Disorder subscale was (M = 3.6) and (M = 1.0) for normal controls. Findings of Table 146 indicated that children in DBD groups and comparison group of children do experience Panic Disorder relatively high as compared to norms described by Nauta el al (2004) for the normal controls. However, mean scores of present sample were relatively low as compared to mean scores of anxiety disordered children on Panic Disorder subscale as mentioned in the norms.

Table 146 showed nonsignificant differences between children with disruptive behaviour disorders and comparison group on Panic Disorder subscale of SCAS-P. So hypothesis no.7 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children proved nonsignificant.

Table 147

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Obsessive Compulsive Disorder subscale of SCAS-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	1.58	(2.24)	1.08	2.07	.86	.57
ADHD-I	42	.90	(2.01)	.28	1.53		
ADHD-HI	5	.80	(1.30)	-.82	2.42		
ADHD-C	11	.91	(1.92)	-.38	2.20		
ODD	4	.75	(1.50)	-1.64	3.14		
CD	8	1.63	(2.72)	-.65	3.90		
ADHD-I CD	13	2.46	(3.82)	.15	4.77		
ADHD-I ODD	7	1.57	(2.07)	-.34	3.49		
ADHD-C CD	44	1.48	(2.34)	.76	2.19		
ADHD-C ODD	18	.61	(1.46)	-.12	1.34		
ADHD-HI CD	6	1.83	(2.40)	-.69	4.35		
ADHD-HI ODD	7	2.00	(2.51)	-.33	4.33		
Total	245	1.38	(2.26)	1.09	1.67		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 147 showed mean differences between DBD groups and comparison group of children on Obsessive Compulsive Disorder subscale of SCAS-P. ADHD-I

CD group showed the highest mean (M = 2.46) as compared to other DBD groups. As per norms described by Spence (1999) on the basis of research findings by Nauta et al. (2004) for Obsessive Compulsive Disorder subscale of SCAS-P, mean for anxiety disordered children on Obsessive Compulsive Disorder subscale was (M = 3.0) and (M = 1.1) for normal controls. Findings of Table 147 indicated that children in DBD groups and comparison group of children experience Obsessive Compulsive Disorder relatively low as compared to norms described by Nauta et al. (2004) for anxiety disordered children.

Table 147 showed nonsignificant differences between children with disruptive behaviour disorders and comparison group on Obsessive Compulsive Disorder subscale of SCAS-P. So hypothesis no. 7 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children proved nonsignificant.

Peterson, Pine, Cohen, & Brook (2001) suggested some relationship between childhood ADHD and adult OCD, but clearly most of children with ADHD did not develop OCD or tic disorders, and vice versa. Moreover, this relationship of ADHD to later OCD has not been borne out by longitudinal studies of large samples of children with ADHD followed to adulthood (Fischer et al., 2002; Weiss & Hechtman, 1993), where no significant elevation in OCD among children with ADHD has been evident in comparison to community control groups.

Table 148

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Physical Injury Fears subscale of SCAS-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	1.81	(2.28)	1.30	2.32	.88	.55
ADHD-I	42	1.43	(2.08)	.78	2.08		
ADHD-HI	5	1.40	(1.51)	-.48	3.28		
ADHD-C	11	1.82	(1.60)	.74	2.89		
ODD	4	1.25	(1.89)	-1.76	4.26		
CD	8	1.25	(1.66)	-.15	2.65		
ADHD-I CD	13	2.92	(3.90)	.56	5.28		
ADHD-I ODD	7	2.00	(3.05)	-.83	4.83		
ADHD-C CD	44	1.07	(1.64)	.57	1.57		
ADHD-C ODD	18	1.28	(1.60)	.48	2.07		
ADHD-HI CD	6	1.67	(1.96)	-.40	3.73		
ADHD-HI ODD	7	1.43	(1.61)	-.07	2.93		
Total	245	1.59	(2.15)	1.32	1.86		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 148 showed mean differences between DBD groups and comparison group of children on Physical Injury Fear subscale of SCAS-P. Findings indicated that ADHD-I CD has the highest mean ($M = 2.92$) as compared to other DBD groups. As per norms described by Spence (1999) on the basis of research findings by Nauta et al. (2004) for Physical Injury Fears subscale of SCAS-P; mean for anxiety disordered children on Physical Injury Fears subscale was ($M = 4.1$) and ($M = 2.6$) for normal controls. Findings of Table 148 indicated that children in DBD groups and comparison group of children experience Physical Injury Fears relatively low as compared to norms described by Nauta el al (2004) for anxiety disordered children.

Table 148 showed nonsignificant differences between children with disruptive behaviour disorders and comparison group on Physical Injury Fears subscale of SCAS-P. So hypothesis no. 7 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children proved nonsignificant.

Table 149

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on total SCAS-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	20.94	(11.65)	18.34	23.53	.52	.88
ADHD-I	42	17.33	(13.33)	13.18	21.49		
ADHD-HI	5	12.40	(6.18)	4.72	20.08		
ADHD-C	11	22.18	(16.78)	10.90	33.46		
ODD	4	18.25	(12.20)	-1.17	37.67		
CD	8	19.50	(11.92)	9.53	29.47		
ADHD-I CD	13	20.85	(17.45)	10.30	31.40		
ADHD-I ODD	7	18.43	(9.93)	9.24	27.61		
ADHD-C CD	44	20.36	(12.89)	16.44	24.28		
ADHD-C ODD	18	17.44	(9.10)	12.91	21.97		
ADHD-HI CD	6	19.67	(9.85)	9.33	30.01		
ADHD-HI ODD	7	22.71	(9.30)	14.11	31.32		
Total	245	19.69	(12.34)	18.14	21.25		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 149 indicated mean differences between DBD groups and comparison group of children on total scores of SCAS-P. ADHD-HI ODD group showed the highest mean (M = 22.71) as compared to other DBD groups. As per norms described by Spence (1999) on the basis of research findings by Nauta et al. (2004) for total scores of SCAS-P, mean for anxiety disordered children on total scores of SCAS-P was (M = 31.8) and for normal controls (M = 14.2). Findings of Table 149 indicated that children in DBD groups and comparison group of children showed relatively low scores on total SCAS-P as compared to norms described by Nauta el al (2004) for anxiety disordered children.

Table 149 showed nonsignificant between group differences in children with disruptive behaviour disorders and comparison group on total SCAS-P. So hypothesis no. 7 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children proved nonsignificant.

Overall, analysis showed nonsignificant differences on all subscales of SCAS-P between DBD groups and comparison group. Children with childhood behaviour disorders relatively high mean scores on Separation Anxiety Disorder, Social Phobia, Generalized Anxiety Disorder, Panic/Agoraphobia, Obsessive Compulsive Disorder; and Physical Injury Fears as compared to norms described by (Spence, 1999) for normal controls. However, their mean scores were low as compared to mean scores of anxiety disordered children.

Assessment of Gender Differences on SCAS-P. To find out gender differences on the total and subscales of SCAS-P, Independent sample t-test was performed. The Tables in the subsequent section represented the details regarding gender differences.

Table 150

Gender Differences of DBD groups on the total and Subscales of SCAS-P (N = 165)

	Gender								
	Boys (*n*=122)		Girls (*n* = 43)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
SAD	4.19	3.63	5.00	4.22	-1.20	.23	-2.14	.51	-.20
Social	5.39	3.66	6.88	3.41	-2.33	.02	-2.75	-.22	-.42
GAD	3.75	3.43	4.67	4.60	3.48	.17	-2.05	.35	-.22
Panic	2.14	1.84	2.24	3.09	3.52	.008	-2.17	-.32	-.03
OCD	.94	1.88	2.26	2.96	-3.34	.001	-2.08	-.53	-.53
PhyInj	1.37	1.89	1.79	2.55	-1.13	.26	-1.15	.31	-.18
T-SCAS-P	17.49	11.33	23.63	15.04	-2.79	.006	-10.47	-1.79	-.46

Note. CI = confidence interval; LL = lower limit; UL = upper limit; SAD = separation anxiety disorder, Social = social phobia; GAD = generalized anxiety disorder; Panic = panic/agoraphobia; OCD = obsessive compulsive disorder; PhyInj = physical injury fears; T-SCAS-P = total spence child anxiety scale. **p* < .05

Table 150 indicated gender differences of DBD groups (all combine) on the total and subscales of SCAS-P via mothers' ratings. There were nonsignificant difference between boys and girls on Separation Anxiety Disorder (SAD), Generalized Anxiety Disorder (GAD), and Physical Injury Fears (Phyinj). However, girls in DBD group scored high mean as compared to boys on Social Phobia (Soph), Panic/Agoraphobia, and Obsessive Compulsive Disorder (OCD) and Total Spence Children Anxiety Scale (SCAS-P). So hypothesis no. 8 that girls in DBD group will score high on total and subscales of SCAS-P as compared to boys proved significant for Social Phobia subscale, Panic/Agoraphobia subscale, Obsessive Compulsive Disorder subscale and for total SCAS-P.

Table 151

Gender Differences of Children of Comparison group on the total and subscales of SCAS-P (N = 80)

	Gender								
	Boys (*n* = 48)		Girls (*n* = 32)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (80)*	*p*	*LL*	*UL*	*d*
SAD	7.13	3.90	8.66	4.41	-1.62	.11	-3.40	.34	-.36
Soph	5.52	3.39	6.44	3.15	-1.21	.23	-2.41	.58	-.28
GAD	3.50	2.96	4.31	3.32	-1.14	.26	-2.22	.60	-.25
Panic	2.15	2.29	3.78	3.84	-2.38	.02	-3.00	-.26	-.51
OCD	4.63	3.50	5.06	3.65	-.538	.59	-2.05	1.18	-.12
Phyinj	4.31	2.82	7.31	3.15	-4.44	.000	-4.34	-1.65	-1.00
SCAS-P	26.71	12.69	34.75	15.76	-2.51	.01	-14.4	-1.68	-.56

Note. CI = confidence interval; LL = lower limit; UL = upper limit; SAD = separation anxiety disorder, Social = social phobia; GAD = generalized anxiety disorder; Panic = panic/agoraphobia; OCD = obsessive compulsive disorder; PhyInj = physical injury fears; T-SCAS-P = total spence child anxiety scale.

*$p < .05$

Table 151 showed gender differences of children in comparison group on the total and subscales of SCAS-P via mothers' ratings. There was nonsignificant difference between boys and girls on Separation Anxiety Disorder (SAD), Social Phobia (Soph), Generalized Anxiety Disorder (GAD), and Obsessive Compulsive Disorder (OCD). However, girls scored high mean as compared to boys on Panic/Agoraphobia subscale, Physical Injury Fears subscale, and on total SCAS-P. So hypothesis no. 8 that girls in comparison group will score high on total and subscales of SCAS-P as compared to boys proved significant for Panic/Agoraphobia subscale, Physical Injury Fears subscale, and total SCAS-P

Psychometric Properties of Child Behaviour Checklist (CBCL/*6-18*) (Urdu version). In the present study, CBCL/6-18 (Urdu version) translated by Khan and Awan (2011) (See Appendix N) was used to assess internalizing and externalizing behaviour problems in children. Before further analysis, alpha reliability coefficients,

and interscale correlation of syndrome scales and DSM oriented scales of CBCL/6-18 were established on the present sample.

Table 152

Alpha Reliability Coefficients of Subscales of CBCL/6-18 Syndrome Scales (N = 245)

Subscales	No. of Items	Alpha Coefficient Urdu	Alpha Coefficient English
Anxious/Depressed	13	.77	.84
Withdrawn/Depressed	8	.70	.80
Somatic Complaints	11	.78	.78
Social Problems	11	.70	.82
Thought Problems	13	.71	.78
Attention Problems	10	.77	.86
Rule Breaking Behaviour	16	.75	.85
Aggressive Behaviour	18	.86	.94
Total CBCL	115	.94	.97

Note. Source for alpha coefficients of English version (Achenbach & Rescorla, 2001)

Findings of Table 152 showed Cronbach alpha coefficients for the Syndrome subscales of CBCL/6-18 (Urdu version). Cronbach's alpha coefficients ranged from .70 to .86 for the seven Syndrome Scales of CBCL/6-18. The alpha coefficient for total 115 items of CBCL/6-18 was (α = .94). Five items were excluded from the present study with the permission of author; those items were item no 2, 56h, 59, 60, and 113. Findings of Table 152 indicated internal consistency of the total and subscales of the CBCL/6-18 Syndrome Scales.

Table 153

Interscale Correlation Coefficient, Means, and Standard Deviations of CBCL/6-18 Syndrome Scales (N = 245)

	Subscales	1	2	3	4	5	6	7	8	9	10
1	Anxious/Depressed	-									
2	Withdrawn/Depressed	.59**	-								
3	Somatic Complaints	.58**	.42**	-							
4	Social Problems	.58**	.52**	.43**	-						
5	Thought Problems	.41**	.44**	.41**	.42**	-					
6	Attention Problems	.50**	.44**	.35**	.53**	.31**	-				
7	Rule Breaking Behaviour	.15*	.26**	.14*	.29**	.27**	.40**	-			
8	Aggressive Behaviour	.43**	.45**	.36**	.52**	.48**	.55**	.60**	-		
9	Internalizing Problems	.89**	.78**	.80**	.62**	.50**	.52**	.21**	.49**	-	
10	Externalizing Problems	.37**	.42**	.31**	.49**	.45**	.55**	.81**	.95**	.44**	-
	M	4.04	2.82	2.45	4.26	1.88	5.76	2.42	6.68	9.31	9.10
	SD	3.56	2.65	2.92	3.20	2.50	3.95	2.97	5.74	7.62	7.91

**$p < .01$, *$p < .05$

Table 153 showed interscale correlation coefficients of CBCL/6-18 Syndrome Scales. The internal consistency of Syndrome Scales of CBCL/6-18 was further determined by calculating interscale correlation among Syndrome Scales. There was a positive and significant interscale correlation between Anxious/Depressed, Withdrawn/Depressed, Somatic Complaints, Social Problems, Thought Problems, Attention Problems, Rule Breaking Behaviour, Aggressive Behaviour, Internalizing Problems, and Externalizing Problems subscales that was significant at (**$p < .01$, *$p < .05$).

Table 154

Alpha Reliability Coefficients of CBCL/6-18 DSM Oriented Scales (N = 245)

Subscales	No. of Items	Alpha Coefficient Urdu	Alpha Coefficient English
Conduct Problems	17	.74	.82
ADHD problems	7	.75	.72
Oppositional Problems	5	.70	.75
Affective Problems	13	.71	.84
Anxiety Problems	6	.71	.86
Somatic Problems	7	.73	.91

Note. Source for alpha coefficients of English version (Achenbach & Rescorla, 2001)

Findings of Table 154 showed Cronbach alpha coefficient for the DSM oriented subscales of CBCL/6-18 that ranged from .70 to .75. The alpha of DSM Oriented Scales of CBCL indicated internal consistency of the scale.

Table 155

Interscale Correlation Coefficients, Means, and Standard Deviations of CBCL/6-18 DSM Oriented Scales (N = 245)

	Subscales	1	2	3	4	5	6
1	Conduct Problems	-					
2	ADHD Problems	.42**	-				
3	Oppositional Problems	.59**	.54**	-			
4	Affective Problems	.45**	.48**	.50**	-		
5	Anxiety Problems	.29**	.32**	.35**	.66**	-	
6	Somatic Problem	.17**	.19**	.22**	.41**	.38**	-
	M	2.84	5.02	2.02	3.62	1.59	1.35
	SD	3.18	3.20	1.97	3.05	1.66	1.95

**$p < .01$

Findings of Table 155 showed interscale correlation coefficients of CBCL/6-18 DSM Oriented scales. Interscale correlation among DSM Oriented Scales indicated internal consistency of DSM Oriented Scales of CBCL/6-18. There was a positive and significant interscale correlation between subscales i.e., Conduct Problems, ADHD Problems, Oppositional Problems, Affective Problems, Anxiety Problems, Somatic Problems that were significant at (**$p < .01$).

Differences of Children on CBCL/6-18 DSM Oriented Scales. Children with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group of children were further assessed through CBCL/6-18 DSM Oriented scales.

Table 156

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Conduct Problems subscale of DSM Oriented scales of CBCL/ 6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	2.06	(2.86)	1.42	2.70	1.55	.11
ADHD-I	42	2.90	(2.45)	2.14	3.67		
ADHD-HI	5	2.60	(2.30)	-.26	5.46		
ADHD-C	11	3.91	(4.39)	.96	6.86		
ODD	4	3.50	(2.38)	-.29	7.29		
CD	8	3.00	(3.11)	.39	5.61		
ADHD-I CD	13	2.62	(3.82)	.31	4.92		
ADHD-I ODD	7	1.43	(.97)	.53	2.33		
ADHD-C CD	44	3.57	(3.21)	2.59	4.55		
ADHD-C ODD	18	3.89	(4.84)	1.48	6.30		
ADHD-HI CD	6	5.33	(3.93)	1.21	9.46		
ADHD-HI ODD	7	1.57	(1.39)	.28	2.86		
Total	245	2.84	(3.18)	2.44	3.24		

Between groups *df* = 11; within groups *df* = 233; groups total *df* = 244

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 156 showed mean differences between DBD groups and comparison group of children on Conduct Problems subscale of DSM Oriented scales. Findings indicated highest mean of ADHD-HI CD (*M* = 5.33) as compared to other DBD groups on conduct problems. It indicated that comorbid group of children i.e., ADHD-HI CD showed highest conduct problems as compared to other DBD groups. ADHDHI CD mean scores were even higher than the CD children. Comparison group of children scored relatively low on conduct problems subscale that indicated their less involvement in conduct problems.

Table 156 showed nonsignificant differences in children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and Comparison group of children on Conduct Problems subscale of DSM Oriented scales of CBCL/6-18. So hypothesis no. 9 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on DSM Oriented scales of CBCL as compared to comparison group of children proved nonsignificant.

Table 157

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on ADHD Problems subscale of DSM Oriented scales of CBCL/ 6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	3.81	(2.75)	3.20	4.43	4.22	.000
ADHD-I	42	4.86	(2.96)	3.93	5.78		
ADHD-HI	5	5.20	(1.92)	2.81	7.59		
ADHD-C	11	6.45	(2.29)	4.91	8.00		
ODD	4	5.75	(1.70)	3.03	8.47		
CD	8	2.50	(1.60)	1.16	3.84		
ADHD-I CD	13	5.00	(2.64)	3.40	6.60		
ADHD-I ODD	7	4.71	(3.59)	1.39	8.04		
ADHD-C CD	44	7.00	(3.56)	5.92	8.08		
ADHD-C ODD	18	6.33	(4.00)	4.34	8.32		
ADHD-HI CD	6	6.00	(1.78)	4.12	7.88		
ADHD-HI ODD	7	3.71	(2.43)	1.47	5.96		
Total	245	5.02	(3.20)	4.62	5.43		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

**$p < .01$

Table 157 showed mean differences between DBD groups i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group of children on ADHD Problems subscale of DSM Oriented scales of CBCL/6-18. ADHD-C CD scored the highest mean (M = 7.00) as compared to other DBD groups. Comparison group also showed comparatively low mean (M = 3.81).

Table 157 showed significant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group of children on ADHD problems subscale of DSM Oriented scale of CBCL/6-18.

To further explore significant differences as mentioned in the Table 157, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 158

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on ADHD Problems subscale of DSM Oriented scale of CBCL/6-18 (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	ADHD-C CD	-3.18*	.56	.000	-5.04	-1.33
ADHD-I	ADHD-C CD	-2.14*	.64	.04	-4.27	-.01
CD	ADHD-C CD	-4.50*	1.15	.007	-8.30	-.70

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; Comparison grp = comparison group.

*$p < .05$

Table 158 showed findings of Tukey's Honestly Significant Difference (HSD) Test on ADHD problems subscale of DSM Oriented scale of CBCL/6-18. Findings indicated significant differences between ADHD-C CD group and comparison group. ADHD-C CD group showed the highest mean (M = 7.00) as compared to all other

groups on ADHD problems subscale. Moreover, ADHD-C CD group also showed significant difference with ADHD-I and CD groups. So hypothesis no. 9 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on DSM Oriented scales of CBCL as compared to comparison group of children proved significant.

Table 159

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Oppositional Problems subscale of DSM Oriented scales of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	1.33	(1.51)	.99	1.66	3.36	.000
ADHD-I	42	1.93	(1.85)	1.35	2.51		
ADHD-HI	5	1.60	(1.67)	-.48	3.68		
ADHD-C	11	3.09	(2.16)	1.64	4.55		
ODD	4	1.75	(.50)	.95	2.55		
CD	8	1.00	(.92)	.23	1.77		
ADHD-I CD	13	2.15	(1.99)	.95	3.36		
ADHD-I ODD	7	1.57	(2.29)	-.55	3.70		
ADHD-C CD	44	2.95	(2.18)	2.29	3.62		
ADHD-C ODD	18	3.22	(2.62)	1.92	4.53		
ADHD-HI CD	6	2.33	(2.25)	-.03	4.70		
ADHD-HI ODD	7	1.43	(.97)	.53	2.33		
Total	245	2.02	(1.97)	1.77	2.27		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

$^{**}p < .01$

Table 159 showed mean differences between DBD groups and comparison group of children on Oppositional problems subscale of DSM Oriented scales of CBCL/6-18. Findings indicated that ADHD-C ODD group showed significantly high mean (M = 3.22) as compared to other DBD groups. Comparison group was relatively low (M = 1.33) as compared to other groups.

Table 159 showed significant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Oppositional Problems DSM Oriented scale of CBCL/6-18.

To further explore significant differences as mentioned in the Table 159, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 160

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Oppositional Problems Subscale of DSM Oriented scale of CBCL/6-18 (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison grp	ADHD-C CD	-1.63*	.35	.000	-2.79	-.47
	ADHD-C ODD	-1.89*	.49	.008	-3.51	-.28

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder; Comparison grp = comparison group.

*$p < .05$

Table 160 showed findings of Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Oppositional problems subscale of DSM Oriented scale of CBCL/6-18. Results indicated significant difference of comparison group with ADHD-C CD and ADHD-C ODD group. So hypothesis no. 9 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or

comorbid disorders will score high on DSM Oriented scales of CBCL as compared to comparison group of children proved significant.

Table 161

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Affective Problems subscale of DSM Oriented scales of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	2.99	(2.69)	2.39	3.59	2.10	.02
ADHD-I	42	3.98	(3.43)	2.91	5.05		
ADHD-HI	5	2.40	(3.36)	-1.77	6.57		
ADHD-C	11	4.45	(1.96)	3.13	5.78		
ODD	4	3.25	(2.63)	-.93	7.43		
CD	8	2.13	(1.64)	.75	3.50		
ADHD-I CD	13	2.85	(2.70)	1.21	4.48		
ADHD-I ODD	7	2.43	(1.61)	.93	3.93		
ADHD-C CD	44	5.23	(3.56)	4.14	6.31		
ADHD-C ODD	18	3.61	(3.05)	2.09	5.13		
ADHD-HI CD	6	3.33	(3.67)	-.52	7.18		
ADHD-HI ODD	7	2.86	(1.86)	1.13	4.58		
Total	245	3.62	(3.05)	3.23	4.00		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Table 161 showed mean differences between DBD groups i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group of children on Affective problems subscale of DSM Oriented scales of CBCL/6-18.

ADHD-C CD group showed significantly high mean (*M* = 5.23) as compared to other DBD groups. Mean scores of comparison group were relatively low (*M* = 2.99) on Affective Problems subscale as compared to DBD groups.

Table 161 showed significant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Affective problems subscale of DSM Oriented scale of CBCL/6-18.

To further explore significant differences as mentioned in the Table 161, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 162

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Affective Problems Subscale of DSM Oriented scale of CBCL/6-18 (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison grp	ADHD-C CD	-2.24*	.56	.005	-4.09	-.39

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; Comparison grp = comparison group.

**$p < .01$

Findings of Table 162 indicated significant difference between comparison group with ADHD-C CD group. However, there was nonsignificant difference between other groups. So hypothesis no. 9 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on DSM Oriented scales of CBCL as compared to comparison group of children proved significant specifically for ADHD-C CD group.

Table 163

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Anxiety Problems subscale of DSM Oriented scales of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	1.49	(1.64)	1.12	1.85	1.47	.14
ADHD-I	42	1.79	(1.88)	1.20	2.37		
ADHD-HI	5	1.40	(1.14)	-.02	2.82		
ADHD-C	11	1.27	(1.55)	.23	2.32		
ODD	4	1.75	(1.50)	-.64	4.14		
CD	8	.50	(.75)	-.13	1.13		
ADHD-I CD	13	1.15	(1.46)	.27	2.04		
ADHD-I ODD	7	1.00	(1.91)	-.77	2.77		
ADHD-C CD	44	2.30	(1.85)	1.73	2.86		
ADHD-C ODD	18	1.11	(1.07)	.57	1.65		
ADHD-HI CD	6	1.67	(1.36)	.23	3.10		
ADHD-HI ODD	7	1.57	(1.39)	.28	2.86		
Total	245	1.59	(1.66)	1.38	1.80		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 163 showed mean differences between DBD groups and comparison group of children on Anxiety Problems subscale of DSM Oriented scales of CBCL/6-18. ADHD-C CD group indicated highest mean ($M = 2.30$) as compared to other DBD groups. However, all DBD groups and comparison group showed relatively low mean on Anxiety problems subscale.

Findings of Table 163 showed nonsignificant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Anxiety problems subscale of DSM Oriented scale of CBCL/6-18.

Table 164

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Somatic Problems subscale of DSM Oriented scales of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	1.43	(1.98)	.98	1.87	2.01	.02
ADHD-I	42	1.21	(1.60)	.72	1.71		
ADHD-HI	5	.40	(.54)	-.28	1.08		
ADHD-C	11	1.00	(1.09)	.26	1.74		
ODD	4	1.00	(1.41)	-1.25	3.25		
CD	8	.63	(.74)	.00	1.25		
ADHD-I CD	13	1.54	(2.18)	.22	2.86		
ADHD-I ODD	7	.00	(.00)	.00	.00		
ADHD-C CD	44	2.27	(2.67)	1.46	3.08		
ADHD-C ODD	18	.33	(.59)	.04	.63		
ADHD-HI CD	6	1.50	(2.07)	-.68	3.68		
ADHD-HI ODD	7	1.29	(1.97)	-.54	3.11		
Total	245	1.35	(1.95)	1.10	1.60		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Table 164 showed mean differences between DBD groups and comparison group of children on Somatic Problems subscale of DSM Oriented scales of CBCL/6-18. ADHD-C CD group scored highest mean (*M* = 2.27) as compared to other DBD groups.

Table 164 showed significant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Somatic problems DSM Oriented scale of CBCL/6-18.

To further explore significant differences as mentioned in the Table 164, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 165

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Somatic Problems Subscale of DSM Oriented scale of CBCL/6-18 (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
ADHD-C CD	ADHD-C ODD	1.939	.53	.01	.17	3.71

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Findings of Table 165 indicated that only significant difference was found between ADHD-C CD group and ADHD-C ODD group. There was nonsignificant difference between other groups. So hypothesis no. 9 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on DSM Oriented scales of CBCL as compared to comparison group of children proved nonsignificant.

Gender Differences on the DSM Oriented Scales of CBCL/6-18. Gender differences of children with childhood behaviour disorders i.e., either ADHD-I,

ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders were also assessed on the DSM Oriented scales of CBCL/6-18.

Table 166

Gender Differences of DBD groups on the DSM Oriented Scales of CBCL/6-18 (N = 165)

	Gender								
	Boys (*n* =122)		Girls (*n* = 43)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
CondutPr	3.39	3.50	2.70	2.48	1.19	.23	-.45	1.84	.22
ADHDPr	5.51	3.19	5.91	3.40	-.69	.49	-1.53	.739	-.12
OppPr	2.22	2.02	2.74	2.21	-1.41	.15	-1.25	.205	-.24
AffectPr	3.78	2.91	4.33	3.85	-.96	.33	-1.66	.568	-.16
AnxityPr	1.52	1.57	2.00	1.92	-1.62	.10	-1.07	.102	-.27
SometPr	1.23	1.77	1.56	2.38	-.950	.34	-1.01	.354	-.15

Note. CI = confidence interval; LL = lower limit; UL = upper limit; CondutPr = Conduct Problem; ADHDPr = ADHD Problem; OppPr = Oppositional Problem; AffectPr = Affect Problem; AnxityPr = Anxiety Problem; SometPr = Somatic Problem.

Findings of Table 166 showed gender differences of DBD groups (all combine) on the DSM Oriented Scales of CBCL/6-18 via Mothers' ratings. There was nonsignificant difference between boys and girls on subscales i.e., Conduct Problems, ADHD Problems, Oppositional Problems, Affective Problems, Anxiety Problems, and Somatic Problems. Nonsignificant differences were also providing evidence that boys and girls in DBD group exhibit similar behavioural problems. So hypothesis no. 10 that boys in DBD group will score high on DSM Oriented scales of CBCL as compared to girls proved nonsignificant.

Table 167

Gender Differences of Comparison group of Children on the DSM Oriented Scales of CBCL/6-18 (N = 80)

	Gender								
	Boys (*n* = 48)		Girls (*n* = 32)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (80)*	*p*	*LL*	*UL*	*d*
CondutPr	1.94	2.51	2.25	3.36	-.47	.63	-1.62	.99	-.10
ADHDPr	4.04	2.85	3.47	2.60	.91	.36	-.68	1.82	.20
OppPr	1.35	1.46	1.28	1.61	.20	.83	-.62	.76	.04
AffectPr	2.85	2.79	3.19	2.58	-.53	.59	-1.56	.89	-.12
AnxityPr	1.19	1.45	1.94	1.83	-2.03	.04	-1.48	-.01	-.45
SometPr	1.42	1.97	1.44	2.03	-.04	.96	-.92	.88	-.009

Note. CI = confidence interval; LL = lower limit; UL = upper limit; CondutPr = Conduct Problem; ADHDPr = ADHD Problem; OppPr = Oppositional Problem; AffectPr = Affect Problem; AnxityPr = Anxiety Problem; SometPr = Somatic Problem.

*$p < .05$

Table 167 showed gender differences of comparison group of children on the DSM Oriented Scales of CBCL/6-18 through mothers' ratings. There was nonsignificant difference between boys and girls on subscales i.e., Conduct Problems, ADHD Problems, Oppositional Problems, Affective Problems, and Somatic Problems. Only significant gender difference was found on Anxiety Problems subscale that indicated girls experience more anxiety as compared to boys. So hypothesis no. 10 that boys in comparison group will score high on DSM Oriented scales of CBCL as compared to girls proved significant only for Anxiety problems subscale.

Differences of DBD groups on the CBCL/6-18 Syndrome Scales. Children with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders were also assessed on the CBCL/6-18 Syndrome Scales i.e., Internalizing and Externalizing scales.

Table 168

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Anxious/Depressed Syndrome scale of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	3.98	(3.46)	3.20	4.75	1.75	.06
ADHD-I	42	3.95	(3.68)	2.80	5.10		
ADHD-HI	5	1.60	(1.14)	.18	3.02		
ADHD-C	11	4.55	(2.77)	2.68	6.41		
ODD	4	3.75	(3.77)	-2.26	9.76		
CD	8	1.13	(1.35)	-.01	2.26		
ADHD-I CD	13	3.92	(3.09)	2.05	5.79		
ADHD-I ODD	7	2.43	(3.15)	-.49	5.35		
ADHD-C CD	44	5.59	(4.08)	4.35	6.83		
ADHD-C ODD	18	3.39	(3.77)	1.51	5.27		
ADHD-HI CD	6	4.33	(2.65)	1.54	7.12		
ADHD-HI ODD	7	3.43	(2.76)	.88	5.98		
Total	245	4.04	(3.56)	3.60	4.49		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 168 showed mean differences between DBD groups i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group of children on Anxious/Depressed Syndrome scale of CBCL/6-18. Findings indicated that comorbid group ADHD-C CD scored the highest mean ($M = 5.59$) as compared to other DBD groups. Findings indicated that ADHD-C CD group showed more Anxious/Depressed symptoms as compared to other DBD children. Table 168 showed nonsignificant differences between children with disruptive behaviour disorders i.e.,

either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Anxious/Depressed Syndrome scale of CBCL/6-18.

To further explore differences on Anxious/Depressed Syndrome scale of CBCL/6-18, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 169

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Anxious/Depressed Subscale of Syndrome scale of CBCL/6-18 (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
ADHD-C CD	CD	-4.46*	1.346	.04	-8.91	-.02

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder.

*$p < .05$

Table 169 showed findings of Tukey's Honestly Significant Difference (HSD) Test. Findings indicated only significant difference between ADHD-C CD comorbid group with CD group. There was nonsignificant difference between all other groups. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscales of Syndrome scales of CBCL as compared to comparison group of children proved nonsignificant. However, differences within DBD group were found significant between ADHD-C CD and CD group.

Table 170

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Withdrawn/Depressed Syndrome scale of CBCL 6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	2.41	(2.41)	1.87	2.95	.91	.52
ADHD-I	42	3.19	(3.04)	2.24	4.14		
ADHD-HI	5	2.00	(3.39)	-2.21	6.21		
ADHD-C	11	3.27	(2.49)	1.60	4.95		
ODD	4	1.75	(1.25)	-.25	3.75		
CD	8	2.50	(1.30)	1.41	3.59		
ADHD-I CD	13	2.15	(2.64)	.56	3.75		
ADHD-I ODD	7	2.00	(2.44)	-.27	4.27		
ADHD-C CD	44	3.55	(3.07)	2.61	4.48		
ADHD-C ODD	18	3.11	(2.08)	2.08	4.15		
ADHD-HI CD	6	3.50	(2.51)	.87	6.13		
ADHD-HI ODD	7	2.14	(2.73)	-.39	4.67		
Total	245	2.82	(2.65)	2.48	3.15		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; attention deficit hyperactivity disorder – combined type; CD = conduct disorder; ODD = oppositional defiant Disorder.

Table 170 showed mean differences between DBD groups and comparison group of children on Withdrawn /Depressed Syndrome scale of CBCL/6-18. ADHD-C CD group showed the highest mean ($M = 3.55$) as compared to other DBD groups. However, mean scores of all DBD groups and comparison group were not representing major difference. Findings showed nonsignificant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Withdrawn/ Depressed Syndrome scale of CBCL/6-18. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid

disorders will score high on total and subscales of Syndrome scales of CBCL as compared to comparison group of children proved nonsignificant.

Table 171

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Somatic Problems Syndrome scale of CBCL/ 6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	2.50	(2.85)	1.87	3.13	2.02	.02
ADHD-I	42	2.29	(2.54)	1.49	3.08		
ADHD-HI	5	1.00	(1.22)	-.52	2.52		
ADHD-C	11	1.91	(1.81)	.69	3.13		
ODD	4	2.00	(2.16)	-1.44	5.44		
CD	8	1.63	(1.30)	.54	2.71		
ADHD-I CD	13	2.54	(3.33)	.52	4.55		
ADHD-I ODD	7	.43	(.78)	-.30	1.16		
ADHD-C CD	44	3.93	(3.84)	2.76	5.10		
ADHD-C ODD	18	1.06	(1.55)	.28	1.83		
ADHD-HI CD	6	2.33	(3.44)	-1.28	5.95		
ADHD-HI ODD	7	2.29	(3.09)	-.58	5.15		
Total	245	2.45	(2.92)	2.09	2.82		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Table 171 showed mean differences between DBD groups and comparison group of children on Somatic Problems Syndrome scale of CBCL/6-18. ADHD-C CD group showed the highest mean (M = 3.93) as compared to other DBD groups. ADHD-C CD group also showed highest mean on Anxious/Depressed and Withdrawn/Depressed Syndrome scales of CBCL. Findings showed significant

differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and Comparison group on Somatic Problems Syndrome scale of CBCL/6-18.

To further explore significant differences as mentioned in the Table 171, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 172

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Somatic Problems Syndrome scale of CBCL/6-18 (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
ADHD-C CD	ADHD-C ODD	2.87*	.79	.02	.24	5.51

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder.

*$p < .05$

Findings of Table 172 showed significant difference between ADHD-C CD group and ADHD-C ODD group that was significant at (* $p < .02$). There was nonsignificant difference between DBD groups with comparison group. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscales of Syndrome scales of CBCL as compared to comparison group of children proved nonsignificant. However, within DBD groups ADHD-C CD and ADHD-C ODD showed significant differences.

Table 173

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Social Problems Syndrome scale of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	3.58	(2.99)	2.91	4.24	2.36	.009
ADHD-I	42	4.00	(3.02)	3.06	4.94		
ADHD-HI	5	5.60	(2.96)	1.92	9.28		
ADHD-C	11	5.82	(2.63)	4.05	7.59		
ODD	4	3.25	(2.63)	-.93	7.43		
CD	8	3.13	(3.52)	.18	6.07		
ADHD-I CD	13	3.00	(2.79)	1.31	4.69		
ADHD-I ODD	7	2.57	(2.76)	.02	5.12		
ADHD-C CD	44	5.86	(3.38)	4.83	6.89		
ADHD-C ODD	18	4.56	(3.41)	2.86	6.25		
ADHD-HI CD	6	5.00	(2.89)	1.96	8.04		
ADHD-HI ODD	7	4.71	(3.59)	1.39	8.04		
Total	245	4.26	(3.20)	3.86	4.66		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Table 173 showed mean differences between DBD groups and comparison group of children on Social Problems Syndrome scale of CBCL/6-18. ADHD-C CD group showed highest mean ($M = 5.86$) as compared to other DBD groups. ADHD-C CD group also showed highest mean on Anxious/Depressed, Withdrawn/Depressed and Somatic Problems Syndrome scale of CBCL. These findings indicated that ADHD-C CD group exhibited the highest symptoms on Internalizing behaviour subscales i.e., Anxious/Depressed, Withdrawn/Depressed and Somatic Problems Syndrome scale as compared to all other groups. Findings showed significant differences between children with disruptive behaviour disorders i.e., either ADHD-I,

ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Social Problems Syndrome scale of CBCL/6-18. Pelham and Bender (1982) described that more than 50% of children with ADHD have significant problems in social relationships with other children.

To further explore significant differences as mentioned in the Table 173, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 174

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Social Problems Syndrome scale of CBCL/6-18 (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison grp	ADHD-C CD	-2.28*	.58	.006	-4.21	-.36

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder.

*$p < .05$

Table 174 showed only significant difference between comparison group and ADHD-C CD group that was significant at (* $p < .006$). There were nonsignificant differences between comparison group and other DBD groups. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Syndrome scales of CBCL as compared to comparison group of children proved significant for only ADHD-C CD group.

In nutshell, findings of Anxious/Depressed, Withdrawn/Depressed and Somatic Problems Syndrome scales showed that ADHD-C CD group significantly scored highest mean. These findings supported the literature that ADHD + CD is a more severe subtype of ADHD in which the outcomes are often worse than is seen in ADHD alone (Barkley, Fischer, Smallish, & Fletcher, 2004).

Table 175

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Thought Problems Syndrome scale of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	1.58	(2.24)	1.08	2.07	1.42	.16
ADHD-I	42	2.12	(2.50)	1.34	2.90		
ADHD-HI	5	2.80	(4.65)	-2.98	8.58		
ADHD-C	11	2.00	(1.78)	.80	3.20		
ODD	4	1.00	(1.41)	-1.25	3.25		
CD	8	.50	(.53)	.05	.95		
ADHD-I CD	13	1.08	(1.60)	.11	2.05		
ADHD-I ODD	7	1.43	(1.61)	-.07	2.93		
ADHD-C CD	44	2.50	(2.74)	1.66	3.34		
ADHD-C ODD	18	1.61	(2.00)	.61	2.61		
ADHD-HI CD	6	4.33	(6.31)	-2.29	10.96		
ADHD-HI ODD	7	1.71	(1.79)	.05	3.38		
Total	245	1.88	(2.50)	1.56	2.19		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Findings of Table 175 showed mean differences between DBD groups and comparison group of children on Thought Problems Syndrome scale of CBCL/6-18. ADHD-HI CD group showed highest mean (M = 4.33) as compared to other DBD groups and comparison group. Findings showed nonsignificant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Thought Problems Syndrome scale of CBCL/6-18. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Syndrome scales of CBCL as compared to comparison group of children proved nonsignificant.

Table 176

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Attention Problems Syndrome scale of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	4.36	(3.43)	3.60	5.13	4.49	.000
ADHD-I	42	6.00	(3.84)	4.80	7.20		
ADHD-HI	5	4.20	(2.16)	1.51	6.89		
ADHD-C	11	7.00	(2.44)	5.35	8.65		
ODD	4	6.75	(2.63)	2.57	10.93		
CD	8	2.88	(.99)	2.05	3.70		
ADHD-I CD	13	5.38	(3.50)	3.27	7.50		
ADHD-I ODD	7	5.57	(3.91)	1.96	9.19		
ADHD-C CD	44	8.61	(4.42)	7.27	9.96		
ADHD-C ODD	18	6.33	(4.74)	3.98	8.69		
ADHD-HI CD	6	6.00	(.89)	5.06	6.94		
ADHD-HI ODD	7	3.29	(2.43)	1.04	5.53		
Total	245	5.76	(3.95)	5.26	6.25		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

$^{**}p < .01$

Table 176 showed mean differences between DBD groups and comparison group of children on Attention Problems Syndrome scale of CBCL/6-18. ADHD-C CD group showed the highest mean ($M = 8.61$) as compared to other DBD groups and comparison group. ADHD-C CD group also showed highest mean scores on Anxious/Depressed, Withdrawn/Depressed, Somatic Problems, and Social Problems Syndrome scale of CBCL/6-18. Findings showed significant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-

C, ODD, CD, or comorbid disorders and comparison group on Attention Problems Syndrome scale of CBCL/6-18.

To further explore significant differences as mentioned in the Table 176, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 177

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Attention Problems Syndrome scale of CBCL/6-18 (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	ADHD-C CD	-4.25*	.69	.000	-6.53	-1.97
CD	ADHD-C CD	-5.73*	1.41	.004	-10.40	-1.08
ADHD-HI	ADHD-C CD	-5.32*	1.49	.02	-10.26	-.39
ODD						

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Findings of Table 177 indicated significant difference of ADHD-C CD group with comparison group of children. Moreover, within DBD groups ADHD-C CD significantly differed from CD and ADHD-HI ODD group. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Syndrome scales of CBCL as compared to comparison group of children proved significant specifically with reference to ADHD-C CD group.

Table 178

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Rule Breaking Behaviour Syndrome scale of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	1.60	(2.44)	1.06	2.14	1.81	.053
ADHD-I	42	2.60	(2.49)	1.82	3.37		
ADHD-HI	5	1.40	(1.67)	-.68	3.48		
ADHD-C	11	2.82	(4.14)	.03	5.60		
ODD	4	1.50	(1.29)	-.55	3.55		
CD	8	2.75	(4.23)	-.79	6.29		
ADHD-I CD	13	3.38	(3.73)	1.13	5.64		
ADHD-I ODD	7	1.71	(1.70)	.14	3.29		
ADHD-C CD	44	3.02	(2.44)	2.28	3.77		
ADHD-C ODD	18	4.06	(5.00)	1.57	6.54		
ADHD-HI CD	6	3.50	(3.88)	-.58	7.58		
ADHD-HI ODD	7	.86	(1.06)	-.13	1.85		
Total	245	2.42	(2.97)	2.04	2.79		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 178 showed mean differences between DBD groups and comparison group of children on Rule Breaking Behaviour Syndrome scale of CBCL/6-18. ADHD-C ODD group showed highest mean ($M = 4.06$) as compared to other DBD groups. Findings showed nonsignificant between groups differences in children with disruptive behaviour disorders and comparison group on Rule Breaking Behaviour Syndrome scale of CBCL/6-18. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Syndrome scales of CBCL as compared to comparison group of children proved nonsignificant.

Table 179

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Aggressive Behaviour Syndrome scale of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	4.66	(4.66)	3.63	5.70	3.71	.000
ADHD-I	42	5.88	(4.26)	4.55	7.21		
ADHD-HI	5	6.00	(4.30)	.66	11.34		
ADHD-C	11	10.64	(6.62)	6.19	15.09		
ODD	4	7.00	(3.91)	.77	13.23		
CD	8	5.13	(4.42)	1.43	8.82		
ADHD-I CD	13	5.38	(6.64)	1.37	9.40		
ADHD-I ODD	7	5.43	(5.82)	.04	10.82		
ADHD-C CD	44	9.16	(6.61)	7.15	11.17		
ADHD-C ODD	18	10.06	(6.28)	6.93	13.18		
ADHD-HI CD	6	11.50	(8.31)	2.78	20.22		
ADHD-HI ODD	7	5.71	(3.35)	2.61	8.81		
Total	245	6.68	(5.74)	5.96	7.40		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

$^{**}p < .01$

Table 179 showed mean differences between DBD groups and comparison group of children on Aggressive Behaviour Syndrome scale of CBCL/6-18. ADHD-HI CD group showed highest mean ($M = 11.50$) as compared to other DBD groups. Findings showed significant differences between children with disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders and comparison group on Aggressive Behaviour Syndrome scale of CBCL/6-18.

To further explore significant differences as mentioned in the Table 179, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 180

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Aggressive Behaviour Syndrome scale of CBCL/6-18 (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	ADHD-C	-5.97*	1.74	.03	-11.73	-.22
	ADHD- C CD	-4.49*	1.01	.001	-7.86	-1.14
	ADHD-C ODD	-5.39*	1.41	.009	-10.06	-.72

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder; Comparison grp = comparison group.

*$p < .05$

Findings of Table 180 indicated significant difference of children with disruptive behaviour disorders specifically ADHD-C, ADHD-C CD, and ADHD-C ODD and comparison group on Aggressive Behaviour Syndrome scale of CBCL/6-18. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Syndrome scales of CBCL as compared to comparison group of children proved significant.

Literature also suggested that children with ADHD who are also aggressive or have ODD/CD may display problem with encoding cues, they may manifest a tendency to over interpret the actions of others toward them as having hostile intentions, and are therefore more likely to respond with aggressive counterattacks (Matthys, Cuperus, & van Engeland, 1999; Milich & Dodge, 1984). Waschbusch et al. (2002) have found that children with comorbid ADHD + ODD/CD were more easily provoked to become aggressive at lower levels of provocation and may carry a grudge longer than do either children with ADHD alone or control children may.

Table 181

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Internalizing Problems Syndrome scale of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	7.85	(5.76)	6.57	9.13	2.08	.02
ADHD-I	42	8.38	(5.72)	6.60	10.17		
ADHD-HI	5	4.20	(5.67)	-2.85	11.25		
ADHD-C	11	9.09	(4.20)	6.27	11.92		
ODD	4	7.50	(5.44)	-1.17	16.17		
CD	8	5.25	(3.28)	2.50	8.00		
ADHD-I CD	13	6.92	(5.28)	3.73	10.12		
ADHD-I ODD	7	4.14	(3.62)	.79	7.50		
ADHD-C CD	44	11.16	(6.63)	9.14	13.17		
ADHD-C ODD	18	6.94	(4.10)	4.90	8.99		
ADHD-HI CD	6	9.33	(5.24)	3.83	14.83		
ADHD-HI ODD	7	7.86	(6.46)	1.88	13.84		
Total	245	8.24	(5.78)	7.51	8.97		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Table 181 showed mean differences between DBD groups and comparison group of children on Internalizing Problems Syndrome scale of CBCL/6-18. ADHD-C CD group showed highest mean (M = 11.16) as compared to other DBD groups. Findings indicated significant differences between children with disruptive behaviour disorders and comparison group on Internalizing Problems Syndrome scale of CBCL/6-18. To further explore significant differences as mentioned in the Table 181, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed. However, nonsignificant differences

were found between DBD groups with comparison group on the (HSD) Test. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Syndrome scales of CBCL as compared to comparison group of children proved nonsignificant.

Table 182

Means, Standard Deviations, and F-value for Children with Disruptive Behaviour Disorders on Externalizing Problems Syndrome scale of CBCL/6-18 (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	6.26	(6.55)	4.80	7.72	3.27	.000
ADHD-I	42	8.48	(5.69)	6.70	10.25		
ADHD-HI	5	7.40	(5.85)	.13	14.67		
ADHD-C	11	13.45	(10.23)	6.58	20.33		
ODD	4	8.50	(3.69)	2.62	14.38		
CD	8	7.88	(8.04)	1.15	14.60		
ADHD-I CD	13	8.77	(9.92)	2.77	14.77		
ADHD-I ODD	7	7.14	(5.66)	1.90	12.39		
ADHD-C CD	44	12.18	(8.38)	9.63	14.73		
ADHD-C ODD	18	14.11	(10.35)	8.96	19.26		
ADHD-HI CD	6	15.00	(10.21)	4.28	25.72		
ADHD-HI ODD	7	6.57	(4.11)	2.76	10.38		
Total	245	9.10	(7.91)	8.10	10.09		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

$^{**}p < .01$

Table 182 showed mean differences between DBD groups and comparison group of children on Externalizing Problems Syndrome scale of CBCL/6-18. Findings indicated that ADHD-HI CD group showed highest mean ($M = 15.00$) as compared to

other DBD groups. Mean score of comparison group was relatively low as compared to DBD groups. Findings showed significant differences between children with disruptive behaviour disorders and comparison group on Externalizing Problems Syndrome scale of CBCL/6-18.

To further explore significant differences as mentioned in the Table 182, Tukey Honestly Significant Difference (HSD) post hoc comparison between DBD groups and comparison group was performed.

Table 183

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Externalizing Problems Syndrome scale of CBCL/6-18 (N = 245)

I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	95% CI	
					LL	UL
Comparison grp	ADHD-C CD	-5.91*	1.41	.002	-10.59	-1.25
	ADHD- C ODD	-7.84*	1.96	.005	-14.34	-1.36

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder; Comparison grp = comparison group.

*$p < .05$

Findings of Table 183 indicated significant difference of comparison group of children with ADHD-C CD and ADHD-C ODD groups. Mean scores of comparison group were significantly low as compared to ADHD-C CD and ADHD-C ODD groups. So hypothesis no. 11 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on Syndrome scales of CBCL as compared to comparison group of children proved significant.

Gender Differences on the Syndrome Scales of CBCL/6-18. Gender differences of children with childhood behaviour disorders i.e., either ADHD-I,

ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders were also assessed on the Syndrome scales of CBCL/6-18.

Table 184

Gender Differences of DBD groups on the Syndrome Scales of CBCL/6-18 (N = 165)

	Gender								
	Boys (*n* = 122)		Girls (*n* = 43)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
anxi_depr	3.83	3.32	4.79	4.30	-1.50	.13	-2.22	-2.22	-.24
withd_depr	3.07	2.40	2.84	3.56	.48	.62	-.72	1.19	.07
Somatic	2.30	2.75	2.79	3.50	-.92	.35	-1.52	.55	-.15
Socialprb	4.68	3.23	4.35	3.33	.57	.56	-.80	1.47	.10
Thoghtprb	2.08	2.73	1.86	2.29	.47	.63	-.69	1.14	.08
Attentprob	6.30	3.93	6.79	4.27	-.68	.49	-1.89	.92	-.11
Rulebreak	2.92	3.25	2.51	2.77	.73	.46	-.69	1.50	.13
Aggresbeh	7.76	6.14	7.37	5.51	.36	.71	-1.70	2.48	.06
Internalize	9.20	7.06	10.68	8.54	-.88	.37	-3.91	1.48	-.18
Externaliz	10.68	8.54	9.88	7.06	.54	.58	-2.07	3.66	.10

Note. CI = confidence interval; LL = lower limit; UL = upper limit; anxi_depr = anxious/depressed; withd_depr = withdrawn/depressed; Somatic = somatic complaints; Socialprb = social problems; Thoghtprb = thought problems; Attentprob = attention problems; Rulebreak = rule breaking behaviour; Aggresbeh = aggressive behaviour; Internalize = internalizing behaviour; Externaliz = externalizing behaviour.

Table 184 showed gender differences of DBD group (all combine) on the Syndrome Scales of CBCL/6-18 via Mothers' ratings. There were nonsignificant difference between boys and girls on Anxious/Depressed, Withdrawn/Depressed, Somatic Problems, Social Problems, Thought Problems, Attention Problems, Rule Breaking Behaviour, Aggressive Behaviour, Internalizing Behaviour, Externalizing behaviour subscales. So hypothesis no. 12 that boys in DBD group will score high on total and subscales of Syndrome scales of CBCL as compared to girls proved nonsignificant.

Table 185

Gender Differences of Comparison group of Children on the Syndrome Scales of CBCL/6-18 (N = 80)

	Gender								
	Boys (*n* = 48)		Girls (*n* = 32)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (80)*	*p*	*LL*	*UL*	*d*
anxi_depr	3.58	3.23	4.56	3.76	-1.24	.21	-2.54	.591	-.27
withd_depr	2.46	2.543	2.34	2.25	.20	.83	-.99	1.21	.05
somatic	2.44	2.90	2.59	2.80	-.23	.81	-1.45	1.14	-.05
socialprb	3.17	2.96	4.19	2.98	-1.50	.13	-2.37	.33	-.34
thoghtprb	1.46	2.07	1.75	2.50	-.56	.57	-1.31	.73	-.12
attentprob	4.38	3.49	4.34	3.40	.04	.96	-1.54	1.60	.01
rulebreak	1.58	2.27	1.63	2.70	-.07	.94	-1.15	1.07	-.02
aggresbeh	4.65	4.46	4.69	5.01	-.03	.96	-2.17	2.08	-.06
Internalize	8.48	7.71	9.50	7.17	-.59	.55	-4.43	2.39	-.13
externaliz	6.23	6.29	6.31	7.02	-.05	.95	-3.07	2.91	-.01

Note. CI = confidence interval; LL = lower limit; UL = upper limit; anxi_depr = anxious/depressed; withd_depr = withdrawn/depressed; Somatic = somatic complaints; Socialprb = social problems; Thoghtprb = thought problems; Attentprob = attention problems; Rulebreak = rule breaking behaviour; Aggresbeh = aggressive behaviour; Internalize = internalizing behaviour; Externaliz = externalizing behaviour.

Table 185 showed gender differences of comparison group of children on the Syndrome Scales of CBCL/6-18 via mothers' ratings. Findings indicated nonsignificant difference between boys and girls on Internalizing and Externalizing behaviour subscales. It indicated comparison group of children exhibit same level of internalizing and externalizing behaviour problems. So hypothesis no. 12 that boys in comparison group will score high on total and subscales of Syndrome scales of CBCL as compared to girls proved nonsignificant.

DISCUSSION

Study II of Part II was planned with manifold objectives. The main focus was studying pervasiveness of Disruptive Behaviour Disorders (DBD) i.e., Attention Deficit Hyperactivity Disorder (ADHD), Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD) in the home and school setting. Pervasiveness is the requirement that the symptoms must be present in at least two of three settings (home, school, work), with sources of information (parent, teacher, or employer) as per DSM-IV (APA, 1994). Therefore, in the present study mothers from the home setting and teachers from the school settings were selected.

Besides pervasiveness, comorbidity between externalizing and internalizing behaviour disorders was studied. Comorbidity refers to the coexistence of two or more distinct disorders in the same individual at the same point in time (Achenbach, 1991; Caron & Rutter, 1991). Comorbidity is not only pervasive but, at times, occurs more frequently than single disorders and has worse developmental consequences than single-form disorders (see review by Nottelman & Jensen, 1995).

SCAS-P (Urdu version) (See Appendix M) and CBCL/6-18 (Urdu version) (Khan & Awan, 2011) (See Appendix N) were used for assessing internalizing behaviour disorders. In the school setting, respective teachers of selected children were approached and requested to make their ratings on DBD Rating scale (Urdu version) (See Appendix E) and SSBS (Urdu version) (See Appendix G). Ross (1980) highlighted the diagnostic utility of teacher assessment of symptoms as an adjunct to the much more commonly used parental assessment of child functioning.

Before testing hypothesis established for Study II, it was deemed necessary to explore alpha reliability coefficients on the basis of mothers' and teachers' ratings together on the DBD Rating scale (Urdu version). Findings of (Table 117) indicated highly satisfactory alpha reliability coefficients for DBD Rating scale (Urdu version) that showed its internal consistency. Satisfactory reliability coefficients were a basic and essential requirement for an assessment instrument. For individual assessment

purposes, Cronbach's alpha reliability coefficients of at least 0.80 have been recommended, whereas for research purposes reliabilities of 0.70 or higher may be sufficient (Nunnally, 1978).

DBD Rating scale (Urdu version) was responded by respective mothers and teachers representing the home and school settings. Findings of Table 119 indicated significant differences between ratings of mothers and teachers on DBD Rating scale regarding ADHD-I, ADHD-HI, ADHD-C, ODD, and comorbid disorders. Mean scores of mothers' ratings' on DBD Rating scale (Urdu version) were comparatively low as compared to teachers' ratings. Low mean scores of mother's ratings indicated two possibilities, first could be emotional factor that being a mother they perceive their child relatively well. Secondly, it could be due to the differences in exhibition of child's behaviour in the home or school situation. So hypothesis no. 1 that teachers' ratings will be comparatively high as compared to mothers on DBD ratings scale (Urdu version) proved significant. Only nonsignificant differences were found on the CD subscale that indicated that mothers and teachers both perceived conduct problems in children equally.

As per literature, the degree of agreement between parents and teachers, for instance, was modest for any dimension of psychological development; it often ranges between .30 and .50, depending on the behavioural dimension being rated (Achenbach, McConaughy, & Howell, 1987; Mitsis et al., 2000). This low degree of agreement sets an upper limit on the extent to which parents and teachers can agree on the severity of ADHD symptoms, and thus on whether or not a child has the disorder. Such disagreements among sources certainly reflect in part real differences in the child's behaviour in these different settings, probably as a function of true differences in situational demands. School, after all, is quite different from the home environment in its expectations, tasks, social context, and general demands for public self-regulation. But the disagreements may also reflect differences in the attitudes, experiences, and judgments of different people.

Gender and grade wise prevalence rate of children with behavioural disorders was also evaluated in the present study. Findings (See Table 120) indicated higher percentage of boys as compared to girls with symptoms of behavioural disorders. In CD and ODD group there was not a single girl. Whereas, boys out numbered girls in almost all DBD groups. So hypothesis no. 2 that boys will show higher prevalence rate of disruptive behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders as compared to girls proved significant excluding ODD and CD groups.

Literature of Pakistani based researches on gender also supported the findings of Table 120; Masood (2008) explored the identification of behaviour problems among school going children of Rawalpindi and Islamabad cities of Pakistan. Findings revealed significant gender differences, there were more (Boys = 66.6%) and less number of girls (Girls = 3.57%) identified with externalizing behaviour problems.

Similarly, Qureshi (2007) compared the emotional expression and behavioural problems among adolescents from broken and intact families. Results regarding gender differences on behavioural problems showed that boys exhibited more externalizing behaviour problems as compared to girls.

Gender has been identified as the most consistently documented risk factor for conduct disorder (Robins, 1991). During childhood, boys greatly outnumbered girls with respect to diagnosis of conduct disorder, with ratios of 4:1 commonly reported by American Psychiatric Association (APA, 1987).

Grade wise differences were also explored for the screened out children of 3rd, 4th, and 5th grades. Findings of Table 121 indicated that higher number of screened out children with symptoms of DBD belonged to grade 3rd and 5th.

In the Study II of Part I the grade wise prevalence rate was highest in the screened out children of grade 4th (See Table 11) via teachers' ratings only. However, Table 121 represented higher grade wise prevalence rate of screened out children

from grade 3rd and 5th through mothers' and teachers' ratings together. These findings indicated two prospective reasons; firstly, differences may exist because Table 11 represented grade wise differences on the basis of teachers ratings exclusively and Table 121 indicated grade wise differences on the basis of teachers and mothers ratings together. Secondly, this difference can be due to pervasiveness of behavioural disorders across home and school settings. In school situations high number of children of grade 4th were identified with behavioural problems, whereas, keeping in view pervasiveness of behavioural disorders across home and school situations more children belonging to grade 3rd and 4th were identified.

Besides determining gender and grade wise prevalence rate, gender differences between boys and girls were also studied on the DBD Rating scale via mothers' ratings. Findings of Table 122 indicated that there were only significant gender differences on the conduct disorder subscale. Findings indicated that boys indulge in conduct problems more as compared to girls of the same age group. So hypothesis no. 3 that boys will score high as compared to girls on total and subscales of DBD Rating scale proved significant only for CD subscale. On all other subscales of DBD Rating scale there were no significant gender differences.

In addition to mothers' ratings; gender differences of DBD groups through teachers' ratings and through mothers' and teachers' ratings together on the DBD Rating scale (Urdu version) were also explored. Findings of Table 123 and Table 124 indicated nonsignificant gender differences between boys and girls on all subscales and total. So hypothesis no. 3 that boys will score high as compared to girls on total and subscales of DBD Rating scale proved nonsignificant.

According to literature, ecological factors and social stressors, including family processes, are predictors of individual differences in aggression (Campbell, 2002; Shaw, Gilliom, Ingoldsby, & Nagin, 2003). During childhood the family environment constitutes the basic social ecology in which the child's behaviour is manifested, learned, encouraged or suppressed (Dishion & Patterson, 2006).

In the Study II, assessment of demographic/familial factors of children including mother's education, family system, number of children, birth order of child, father's income was also performed. Findings of Table 125 showed that child's gender, father's education and child's age proved significant predictors of childhood behaviour problems. Findings indicated that education of father proved significant predictor. In Pakistani families father is considered the head of the family therefore if the head of family is educated it will certainly decrease the chances of behavioural problems of children. Findings of Table 125 also indicated that gender also plays its due role in the prediction of childhood behaviour disorders. Boys were more likely to develop behavioural problems as compared to girls. Moreover, findings indicated age was another significant predictor of behaviour disorders, as the age of child increase as more chances he/she has for developing behavioural problems.

Study II of Part II focused on screening of children with DBD symptoms keeping into consideration the pervasiveness factor. Moreover, social competence and antisocial behaviour of screened out children was also investigated. Social competence includes a wide variety of skills, behaviours, judgments and outcomes (Cavell, 1990; Dodge & Murphy, 1984). Social competence often involves two related evaluative determinants, that is, social competence is typically reflected in the judgments of others and self reports (Nowicki, 2003). The operational definition of social competence should measure the ability to effectively function within a social context (Cavell, 1990; Dodge & Murphy, 1984).

Tables 126 to 132 showed comparison between DBD groups and comparison group on total and subscales of social competence scale of School Social Behaviour Scale (SSBS). Findings indicated significant differences between DBD groups and comparison group. Findings supported the hypothesis no. 4 that children with behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score low on social competence and its subscales as compared to comparison group of children except ODD group. ODD group (n = 4) showed high mean scores as compared to comparison group. However, significant differences in the level of social competence within DBD groups were also found.

Findings of Tables 126 to 132 showed differences between comparison group and DBD groups on social competence and its subscales; overall, these findings indicated that there was no huge mean difference between DBD groups and comparison group. However, it can be concluded that the sample of Study II was consisted of academically low performing children therefore overall children showed low mean scores on social competence. As per research findings of Loona and Kamal (2002) academically low performing children showed poor social competence as compared to children having high academic performance.

Findings of Tables 133 to 140 on total and subscales of the antisocial behaviour subscale of SSBS indicated that children of DBD group indulged into more hostile irritable, disruptive demanding, and antisocial aggressive behaviour. On hostile irritable subscale, ADHD-C CD group of children scored the highest mean (M = 37.82) indicating their high involvement in the hostile irritable activates. Similarly, on antisocial aggressive subscale (M = 25.30) and disruptive demanding subscale (M = 27.61), ADHD-C CD group of children scored highest as compared to other DBD groups that indicated higher involvement of ADHD-C CD comorbid group in the antisocial activities. Mean scores of comparison group were significantly low as compared to DBD groups. So findings proved the hypothesis no. 5 significant that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on antisocial behaviour subscale of SSBS as compared to comparison group of children.

Gender wise differences between boys and girls of DBD groups on SSBS and its subscales were also examined. Findings of Table 141 indicated nonsignificant gender differences between boys and girls on all subscales of SSBS except on academic skills subscale of social competence in which boys scored high as compared to girls. So hypothesis no. 6 that boys of DBD groups will score high as compared to girls on antisocial behaviour subscale and low on social competence subscale of SSBS proved nonsignificant.

Likewise, gender differences of boys and girls in the comparison group were also studied on the total and subscales of SSBS. Findings indicated nonsignificant gender differences on all subscales of SSBS (See Table 142). It indicated that comparison group of boys and girls exhibit similar social competence and antisocial behaviour. So hypothesis no. 6 that boys in comparison group will score high as compared to girls on antisocial behaviour subscale and low on social competence subscale of SSBS proved nonsignificant.

Study II also evaluated internalizing behaviour disorder in children screened out with externalizing behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbid disorders for the differential diagnosis. According to literature, internalizing disorders such as anxiety and depression occur at higher than expected rates among youngsters with conduct disorders (Loeber & Keenan, 1994; Loeber, Burke, Lahey, Winters, & Zera, 2000). Therefore, Study II investigated co-occurrence of externalizing and internalizing behaviour disorders specifically anxiety and depression.

Findings of Tables 143 to 149 indicated nonsignificant differences in children screened out with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbid disorders and comparison group of children on Spence Child Anxiety Scale (Urdu version) (SCAS-P) and its subscales. Findings indicated that children in the DBD groups and comparison group showed low mean scores on SCAS-P and its subscales i.e., separation anxiety disorder, social phobia, generalized anxiety disorder, panic disorder, obsessive compulsive disorder, and physical injury fears. So hypothesis no. 7 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscale of SCAS-P as compared to comparison group of children proved nonsignificant.

Moreover, gender differences of DBD group on SCAS-P and its subscales were also studied. As per literature, girls are risk for internalizing problems as

compared to boys (e.g., Achenbach et al., 1991; Walden & Garber, 1994). Therefore, Study II also explored gender differences on SCAS-P and its subscales.

Findings of Table 150 indicated significant gender differences on the total and subscales of SCAS-P i.e., social phobia, panic disorder, and obsessive compulsive disorder. Girls scored significantly high on these subscales as compared to boys. Therefore hypothesis no. 8 that girls in DBD group will score high on total and subscales of SCAS-P as compared to boys proved significant for total and subscales of SCAS-P i.e., social phobia, panic disorder, and obsessive compulsive disorder.

Findings of Table 150 also supported the previous findings that girls score high on internalizing problems as compared to boys. Masood (2008) indicated that girls scored higher on internalizing problems as compared to boys, there were 23.8 per cent girls and only 5.95 per cent boys identified with internalizing behaviour problems.

Findings of Table 151 showed gender differences of children in comparison group on the total and subscales of SCAS-P. There was nonsignificant difference between boys and girls on separation anxiety disorder (SAD), social phobia (Soph), generalized anxiety disorder (GAD), and obsessive compulsive disorder (OCD). However, girls scored high mean as compared to boys on panic/agoraphobia subscale, physical injury fears subscale, and on total SCAS-P. So hypothesis no. 8 that girls in comparison group will score high on total and subscales of SCAS-P as compared to boys proved significant for panic/agoraphobia subscale, physical injury fears subscale, and total SCAS-P.

Before hypothesis testing psychometric properties of CBCL/6-18 (Urdu version) translated by (Khan & Awan, 2011) were determined on the present sample. Table 152 and 154 showed alpha reliability coefficients for CBCL/6-18 (Urdu version) syndrome scales and DSM oriented scales. Alpha reliability coefficients indicated internal consistency of the syndrome scales and DSM oriented scales of the CBCL/6-18 (Urdu version) (Khan & Awan, 2011).

Moreover, children with behavioural disorders were assessed on the CBCL/6-18 DSM Oriented (See Tables 156 to 165). Findings indicated nonsignificant

differences on conduct problems and anxiety problems subscale of CBCL/6-18 DSM Oriented scale. However, on ADHD problems, oppositional problems, affective problems, and somatic problems subscale significant differences were found. So hypothesis no. 9 that children with behavioural disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on DSM Oriented scales of CBCL as compared to comparison group of children proved significant for subscales i.e., ADHD problems, oppositional problems, affective problems, and somatic problems.

Study II also explored gender differences between boys and girls on the DSM Oriented Scales of CBCL/6-18. Findings of Table 166 showed nonsignificant difference between boys and girls on subscales i.e., conduct problems, ADHD problems, oppositional problems, affective problems, anxiety problems, and somatic problems. So hypothesis no. 10 that boys in DBD group will score high on DSM Oriented scales of CBCL as compared to girls proved nonsignificant. Similarly, gender differences of comparison group of children on the DSM Oriented Scales of CBCL/6-18 were also explored. Findings of Table 167 showed nonsignificant difference between boys and girls on subscales i.e., conduct problems, ADHD Problems, oppositional problems, affective problems, and somatic problems. Only significant gender difference was found on Anxiety Problems subscale that indicated girls experience more anxiety as compared to boys. So hypothesis no. 10 that boys in comparison group will score high on DSM Oriented scales of CBCL as compared to girls proved significant only for Anxiety problems subscale.

The rate of comorbidity between depression and ADHD is reported to be very high (e.g., Angold et al., 1999; Biederman et al., 1991); however, comorbidity rates of ADHD with other disorders are even higher. In Study II, assessment of depression was performed through CBCL/6-18 Syndrome scales. Findings of Tables 168 to 183 showed nonsignificant differences between DBD groups and comparison group on anxious/depressed, withdrawn/depressed, thought problems, and rule breaking behaviour syndrome scale. However, on somatic problems, social problems, attention problems syndrome scale significant between DBD groups and comparison group were found. So hypothesis no. 11 that children with behavioural disorders i.e., either

ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders will score high on total and subscales of Syndrome scales of CBCL as compared to comparison group of children proved significant only for somatic problems, social problems, and attention problems syndrome scale.

Moreover, gender differences of DBD group (all combine) on the Syndrome Scales of CBCL/6-18 were also explored. Findings of Table 184 showed nonsignificant gender difference between boys and girls on anxious/depressed, withdrawn/depressed, somatic problems, social problems, thought problems, attention problems, rule breaking behaviour, aggressive behaviour, internalizing behaviour, externalizing behaviour subscales. These findings indicated that boys and girls with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD, or comorbid disorders exhibit similar kind of behaviour with same frequency. So hypothesis no. 12 that boys in DBD group will score high on total and subscales of Syndrome scales of CBCL as compared to girls proved nonsignificant.

Likewise, gender differences of comparison group of children on the Syndrome Scales of CBCL/6-18 were also explored. Findings of Table 185 showed nonsignificant difference between boys and girls on anxious/depressed, withdrawn/depressed, somatic problems, social problems, thought problems, attention problems, rule breaking behaviour, aggressive behaviour, internalizing behaviour, externalizing behaviour subscales. So hypothesis no. 12 that boys in comparison group will score high on total and subscales of Syndrome scales of CBCL as compared to girls proved nonsignificant.

Findings of Study II will prove useful in understanding childhood behaviour disorders keeping in view pervasiveness across home and school settings. Moreover, assessment of internalizing behaviour disorders in screened out children with disruptive behaviour disorders will prove helpful in understanding these disorders in Pakistani context.

Study III: Validation of Disruptive Behaviour Disorder (DBD) Rating scale (Urdu version) and Spence Child Anxiety Scale (Urdu version) with Child Behaviour Checklist/6-18 (Urdu version)

The Child Behaviour Checklist (CBCL/6-18) (Achenbach & Rescorla, 2001) has sound DSM-Oriented Scales, constructed through expert clinical judgment to match selected categories for behavioural/emotional problems as described in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1994) (Nakamura, Ebesutani, Bernstein, & Chorpita, 2009). The present Study was planned to validate DBD Rating scale (Urdu version) (See Appendix E) and SCAS-P (Urdu version) (See Appendix M) with the DSM Oriented and Syndrome scales of CBCL/6-18. DBD Rating Scale and SCAS-P are measures that are also based on the criteria of DSM-IV (APA, 1994).

Achenbach, Dumenci, and Rescorla (2003) developed the CBCL/6-18 DSM-Oriented Scales to supplement the CBCL Syndrome Scales. Whereas the Syndrome Scales were derived empirically via factor analytic methods, DSM Oriented Scales were constructed through agreement in experts' ratings of the preexisting items' consistency with DSM-IV (APA, 1994) diagnostic criteria. The cross-informant syndromes are Aggressive Behaviour; Anxious/Depressed; Attention Problems; Rule-Breaking Behaviour; Social Problems; Somatic Complaints; Thought Problems; and Withdrawn/Depressed.

The CBCL also has a scale set to show scores associated with disorders from the DSM-IV-TR (American Psychiatric Association, 2000). The six DSM-oriented scales are: Affective Problems; Anxiety Problems; Somatic Problems; Attention Deficit Hyperactivity Problems; Oppositional Defiant Problems; and Conduct Problems. The scales are based on new factor analyses of parents' ratings of 4,994 clinically referred children, and are normed on 1,753 children aged 6 to 18 years. The normative sample was representative of the 48 contiguous states for socioeconomic status, ethnicity, region, and urban-suburban-rural residence. Children were excluded from the normative sample if they had been referred for mental health or special

education services within the past year. Many studies have demonstrated a high rate of reliability between the scales of the CBCL and actual psychological diagnosis (Warnick, Bracken, & Kasl, 2007).

The CBCL is widely used in mental health services, schools, medical settings, child and family services, public health agencies, child guidance, and training programs (Achenbach 2009a), and it has been used in over 6,500 published scholarly articles (Achenbach, 2009b).

In Study III, CBCL/6-18 DSM Oriented Scales and CBCL Syndrome Scales are used to evaluate convergent validity of DBD Rating scale (Urdu version), and convergent and discriminant validity of SCAS-P (Urdu version). Convergence means that evidence from different sources gathered in different ways all indicates the same or similar meaning of the construct (Kerlinger, 1976). The psychometric properties of CBCL have been well established and the measure is widely used internationally.

SCAS-P (Spence, 1999) measures anxiety disorders i.e., separation anxiety disorder, generalized anxiety disorder, social phobia, specific phobia, panic disorder, obsessive-compulsive disorder, and post-traumatic or acute stress disorder. Anxiety disorders are among the most prevalent psychiatric problems in children and adolescents. Epidemiological research shows that between 8 to 12% of youths suffer from anxiety complaints that are severe enough to interfere with daily life and functioning (Bernstein, Borchardt, & Perwien, 1996).

DBD Rating scale (Urdu version) evaluates Attention-Deficit/Hyperactivity Disorder, including Inattention, and Hyperactivity/impulsivity, Oppositional Defiant Disorder, and Conduct Disorder. Keeping in view the fact that CBCL/6-18, measures similar constructs as assessed by DBD Rating scale and SCAS-P, Study III focusing validation was planned.

Objectives

1. To carry out convergent validation of DBD Rating subscales (ADHD, ODD, and CD) with CBCL DSM Oriented Scales i.e., Conduct Problems, ADHD Problems, and Oppositional Problems.
2. To carry out convergent validation of DBD subscales (ADHD, ODD, and CD) with CBCL syndrome scales i.e., Attention Problems, Rule Breaking Behaviour, Aggressive Behaviour, Externalizing Problems.
3. To carry out convergent validation of SCAS-P subscales (Separation Anxiety Disorder, Social Phobia, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, and Physical Injury fears) with CBCL DSM Oriented Scales i.e., Anxiety Problems, Affect Problem, and Somatic Problems.
4. To carry out convergent validation of SCAS-P subscales (separation anxiety disorder, Social Phobia, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, and Physical Injury fears) with CBCL syndrome scales i.e., Anxious Depressed, Withdrawn Depressed, Somatic Problems and Internalizing Problems).
5. To carry out discriminant validation of SCAS-P subscales (separation anxiety disorder, Social Phobia, Generalized Anxiety Disorder, Obsessive Compulsive Disorder, and Physical Injury fears) with CBCL syndrome scales i.e., Rule breaking behaviour, Aggressive behaviour subscales of Externalizing Problems subscale).

Sample

Study III included same academically low performing children of Study II within age range 7 to 13 years (N = 245; mean age = 9.68; SD = 1.56). There were (girls: n = 75; mean age = 9.32; SD = 1.25) and (boys: n = 170; mean age = 9.84; SD = 1.65) from 3rd to 5th grades. DBD Rating scale (Urdu version), SCAS-P (Urdu version), and CBCL/6-18 (Urdu version) were presented to mothers of selected children through School administration.

Instruments

Details regarding instruments used in the Study III were as follows.

DBD Rating Scale (Urdu version). DBD Rating scale (Urdu version) is 42 items scale to assess Attention-Deficit/Hyperactivity Disorder, including Inattention Symptoms, Hyperactivity/impulsivity Symptoms and ADHD Combined type. Moreover, it can assess Oppositional Defiant Disorder and Conduct Disorder. Cronbach's alpha coefficients yielded an internal consistency coefficient of .94 for the entire 42 items of DBD Rating Scale (Urdu version). Cronbach's alpha coefficients ranged from .80 to .91 for the four subscales of DBD Rating Scale (Urdu version). See page no 64 of Study II of Part I for details regarding DBD Rating scale (Urdu version).

Spence Child Anxiety Scale (SCAS-P) (Urdu version) (Parent version). SCAS-P (Urdu version) (See Appendix M) has six subscales that measure Separation Anxiety Disorder, Social Phobia, Generalized Anxiety Disorder, Panic/Agoraphobia, Obsessive Compulsive Disorder and Physical Injury Fears (See page no 217 of Study I of Part II for details regarding Spence Child Anxiety Scale (SCAS-P) (Urdu version).

Child Behaviour Checklist (CBCL) (Urdu version). CBCL/6-18 (Urdu version) (See Appendix N) translated by Khan and Awan (2011) was used. Parents rated their child for how true each item is now or within the past 6 months using the following scale: 0 = not true (as far as you know); 1 = somewhat or sometimes true; 2 = very true or often true (Achenbach & Rescorla, 2001) (See page no 229 of Study II of Part II for details regarding Child Behaviour Checklist (CBCL) (Urdu version).

Procedure

DBD Rating scale (Urdu version) (See Appendix E), SCAS-P (Urdu version) (See Appendix M) and CBCL/6-18 (Urdu version) (See Appendix N) along with Informed consent (See Appendix T) was sent to Mothers of academically low performing children within age range 7 to 13 years from 3 to 5 grades. Complete instructions about filling up the scale and response categories were mentioned on the scales for mothers. They took keen interest in filling up the scales and found no difficulty in comprehending item statements.

Results

Convergent validation of DBD Rating scale (Urdu version) through CBCL/6-18 DSM Oriented Scales and CBCL/6-18 Syndrome Scales. CBCL/6-18 DSM Oriented scales i.e., Conduct Problems, ADHD Problems, and Oppositional Problems subscales were used to validate DBD Rating scale via mothers' ratings. Moreover, CBCL/6-18 Syndrome Scales i.e., Attention Problems, Rule Breaking Behaviour, Aggressive Behaviour, and Externalizing Problems subscales were also used to validate DBD Rating scale.

To determine convergent validity of DBD Rating scale (Urdu version) through CBCL/6-18 DSM Oriented Scales and CBCL/6-18 Syndrome Scales interscale correlations were performed.

Table 186

Interscale Correlation Coefficients, Means, and Standard Deviations of subscales of DBD Rating scale and CBCL/6-18 DSM Oriented Scales via mothers' ratings (N = 245)

	Subscales	1	2	3	4	5	6	7	8
1	ADHD-I	-							
2	ADHD-HI	.61**	-						
3	ADHD-C	.90**	.89**	-					
4	ODD	.58**	.65**	.68**	-				
5	CD	.57**	.60**	.65**	.67**	-			
6	Conduct Problem	.25**	.29**	.30**	.37**	.40**	-		
7	ADHD Problem	.50**	.43**	.52**	.38**	.32**	.42**	-	
8	Opposit Problem	.42**	.42**	.47**	.54**	.39**	.59**	.54**	-
	M	8.99	8.24	17.23	5.63	4.62	2.84	5.02	2.02
	SD	5.58	5.11	9.62	4.05	3.82	3.18	3.20	1.97

Note. ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; Opposit problem = oppositional problems.

**$p < .01$

Findings of Table 186 indicated interscale correlations between subscales of DBD Rating scale and subscales of CBCL/6-18 DSM Oriented Scales via mothers' ratings. According to Bagozzi (1993), convergent validity refers to the degree to which multiple attempts measure the same concept in agreement. The Table represented significant positive interscale correlation between DBD Rating Scale and DSM Oriented Scales of CBCL/6-18 via mothers' ratings. These findings indicated that convergent validity was found between subscales of DBD Rating scale and DSM Oriented Scales of CBCL/6-18.

Table 187

Interscale Correlation Coefficients, Means, and Standard Deviations between DBD subscales and CBCL/6-18 Syndrome Scales via mothers' ratings (N = 245)

Subscales	1	2	3	4	5	6	7	8	9
1 ADHD-I	-								
2 ADHD-HI	.61**	-							
3 ADHD-C	.90**	.89**	-						
4 ODD	.58**	.65**	.68**	-					
5 CD	.57**	.60**	.65**	.67**	-				
6 Attention Prob	.53**	.39**	.51**	.36**	.31**	-			
7 Rule breaking	.25**	.26**	.28**	.32**	.34**	.40**	-		
8 Aggressive beh	.40**	.44**	.46**	.53**	.46**	.55**	.60**	-	
9 Externalizg beh	.38**	.42**	.44**	.50**	.46**	.55**	.81**	.95**	-
M	8.99	8.24	17.23	5.63	4.62	5.76	2.42	6.68	9.10
SD	5.58	5.11	9.62	4.05	3.82	3.95	2.97	5.74	7.91

Note. ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant disorder; CD = conduct disorder; Attention Prob = attention problems; Rule breaking = rule breaking behaviour; Aggressive beh = aggressive behaviour; Externalizg beh = externalizing behaviour.

**$p < .01$

Table 187 represented interscale correlation between DBD Rating Scale and CBCL/6-18 Syndrome Scales through mothers' ratings. There was significant positive

correlation between all subscales of DBD Rating scale and CBCL/6-18 Syndrome Scales. Findings indicated that convergent validity was found between DBD Rating scale and CBCL/6-18 Syndrome scales via mothers' ratings on both measures.

Convergent Validation of subscales and total of SCAS-P (Urdu version) through CBCL/6-18 DSM Oriented Scales and CBCL/6-18 Syndrome Scales. CBCL/6-18 DSM Oriented scales i.e., Anxiety Problems, Affective Problems, and Somatic Problems subscales were used to validate SCAS-P subscales and total via mothers' ratings. Moreover, CBCL/6-18 Syndrome Scales i.e., Anxious/Depressed, Withdrawn/Depressed, Somatic Problems, and Internalizing Problems subscales were also used for validating SCAS-P subscales and total.

Nauta et al. (2004) also determined convergent and divergent validity of the SCAS-P through CBCL/4-18 Internalizing and Externalizing subscales (Achenbach, 1991). The SCAS-P total scale correlated strongly and significantly with the CBCL-internalizing subscale representing (r = 0.55 in the anxiety disordered group, r = 0.59 in the normal control group). SCAS-P also significantly correlated with the CBCL-externalizing subscale representing (r = 0.33 in the anxiety disordered group, r = 0.34 in the normal control group). As predicted, the correlation of SCAS-P with the CBCL-internalizing subscale was significantly higher than the correlation with the CBCL-externalizing subscale in both groups thus providing evidence for convergent and divergent validity respectively.

Table 188

Interscale Correlation Coefficients, Means, and Standard Deviations of SCAS-P Total and Subscales with CBCL/6-18 DSM Oriented Scales (N = 245)

	Subscales	1	2	3	4	5	6	7	8	9	10
1	SAD	-									
2	Soc Pho	.36**	-								
3	GAD	.31**	.54**	-							
4	Panic	.41**	.44**	.53**	-						
5	OCD	.46**	.19**	.10	.23**	-					
6	Phyinj	.47**	.19**	.26**	.28**	.36**	-				
7	ToSCAS	.76**	.72**	.71*	.71**	.53**	.58**	-			
8	AnxiPrb	.09	.28**	.28**	.17**	.20**	-.02	.26**	-		
9	AffeProb	.09	.31**	.34**	.22**	.11	-.03	.28**	.66**	-	
10	SomProb	.16*	.20**	.31**	.19**	.13*	.06	.27**	.41**	.38**	-
	M	4.67	5.82	3.91	2.34	1.38	1.59	19.69	3.62	1.59	1.35
	SD	3.93	3.53	3.32	2.73	2.26	2.15	12.34	3.05	1.66	1.95

Note. SAD = separation anxiety disorder; SocPho = social phobia; GAD = generalized anxiety disorder; Panic = panic/agoraphobia; OCD = obsession compulsive disorder; Phyinj = physical injury fears; ToSCAS = total spence children anxiety scale; AnxiPrb = anxiety problems; AffeProb = affective problems; SomProb = somatic problems.

**$p < .01$, *$p < .05$

Findings of Table 188 represented interscale correlation between SCAS-P and CBCL/6-18 DSM Oriented scales through mothers' ratings. Findings indicated positive correlation between subscales of SCAS-P with CBCL DSM Oriented scales. Findings are providing evidence that SCAS-P (Urdu version) is a valid measure that can be used for screening or diagnosis of children with Anxiety Disorder.

Table 189

Interscale Correlation Coefficients, Means, and Standard Deviations of SCAS-P Total and Subscales with CBCL/6-18 Syndrome Scales (N = 245)

	Subscales	1	2	3	4	5	6	7	8	9	10	11
1	SAD	-										
2	Social Pho	.36**	-									
3	GAD	.31**	.54**	-								
4	Panic	.41**	.44**	.53**	-							
5	OCD	.46**	.19**	.10	.23**	-						
6	Physical inj	.47**	.19**	.26**	.28**	.36**	-					
7	TotalSCAS	.76**	.72**	.71 *	.71**	.53**	.58**	-				
8	Anxity/Dep	.19**	.33**	.34**	.21**	.16**	.08	.34**	-			
9	Wthdra/De	.08	.29**	.27**	.16**	.18**	.02	.26**	.59**	-		
10	Somatc Prb	.18**	.26**	.35**	.25**	.15 *	.08	.32**	.58**	.42**	-	
11	Internalzig	.16**	.32**	.34**	.21**	.22**	.09	.34**	.80**	.77**	.76**	
	M	4.67	5.82	3.91	2.34	1.38	1.59	19.69	4.04	2.82	2.45	8.24
	SD	3.93	3.53	3.32	2.73	2.26	2.15	12.34	3.56	2.65	2.92	5.78

Note. SAD = separation anxiety disorder; SocPho = social phobia; GAD = generalized anxiety disorder; Panic = panic/agoraphobia; OCD = obsession compulsive disorder; Phyinj = physical injury fears; ToSCAS = total spence children anxiety scale; Anxity/Dep = anxious/depressed; Withdra/De = withdrawn/depressed; Somatc Prb = somatic problems; Internalig = internalizing problems.

**$p < .01$, *$p < .05$

Table 189 represented interscale correlation between SCAS-P and CBCL/6-18 Syndrome scales via mothers' ratings. There was strong positive correlation between subscales of SCAS-P with CBCL/6-18 Syndrome scales. Findings provided evidence regarding convergent validity between SCAS-P (Urdu version) and CBCL/6-18 on the basis of significant positive correlation. SCAS-P (Urdu version) proved to be a valid measure for screening or diagnosis of children with Anxiety Disorder.

Discriminant Validity. Discriminability means that one can empirically differentiate the construct from the other constructs that may be similar and that can

point out what is unrelated to the construct (Kerlinger, 1976). Discriminant validity of SCAS-P was established through CBCL/6-18 Externalizing Syndrome Scales.

Table 190

Interscale Correlation Coefficients, Means, and Standard Deviations of SCAS-P total and Subscales with Externalizing Syndrome Scales of CBCL/6-18 (N = 245)

	Subscales	1	2	3	4	5	6	7	8	9	10
1	SAD	-									
2	Soc Pho	.36**	-								
3	GAD	.31**	.54**	-							
4	Panic	.41**	.44**	.53**	-						
5	OCD	.46**	.19**	.10	.23**	-					
6	Phyinj	.47**	.19**	.26**	.28**	.36**	-				
7	ToSCAS	.76**	.72**	.71*	.71**	.53**	.58**	-			
8	Rulebrek	-.04	.10	.16**	-.008	-.01	.02	.06	-		
9	Aggrebeh	.19	.20	.17**	-.03	.07	-.02	.11	.60**	-	
10	Externaliz	-.008	.18	.19**	-.02	.04	-.01	.10	.81**	.95**	-
	M	4.76	5.82	3.91	2.34	1.38	1.59	19.69	2.42	6.68	9.10
	SD	3.93	3.53	3.32	2.73	2.26	2.15	12.34	2.97	5.74	7.91

Note. SAD = separation anxiety disorder; SocPho = social phobia; GAD = generalized anxiety disorder; Panic = panic/agoraphobia; OCD = obsession compulsive disorder; Phyinj = physical injury fears; ToSCAS = total spence children anxiety scale; Rulebrek = rule breaking behaviour; Aggrebeh = aggressive behaviour; Externaliz = externalizing problems.

**$p < .01$, *$p < .05$

Findings of Table 190 represented interscale correlation between SCAS-P and CBCL/6-18 externalizing syndrome scales i.e., rule breaking behaviour, aggressive behaviour, and externalizing problems via mothers' ratings. There was negative and nonsignificant correlation between most subscales of SCAS-P with CBCL/6-18 externalizing syndrome scales. Findings provided evidence for discriminant validity between SCAS-P (Urdu version) and CBCL/6-18 externalizing syndrome scales.

DISCUSSION

Study III of Part II primarily focused on validation of translated scales in Urdu language i.e., DBD Rating scale (Urdu version) and SCAS-P (Urdu version). Campbell and Fiske (1959) described in convergent validation a test correlates highly with other variables with which it should theoretically correlate. However, in discriminant validity test variables do not correlate significantly with variables from which it should differ.

The validation of DBD Rating scale (Urdu version) and SCAS-P (Urdu version) was performed through CBCL/6-18 (Urdu version) translated by (Khan & Awan, 2011). DBD Rating scale is a measure of Diagnostic and Statistical Manual of Mental Disorders (3rd ed., rev.; APA, 1987) and DSM–IV (APA, 1994) symptoms of ADHD, oppositional defiant disorder (ODD) and conduct disorder (CD).

Spence Children's Anxiety Scale (SCAS-P) (Spence, 1999) has 38 anxiety items with one open ended non scored item. SCAS-P provides an overall measure of anxiety together with scores on six sub-scales each exploring a specific aspect of child anxiety. Nauta et al. (2004) examined the psychometric properties of the parent version of the SCAS-P by including 484 parents of anxiety disordered children and 261 parents in a normal control group. Results of confirmatory factor analysis provided support for six inter-correlated factors, that corresponded with the child self-report as well as with the classification of anxiety disorders by DSM-IV (APA, 1994) (namely separation anxiety, generalized anxiety, social phobia, panic/agoraphobia, obsessive compulsive disorder, and fear of physical injuries).

CBCL/6-18 (Achenbach & Rescorla, 2001) is most widely used and internationally known measure. The CBCL/6-18 included internalizing and externalizing problems scales i.e., aggressive behaviour, anxious/depressed, attention problems, rule-breaking behaviour, social problems, somatic complaints, thought problems, and withdrawn/depressed. The six DSM-oriented scales included subscales i.e., affective problems, anxiety problems, somatic problems, ADHD problems, oppositional defiant problems, and conduct problems.

In an effort to provide closer linkage with prevailing DSM IV (1994) criteria, Achenbach et al. (2003) developed the CBCL/6-18 DSM-Oriented Scales to supplement the CBCL Syndrome Scales. Whereas the Syndrome Scales were derived empirically via factor analytic methods, DSM Oriented Scales were constructed through agreement in experts' ratings of the preexisting items' consistency with DSM-IV (APA, 1994) diagnostic criteria.

The scales were based on factor analyses of parents' ratings of 4,994 clinically referred children, and are normed on 1,753 children aged 6 to 18. The normative sample was representative of the 48 contiguous states for socioeconomic status, ethnicity, region, and urban-suburban-rural residence. Children were excluded from the normative sample if they had been referred for mental health or special education services within the past year (Achenbach & Rescorla, 2001).

This standardized parent-report measure consisted of 113 items, parents describe their child's behaviour over the past 6 months using a 3-point rating scale. In this Study, CBCL/6-18 DSM Oriented Scales and CBCL Syndrome Scales were used to validate DBD Rating scale (Urdu version), and SCAS-P (Urdu version).

Findings of See Table 186 indicated positive correlation between DBD Rating scale and DSM Oriented scales of CBCL/6-18 i.e., conduct problems, ADHD problems, and oppositional problems through mothers' ratings. There was strong positive correlation between all subscales of DBD Rating scale with CBCL/6-18 DSM oriented scales. These findings indicated that convergent validity was found between subscales of DBD Rating scale and DSM oriented Scales of CBCL/6-18. According to Bagozzi (1993), convergent validity refers to the degree to which multiple attempts measure the same concept in agreement.

Convergent validation between DBD Rating scale and CBCL/6-18 Syndrome scales i.e., attention problems, rule breaking behaviour, aggressive behaviour, and externalizing behaviour through mothers' ratings were also explored. Findings of Table 187 indicated significant positive correlation between all subscales of DBD Rating scale and CBCL/6-18 Syndrome scales that indicated that convergent validity

was found between DBD Rating scale and CBCL/6-18 Syndrome scales via mothers' ratings on both measures.

Besides DBD Rating scale, convergent and discriminant validation of SCAS-P was also carried out. Findings of Table 188 represented interscale correlation between SCAS-P and CBCL/6-18 DSM oriented scales i.e., anxiety problems, affective problems, and somatic problems through mothers' ratings. Findings indicated positive correlation between subscales of SCAS-P with CBCL DSM oriented scales that provided evidence that SCAS-P (Urdu version) proved to be a valid measure that can be used for screening or diagnosis of children with Anxiety Disorder.

Convergent validation of SCAS-P and CBCL/6-18 Syndrome scales i.e., anxious/depressed, withdrawn/depressed, somatic problems, and internalizing problems via mothers' ratings was also explored. Findings of Table 189 represented strong positive correlation between subscales of SCAS-P with CBCL/6-18 Syndrome scales that was providing evidence for convergent validity. SCAS-P (Urdu version) proved to be a valid measure for screening or diagnosis of children with Anxiety Disorder.

Moreover, discriminant validation of SCAS-P was assessed through CBCL/6-18 externalizing syndrome scales i.e., rule breaking behaviour, aggressive behaviour, and externalizing problems via mothers' ratings. Findings of Table 190 represented negative and nonsignificant correlation between subscales of SCAS-P with CBCL/6-18 externalizing syndrome scales. However, SCAS-P subscale i.e., generalized anxiety disorder showed positive correlation with CBCL/6-18 externalizing syndrome scales i.e., rule breaking behaviour, aggressive behaviour, and externalizing. It indicated that generalized anxiety further escalate externalizing behaviour in children. Findings provided evidence for discriminant validity between SCAS-P (Urdu version) and CBCL/6-18 externalizing syndrome scales.

Overall, findings of Study III indicated that DBD rating scale (Urdu version), and SCAS-P (Urdu version) are reliable and valid measures to be used in the present research. These measures will also prove useful for future researchers working in the area of clinical psychology and developmental psychopathology.

Study IV: Assessment of Callous Unemotional Traits in children with Disruptive Behaviour Disorders

Callous Unemotional Traits (e.g., lack of guilt, absence of empathy, shallow and constrained emotions) have been hallmarks of conceptualization of adult psychopathology (Cleckley, 1976). In children, callous-unemotional (CU) traits might additionally contribute to the childhood behavioural disorders. This study investigated the role of CU traits in children screened out via mothers' and teachers' ratings on DBD Rating scale with behavioural problems. Callous-unemotional trait closely associate with psychopathy, as per research findings behaviourally difficult children displaying these traits need a different kind of treatment than the behaviourally difficult children not showing these traits (Goldstein et al., 1998).

This is in line with the findings of other community sample studies that have reported increasing levels of narcissistic and callous unemotional traits with grade, and male children displaying more of these traits than female children (Frick et al., 2000).

The callousness factor depicted a dimension of behaviour that included a lack of empathy, guilt, and remorse for misdeeds. The second factor uncaring represented a dimension of behaviour that focused on a lack of caring about ones performance in tasks and for the feelings of other people. The third factor unemotional described a dimension of behaviour that focused on an absence of emotional expression (Frick et al., 2000). In addition, there is a characteristic course and outcome: the presence of CU traits in youth with disruptive behaviour is increasingly stable with the increase of age and associated with increased levels of conduct problems, delinquency, re-offense and/or substance use over longer periods of time from childhood up to adulthood. The presence of CU traits can be assessed reliably as from school age, with preliminary data suggesting reliable assessment at preschool age as well. Although assessment measures are still in development, a consistent pattern of signs and symptoms is found demarcating it from other disorders. Furthermore, CU traits are associated with a distinct pattern of conduct problems in CD, while there are indications that the same might be true for ODD and ADHD (Herpers, Rommelse, Bons, Buitelaar, &

Scheepers, 2012). The presence of CU traits has been shown to predict a more severe and chronic course of antisocial behaviour (Frick & Dickens, 2006) and may be a primary contributor to the higher rate of aggression and violence exhibited by this group (Frick & Marsee, 2006; Frick & Morris, 2004). Therefore, it was deemed necessary to plan Study IV to assess Callous Unemotional traits of children rated by mothers' and teachers' with childhood behaviour disorders ($N = 245$).

Objectives

Study IV was designed with the following objectives.

1. To study differences in callous unemotional traits in children with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders via ICU-P (Frick, 2004).
2. To assess gender differences of children with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders on ICU-P (Frick, 2004).
3. To assess gender differences in comparison group of children on ICU-P (Frick, 2004).
4. To assess grade wise differences of children with childhood behaviour disorders i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders and comparison group of children on ICU-P (Frick, 2004).
5. To predict childhood behaviour disorders through callous unemotional traits in the total sample.
6. To predict childhood behaviour disorders through callous unemotional traits specifically in DBD children i.e., either ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders on ICU-P (Frick, 2004).
7. Translation of Inventory of Callous Unemotional Traits (ICU-P) (Parent Report) (Frick, 2004) 24-items into Urdu language and establishing its psychometric properties.

To meet mentioned objectives following hypothesis were formulated.

Hypotheses

1. Children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to comparison group of children.
2. Boys with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to girls.
3. Boys in comparison group will score high on total and subscales of ICU-P as compared to girls in the same group.
4. Children of grade 5th will show higher callous unemotional traits as compared to children of grade 3rd and 4th on ICU-P (Frick, 2004).
5. Callous unemotional traits will predict childhood behaviour problems in academically low performing children.
6. Callous unemotional traits will predict childhood behaviour problems in the DBD group of children i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders.

Operational Definition of Variables

Variables of Study IV were defined as following.

Callousness. Callousness represented dimension of behaviour that include lack of empathy, guilt, and remorse for misdeeds (Essau, Sasagawa, & Frick, 2006).

Unemotional. Unemotional dimension of behaviour focused on the absence of emotional expression (Essau et al., 2006).

Uncaring. Uncaring dimension of behaviour focused on a lack of caring about ones performance in tasks and for the feelings of other people (Essau et al., 2006).

Before testing hypothesis of Study IV, translation of Inventory of Callous Unemotional Traits (Parent version) (ICU-P) in Urdu language was carried out by completing following standardized procedure of forward and back translation.

Phase I: Translation of Inventory of Callous Unemotional Traits (ICU-P) (Frick, 2004) 24-items into Urdu language.

Phase II: Selection of best translated items in Urdu Language by Committee of experts.

Phase III: Back translation of Urdu translated Inventory of Callous Unemotional Traits (ICU-P) (Frick, 2004) 24-items into English language.

Phase IV: Evaluation of Back translated items and finalization of most appropriate translated items into Urdu language by committee of experts.

***Phase V*:** Determination of psychometric properties of Inventory of Callous Unemotional Traits (ICU-P) (Frick, 2004).

Details of the five phases of Part I are mentioned in the subsequent section.

Phase I: Translation of Inventory of Callous Unemotional Traits (ICU-P) (Parent Version) (Frick, 2004) 24-items into Urdu language

Phase I consisted translating Inventory of Callous Unemotional Traits (ICU-P) (Frick, 2004) 24-items into Urdu language. The original scale in English language (See Appendix P) was given to nine bilinguals with complete understanding and knowledge of Urdu and English language. Bilinguals were instructed to translate every item of the scale from English into Urdu language without any change in the original scale (See Appendix O). The qualification of bilinguals was M.Phil in Urdu, English, and Psychology.

Phase II: Selection of best translated items in Urdu Language by Committee of experts

The second phase consisted of expert evaluation of the content, grammatical structure, and wordings of the Urdu translated items by the committee of experts. Proficient committee members evaluated all translated items and selected best translated item for the next phase of Back translation. Item No 4, 5, 8, 9, 10, 11, 16, and 18 were recommended to be translated again by the proficient committee members. Six new bilinguals with M.Phil in English and Psychology were approached again. Retranslated items were evaluated again and best translations were selected for back translation. The committee of experts in the present phase consisted of a Professor in National Institute of Psychology, Quaid-i-Azam University, Islamabad and two Ph.D Scholars. After completing the process of selection of the most appropriately translated Urdu items, these items were enlisted and given to the bilinguals for back translation (See Appendix Q).

Phase III: Back translation of Urdu translated Inventory of Callous Unemotional Traits (ICU-P) into English language

The third phase included Back Translation of the selected Urdu items of (ICU-P) (Frick, 2004) in English language. The Urdu translated list of items was given to nine bilinguals with M.Phil in Urdu and English literature. In the Back translation phase only those bilinguals were included who were unfamiliar with the content of items and they had not participated in the first phase of Urdu translation. Bilinguals were instructed to back translate all Urdu translated items into English language.

Phase IV: Evaluation of Back translated items by committee of experts

The back translated items of ICU-P were critically evaluated by a committee of experts consisting two Ph.D Scholars and a Professor doctor in National Institute of Psychology, Quaid-i-Azam University, Islamabad. After critical assessment of back translated items (See Appendix R) with reference to the context, and grammar

selection of final items for ICU-P **(**Urdu version) was made. Since Back translation method is a standardized translation procedure it helped in assessing the accuracy of the translation.

Phase V: Determination of psychometric properties of ICU-P

Psychometric properties of ICU-P **(**Urdu version) **(**See Appendix S**)** were determined in terms of alpha reliability, and inter scale correlation.

Sample

Sample of Study IV was consisted of same screened out children that were selected for Study II and Study III of Part II. Sample included academically low performing children (*N* = 245; mean age = 9.68; *SD* = 1.56) including (girls: *n* = 75; mean age = 9.32; *SD* = 1.25) and (boys: *n* = 170; mean age = 9.84; *SD* = 1.65) within age range 7 to 13 years of age from 3rd to 5th grades. Inventory of Callous-Unemotional Traits (ICU-P) (Urdu version) (Frick, 2004) was presented to respective mothers (*N* = 245) of selected children through School administration.

Instrument

Inventory of Callous-Unemotional Traits (ICU-P) by (Frick, 2004) was based on the six items scale of the Antisocial Process Screening Device (APSD; Frick & Hare, 2001) that designate a distinct and important group of antisocial youth who show a number of characteristics associated with the construct of psychopathy. ICU-P was consisted of 24 items. Its subscales can be used for assessing Callousness (Item no 4, 8, 9, 18, 11, 21, 7, 20, 2, 10, 12), Uncaring (Item no 15, 23, 16, 3, 17, 24, 13, 5), and Unemotional traits (Item no 1, 19, 6, 22, 14). Items were scored on a 4-point Likert scale from (Not at all = 0) to (Definitely true = 3). Scores of first subscale of ICU-P i.e., Callousness can range from minimum 0 to maximum 33, scores of second subscale i.e., Uncaring can range from minimum 0 to maximum 24, and scores of Unemotional subscale of ICU-P can range from minimum 0 to maximum 15.

Procedure

Inventory of Callous-Unemotional Traits (ICU-P) (Urdu version: See Appendix S) along with Informed consent was presented to respective mothers of academically low performing children within age range 7 to 13 years from grade 3rd to 5th. Complete instructions about filling up the scale were mentioned. Most of the mothers took keen interest in filling up the form and found no difficulty in understanding items.

Results

For determination of reliability of Inventory of Callous Unemotional Traits (ICU-P) (Urdu version) and its subscales Cronbach alpha reliability coefficients and interscale correlations were performed.

Table 191

Alpha Reliability Coefficients of Total and Subscales of ICU-P (N = 245)

Subscales	No. of Items	Alpha Coefficients (Urdu version)	Alpha Coefficients (English version)
Unemotional	5	.73	.64
Uncaring	8	.78	.73
Callousness	11	.72	.70
Total ICU-P	24	.75	.77

Note. (Source for ICU English version, Essau, Frick, & Sasagawa, 2006)

In Table 191 Cronbach's alpha coefficients yielded an internal consistency coefficient of .75 for the 24 items of ICU-P (Urdu version). Cronbach's alpha coefficients ranged from .72 to .78 for the three subscales of ICU-P (Urdu version). The alphas of ICU-P subscales were as follows, Unemotional (α = .73), Uncaring (α = .78), Callousness (α = .72). All subscales and total alpha reliability was satisfactory that indicated internal consistency of the scale.

Table 192

Interscale Correlation Coefficients, Means, and Standard Deviations of Inventory of Callous Unemotional Traits (ICU-P) (N = 245)

	Subscales	1	2	3	4
1	Unemotional	-			
2	Uncaring	.02	-		
3	Callousness	.13*	.26**	-	
4	Total ICU-P	.66**	.70**	.55**	-
	M	8.14	12.59	10.22	30.95
	SD	2.52	4.95	5.02	8.21

**$p < .01$. *$p < .05$

Findings of Table 192 indicated interscale correlation coefficients, means, and standard deviations of total and subscales of ICU-P. The internal consistency of ICU-P was further determined by calculating interscale correlation among total and subscales of ICU-P. There was a positive and significant interscale correlation between subscales i.e., unemotional, uncaring, and callousness with total ICU. Findings indicated that the three subscales were moderately inter correlated. However, uncaring and unemotional subscales showed nonsignificant interscale correlation.

Table 193

Means, Standard Deviations, and F-value for Screened out Children on Callous subscale of ICU-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	9.30	(4.60)	8.28	10.32	2.26	.01
ADHD-I	42	11.12	(4.90)	9.59	12.65		
ADHD-HI	5	7.60	(4.50)	2.01	13.19		
ADHD-C	11	9.36	(4.78)	6.15	12.58		
ODD	4	10.00	(4.39)	3.00	17.00		
CD	8	10.50	(7.36)	4.34	16.66		
ADHD-I CD	13	9.00	(3.74)	6.74	11.26		
ADHD-I ODD	7	11.00	(4.47)	6.86	15.14		
ADHD-C CD	44	12.86	(5.42)	11.22	14.51		
ADHD-C ODD	18	9.39	(4.55)	7.13	11.65		
ADHD-HI CD	6	6.33	(4.22)	1.90	10.77		
ADHD-HI ODD	7	8.71	(5.37)	3.74	13.69		
Total	245	10.22	(5.02)	9.59	10.85		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

$^{**}p < .01$

Table 193 showed mean differences between DBD groups and comparison group of children on callous subscale of ICU-P. ADHD-C CD group showed the highest mean ($M = 12.86$) as compared to other groups. Literature also suggested that ADHD + CD children were more likely to show early psychopathic traits, such as callousness and lack of empathy or emotion toward others (see also Lynam, 1998).

Findings of Table 193 showed significant differences between children with disruptive behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders and comparison group on callous subscale of ICU-P.

To further explore significant differences between comparison group and children with disruptive behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders on Callous subscale of ICU-P Tukey's Honestly Significant Difference (HSD) Test was performed.

Table 194

Tukey's Honestly Significant Difference (HSD) Test on Callous subscale of ICU-P (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison grp	ADHD-C CD	-3.56*	.91	.007	-6.59	-.53

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; CD = conduct disorder; Comparison grp = comparison group

*$p < .05$

Findings of Table 194 indicated significant difference between comparison group children with ADHD-C CD group. However there was nonsignificant difference between other DBD groups and comparison group. So hypothesis no. 1 that children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to comparison group of children proved significant only for ADHD-C CD group.

Table 195

Means, Standard Deviations, and F-value for Screened out Children on Uncaring subscale of ICU-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	14.24	(4.68)	13.20	15.28	1.94	.03
ADHD-I	42	12.26	(4.20)	10.95	13.57		
ADHD-HI	5	12.00	(7.34)	2.88	21.12		
ADHD-C	11	13.91	(6.70)	9.41	18.41		
ODD	4	12.25	(6.94)	1.20	23.30		
CD	8	10.75	(4.97)	6.59	14.91		
ADHD-I CD	13	13.46	(6.20)	9.72	17.21		
ADHD-I ODD	7	11.57	(3.73)	8.12	15.03		
ADHD-C CD	44	11.16	(4.46)	9.80	12.52		
ADHD-C ODD	18	10.00	(4.72)	7.65	12.35		
ADHD-HI CD	6	11.83	(4.91)	6.67	16.99		
ADHD-HI ODD	7	12.00	(4.93)	7.44	16.56		
Total	245	12.59	(4.95)	11.96	13.21		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

*$p < .05$

Table 195 showed differences between children with disruptive behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders and comparison group on Uncaring subscale of ICU-P. Comparison group of children showed the highest mean (M = 14.24) as compared to DBD groups. Findings indicated that academically low performing children without behavioural problems were scoring high mean on uncaring subscale as compared to children with behavioural problems. High scores of academically low performing comparison group

of children on uncaring subscale of ICU-P can be one of the factors of their low performance.

Table 195 showed significant differences between children with disruptive behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders and comparison group on Uncaring subscale of ICU-P.

To further explore significant differences between comparison group and children with disruptive behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders on Uncaring subscale of ICU-P Tukey's Honestly Significant Difference (HSD) Test was performed.

Table 196

Tukey's Honestly Significant Difference (HSD) Post Hoc Test on Uncaring Subscale of ICU-P (N = 245)

					95% CI	
I (DBD Group)	J (DBD Group)	Mean Diff (I - J)	St Error	*p*	LL	UL
Comparison grp	ADHD-C CD	3.07*	.91	.04	.07	6.09
	ADHD- C ODD	4.23*	1.26	.04	.06	8.42

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder; Comparison grp = comparison group

*$p < .05$

Table 196 showed findings of Tukey's Honestly Significant Difference (HSD) Test. Results indicated significant difference between comparison group with ADHD-C CD and ADHD-C ODD groups. Comparison group showed high mean as compared to all DBD groups. So hypothesis no. 1 that children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to comparison group of children proved nonsignificant.

Table 197

Means, Standard Deviations, and F-value for Screened out Children on Unemotional subscale of ICU-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	8.40	(2.70)	7.80	9.00	.86	.57
ADHD-I	42	8.24	(2.69)	7.40	9.08		
ADHD-HI	5	8.60	(4.66)	2.80	14.40		
ADHD-C	11	8.64	(2.29)	7.10	10.18		
ODD	4	6.25	(2.06)	2.97	9.53		
CD	8	6.75	(1.98)	5.09	8.41		
ADHD-I CD	13	8.46	(1.71)	7.43	9.50		
ADHD-I ODD	7	8.57	(1.27)	7.39	9.75		
ADHD-C CD	44	7.82	(2.39)	7.09	8.55		
ADHD-C ODD	18	7.39	(2.47)	6.16	8.62		
ADHD-HI CD	6	9.00	(2.00)	6.90	11.10		
ADHD-HI ODD	7	8.29	(1.97)	6.46	10.11		
Total	245	8.14	(2.52)	7.82	8.46		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 197 showed mean differences between DBD groups and comparison group of children on unemotional subscale of ICU-P. ADHD-HI CD group showed the highest mean (M = 9.00) as compared to other groups. Table 197 showed nonsignificant differences between children with disruptive behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders and comparison group on unemotional subscale of ICU-P. So hypothesis no. 1 that children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and

subscales of ICU-P as compared to comparison group of children proved nonsignificant.

Table 198

Means, Standard Deviations, and F-value for Screened out Children on total ICU-P (N = 245)

				95% CI			
Groups	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
Comparison group	80	31.94	(8.31)	30.09	33.79	.93	.50
ADHD-I	42	31.62	(8.80)	28.88	34.36		
ADHD-HI	5	28.20	(8.89)	17.15	39.25		
ADHD-C	11	31.91	(9.50)	25.53	38.29		
ODD	4	28.50	(6.80)	17.67	39.33		
CD	8	28.00	(9.47)	20.08	35.92		
ADHD-I CD	13	30.92	(4.66)	28.11	33.74		
ADHD-I ODD	7	31.14	(6.61)	25.02	37.26		
ADHD-C CD	44	31.84	(8.44)	29.27	34.41		
ADHD-C ODD	18	26.78	(8.25)	22.67	30.88		
ADHD-HI CD	6	27.17	(7.73)	19.05	35.28		
ADHD-HI ODD	7	29.00	(4.16)	25.15	32.85		
Total	245	30.95	(8.21)	29.91	31.98		

Between groups $df = 11$; within groups $df = 233$; groups total $df = 244$

Note. CI = confidence interval; LL = lower limit; UL = upper limit; ADHD-I = attention deficit hyperactivity disorder – inattentive type; ADHD-HI = attention deficit hyperactivity disorder – hyperactive impulsive type; ADHD-C = attention deficit hyperactivity disorder – combined type; ODD = oppositional defiant Disorder; CD = conduct disorder.

Table 198 showed mean differences between DBD groups i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders and comparison group of children on total ICU-P. Comparison group showed the highest mean (M = 31.94) as compared to other groups. Findings indicated nonsignificant differences between DBD groups and comparison group on total ICU-P. So hypothesis no. 1 that

children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to comparison group of children proved nonsignificant.

Gender differences on total and subscales of ICU-P (Urdu version). To study gender differences between boys and girls on ICU-P and its subscales independent samples *t* - test was performed.

Table 199

Gender Differences of DBD groups on the total and subscales of ICU-P via Mothers' ratings (N = 165)

	Gender								
	Boys (*n* =122)		Girls (*n* = 43)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (165)*	*p*	*LL*	*UL*	*d*
Callous	10.92	5.56	9.95	3.81	1.05	.29	-.848	2.77	.20
Uncaring	11.66	4.88	12.16	4.98	-.58	.56	-2.22	1.21	-.10
Unemotional	7.89	2.58	8.35	1.92	-1.05	.29	-1.30	.396	-.20
Total ICU-P	30.47	8.58	30.47	6.85	.001	.99	-2.86	2.86	0

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 199 showed gender differences of DBD group (all combine) on the total and subscales of ICU-P via mothers' ratings. There was nonsignificant difference between boys and girls on callous, uncaring, and unemotional subscales of ICU-P. So hypothesis no. 2 that boys with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to girls proved nonsignificant.

Table 200

Gender Differences of Children with comparison group on the total and Subscales of Inventory of Callous Unemotional Traits ICU-P (N = 80)

	Gender								
	Boys (*n* = 48)		Girls (*n* = 32)				95% CI		Cohen's
Subscales	*M*	*SD*	*M*	*SD*	*t (80)*	*p*	*LL*	*UL*	*d*
Callous	8.81	4.33	10.03	4.96	-1.16	.24	-3.30	.86	-.26
Uncaring	13.81	4.61	14.88	4.79	-.99	.32	-3.19	1.06	-.22
Unemotional	8.65	2.74	8.03	2.64	.99	.32	-.61	1.84	.23
Total ICU-P	31.27	7.48	32.94	9.46	-.87	.38	-5.44	2.11	-.19

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 200 showed gender differences of children in comparison group on the total and subscales of ICU-P via mothers' ratings. There was nonsignificant difference between boys and girls on callous, uncaring, unemotional subscales and total ICU-P. So hypothesis no. 3 that boys in comparison group will score high on total and subscales of ICU-P as compared to girls proved nonsignificant. There was no difference in boys and girls on total and subscales of ICU-P.

Grade wise differences on total and subscales of ICU-P (Urdu version). To study grade wise differences in children of 3rd, 4th, and 5th grades on ICU-P and its subscales One way ANOVA was performed.

Table 201

Means, Standard Deviations, and F-value for Screened out Children on Callous subscale of ICU-P (N = 245)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	75	10.24	(4.67)	9.16	11.32	.004	.99
4th Grade	78	10.18	(5.25)	8.99	11.36		
5th Grade	92	10.24	(5.16)	9.17	11.31		
Total	245	10.22	(5.02)	9.59	10.85		

Between groups *df* = 2; within groups *df* = 242; groups total *df* = 244

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 201 showed mean differences between children of 3rd, 4th, and 5th grades on callous subscale of ICU-P (Urdu version). Findings indicated nonsignificant differences between children of 3rd, 4th, and 5th grades. So hypothesis no. 4 that children of grade 5th will show higher scores as compared to children of grade 3rd and 4th on total and subscales of ICU-P proved nonsignificant.

Table 202

Means, Standard Deviations, and F-value for Screened out Children on Uncaring subscale of ICU-P (N = 245)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	75	13.13	(5.50)	11.87	14.40	2.85	.05
4th Grade	78	13.21	(4.63)	12.16	14.25		
5th Grade	92	11.62	(4.63)	10.66	12.58		
Total	245	12.59	(4.95)	11.96	13.21		

Between groups *df* = 2; within groups *df* = 242; groups total *df* = 244

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 202 showed mean differences between children of 3rd, 4th, and 5th grades on uncaring subscale of ICU-P. Findings indicated that mean scores of children from 3rd grades (*M* = 13.13) were relatively high as compared to children of 4th and 5th grades. However, findings indicated nonsignificant differences between groups. So hypothesis no. 4 that children of grade 5th will show higher scores as compared to children of grade 3rd and 4th on total and subscales of ICU-P proved nonsignificant.

Table 203

Means, Standard Deviations, and F-value for Screened out Children on Unemotional subscale of ICU-P (N = 245)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	75	8.29	(2.59)	7.70	8.89	.33	.71
4th Grade	78	8.18	(2.41)	7.64	8.72		
5th Grade	92	7.98	(2.58)	7.44	8.51		
Total	245	8.14	(2.52)	7.82	8.46		

Between groups *df* = 2; within groups *df* = 242; groups total *df* = 244

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 203 showed mean differences between children of 3rd, 4th, and 5th grades on unemotional subscale of ICU-P. Findings indicated that mean scores of children of 3rd grade (*M* = 8.29) were relatively high as compared to children of 4th and 5th grades. However, findings indicated nonsignificant differences between groups. So hypothesis no. 4 that children of grade 5th will show higher scores as compared to children of grade 3rd and 4th on total and subscales of ICU-P proved nonsignificant.

Table 204

Means, Standard Deviations, and F-value for Screened out Children on total ICU-P (N = 245)

				95% CI			
Grades	*n*	*M*	*(SD)*	LL	UL	*F*	*p*
3rd Grade	75	31.67	(8.57)	29.69	33.64	1.35	.26
4th Grade	78	31.56	(8.81)	29.58	33.55		
5th Grade	92	29.84	(7.31)	28.32	31.35		
Total	245	30.95	(8.21)	29.91	31.98		

Between groups *df* = 2; within groups *df* = 242; groups total *df* = 244

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 204 showed mean differences between children of 3rd, 4th, and 5th grades on total ICU-P. Findings indicated that mean scores of children of 3rd and 4th grades were relatively high as compared to children of 5th grade. Findings indicated nonsignificant differences between children of 3rd, 4th, and 5th grades. So hypothesis no. 4 that children of grade 5th will show higher scores as compared to children of grade 3rd and 4th on total and subscales of ICU-P proved nonsignificant.

Table 205

Multiple Linear Regression Analysis for assessing Callous Unemotional Traits as predictor of childhood behaviour problems (N = 245)

	Model 1				95% CI
Variables	B	β	*t*	*p*	LL UL
(Constant)	122.08*		11.22	.000	[100.66, 143.51]
Callous	1.60*	.184	3.04	.003	[.565, 2.64]
Uncaring	-2.86*	-.322	-5.19	.000	[-3.94, 1.75]
Unemotional	-.35	-.021	-.32	.74	[-2.50, 1.78]
R^2	.138				
F	12.81**			.000	
ΔR^2	.127				

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 205 showed callous and uncaring traits significantly predicted childhood behaviour problems. So hypothesis no. 5 that callous unemotional traits will predict childhood behaviour problems in academically low performing children proved significant for callous and uncaring traits. As per literature children having callous unemotional traits and behaviour disorders at the same time are at increased of developing adult psychopathology.

Table 206

Multiple Linear Regression Analysis for assessing Callous Unemotional Traits as predictor of childhood behaviour problems (N = 165)

Variables	Model 1				95% CI	
	B	β	*t*	*p*	LL	UL
(Constant)	131.73		12.09	.000	[100.22, 153.23]	
Callous	.95	.14	1.86	.06	[-.05, 1.96]	
Uncaring	-1.73*	-.24	-3.14	.002	[-2.83, -.64]	
Unemotional	.01	.001	.01	.99	[-2.21, 2.23]	
R^2	.08					
F	4.69**			.004		
ΔR^2	.06					

Note. CI = confidence interval; LL = lower limit; UL = upper limit.

Findings of Table 206 showed that uncaring traits significantly predicted childhood behaviour problems in children screened out with disruptive behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders. So hypothesis no. 6 that callous unemotional traits will predict childhood behaviour problems in children screened out with disruptive behaviour disorders proved significant only for uncaring subscale. As per literature children having callous unemotional traits and behaviour disorders at the same time are at increased of developing adult psychopathology.

DISCUSSION

Study IV of present research was planned to study callous unemotional (CU) traits in children with childhood behaviour disorders. CU traits refer to a specific affective (e.g., absence of guilt, constricted display of emotions) and interpersonal (e.g., failure to show empathy, use of others for one's own gain) style that is characteristic of a subgroup of children with severe conduct problems (Christian, Frick, Hill, Tyler, & Frazer, 1997; Frick, Barry, & Bodin, 2000; Frick, O'Brien, Wootton, & McBurnett, 1994).

The presence of CU traits may designate a particularly severe and aggressive pattern of conduct problems (Christian et al., 1997; Lynam, 1997) and it may enhance the prediction of later delinquency (Brandt et al., 1997; Forth et al., 1990; Toupin et al., 1995). The predictive utility of these traits has been one of the most clinically useful aspects of the construct of psychopathy in research on antisocial adults (Hare, 1998; Hart & Hare, 1997) but such utility has not been extensively tested in youth (Edens et al., 2001).

For studying CU traits, Inventory of Callous Unemotional Traits (Parent version) was translated into Urdu language by following the standardized procedure of forward (See Appendix Q) and back translation (See Appendix R). After critical assessment of back translated items (See Appendix R) with reference to the context, and grammar selection of final items for ICU-P (Urdu version) was made. Alpha reliability coefficients for the ICU-P (Urdu version) were determined; findings of Table 191 indicated satisfactory reliabilities thus indicating internal consistency of ICU-P (Urdu version). The alphas of ICU-P (Urdu version) were as follows, unemotional ($\alpha = .73$), uncaring ($\alpha = .78$), and callousness ($\alpha = .72$).

Study IV focused on exploring differences of screened out children with symptoms of DBD i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbid disorders and as comparison group on ICU-P and its subscales. To study differences between children with behavioural disorders, one way ANOVA was

performed. Findings of Table 194 indicated significant difference between comparison group children with ADHD-C CD group on callous subscale of ICU-P. However, there was nonsignificant difference between other DBD groups and comparison group. So hypothesis no. 1 that children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to comparison group of children proved significant only for ADHD-C CD group.

According to Lynam (1998), ADHD children comorbid with CD are more likely to show early psychopathic traits, such as callousness and lack of empathy or emotion toward others. Findings of Table 194 also supported the research findings of Lynam (1998). Pre-adolescent children who show conduct problems and CU traits, whether from a clinic-referred or community sample, appear to be at particularly high risk for showing delinquent behaviours and, thus, they should be the focus of interventions designed to reduce a child's involvement in illegal behaviours (Frick, 2001).

On uncaring subscale of ICU-P (Urdu version) there were significant differences between ADHD-C, ADHD-C ODD, and Comparison group. Findings of Table 195 indicated significant difference between comparison group with ADHD-C CD and ADHD-C ODD groups. Comparison group showed high mean as compared to all DBD groups. So hypothesis no. 1 that children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to comparison group of children proved nonsignificant. However, on unemotional subscale and total ICU-P there are nonsignificant differences between DBD groups and Comparison group (See Table197).

Gender differences on ICU-P (Urdu version) subscales and total were also explored. According to Frick, Stickle, Dandreauz, Farrell, and Kimonis (2005) the presence of CU traits was associated with lower socioeconomic status, lower intelligence, and as compared to boys it exist in a lower percentage of girls. Findings

of Table 199 showed nonsignificant differences between boys and girls on callous, uncaring, and unemotional subscales of ICU-P. So hypothesis no. 2 that boys with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders will show high scores on total and subscales of ICU-P as compared to girls proved nonsignificant.

Moreover, gender differences of comparison group on the total and subscales of ICU-P (Urdu version) via mothers' ratings were also explored. Findings of Table 200 showed nonsignificant difference between boys and girls on callous, uncaring, unemotional subscales and total ICU-P. So hypothesis no. 3 that boys in comparison group will score high on total and subscales of ICU-P as compared to girls proved nonsignificant.

Besides gender differences, grade wise differences on total and subscales of ICU-P (Urdu version) (See Tables 201 to 204) were also explored between children of 3rd, 4th, and 5th grades on subscales of ICU-P. Findings indicated nonsignificant differences between children of 3rd, 4th, and 5th grades. So hypothesis no. 4 that children of grade 5th will show higher scores as compared to children of grade 3rd and 4thon total and subscales of ICU-P proved nonsignificant.

As per literature children having callous unemotional traits and behaviour disorders at the same time are at increased of developing adult psychopathology. Therefore, multiple regression analysis was performed to assess role of callous unemotional traits in prediction of childhood behaviour disorders on the overall sample (N = 245). Findings of Table 205 showed callous and uncaring traits significantly predicted childhood behaviour problems. So hypothesis no. 5 that callous unemotional traits will predict childhood behaviour problems in academically low performing children proved significant. However, unemotional traits proved nonsignificant.

Moreover, Study IV also evaluated role of callous unemotional traits in prediction of childhood behaviour disorders on children screened out with childhood

behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders (N = 165). Findings of Table 206 showed that uncaring traits significantly predicted childhood behaviour problems. So hypothesis no. 6 that callous unemotional traits will predict childhood behaviour problems in children screened out with disruptive behaviour disorders proved significant only for uncaring subscale. As per literature children having callous unemotional traits and behaviour disorders at the same time are at increased of developing adult psychopathology.

Findings of Study IV will prove helpful in understanding the presence of callous unemotional traits in children with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders. These findings will also prove helpful for the practicing clinicians and child psychologists to assess this area. In case of presence of callous unemotional traits, clinicians must implement a suitable treatment that can facilitate such children and protect them from the risk of adult psychopathy.

Chapter-V

GENERAL DISCUSSION

Present research investigated disruptive behaviour disorders i.e., Attention Deficit Hyperactivity Disorder (ADHD), Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD) in children of with age range 8 to 13 years. The literature suggested that children with disruptive behaviour disorders face considerable co-occurrence of ODD and CD with ADHD (Waschbusch, 2002); comorbidity with internalizing behaviour problems i.e., anxiety and depression, poor academic performance, low social competence, high antisocial behaviour, and callous unemotional traits. The present research attempted to explore these variables in children screened out with childhood behaviour disorders.

The present research through its two main Parts studied children screened out with disruptive behaviour disorders exclusively in the school setting (N = 806) and in the home and school settings together (N = 245). Initially it was planned to include screened out children of Part I in the subsequent Part II to investigate pervasiveness of disruptive behaviour disorders. But due to non availability of screened out children of Part I for the subsequent Part II, an entirely new sample was selected to study objectives formulated for the Part II.

Part I: Screening Children with Behaviour Problems in the School Setting and Studying their Academic Performance and School Social Behaviour

Study I of Part I, aimed at translating Disruptive Behaviour Disorders (DBD) Rating Scale into Urdu language because mostly people in Pakistan feel more comfortable in communicating in their mother and national language. Translation of DBD Rating Scale into Urdu language was performed by following guidelines and standardized procedure of forward and back translation (Brislin, 1973). Moreover, psychometric properties of the DBD Rating scale (Urdu version) were also determined, initial psychometric analysis indicated internal consistency of DBD Rating scale. Moreover, in Study I, psychometric properties of School Social

Behaviour Scale (SSBS) (Loona & Kamal, 2002) were also determined. Cronbach's alpha coefficients of SSBS and its subscales (N = 280) were satisfactorily high, i.e., ranging from .79 to .96 that provided evidence for the internal consistency and overall coherence of the SSBS (Urdu version).

Gender and grade wise prevalence rate. School environment provides an opportunity to gather information regarding child's social activities, academic performance, and overall conduct. In Study II screening of children with symptoms of childhood behaviour disorders was performed (N = 806), there were boys (n = 141; 17.5%) and girls (n = 94, 11.6%) screened out with symptoms of disruptive behaviour disorders. Findings regarding prevalence rate of boys and girls of the present sample (N = 806) were in accordance with literature based findings. As per literature, boys are diagnosed with ADHD only about two to three times more frequently than girls in population-based samples (Szatmari et al., 1989; Taylor, Hepinstall, Sonuga-Barke, & Sandberg, 1998). Findings of present research also indicated higher prevalence rate of boys with symptoms of DBD as compared to girls. In Pakistani culture girls are groomed as more tolerant and submissive, whereas mostly families with low education never impose restrictions on boys, consequently; this leads to behavioural problems of boys. Parents encourage young girls to stay at home and play indoor games usually with a selected group of friends, therefore, parents can easily observe their activities. However, boys usually participate in out door activities, their circle of friends is relatively large as compared to girls, they interact with boys of diverse temperaments, therefore, boys with behavioural problems face peer rejection that further enhance their aggression and conduct problems.

Moreover, grade wise prevalence rate indicated higher prevalence of children with symptoms of DBD in grade 4th (n = 106; 13.1 %) as compared to grade 3rd (n = 63; 7.9%) and grade 5th (n = 66; 8.2%). These findings indicated that in the school setting children of grade 4th exhibited relatively more behavioural problems as compared to children of grade 3rd and 5th. The screening of children with behavioural problems was performed keeping in view their behaviour in the school setting, so it can be concluded that teachers perceive behavioural problems more in children of

grade 4th as compared to children of grades 3rd and 5th. In the primary section, children of grade 5th are considered as the senior most students of primary section and teachers expect from them to behave appropriately. Therefore, to meet expectations of their teachers there can be a possible decline in exhibition of behaviour problems in children specifically in the schools setting.

Academic performance, social competence and antisocial behaviour. Studies show that children with symptoms of DBD show poor academic performance in schools (See e.g., Barkley, 1977; Pelham et al., 1985; Rapport et al., 1986). Study II, also investigated the academic performance and School Social Behaviour i.e., Social Competence and Antisocial Behaviour of screened out children belonging to academically high, middle, and low scorer groups. Findings of the present research also supported the literature based outcomes that children with behavioural problems usually experience low academic performance.

On Social Competence and its subscales it was assumed that mean scores of comparison group will be comparatively high as compared to DBD groups. Comparison group was comprised of those children who were not displaying behavioural problems. The distinctive finding with respect to Social Competence was that Attention Deficit Hyperactivity Disorder – Predominantly Hyperactive Impulsive (ADHD-HI) type children and ODD group showed high scores on Social Competence as compared to comparison group. These findings were contrary to the western literature that suggested that ADHD develop negative perceptions concerning their Social Competence (e.g., Hoza et al., 2004). However, mean scores of comparison group on Social Competence were high as compared to ADHD-I, ADHD-C, CD, and Comorbid group. In Pakistani context, findings provided evidence that ADHD-HI and ODD group display high Social Competence including their interpersonal, self management, and academic skills. These contrary findings can be attributed to the cultural difference. In Pakistani culture, ODD that is characterized by chronic argumentativeness, defiance, and anger creates do not negatively influence social competence. Similarly, high scores of ADHD-HI screened out group of children on social competence can be because of cultural difference. In Pakistani culture, parents'

usually perceive their children with hyperactivity and ODD socially very interactive and responsive. However, western literature suggests that ADHD-HI may have serious disturbances in their peer relations (Pelham & Milich, 1984) that was not confirmed by the present research.

The interaction effect of Academic Performance groups i.e., high, middle, and low and DBD groups i.e., ADHD-I, ADHD-HI, ADHD-C, ODD, CD and comorbid symptoms on Antisocial Behaviour was also studied through Univariate analysis of variance. The interaction effect of both variables i.e., Academic Performance and DBD symptoms proved significant for increasing Antisocial Behaviour. In Pakistani context these findings provided evidence that if children exhibit behavioural problems along with low academic performance consequence will be increase in their Antisocial Behaviour. Youngsters with poor academic skills are increasingly likely to lose interest in school and to associate with delinquent peers. By adolescence, the relationship between antisocial behavior and underachievement is firmly established (Mash & Wolfe, 2002).

Demographic/familial factors and perceived parenting styles as predictors of DBD. In Study III, role of demographic/familial factors and perceived parenting styles i.e., Authoritarian, Authoritative, and Permissive styles was explored as predictors of behavioural problems. Familial/demographic factors included number of siblings of child, birth order of child, father's monthly income, father's education, father's profession, mother's education, marital status, and family system. However, findings of binary logistic regression indicated that only one predictor variable i.e., marital status predicted outcome variable significantly. Children of single parents (by death and divorce) are more prone to childhood behaviour disorders as compared to both parents. However, rest of familial factors proved nonsignificant for predicting childhood behaviour disorders. In majority Pakistani families male partners are responsible for fulfilling economic and financial burdens; females are usually responsible for looking after domestic matters. Similarly, in the present research mostly mothers were non working and house wives. This cultural background is supportive in understanding the reason of marital status proving as significant

predictor. Families with both parents usually face less financial and domestic problems as compared to single parent families that consequently lead to increase in behavioural problems of children. In Pakistan, the role of father is to be strict in disciplining children while mothers are more nurturing. When single parent have to perform both roles that cannot be fulfilled and child suffers the adverse consequences.

As per literature there is significant effect of parenting styles on the behavioural problems of children. In the present research, Parental Authority Questionnaire developed by (Buri, 1991) and translated into Urdu language by (Babree, 1997) was used to explore perceived parenting styles of children. Findings of Multiple Linear Regression indicated that paternal authoritarian, and maternal authoritarian and authoritative styles proved significant predictors for childhood behaviour problems (N = 635). In Pakistani culture usually parents keep strict control on children to maintain discipline and teach obedience. Findings indicated that authoritarian parenting style that is characterized by high demandingness, but coupled with low responsiveness proved significant predictor for childhood behaviour disorders. An unusual finding in Pakistani context was that maternal authoritative parenting style that is characterized by both responsive and listening to child also proved significant predictor for childhood behaviour problems. The possible explanation of this finding can be that in Pakistan combination of parenting styles may prove more effective as compared to practicing any single parenting style. In Pakistan, behavioural problems can be effectively controlled by combining parental effective control, warmth, responsiveness, and demanding behaviour in a balanced way and according to situational demands.

Moreover, Multiple Linear Regression was also performed for assessment of perceived parenting styles as predictors of outcome variable i.e., childhood behaviour problems for screened out children with DBD symptoms. Findings indicated that paternal authoritarian, authoritative, and permissive perceived parenting style proved nonsignificant predictors of childhood behaviour problems. However, maternal authoritative perceived parenting style proved significant predictor for childhood

behaviour disorders. These findings indicated that maternal authoritative parenting style can become reason of increase in behaviour problems.

Part II: Assessment of Externalizing and Internalizing Behaviour Disorders: Pervasiveness across Home and School Settings

In Study I of Part II translation of SCAS-P into Urdu language and analysis of its psychometric properties was performed. Alpha reliability coefficients for the six subscales of SCAS-P (Urdu version) ranged from .68 to .81 Alpha reliabilities of subscales and total of SCAS-P were satisfactory that indicated internal consistency of the scale.

Pervasiveness of Disruptive Behaviour Disorders. Study II investigated pervasiveness of disruptive behaviour disorders i.e., ADHD, CD, and ODD in the home and school settings and to explore comorbidity of externalizing and internalizing behaviour disorders. Differences between ratings of mothers and teachers on DBD Rating scale regarding ADHD-I, ADHD-HI, ADHD-C, ODD, and comorbid disorders indicated that mean scores of mothers' ratings' were comparatively low as compared to teachers' ratings. There are two possible explanations for low scores of mothers ratings, first can be due to emotional factor that being mothers they usually rate their child's behaviour with less severity, second, there is possibility that as compared to home children exhibit behavioural problems more in schools. Therefore, teachers' ratings were relatively high as compared to mothers. As per literature, the degree of agreement between parents and teachers often ranges between .30 and .50, depending on the behavioural dimension being rated (Achenbach, McConaughy, & Howell, 1987; Mitsis et al., 2000). In the present research all significant correlations between mothers and teachers ratings on DBD Rating scale ranged from .10 to .27. The degree of agreement between mothers and teachers was comparatively low as compared to the west. In Pakistani culture, due to the emotional factor usually mothers highlight positive behaviour of their child more and describe behavioural problems less.

Gender and grade wise prevalence. Study II, assessed disruptive behaviour disorders in children through mothers' and teachers' ratings regarding child's behaviour in the home and school setting. Gender and grade wise prevalence rate of children with behavioural disorders was also evaluated in children identified with behavioural disorders after addressing pervasiveness issue. Findings indicated higher percentage of boys as compared to girls with symptoms of behavioural disorders. In CD and ODD group there was not a single girl. In Study II of Part I gender wise prevalence rate of screened out children with disruptive behaviour disorders from the school settings was also evaluated. Findings of Study II of Part I and Study II of Part II are indicating similar findings that boys have higher prevalence rate as compared to girls. Boys have been found to generate consistently higher parent and teacher ratings of hyperactivity and inattentiveness than girls matched for age (Achenbach, 1991; Bauermeister, 1992; Brito, Pinto, & Lins, 1995; Trites, Blouin, & Laprade, 1980).

Similarly, grade wise differences of screened out children with disruptive behaviour disorders through mothers and teachers ratings together were also explored. There was higher number of screened out children with symptoms of DBD from grade 3rd and 5th. In Study II of Part I, as per ratings of teachers high number of children belonging to grade 4th was screened out with behavioural problems. However, this difference can be due to the fact that in Part I teachers' ratings were solely regarding behaviour of children in the school setting whereas in Study II of Part II teachers' and mothers' ratings represented home and school situations both.

Assessment of demographic/familial factors as predictors of behaviour disorders. In the Study II, demographic/familial factors of children including father's education, mother's education, family system, number of children, birth order of child, and father's income were studied as predictors of childhood behaviour disorders. Findings of binary logistic regression indicated that child's gender, father's education and child's age proved significant predictors of childhood behaviour problems. In Pakistani families father is considered as the head of the family and he certainly exercises most influential role. Children are usually influenced by both parents but they get enormous influence of their fathers, therefore, if the head of

family is highly educated it will certainly decrease the chances of behavioural problems of children. Gender also plays very important role in the prediction of childhood behaviour disorders; boys are more likely to develop behavioural problems as compared to girls. The findings regarding prevalence ratio also proved the fact that number of screened out boys was significantly high as compared to girls. Moreover, age was another significant predictor of behaviour disorders that indicated chances of behavioural problems in children increase with age. In the Study II of Part I, marital status proved to be a significant predictor of childhood behaviour disorders. In the present analysis marital status was not included because all children (N = 245) had both parents.

Social competence and antisocial behaviour. In Study II, social competence and antisocial behaviour of screened out children was also investigated. Social competence includes a wide variety of skills, behaviours, judgments and outcomes (Cavell, 1990; Dodge & Murphy, 1984). Comparison between DBD groups and comparison group on total and subscales of social competence scale indicated significant differences between DBD groups and comparison group. Only ODD group showed high mean scores on Social Competence as compared to comparison group. In Study II, of Part I, ODD group showed highest scores on Social Competence and its subscales as well. This comparison indicated that children screened out with symptoms of ODD either in the school setting only or either in the school and home settings together, experience high Social Competence.

Overall, findings indicated that there was no huge mean difference between DBD groups and comparison group on Social Competence. However, it can be concluded that the sample of Study II was consisted of academically low performing children therefore overall children showed low mean scores on social competence. As per research findings of Loona and Kamal (2002) academically low performing children showed poor social competence as compared to children having high academic performance.

On total and subscales of Antisocial Behaviour Scale of SSBS, DBD groups showed high scores on hostile irritable, disruptive demanding, and antisocial aggressive behaviour subscales. On hostile irritable subscale, ADHD-C CD group of children scored highest mean (M = 37.82) indicating their high involvement in the hostile irritable activates. Similarly, on antisocial aggressive subscale (M = 25.30) and disruptive demanding subscale (M = 27.61), ADHD-C CD group of children scored highest mean as compared to other DBD groups that indicated higher involvement of ADHD-C CD comorbid group in the antisocial activities. Mean scores of comparison group of children were significantly low as compared to DBD groups.

Assessment of internalizing behaviour disorders. Study II also evaluated internalizing behaviour disorder in children screened out with externalizing behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbid disorders for the differential diagnosis. According to literature, internalizing disorders such as anxiety and depression occur at higher than expected rates among youngsters with conduct disorders (Loeber & Keenan, 1994; Loeber, Burke, Lahey, Winters, & Zera, 2000). Therefore, Study II investigated co-occurrence of externalizing and internalizing behaviour disorders specifically anxiety and depression.

The children screened out with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbid disorders and comparison group were assessed through SCAS-P and its subscales i.e., separation anxiety disorder, social phobia, generalized anxiety disorder, panic disorder, obsessive compulsive disorder, and physical injury fears. These findings indicated children with childhood behaviour disorders experience anxiety but not to the extent to be diagnosed as an anxiety disorder. Moreover, gender differences of DBD groups on SCAS-P and its subscales were also studied.

As per literature, girls are risk for internalizing problems as compared to boys (e.g., Achenbach et al., 1991; Walden & Garber, 1994). There were significant gender differences on the total and subscales of SCAS-P i.e., social phobia, panic disorder,

and obsessive compulsive disorder. Girls scored significantly high on these subscales as compared to boys thus proving the literature based findings.

Moreover, children with behavioural disorders were assessed on the CBCL/6-18 DSM Oriented scales (Achenbach & Rescorla, 2001) (Urdu version) by (Khan & Awan, 2011). Findings indicated nonsignificant differences on conduct problems and anxiety problems subscale of CBCL/6-18 DSM Oriented scales. However, on ADHD problems, oppositional problems, affective problems, and somatic problems subscale significant differences were found. Study II also explored gender differences between boys and girls on the DSM Oriented Scales of CBCL/6-18. There was nonsignificant difference between boys and girls on subscales i.e., conduct problems, ADHD problems, oppositional problems, affective problems, anxiety problems, and somatic problems.

In Study II, assessment of depression was performed through CBCL/6-18 Syndrome scales. Children in the DBD groups showed low mean scores on syndrome scales of CBCL/6-18. There were nonsignificant differences between DBD groups and comparison group on anxious/depressed, withdrawn/depressed, thought problems, and rule breaking behaviour on CBCL/6-18 Syndrome scales. However, on somatic problems, social problems, attention problems syndrome scale significant between DBD groups and comparison group were found.

Moreover, gender differences of DBD groups on the Syndrome Scales of CBCL/6-18 were also explored. There were nonsignificant gender difference between boys and girls on anxious/depressed, withdrawn/depressed, somatic problems, social problems, thought problems, attention problems, rule breaking behaviour, aggressive behaviour, internalizing behaviour, and externalizing behaviour subscales.

Validation study. Study III of Part II primarily focused on validation of translated scales of present research into Urdu language i.e., DBD Rating scale (Urdu version) and SCAS-P (Urdu version). The validation of DBD Rating scale (Urdu version) and SCAS-P (Urdu version) was performed through CBCL/6-18 (Urdu

version) translated by (Khan & Awan, 2011). There was positive correlation found between DBD Rating scale and DSM Oriented scales of CBCL/6-18 (Khan & Awan, 2011) i.e., conduct problems, ADHD problems, and oppositional problems through mothers' ratings thus providing evidence for convergent validity. Convergent validation between DBD Rating scale and CBCL/6-18 Syndrome scales i.e., attention problems, rule breaking behaviour, aggressive behaviour, and externalizing behaviour through mothers' ratings were also explored. There was a significant positive correlation between all subscales of DBD Rating scale and CBCL/6-18 Syndrome scales that provided evidence for convergent validity.

In Study III, convergent and discriminant validation of SCAS-P was also performed. The interscale correlation between SCAS-P and CBCL/6-18 DSM oriented scales i.e., anxiety problems, affective problems, and somatic problems through mothers' ratings indicated positive correlation between subscales of SCAS-P with CBCL/6-18 DSM oriented scales. Convergent validation of SCAS-P and CBCL/6-18 Syndrome scales i.e., anxious/depressed, withdrawn/depressed, somatic problems, and internalizing problems via mothers' ratings indicated a strong positive correlation between subscales.

Moreover, discriminant validation of SCAS-P was assessed through CBCL/6-18 externalizing syndrome scales i.e., rule breaking behaviour, aggressive behaviour, and externalizing problems via mothers' ratings. Findings represented negative and nonsignificant correlation between subscales of SCAS-P with CBCL/6-18 externalizing syndrome scales thus providing evidence for discriminant validity between SCAS-P (Urdu version) and CBCL/6-18 externalizing syndrome scales.

Callous unemotional traits. Study IV of present research was planned to study callous unemotional (CU) traits in children with childhood behaviour disorders. For studying CU traits, Inventory of Callous Unemotional Traits (Parent version) (Frick, 2004) was translated into Urdu language by following the standardized procedure of forward and back translation. Alpha reliability coefficients for the ICU-P

(Urdu version) were determined that indicated satisfactory reliabilities thus indicating internal consistency of ICU-P (Urdu version).

Study IV focused on exploring differences of screened out children with symptoms of DBD i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and comorbid disorders and comparison group on ICU-P and its subscales. Findings indicated ADHD-C CD group showed high mean score on callous subscale of ICU-P, these findings proved literature based findings that ADHD children comorbid with CD are more likely to show early psychopathic traits, such as callousness and lack of empathy or emotion toward others (See Lynam, 1998). On uncaring subscale of ICU-P (Urdu version) Comparison group showed high mean as compared to all DBD groups that indicated high uncaring traits in comparison group of children as compared to DBD group of children. However, on unemotional subscale and total ICU-P there were nonsignificant differences between DBD groups and Comparison group.

Gender differences on ICU-P (Urdu version) subscales and total were also explored. There was nonsignificant difference between boys and girls on callous, uncaring, and unemotional subscales of ICU-P. Besides gender differences, grade wise differences on total and subscales of ICU-P (Urdu version) indicated nonsignificant differences between children of 3rd, 4th, and 5th grades.

As per literature children having callous unemotional traits and behaviour disorders at the same time are at increased risk of developing adult psychopathology. Therefore, multiple regression analysis was performed to assess role of callous unemotional traits in prediction of childhood behaviour disorders in the overall sample (N = 245). Findings showed callous and uncaring traits significantly predicted childhood behaviour problems. Moreover, Study IV also evaluated role of callous unemotional traits in prediction of childhood behaviour disorders in children screened out with childhood behaviour disorders i.e., either with ADHD-I, ADHD-HI, ADHD-C, ODD, CD or comorbid disorders (N = 165). Findings showed that uncaring traits significantly predicted childhood behaviour problems. These findings will also prove

helpful for the practicing clinicians and child psychologists to assess this area. In case of presence of callous unemotional traits, clinicians must implement a suitable treatment that can facilitate such children and protect them from the risk of adult psychopathy.

Conclusion

In the light of the findings of the present research it can be concluded that disruptive behaviour disorders i.e., ADHD-I, ADHD-HI, ADHD-C, ODD, CD, and Comorbid disorders influence many aspects of child functioning including psychological and social aspects. In Pakistani context, for the first time disruptive behaviour disorders i.e., ADHD, ODD, and CD were studied simultaneously. Findings of present research not only provided useful information regarding single form disorder but also explained comorbidities between these disruptive behaviour disorders. Gender and grade wise prevalence ratio established on the present sample provided valuable information for understanding prevalence of disruptive behaviour disorders in Pakistani context.

The present research attempted to explore pervasiveness of disruptive behaviour disorders across home and school settings for the first time. Findings provided an opportunity to explore similarities and differences in children with disruptive behaviour disorders by focusing school and home setting simultaneously. DBD Rating scale (Urdu version), SCAS-P (Urdu version), and ICU-P (Urdu version) proved valuable measures for gathering information about child from their mothers and teachers. Moreover, assessment of internalizing behaviour disorders and callous unemotional traits in children with behaviour disorders opened new avenues to explore in the future researches.

Suggestions and Limitations

1. In Pakistan, there is scarcity of research work in the area of developmental psychopathology, therefore, large scale nation wide studies must be planned to explore the exact prevalence rate of children with behavioural disorders in Pakistan.
2. In the present research, non probability sampling method i.e., purposive sample was selected from cities of Islamabad and Rawalpindi. There is a dire need to plan large scale studies covering maximum cities of Pakistan to explore causes and correlates, associated features, and prevalence rate of disruptive behaviour disorders. Studies focusing childhood behaviour disorders at national level will prove useful in devising specific strategies and interventions to deal with these children.
3. Information regarding child was gathered through teachers and mothers ratings. To obtain in depth information regarding behaviour of the child multi-methods including rating scales, observation, and interviews can be incorporated together.
4. In the present research, Inventory of Callous Unemotional Traits (Parent Version) was used to assess children's callous unemotional traits. For future researches it is recommended that parent, teacher, and child versions of Inventory of Callous Unemotional Traits should be used together to get in depth information and assess differences in the perception of teachers and parents.
5. Mothers and teachers indeed play a central role in facilitating children with behavioural problems so specific interventions focusing mother-child relationship and teacher-child relationships should be devised. These interventions will prove effective in improving academic performance and psychosocial functioning of children. It will also help children in improving their social competence and minimizing their antisocial, externalizing and internalizing behavioural problems.

6. The present study was based on cross sectional design therefore time lagged correlation was not applied. However, in future, time series design or longitudinal design based studies can be planned to carryout in depth analysis through applying time lagged correlation.

7. While data collection suitable measures may be taken to gather demographic information about those individuals who do not fill up questionnaires. So that demographic characteristics comparison between those who completed and those who did not completed the questionnaire can be made.

8. It is suggested to explore indigenous conceptualization of parenting styles because of cross cultural differences and present research findings.

Implications

1. Present research will prove useful for future researchers working in the area of developmental psychopathology, clinical, educational, and child psychology.
2. Findings will prove helpful in understanding gender and grade wise prevalence rate of childhood behaviour disorders, specifically, in cities of Islamabad, and Rawalpindi.
3. Findings will prove useful for parents of children with behaviour problems in understanding the behaviour of their children.
4. In school settings, teachers will be able to understand behaviour problems of their students in a relatively better way, and they can devise strategies to improve academic performance of children.
5. The translation of DBD Rating scale, SCAS-P, and ICU-P into Urdu language carried out in this study can be used in future researches in the area of developmental psychopathology, educational, child, and clinical psychology within Pakistan.
6. These translated scales would allow further exploration of disruptive behaviour disorders in Pakistan.

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Appendix-A

INSTRUCTIONS FOR URDU TRANSLATION OF DBD RATING SCALE

I am a PhD Scholar at National Institute of Psychology and for the partial fulfillment of PhD thesis titled "Psychosocial functioning of children with childhood behavioral problems", you are requested to translate the items given in the scale into Urdu by following the instructions given below:

Translate all items from English to Urdu by trying to keep content equivalence between both versions. You are requested to use simple Urdu words in order to maintain moderate comprehension level. Translate items without any change or substitution of item in the original text.

Thank you.

Appendix-B

ITEMS OF DISRUPTIVE BEHAVIOUR DISORDER RATING SCALE (DBD) GIVEN TO BILINGUALS FOR TRANSLATION INTO URDU

Item No.	Statements
1.	Often interrupts or intrudes on others (e.g., butts into conversations or games)
2.	Has run away from home overnight at least twice while living in parental or parental surrogate home (or oncewithout returning for a lengthy period)
3.	Often argues with adults
4.	Often lies to obtain goods or favors or to avoid obligations (i.e., "cons" others)
5.	Often initiates physical fights with other members of his or her household
6.	Has been physically cruel to people
7.	Often talks excessively
8.	Has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking andentering; forgery)
9.	Is often easily distracted by extraneous stimuli
10.	Often engages in physically dangerous activities without considering possible consequences (not for thepurpose of thrill-seeking), e.g., runs into street without looking
11.	Often truant from school, beginning before age 13 years
12.	Often fidgets with hands or feet or squirms in seat
13.	Is often spiteful or vindictive
14.	Often swears or uses obscene language
15.	Often blames others for his or her mistakes or misbehavior
16.	Has deliberately destroyed others' property (other than by fire setting)
17.	Often actively defies or refuses to comply with adults' requests or rules
18.	Often does not seem to listen when spoken to directly
19.	Often blurts out answers before questions have been completed
20.	Often initiates physical fights with others who do not live in his or her household (e.g., peers at school or in theneighborhood)
21.	Often shifts from one uncompleted activity to another
22.	Often has difficulty playing or engaging in leisure activities quietly
23.	Often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
24.	Is often angry and resentful
25.	Often leaves seat in classroom or in other situations in which remaining seated is expected
26.	Is often touchy or easily annoyed by others
27.	Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace(not due to oppositional behavior or failure to understand instructions)

28. Often loses temper
29. Often has difficulty sustaining attention in tasks or play activities
30. Often has difficulty awaiting turn
31. Has forced someone into sexual activity
32. Often bullies, threatens, or intimidates others
33. Is often "on the go" or often acts as if "driven by a motor"
34. Often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
35. Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, maybe limited to subjective feelings of restlessness)
36. Has been physically cruel to animals
37. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such asschoolwork or homework)
38. Often stays out at night despite parental prohibitions, beginning before age 13 years
39. Often deliberately annoys people
40. Has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery)
41. Has deliberately engaged in fire setting with the intention of causing serious damage
42. Often has difficulty organizing tasks and activities
43. Has broken into someone else's house, building, or car
44. Isoften forgetful in daily activities
45. Has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife,gun)

Appendix-C

FINAL SELECTED ITEMS AFTER URDU TRANSLATION OF DBD RATING SCALE

Attention Deficit/Hyperactivity Disorder

Inattention Symptoms ($n = 9$)

Item No.	Statements
9	اکثر غیر متعلق محرکات (Stimuli) کی وجہ سے با آسانی اس کی توجہ ہٹ جاتی ہے۔
18	اس سے براہِ راست بات کی جائے تو ان سنی کر دیتا ہے۔
23	اکثر تفصیلات کو زیادہ توجہ نہ دے سکنے یا لاپرواہی کی وجہ سے سکول کے کام اور دوسری سرگرمیوں میں غلطی کرتا/کرتی ہے۔
27	اکثر ہدایات پر عمل نہیں کر پاتا/پاتی اور سکول کا کام، کورس اور دوسری ذمہ داریوں کو مکمل کرنے میں ناکام رہتا/رہتی ہے۔(اس لئے نہیں کہ اسے مخالفانہ رویے کا سامنا ہوتا ہے یا اسے ہدایات سمجھ نہیں آتی)۔
29	اکثر کاموں اور کھیل میں توجہ برقرار رکھنے میں مشکل ہوتی ہے۔
34	اکثر کاموں اور سرگرمیوں کے لئے درکار اشیاء گم کر دیتا/دیتی ہے (مثلاً کھلونے، سکول کا کام assignment، پنسل، کتابیں، اور ضروری اشیاء)۔
37	اکثر ایسے کام جن میں مستقل ذہنی توجہ درکار ہو کو ناپسند کرتا/کرتی ہے یا جان چھڑاتا/چھڑاتی ہے (مثلاً سکول کا کام یا ہوم ورک)۔
42	اکثر کاموں اور مصروفیات کو ترتیب دینے میں مشکل پیش آتی رہتی ہے۔
44	اکثر روزمرہ کے کاموں میں بھلکڑ ہے۔

Attention Deficit/Hyperactivity Disorder

Hyperactivity/Impulsivity Symptoms ($n = 9$)

Item No.	Statements
1	اکثر بات کاٹتا ہے یا دوسروں کے معاملات میں دخل دیتا/دیتی ہے (مثلاً کسی کی گفتگو یا کھیل میں مخل ہوتا/ہوتی ہے)۔
7	اکثر زیادہ بولتا/بولتی ہے۔
12	اکثر ہاتھوں اور پاؤں کو بے چینی سے ہلاتا/ہلاتی ہے اور کرسی پر بیٹھا مل کھاتا/رہتی ہے۔
19	اکثر سوال پوچھے جانے سے پہلے جواب دینا شروع کر دیتا ہے۔
22	اکثر کھیل اور دیگر مشاغل خاموشی سے جاری رکھنے میں دشواری ہوتی ہے۔
25	اکثر کمرہ جماعت میں یا ایسی صورت حال میں جہاں بیٹھنا متوقع ہو اپنی جگہ چھوڑ دیتا/دیتی ہے۔
30	اکثر اپنی باری کا انتظار مشکل سے کرتا/کرتی رہی ہے۔
33	اکثر جلدی میں ہوتا/ہوتی ہے۔
35	اکثر نامناسب مواقع پر بے انتہا بھاگتا دوڑتا/بھاگتی دوڑتی اور چھلانگیں لگاتا/لگاتی ہے۔

Attention Deficit/Hyperactivity Disorder

Oppositional Defiant Symptoms (*n* = 8)

Item No.	Statements
3	اکثر بڑوں سے بحث کرتا/کرتی ہے۔
13	اکثر بدخواہی یا انتقام جو ہوتا/ہوتی ہے۔
15	اکثر اپنے برے رویے یا غلطیوں کے لئے دوسروں کو قصوروار ٹھہراتا/ٹھہراتی ہے۔
17	اکثر بڑوں کے اصولوں اور درخواستوں کو ماننے سے انکار کرتا/کرتی ہے۔
24	اکثر غصہ میں اور ناراض رہتا/رہتی ہے۔
26	اکثر ذود رنج/احساس ہوتا/ہوتی ہے یا دوسروں سے باآسانی ناراض ہو جاتا/جاتی ہے۔
28	اکثر آپے سے باہر ہو جاتا/جاتی ہے۔
39	اکثر جان بوجھ کر لوگوں کو ناراض کرتا/کرتی ہے۔

Conduct Disorder (Aggression to People and Animals) (*n* = 7)

Item No.	Statements
5	اکثر ہاتھاپائی کا آغاز کرتا/کرتی ہے۔
6	لوگوں کو جسمانی اذیت دیتا رہا/دیتی رہی ہے۔
20	اکثر دوسرے جو اسکے گھر میں نہیں رہتے (مثلاً محلے یا سکول کے بچے) سے جسمانی لڑائی میں پہل کرتا/کرتی ہے۔
31	کسی کے ساتھ جنسی فعل کے لئے زبردستی کی ہے۔
32	اکثر دوسروں پہ دھونس جمانا، دھمکی دینا یا ہراساں کرتا/کرتی ہے۔
36	جانوروں کو جسمانی اذیت دیتا رہا/دیتی رہی ہے۔
40	لوگوں کے سامنے ان کی چیزیں چرا لیتا ہے (مثلاً پرتشدد انداز میں پرس چھیننا، دھمکی دینا)۔
45	ایسا ہتھیار استعمال کیا ہے جو دوسروں کو شدید جسمانی نقصان پہنچا سکتا ہے۔ (مثلاً بلا، اینٹ، شیشے کی ٹوٹی بوتل، چھری وغیرہ)۔

Conduct Disorder (Destruction of Property) (*n* = 2)

Item No.	Statements
16	جان بوجھ کر دوسروں کی اشیاء/چیزوں کو تباہ کرتا رہا/کرتی رہی ہے۔
41	جان بوجھ کر بھاری نقصان کی نیت سے آگ لگانے میں ملوث رہا/رہی ہے۔

Conduct Disorder (Deceitfulness of theft) (*n* = 3)

Item No.	Statements
4	اکثر چیزیں یا خوشنودی (favors) حاصل کرنے کے لئے یا فرائض سے جان چھڑانے کے لئے جھوٹ بولتا/بولتی ہے۔(مثلاً دوسروں کو بہلاوا دینا)۔
8	بیش قیمت اشیاء مالک سے نظر بچا کر چوری کرتا رہی/کرتی رہی ہے۔(مثلاً جعل سازی یا نقب لگائے بغیر دکان سے چیزیں چوری کر لینا)۔
43	کسی دوسرے کے گھر، عمارت یا کار میں نقب زنی کی ہے۔

Conduct Disorder (Serious Violation of Rules) (*n* = 3)

Item No.	Statements
2	کم از کم دو مرتبہ والدین یا کسی گارڈین کے گھر سے رات بھر کے لئے بھاگ گیا (یا ایک مرتبہ لمبے عرصے تک گھر واپس آئے بغیر)۔
11	13 سال کا ہونے سے پہلے اکثر سکول سے بھاگا/بھاگی ہے۔
38	13 سال کی عمر سے پہلے والدین کی ممانعت کے باوجود اکثر رات کو گھر سے باہر رہتا/رہتی ہے۔

Excluded Items of the Scale (Not included in the scoring according to DSM-IV, 1994) (*n* = 3)

Item No.	Statements
10	اکثر ممکنہ نتائج کی پرواہ کیے بغیر خطرناک جسمانی سرگرمیوں میں ملوث ہوتا/ہوتی ہے۔(مثلاً بغیر ایڈونچر کے مقصد کے گلیوں میں اندھا دھند بھاگنا)۔
14	اکثر قسم اٹھاتا ہے اور بے ہودہ زبان استعمال کرتا/کرتی ہے۔
21	اکثر ایک کام نامکمل چھوڑ کر دوسرے کی طرف منتقل ہو جاتا/جاتی ہے۔

Appendix-D

FINAL SELECTED ITEMS AFTER BACK TRANSLATION OF DBD RATING SCALE

Attention-Deficit Hyperactivity Disorder
Inattention Symptoms(*n* = 9)

Item No.	Statements
9	Is often distracted due to external stimuli.
18	Often turn deaf ear when talk directly.
23	Often due to not paying attention to details or carelessness, he commits mistakes in his/her school work and other activities.
27	Often he does not adhere to instructions and fail to accomplish school work, course and other obligations (not for the reason that he has to face any negative attitude or that he does not understand instructions).
29	Often has difficulty in retaining concentration while working or in play.
34	Often loses things required for work and activities (toys, school assignment, pencils, books and essential things).
37	Often avoids or dislikes such work where continuous mental attention is required (e.g., school work or home work).
42	Often has difficulty in organizing tasks and activities.
44	Is often forgetful in daily activities.

Attention-Deficit Hyperactivity Disorder
Hyperactivity/Impulsivity Symptoms(*n* = 9)

Item No.	Statements
1	Often interrupts or interferes into others matters (for instance, interferes into someone's conversation or play).
7	Often talks excessively.
12	Often moves his/her hands and feet restlessly and keeps on twisting/coiling his body while sitting on a chair.
19	Often tends to answer abruptly even before he is questioned.
22	Often has difficulty in carrying out games and other activities quietly.
25	Often leaves the seat in the classroom or in situation where remaining seated is expected.
30	Often has difficulty to wait for his/her turn.
33	Often is in a hurry.
35	Often runs and jumps excessively in inappropriate situation.

Oppositional Defiant Disorder(*n* = 9)

Item No.	Statements
3	Often argues with adults.
13	Is often spiteful or vindictive.
15	Often blames others for his/her bad behavior or mistakes.

17	Often refuses to accept adults/elders principles/rules and requests.
24	Is often angry and resentful.
26	Often he is sensitive or easily gets annoyed with others.
28	Often loses temper.
39	Often he/she deliberately makes people annoyed.
8	Has stolen precious things hiding from the owner (e.g., stealing from a shop habitually and not through forgery (counterfeit) or burglary.
43	Has broken into some one's home, building or car.

Conduct Disorder (Serious violation of rules)(*n* = 3)

Item No.	**Statements**
2	Has run away twice from parent's or guardian's home for whole the night (or once ran away for a long period without returning to home).
11	Often run away from school before the age 13.
38	Often stays out of home at nights, before reaching age of 13, inspire of parental prohibitions.

Conduct Disorder (Aggression to People and Animals)(*n* = 8)

Item No.	**Statements**
5	Often initiates physical fights.
6	He/she has been torturingpeople physically.
20	Often initiates physical fight with others who do not reside in his house (e.g., children belonging to school and neighborhood).
31	Has forced someone for physical/sexual activity.
32	Often bully, threatens, or intimidates others.
36	Has been physically torturing animals.
40	Snatches away things from people (for example, snatching purse violently, threatening).
45	Has used a type of weapon that can inflict serious physical damage on others (e.g., bad, brick, broken glass bottles, and knife, etc.).

Conduct Disorder (Destructing of property)(*n* = 2)

Item No.	**Statements**
16	Has deliberately destroyed others possessions.
41	Often ignites fire with the intention of inflicting heavy damage.

Conduct Disorder (Deceitfulness or theft)(*n* = 3)

Item No.	**Statements**
4	Often lies to get things or favors and to get rid of responsibilities (for example to give pretext to others).

Excluded Items (Items not included according to DSM-IV (1994) criteria)
(*n* = 3)

Item No.	Statements
10	Often indulges in dangerous physical activities without taking care of the expected outcome (e.g., blindly running in streets without the sake of adventure).
14	Often swears and uses immoral language.
21	Often switches his/her tasks from one to another without actually finishing the previous one.

Appendix-E

DBD Rating Scale-Urdu Version

ہدایات: سوالنامہ میں دیے گئے بیانات کوغور سے پڑھیں اور سامنے دیے گئے جوابات میں سے آپ کے خیال میں جو جواب اس بچے کے کردار کی درست عکاسی کرتا ہے اس پر (✓) کا نشان لگائیں۔

	بیانات	بالکل نہیں	بہت کم	زیادہ	بہت زیادہ
1	اکثر بات کاٹتا ہے یا دوسروں کے معاملات میں دخل دیتا/دیتی ہے (مثلاً کسی کی گفتگو یا کھیل میں مخل ہوتا رہوتی ہے)۔				
2	کم از کم دو مرتبہ والدین یا کسی گارڈین کے گھر سے رات بھر کے لئے بھاگ گیا (یا ایک مرتبہ لمبے عرصے تک گھر واپس آئے بغیر)۔				
3	اکثر بڑوں سے بحث کرتا/کرتی ہے۔				
4	اکثر چیزیں یا خوشنودی (favors) حاصل کرنے کے لئے یا فرائض سے جان چھڑانے کے لئے جھوٹ بولتا/بولتی ہے۔ (مثلاً دوسروں کو بہلاوا دینا)۔				
5	اکثر ہاتھاپائی کا آغاز کرتا/کرتی ہے۔				
6	لوگوں کو جسمانی اذیت دیتا رہا/دیتی رہی ہے۔				
7	اکثر زیادہ بولتا/بولتی ہے۔				
8	بیش قیمت اشیاء مالک سے نظر بچا کر چوری کرتا رہی/کرتی رہی ہے۔ (مثلاً جعل سازی یا نقب لگائے بغیر دکان سے چیزیں چوری کر لینا)۔				
9	اکثر غیر متعلق محرکات (Stimuli) کی وجہ سے با آسانی اس کی توجہ ہٹ جاتی ہے۔				
10	اکثر ممکنہ نتائج کی پرواہ کیے بغیر خطرناک جسمانی سرگرمیوں میں ملوث ہوتا/ہوتی ہے۔ (مثلاً بغیر ایڈونچر کے مقصد کے گلیوں میں اندھادھند بھاگنا)۔				
11	13 سال کا ہونے سے پہلے اکثر سکول سے بھاگا/بھاگی ہے۔				
12	اکثر ہاتھوں اور پاؤں کو بے چینی سے ہلاتا/ہلاتی ہے اور کرسی پر بیٹھا مل کھاتا رہتا/رہتی ہے۔				
13	اکثر بدخواہ یا انتقام جو ہوتا/ہوتی ہے۔				
14	اکثر قسم اٹھاتا ہے اور بے ہودہ زبان استعمال کرتا/کرتی ہے۔				
15	اکثر اپنے برے رویے یا غلطیوں کے لئے دوسروں کو قصوروار ٹھہراتا/ٹھہراتی ہے۔				
16	جان بوجھ کر دوسروں کی اشیاء/چیزوں کو تباہ کرتا رہا/کرتی رہی ہے۔				
17	اکثر بڑوں کے اصولوں اور درخواستوں کو ماننے سے انکار کرتا/کرتی ہے۔				
18	اس سے براہِ راست بات کی جائے تو ان سنی کر دیتا ہے۔				
19	اکثر سوال پوچھے جانے سے پہلے جواب دینا شروع کر دیتا ہے۔				
20	اکثر دوسرے جو اسکے گھر میں نہیں رہتے (مثلاً محلے یا سکول کے بچے) سے جسمانی لڑائی میں پہل کرتا/کرتی ہے۔				
21	اکثر ایک کام نامکمل چھوڑ کر دوسرے کی طرف منتقل ہو جاتا/جاتی ہے۔				

	بیانات	بالکل نہیں	بہت کم	زیادہ	بہت زیادہ
22	اکثر کھیل اور دیگر مشاغل خاموشی سے جاری رکھنے میں دشواری ہوتی ہے۔				
23	اکثر تفصیلات کو زیادہ توجہ نہ دے سکنے یا لاپرواہی کی وجہ سے سکول کے کام اور دوسری سرگرمیوں میں غلطی کرتا/کرتی ہے۔				
24	اکثر غصہ میں اور ناراض رہتا/رہتی ہے۔				
25	اکثر کمرہ جماعت میں یا ایسی صورت حال میں جہاں بیٹھنا متوقع ہو اپنی جگہ چھوڑ دیتا/دیتی ہے۔				
26	اکثر ذود رنج/احساس ہوتا/ہوتی ہے یا دوسروں سے با آسانی ناراض ہو جاتا/جاتی ہے۔				
27	اکثر ہدایات پر عمل نہیں کر پاتا/پاتی اور سکول کا کام، کورس اور دوسری ذمہ داریوں کو مکمل کرنے میں ناکام رہتا/رہتی ہے۔(اس لئے نہیں کہ اسے مخالفانہ رویے کا سامنا ہوتا ہے یا اسے ہدایات سمجھ نہیں آتی)۔				
28	اکثر آپے سے باہر ہو جاتا/جاتی ہے۔				
29	اکثر کاموں اور کھیل میں توجہ برقرار رکھنے میں مشکل ہوتی ہے۔				
30	اکثر اپنی باری کا انتظار مشکل سے کرتا/کرتی رہی ہے۔				
31	کسی کے ساتھ جنسی فعل کے لئے زبردستی کی ہے۔				
32	اکثر دوسروں پہ دھونس جمانا، دھمکی دینا یا ہراساں کرتا/کرتی ہے۔				
33	اکثر جلدی میں ہوتا/ہوتی ہے۔				
34	اکثر کاموں اور سرگرمیوں کے لئے درکار اشیاء گم کر دیتا/دیتی ہے (مثلاً کھلونے، سکول کا کام assignment، پنسل، کتابیں، اور ضروری اشیاء)۔				
35	اکثر نامناسب مواقع پر بے انتہا بھاگتا دوڑتا/بھاگتی دوڑتی اور چھلانگیں لگاتا/لگاتی ہے۔				
36	جانوروں کو جسمانی اذیت دیتا رہا/دیتی رہی ہے۔				
37	اکثر ایسے کام جن میں مستقل ذہنی توجہ درکار ہو کو ناپسند کرتا/کرتی ہے یا جان چھڑاتا/چھڑاتی ہے (مثلاً سکول کا کام یا ہوم ورک)۔				
38	13 سال کی عمر سے پہلے والدین کی ممانعت کے باوجود اکثر رات کو گھر سے باہر رہتا/رہتی ہے۔				
39	اکثر جان بوجھ کر لوگوں کو ناراض کرتا/کرتی ہے۔				
40	لوگوں کے سامنے ان کی چیزیں چرا لیتا ہے (مثلاً پرتشدد انداز میں پرس چھیننا، دھمکی دینا)۔				
41	جان بوجھ کر بھاری نقصان کی نیت سے آگ لگانے میں ملوث رہا/رہی ہے۔				
42	اکثر کاموں اور مصروفیات کو ترتیب دینے میں مشکل پیش آتی رہتی ہے۔				
43	کسی دوسرے کے گھر، عمارت یا کار میں نقب زنی کی ہے۔				
44	اکثر روزمرّہ کے کاموں میں بھلکو ہے۔				
45	ایسا ہتھیار استعمال کیا ہے جو دوسروں کو شدید جسمانی نقصان پہنچا سکتا ہے۔(مثلاً بلا، اینٹ، شیشے کی ٹوٹی بوتل، چھری وغیرہ)۔				

Appendix-F

اجازت نامہ (برائے اساتذہ)

میرا تعلق قومی ادارہ نفسیات، قائداعظم یونیورسٹی اسلام آباد سے ہے جو کہ ایک تعلیمی تحقیقی ادارہ ہے اور اس کے زیر نگرانی مختلف نفسیاتی اور سماجی موضوعات پر تحقیقات کا کام کیا جاتا ہے۔ موجودہ تحقیق بچوں سے متعلقہ اور بچوں کے سکول میں مختلف کرداروں کے بارے میں ہے جو کہ عام مشاہدہ میں آتے ہیں۔ بحیثیت استاد آپ کو بچے کے مختلف کرداروں کا قریبی مشاہدہ کرنے کا موقع ملتا ہے۔ جس کے باعث آپ بچے کے بارے میں بہترین رائے کا اظہار کر سکتے ہیں۔ یہ سوالنامہ بچوں سے متعلق کچھ بیانات پر مشتمل ہے۔ ہر بیان کے سامنے پانچ جوابات تحریر ہیں۔ آپ سے درخواست ہے کہ ہر بیان کو غور سے پڑھیں اور گزشتہ چھ ماہ کے دوران بچے کے کردار کو مدنظر رکھتے ہوئے سوالنامہ "الف" اور سوالنامہ "ب" میں پوچھے گئے بیانات کا جواب دیں اور جو جواب بچے کے کردار کی جس حد تک عکاشی کرتا ہے اس کے سامنے (✓) کا نشان لگائیں۔

آپ سے درخواست ہے کہ تمام بیانات سے متعلق اپنے جوابات کا اظہار کریں نیز جواب دینے کے لئے پانچ ممکنہ جوابات میں سے کسی ایک جواب پر (✓) کا نشان لگائیں۔ آپ کے جوابات مکمل صیغہ راز میں رکھے جائیں گے اور صرف ریسرچ کے سلسلے میں استعمال ہوں گے۔

آپ کا تعاون اس تحقیق میں مددگار ہوگا۔

شکریہ

Appendix-G

SCHOOL SOCIAL BEHAVIOR SCALE

ہدایات :سوالنامہ میں دیئے گئے بیانات کوغور سے پڑھیں اور سامنے دیئے گئے جوابات میں سے آپ کے خیال میں جو جواب اس بچے کے کردار کی درست عکاسی کرتا ہے اس پر (✓) کا نشان لگائیں۔

	بیانات	بالکل نہیں	بہت کم	کبھی کبھی	زیادہ تر	ہمیشہ
.1	دوسرے طلباء کو اگر ضرورت ہو تو مدد کی پیشکش کرتا/کرتی ہے۔					
.2	سکول میں بحث ومباحثہ اور دیگر سرگرمیوں میں بھرپور حصہ لیتا/لیتی ہے۔					
.3	دوسرے طلباء کے مسائل اور ضروریات سمجھتا/سمجھتی ہے۔					
.4	دوسرے طلباء کو سکول کی سرگرمیوں میں حصہ لینے کی دعوت دیتا/دیتی ہے۔					
.5	ساتھی طلباء اس کی قابلیت اور ہنرمندی کی تعریف کرتے ہیں۔					
.6	ہر طرح کے ساتھیوں کے ساتھ میل میلاپ رکھتا/رکھتی ہے۔					
.7	ساتھی طلباء کے ساتھ گفتگو شروع کرنے یا اس میں شامل ہونے کی صلاحیت رکھتا/رکھتی ہے۔					
.8	دوسرے طلباء کے احساسات سمجھتا/سمجھتی ہے۔					
.9	ساتھی طلباء کی پہلے سے جاری شدہ سرگرمیوں میں خوش اسلوبی/مناسب طریقے سے شامل ہو جاتا/جاتی ہے۔					
.10	اس میں بہترین قائدانہ صلاحیت موجود ہے۔					
.11	دوسروں کی خوبیوں یا کامیابیوں کی تعریف کرتا/کرتی ہے۔					
.12	ضرورت کے وقت مناسب طریقے سے اپنی بات کو منوالیتا/لیتی ہے۔					
.13	دوسرے طلباء اسے اپنی سرگرمیوں میں شامل کرنا چاہتے ہیں۔					
.14	اس کے ساتھی اسے عزت واحترام سے دیکھتے ہیں۔					
.15	متفرق حالات میں دوسرے طلباء کے ساتھ تعاون کرتا/کرتی ہے۔					
.16	مسائل پیدا ہونے کی صورت میں پرسکون رہتا/رہتی ہے۔					
.17	دیگر طلباء کو اہمیت دیتا/دیتی ہے۔					
.18	بوقت ضرورت ساتھی طلباء سے سمجھوتہ کرلیتا/لیتی ہے۔					
.19	کلاس کے قواعد وضوابط کی پابندی کرتا/کرتی ہے۔					

	بیانات	بالکل نہیں	بہت کم	کبھی کبھی	زیادہ تر	ہمیشہ
20.	سکول کے مختلف اوقات میں موزوں طرز عمل کا مظاہرہ کرتا/کرتی ہے۔					
21.	جب استاد کسی غلطی کی نشاندہی کرے تو مناسب طرز عمل کا مظاہرہ کرتا/کرتی ہے۔					
22.	غصہ میں اپنے آپ پر قابو رکھتا/رکھتی ہے۔					
23.	اسکول میں اپنی ذات سے متوقع مختلف کرداروں سے بخوبی نباہ کرسکتا/سکتی ہے۔					
24.	ضبط نفس کا مظاہرہ کرتا/کرتی ہے۔					
25.	کلاس روم کی مختلف سرگرمیوں میں مناسب طریقے سے حصہ لے سکتا/سکتی ہے۔					
26.	اپنا کام ایک ہی نشت میں مکمل کرلیتا/لیتی ہے۔					
27.	استاد کی ہدایات کو غور سے سنتا/سنتی اوران پر عمل کرتا/کرتی ہے۔					
28.	استاد کی ہدایات کی وضاحت مناسب طریقے سے طلب کرتا/کرتی ہے۔					
29.	دوسروں کی مدد کے بغیر سکول کا کام کرتا/کرتی ہے۔					
30.	سکول کا کام بروقت مکمل کرتا/کرتی ہے۔					
31.	بوقت ضرورت مناسب طریقے سے دوسروں سے مدد طلب کرتا/کرتی ہے۔					
32.	اپنی اہلیت کے مطابق اچھے معیار کا کام کرتا/کرتی ہے۔					
33.	دوسرے طلباء کو مسائل کا ذمہ دار ٹھہراتا/ٹھہراتی ہے۔					
34.	دوسرے طلباء کو تنگ کرتے ہوئے ان کا مذاق اڑاتا/اڑاتی ہے۔					
35.	بدلحاظ اور بدتمیز ہے۔					
36.	جلد غصہ میں آجاتا/جاتی ہے۔					
37.	دوسروں سے بہتر کارکردگی دکھاتا/دکھاتی ہے۔					
38.	دوسرے طلباء کے ساتھ اس کا رویہ دوستانہ نہیں ہوتا۔					
39.	غصہ میں بے قابو ہوجاتا/جاتی ہے۔					
40.	دوسرے طلباء کی ضروریات اور جذبات کی پرواہ نہیں کرتا/کرتی۔					
41.	ساتھی طلباء کی بے عزتی کرتا/کرتی ہے۔					

	بیانات	بالکل نہیں	بہت کم	کبھی کبھی	زیادہ تر	ہمیشہ
.42	شکوہ وشکایت کرتا/کرتی ہے۔					
.43	ساتھی طلباء سے بحث اورلڑائی کرتا/کرتی ہے۔					
.44	شیخیاں/ڈینگیں مارتا/مارتی ہے۔					
.45	دوسرے طلباء سے ظالمانہ سلوک کرتا/کرتی ہے۔					
.46	بہت جلدی چڑ جاتا/جاتی ہے۔					
.47	دوسروں کی چیزیں اٹھالیتا/لیتی ہے۔					
.48	استاد/سکول کے عملہ کی نافرمانی کرتا/کرتی ہے۔					
.49	سکول کے کام/کھیلوں میں غصہ دکھاتا/دکھاتی ہے۔					
.50	لڑائی جھگڑوں میں پڑتا/پڑتی ہے۔					
.51	اساتذہ/سکول کے عملہ سے جھوٹ بولتا/بولتی ہے۔					
.52	سکول کی املاک کوخراب اورتباہ کرتا/کرتی ہے۔					
.53	دوسرے طلباء سے زبانی غصے کااظہارکرتا/کرتی اوردھمکیاں دیتا/دیتی ہے۔					
.54	قسمیں کھاتا/کھاتی ہےاورفحش زبان استعمال کرتا/کرتی ہے۔					
.55	غصہ میں لڑائی مارکٹائی کرتا/کرتی ہے۔					
.56	سکول میں مسائل کاشکارہوجاتا/جاتی ہے۔					
.57	اساتذہ اوردیگر عملےکونظرانداز کرتا/کرتی ہے۔					
.58	اساتذہ سے بہت زیادہ توجہ چاہتا/چاہتی ہے۔					
.59	اسے قابو کرنا مشکل ہے۔					
.60	دوسرے طلباءکوتنگ اوربرہم کرتا/کرتی ہے۔					
.61	پہلے سے جاری شدہ کام میں رکاوٹ ڈالتا/ڈالتی ہے۔					
.62	قابل اعتمادنہیں۔					
.63	سوچے سمجھے بغیر جلدی میں کام کرتا/کرتی ہے۔					
.64	کام نہیں کرتا/کرتی اوربہت کم کامیابی حاصل کرتا/کرتی ہے۔					
.65	دوسرے طلباء کی مدد کاطالب رہتا/رہتی ہے۔					

Appendix-H

PARENTAL AUTHORITY QUESTIONNAIRE

ہدایات

ہم قومی ادارۂ نفسیات، قائداعظم یونیورسٹی اسلام آباد کی طرف سے والدین اور بچوں کے آپس میں تعلقات پر ایک تحقیق کر رہے ہیں۔اس سلسلے میں ہم نے یہ سوالنامہ تیار کی ہے اس کے ذریعے ہم آپ سے یہ پوچھنا چاہتے ہیں کہ آپ کی امی ابو کا گھر میں آپ سے برتاؤ کیسا ہے۔ اس سوالنامے میں بیانات درج ہیں۔آپ ہر بیان کو غور سے پڑھیں اور اس کے سامنے دیئے گئے جوابات میں سے جو آپ کے خیال میں سب سے مناسب ہے اس پر (✓) کا نشان لگا دیں۔ہر بیان کیلئے 5 ممکنہ جوابات موجود ہیں۔

نیچے ایک مثال درج کی گئی ہے اسے غور سے پڑھیں تا کہ آپ کو اچھی طرح سے سمجھ آجائے کہ آپ نے کیا کرنا ہے۔

مثال: **بالکل صحیح کسی حد تک صحیح معلوم نہیں کسی حد تک غلط بالکل غلط**

میرے امی فیصلہ کرتے وقت ہماری رائے کو اہمیت دیتی ہیں۔

اگر یہ جملہ آپ کی امی کے برتاؤ کے مطابق صحیح ہے اور آپ اس جملے سے مکمل طور پر اتفاق کرتے ہیں تو "بالکل صحیح" کے نیچے دی گئی جگہ میں ( ) کا نشان لگا دیں۔

سوالات کا کوئی بھی غلط یا صحیح جواب نہیں ہے لہٰذا ہر سوال کا جواب اسی طرح دیں جیسا آپ محسوس کرتے ہیں۔اور آپ کے گھر میں ہوتا ہے۔یاد رہے کہ ہر بیان کے لیے ایک نشان لگائیں اور ہر بیان کا جواب ضرور دیں۔

آپ سے حاصل کردہ معلومات خفیہ رکھی جائیں گی اور ڈیٹا صرف تحقیقی مقاصد کیلئے استعمال ہوگا۔نیز اگر دوران ریسرچ/تحقیق کسی وقت بھی آپ اس تحقیقی سرگرمی سے علیحدہ ہونا چاہیں تو آپ کو اجازت ہوگی۔

تعاون کا شکریہ۔

Parental Authority Questionnaire (Urdu Version)

ہدایات: سوالنامہ میں دیے گئے بیانات کو غور سے پڑھیں اور سامنے دیئے گئے جوابات میں سے کسی ایک پر (✓) کا نشان لگائیں۔

		بالکل صحیح	کسی حد تک صحیح	معلوم نہیں	کسی حد تک غلط	بالکل غلط
.1	میری امی کے خیال میں گھر میں بچوں کو بھی اپنی مرضی کرنے کا اتنا ہی اختیار ہونا چاہیے جتنا کہ والدین کو۔					
.2	میری امی کے خیال میں بچوں سے ان کی بہتری کے لیے کچھ کام زبردستی بھی کروانے چاہیں۔					
.3	میری امی چاہتی ہیں کہ میں بغیر کوئی سوال پوچھے ان کے کہنے پر فوری عمل کروں۔					
.4	میری امی گھر کے کسی معاملہ سے متعلق فیصلہ کرنے کے بعد اس کی وجوہات بھی بتاتی ہیں۔					
.5	جب بھی گھر میں کوئی پابندی اور اصول مجھ کو نامناسب لگے تو میری امی میری بات اور مشوروں کو سن لیتی ہیں۔					
.6	میری امی کے خیال میں بچوں کو اس بات کی آزادی ہونی چاہیے کہ وہ اپنے لیے جو چاہیں سوچیں اور اس پر عمل کریں۔ چاہے والدین ان سے اتفاق کریں یا نہ کریں۔					
.7	میری امی اس بات کی اجازت نہیں دیتیں کہ میں ان کے کیے ہوئے فیصلے کے خلاف بولوں۔					
.8	میری امی گھر میں بچوں سے متعلق معاملات کے فیصلے سوچ سمجھ کر اور اچھے طریقے سے کرتی ہیں۔					
.9	میری امی کا خیال ہے کہ والدین کو بچوں کی تربیت سختی سے کام لیتے ہوئے کرنی چاہیے۔					
.10	میری امی یہ نہیں سمجھتیں کہ مجھے اصول صرف اس لیے مان لینے چاہیں کہ وہ بڑوں نے بنائے ہیں۔					
.11	یہ جانتے ہوئے بھی کہ میری امی مجھ سے کیا چاہتی ہیں پھر بھی اگر مجھے کوئی بات ٹھیک نہ لگے تو میں آزادی سے ان سے اس کے متعلق بات کر سکتا ہوں۔					
.12	میری امی کا خیال ہے کہ عقلمند والدین کو بہت شروع ہی میں بچوں کو یہ بتا دینا چاہیے کہ گھر میں کس کا حکم چلے گا۔					
.13	میری امی بہت کم بتاتی ہیں کہ مجھے مختلف کام کیسے کرنے ہیں۔					
.14	میری امی اکثر وہی فیصلہ کرتی ہیں جو کہ گھر میں ہم بچوں کی مرضی ہوتی ہے۔					
.15	میری امی ہمیشہ ہمیں مختلف کام کرنے کے طریقے بہت اچھی طرح سے بتاتی اور سمجھاتی ہیں۔					

		بالکل صحیح	کسی حد تک صحیح	معلوم نہیں	کسی حد تک غلط	بالکل غلط
.16	جب میں امی کی بات نہ مانوں تو وہ بہت ناراض ہو جاتی ہیں۔					
.17	میری امی کا خیال ہے کہ اگر والدین بچوں کے خیالات، فیصلوں اور معاملات پر پابندی نہ لگائیں تو معاشرے کے بہت سے مسائل ختم ہو سکتے ہیں۔					
.18	میری امی مجھے بتاتی ہیں کہ مجھے کیا کرنا چاہیے۔ لیکن اگر میں ویسا نہ کر سکوں تو وہ مجھے سزا دیتی ہیں۔					
.19	میری امی مجھے میرے زیادہ تر معاملات میں خود فیصلہ کرنے دیتی ہیں۔					
.20	میری امی فیصلہ کرتے وقت ہماری رائے کو اہمیت دیتی ہیں لیکن صرف ہماری مرضی پر فیصلہ نہیں کرتیں۔					
.21	میری امی یہ ذمہ داری نہیں لیتیں کہ وہ مجھے بتائیں کہ مجھے مختلف کام کیسے کرنے ہیں۔					
.22	میری امی بچوں کے معاملات کے بارے میں ایک خاص رویہ رکھتی ہیں مگر اس کو کبھی کبھی بچوں کی ضرورت کے مطابق تبدیل بھی کر دیتی ہیں۔					
.23	میری امی بتاتی ہیں کہ مجھے کیا کرنا چاہیے اور وہ چاہتی ہیں کہ میں ان کی باتوں پر عمل کروں لیکن وہ میری بات بھی مان لیتی ہیں کہ میں ان کاموں کو کیسے کرنا چاہتا ہوں۔					
.24	میری امی مجھے اجازت دیتی ہیں کہ میں گھر کے معاملات میں اپنی رائے دوں اور اپنے بارے میں خود فیصلہ بھی کروں۔					
.25	میری امی کا خیال ہے کہ معاشرے کے بہت سے مسائل حل ہو جائیں اگر والدین بچوں کی غلطیوں پر ان کے ساتھ سختی سے پیش آئیں۔					
.26	میری امی اکثر مجھے بتاتی ہیں کہ وہ مجھ سے کیا چاہتی ہیں اور میں کس طرح ان کی خواہش کو پورا کر سکتا ہوں۔					
.27	میری امی مجھے مشورے دیتی ہیں لیکن اگر مجھے ان کا مشورہ ٹھیک نہ لگے تو وہ میری بات بھی سمجھتی ہیں۔					
.28	میری امی گھر میں بچوں کے معاملات کے بارے میں ہدایات نہیں دیتیں۔					
.29	مجھے پتہ ہے میری امی چاہتی ہیں کہ میں ان کی ہر بات مانوں کیونکہ وہ مجھ سے بڑی ہیں۔					
.30	اگر مجھے امی کے کسی فیصلے پر دکھ پہنچے تو وہ میری بات سن لیتی ہیں اور اگر وہ غلطی پر ہوں تو اس غلطی کو مان بھی لیتی ہیں۔					

ہدایات:سوالنامہ میں دیے گئے بیانات کوغور سے پڑھیں اورسامنے دیئے گئے جوابات میں سے کسی ایک پر (✓) کانشان لگائیں۔

		بالکل صحیح	کسی حد تک صحیح	معلوم نہیں	کسی حد تک غلط	بالکل غلط
.1	میرے ابو کے خیال میں گھر میں بچوں کو بھی اپنی مرضی کرنے کا اتنا ہی اختیار ہونا چاہیے جتنا کہ والدین کو۔					
.2	میرے ابو کے خیال میں بچوں سے ان کی بہتری کے لیے کچھ کام زبردستی بھی کروانے چاہیں۔					
.3	میرے ابو چاہتے ہیں کہ میں بغیر کوئی سوال پوچھے ان کے کہنے پر فوری عمل کروں۔					
.4	میرے ابو گھر کے کسی معاملہ سے متعلق فیصلہ کرنے کے بعد اس کی وجوہات بھی بتاتے ہیں۔					
.5	جب بھی گھر میں کوئی پابندی اور اصول مجھ کو نا مناسب لگے تو میرے ابو میری بات اور مشوروں کو سن لیتے ہیں۔					
.6	میرے ابو کے خیال میں بچوں کو اس بات کی آزادی ہونی چاہیے کہ وہ اپنے لیے جو چاہیں سوچیں اور اس پر عمل کریں۔چاہے والدین ان سے اتفاق کریں یا نہ کریں۔					
.7	میرے ابو اس بات کی اجازت نہیں دیتے کہ میں ان کے کیے ہوئے فیصلے کے خلاف بولوں۔					
.8	میرے ابو گھر میں بچوں سے متعلق معاملات کے فیصلے سوچ سمجھ کر اور اچھے طریقے سے کرتے ہیں۔					
.9	میرے ابو کا خیال ہے کہ والدین کو بچوں کی تربیت سختی سے کام لیتے ہوئے کرنی چاہیے۔					
.10	میرے ابو یہ نہیں سمجھتے کہ مجھے اصول صرف اس لیے مان لینے چاہیں کہ وہ بڑوں نے بنائے ہیں۔					
.11	یہ جانتے ہوئے بھی کہ میرے ابو مجھ سے کیا چاہتے ہیں پھر بھی اگر مجھے کوئی بات ٹھیک نہ لگے تو میں آزادی سے ان سے اس کے متعلق بات کر سکتا/سکتی ہوں۔					
.12	میرے ابو کا خیال ہے کہ عقلمند والدین کو بہت شروع ہی میں بچوں کو یہ بتا دینا چاہیے کہ گھر میں کس کا حکم چلے گا۔					
.13	میرے ابو بہت کم بتاتے ہیں کہ مجھے مختلف کام کیسے کرنے ہیں۔					
.14	میرے ابو اکثر وہی فیصلہ کرتے ہیں جو کہ گھر میں ہم بچوں کی مرضی ہوتی ہے۔					
.15	میرے ابو ہمیشہ ہمیں مختلف کام کرنے کے طریقے بہت اچھی طرح سے بتاتے اور سمجھاتے ہیں۔					

		بالکل صحیح	کسی حد تک صحیح	معلوم نہیں	کسی حد تک غلط	بالکل غلط
.16	جب میں ابو کی بات نہ مانوں تو وہ بہت ناراض ہو جاتے ہیں ۔					
.17	میرے ابو کا خیال ہے کہ اگر والدین بچوں کے خیالات، فیصلوں اور معاملات پر پابندی نہ لگائیں تو معاشرے کے بہت سے مسائل ختم ہو سکتے ہیں۔					
.18	میرے ابو مجھے بتاتے ہیں کہ مجھے کیا کرنا چاہیے۔لیکن اگر میں ویسا نہ کر سکوں تو وہ مجھے سزا دیتے ہیں۔					
.19	میرے ابو مجھے میرے زیادہ تر معاملات میں خود فیصلہ کرنے دیتے ہیں۔					
.20	میرے ابو فیصلہ کرتے وقت ہماری رائے کو اہمیت دیتے ہیں لیکن صرف ہماری مرضی پر فیصلہ نہیں کرتے ۔					
.21	میرے ابو یہ ذمہ داری نہیں لیتے کہ وہ مجھے بتائیں کہ مجھے مختلف کام کیسے کرنے ہیں ۔					
.22	میرے ابو بچوں کے معاملات کے بارے میں ایک خاص رویہ رکھتے ہیں مگر اس کو کبھی کبھی بچوں کی ضرورت کے مطابق تبدیل بھی کر دیتے ہیں۔					
.23	میرے ابو بتاتے ہیں کہ مجھے کیا کرنا چاہیے اور وہ چاہتے ہیں کہ میں ان کی باتوں پر عمل کروں لیکن وہ میری بات بھی مان لیتے ہیں کہ میں ان کاموں کو کیسے کرنا چاہتا/چاہتی ہوں۔					
.24	میرے ابو مجھے اجازت دیتے ہیں کہ میں گھر کے معاملات میں اپنی رائے دوں اور اپنے بارے میں خود فیصلہ بھی کروں ۔					
.25	میں ابو کا خیال ہے کہ معاشرے کے بہت سے مسائل حل ہو جائیں اگر والدین بچوں کی غلطیوں پر ان کے ساتھ سختی سے پیش آئیں ۔					
.26	میرے ابو اکثر مجھے بتاتے ہیں کہ وہ مجھ سے کیا چاہتے ہیں اور میں کس طرح ان کی خواہش کو پورا کر سکتا/سکتی ہوں ۔					
.27	میرے ابو مجھے مشورے دیتے ہیں لیکن اگر مجھے ان کا مشورہ ٹھیک نہ لگے تو وہ میری بات بھی سمجھتے ہیں۔					
.28	میرے ابو گھر میں بچوں کے معاملات کے بارے میں ہدایات نہیں دیتے۔					
.29	مجھے پتہ ہے میرے ابو چاہتے ہیں کہ میں ان کی ہر بات مانوں کیونکہ وہ مجھ سے بڑے ہیں ۔					
.30	اگر مجھے ابو کے کسی فیصلے پر دکھ پہنچے تو وہ میرے بات سن لیتے ہیں اور اگر وہ غلطی پر ہوں تو اس غلطی کو مان بھی لیتے ہیں۔					

Appendix-I

INSTRUCTIONS FOR URDU TRANSLATION OF SPENCE CHILDREN'S ANXIETY SCALE (SCAS-P)

I am a PhD Scholar at National Institute of Psychology and for the partial fulfillment of PhD thesis titled "Psychosocial functioning of children with childhood behavioral problems", you are requested to translate the items given in the scale into Urdu by following the instructions given below:

Translate all items from English to Urdu by trying to keep content equivalence between both versions. You are requested to use simple Urdu words in order to maintain moderate comprehension level. Translate items without any change or substitution of item in the original text.

Thank you.

Appendix-J

ITEMS OF SPENCE CHILDREN'S ANXIETY SCALE (SCAS-P) GIVEN TO BILINGUALS FOR TRANSLATION INTO URDU

Item No.	Statements
1.	My child worries about things
2.	My child is scared of the dark.
3.	When my child has a problem, she/he complains of having a funny feeling in his / her stomach
4.	My child complains of feeling afraid
5.	My child would feel afraid of being on his/her own at home
6.	My child is scared when she/he has to take a test
7.	My child is afraid when she/he has to use public toilets or bathrooms
8.	My child worries about being away from us / me.
9.	My child feels afraid that she/he will make a fool of him/herself in front of people
10.	My child worries that she/he will do badly at school
11.	My child worries that something awful will happen to someone in our family
12.	My child complains of suddenly feeling as if she/he can't breathe when there is no reason for this
13.	My child has to keep checking that she/he has done things right (like the switch is off, or the door is locked)
14.	My child is scared if she/he has to sleep on his/her own
15.	My child has trouble going to school in the mornings because she/he feels nervousor afraid
16.	My child is scared of dogs
17.	My child can't seem to get bad or silly thoughts out of his / her head
18.	When my child has a problem, she/he complains of his/her heart beating really fast
19.	My child suddenly starts to tremble or shake when there is no reason for this
20.	My child worries that something bad will happen to him/her
21.	My child is scared of going to the doctor or dentist
22.	When my child has a problem, she/he feels shaky
23.	My child is scared of heights (e.g., being at the top of a cliff)
24.	My child has to think special thoughts (like numbers or words) to stop bad things from happening.
25.	My child feels scared if she/he has to travel in the car, or on a bus or train
26.	My child worries what other people think of him/her
27.	My child is afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds)
28	All of a sudden my child feels really scared for no reason at all
29.	My child is scared of insects or spiders

30. My child complains of suddenly becoming dizzy or faint when there is no reason for this
31. My child feels afraid when she/he has to talk in front of the class
32. My child's complains of his / her heart suddenly starting to beat too quickly for no reason
33. My child worries that she/he will suddenly get a scared feeling when there is nothing to be afraid of
34. My child is afraid of being in small closed places, like tunnels or small rooms
35. My child has to do some things over and over again (like washing his / her hands, cleaning or putting things in a certain order).
36. My child gets bothered by bad or silly thoughts or pictures in his/her head
37. My child has to do certain things in just the right way to stop bad things from happening
38. My child would feel scared if she/he had to stay away from home overnight
39. Is there anything else that your child is really afraid of?

Please write down what it is, and fill out how often she/he is afraid of this thing

Appendix-K

FINAL SELECTED ITEMS AFTER URDU TRANSLATION OF SPENCE CHILDREN'S ANXIETY SCALE (SCAS-P)

Seperation Anxiety Disorder (SAD)

(*n* = 6)

Item No.	Statements
5	میرا بچہ/بچی گھر میں اکیلے ہونے پر ڈر/خوف محسوس کرے گا/کرے گی۔
8	میرا بچہ/بچی مجھ سے یا ہم سے دور ہونے پر پریشان ہوتا/ہوتی ہے۔
11	میرا بچہ/بچی پریشان ہوتا/ہوتی ہے کہ ہمارے خاندان میں کسی کے ساتھ کچھ بُرا ہو جائے گا۔
14	اکیلے سونے کی صورت میں میرے بچے کو ڈر لگتا ہے۔
38	میرے بچے کو ڈر لگے گا اگر اس کو ساری رات کے لئے گھر سے دور رہنا پڑے۔
15	میرے بچے کو صبح سکول جانے میں مشکل ہوتی ہے کیونکہ وہ گھبراہٹ یا خوفزدہ (Nervous) محسوس کرتا/کرتی ہے۔

Social Phobia (SoPh)

(*n* = 6)

Item No.	Statements
6	میرا بچہ خوفزدہ ہوتا ہے جب اس کو کوئی ٹیسٹ دینا ہوتا ہے۔
7	میرا بچہ خوفزدہ ہوتا ہے جب اس کو عوامی بیت الخلاء (public toilet) استعمال کرنا پڑتا ہے۔
9	میرے بچے کو اس بات سے ڈر محسوس ہوتا ہے کہ وہ لوگوں کے سامنے بے وقوف نہ بن جائے۔
10	میرا بچہ/بچی سکول میں بری کارکردگی کے بارے میں پریشان ہوتا/ہوتی ہے۔
26	میرا بچہ/بچی پریشان رہتا/رہتی کہ دوسرے لوگ اس کے بارے میں کیا سوچتے ہیں۔
31	میرا بچہ/بچی خوفزدہ محسوس کرتا/کرتی ہے جب اسے اپنی جماعت کے سامنے بات کرنی پڑتی ہے۔

Generalized Anxiety Disorder (GAD)

(*n* = 6)

Item No.	Statements
1	میرا بچہ/بچی چیزوں کے بارے میں پریشان رہتا/رہتی ہے۔
3	جب میرے بچے کے ساتھ مسئلہ ہوتا ہے تو وہ معدے میں عجیب قسم کی کیفیت محسوس کرنے کی شکایت کرتا/کرتی ہے۔
4	میرا بچہ/بچی خوف محسوس کرنے کی شکایت کرتا/کرتی ہے۔
18	جب میرے بچے کو کوئی مسئلہ ہوتا ہے تو وہ اپنے دل کی تیز دھڑکن کی شکایت کرتا/کرتی ہے۔
20	میرا بچہ/بچی پریشان رہتا/رہتی ہے کہ اس کے ساتھ کچھ برا ہوگا۔
22	جب میرے بچے کو مسئلہ ہوتا ہے تو وہ کپکپی محسوس کرتا/کرتی ہے۔

Panic/Agorphobia (Panic/Ag) (*n* = 9)

Item No.	Statements
12	میرا بچہ/ بچی اچانک یہ محسوس کرنے کی شکایت کرتا/کرتی ہے کہ وہ سانس نہیں لے سکتا/سکتی جبکہ اس کی کوئی وجہ نہیں ہوتی۔
19	میرا بچہ/ بچی اچانک سے کپکپانا اور لرزنا شروع کر دیتا ہے جب کہ اس کی کوئی وجہ نہیں ہوتی۔
25	میرے بچہ/ بچی کو اگر کار، بس یا ٹرین میں سفر کرنا پڑ جائے تو وہ خوف محسوس کرتا/کرتی ہے۔
27	میرا بچہ/ بچی پر ہجوم جگہوں پر ہوتے ہوئے ڈر محسوس کرتا/کرتی ہے (مثلاً خرید و فروخت کی جگہ، سینیما، بسیں، مصروف کھیل کے میدان)۔
28	اچانک بغیر کسی وجہ کے میرا بچہ خوفزدہ محسوس کرتا/کرتی ہے۔
30	میرا بچہ/ بچی اچانک چکر آنے اور بے ہوشی طاری ہونے کی شکایت کرتا/کرتی ہے جب کہ اس کی کوئی وجہ نہیں ہوتی۔
32	میرا بچہ/ بچی بغیر کسی وجہ کے اچانک دل کی دھڑکن تیز ہو جانے کی شکایت کرتا/کرتی ہے۔
33	میرا بچہ/ بچی پریشان ہوتا/ہوتی ہے کہ وہ اچانک خوف محسوس کرے گا/گی جبکہ ڈرنے کی کوئی وجہ نہیں ہوتی۔
34	میرا بچہ/ بچی چھوٹی اور تنگ جگہوں مثلاً سرنگوں اور چھوٹے کمروں میں ہونے سے خوفزدہ ہوتا/ہوتی ہے۔

Obsessive Compulsive Disorder (OCD) (*n* = 6)

Item No.	Statements
13	میرا بچہ/ بچی مسلسل چیک کرتا رہتا/رہتی ہے کہ اُس نے کام صحیح کیا ہے (جیسے بجلی بند کرنا یا دروازے کو تالا لگانا)۔
17	میرا بچہ/ بچی اپنے دماغ سے فضول یا برے خیالات نہیں نکال پاتا۔
24	کچھ برا ہونے سے روکنے کے لئے میرے بچے کو کوئی خاص سوچ سوچنی پڑتی ہے مثلاً کوئی نمبر یا الفاظ وغیرہ۔
35	میرے بچے کو کچھ چیزیں بار بار کرنی پڑتی ہیں (مثلاً اپنے ہاتھ دھونا اور چیزیں صاف کرنا اور ایک خاص ترتیب سے رکھنا)۔
36	میرا بچہ/ بچی ذہن میں برے اور بے وقوفانہ خیالات یا تصاویر کی وجہ سے پریشان ہوتا/ہوتی ہے۔
37	میرے بچے کو کچھ چیزیں صحیح طریقے سے کرنی پڑتی ہیں تا کہ بری چیزوں کو ہونے سے روک سکے۔

Physical Injury Fears (Ph.Inj) (*n* = 5)

Item No.	Statements
2	میرا بچہ/ بچی اندھیرے سے ڈرتا/ڈرتی ہے۔
16	میرے بچہ/ بچی کو کتوں سے ڈر لگتا ہے۔
21	میرا بچہ/ بچی ڈاکٹر یا ڈینٹسٹ کے پاس جانے سے ڈرتا/ڈرتی ہے۔
23	میرے بچہ/ بچی کو اونچی جگہوں سے ڈر لگتا ہے (جیسے پہاڑ کی چوٹی پر ہونا)۔
29	میرا بچہ/ بچی کیڑوں یا مکڑیوں سے ڈرتا ہے۔

Item No.	Statements
39	کیا اس کے علاوہ کوئی اور چیز ہے جس سے آپکا بچہ/ بچی واقعی خوفزدہ ہوتا/ہوتی ہے۔ آپ سے گذارش ہے کہ لکھیے وہ کیا چیز ہے اور پر کیجیے کہ وہ اس چیز سے کتنی بار ڈرتا/ڈرتی ہے۔

Appendix-L

FINAL SELECTED ITEMS AFTER BACK TRANSLATION OF SCAS-P

Separation Anxiety Disorder (SAD)(*n* = 6)

Item No.	Statements
5.	My child will feel afraid of being alone at home
8.	My child worries from being away from us or from me.
11.	My child worries that something bad will happen to someone in our family.
14.	My child is afraid of sleeping alone.
38.	My child will feel afraid of staying away from home for whole night.
15.	My child has trouble to go to school in the morning because he/she feels nervousor feels fear.

Social Phobia (Soph)(*n* = 6)

Item No.	Statements
6.	My child feels scared whenever he/she has any test.
7.	My child feels afraid when he/she has to use public toilet.
9.	My child feels afraid of becoming fool in front of people.
10.	My child worries about he/she bad performance in school.
26.	My child worries that what other people think about him/her.
31.	My child feels afraid when he/she has to talk in front of his class.

Generalized Anxiety Disorder (GA/D)(*n* = 6)

Item No.	Statements
1	My child worries about things.
3	When my child has a problem then he/she complains for a strange kind of feeling in stomach.
4	My child complains for feeling of fear.
18	When my child has some problem he/she complains about the fast heart beat.
20	My child worries that something bad will happen with him/her.
22	When my child has a problem, he/she feels shivering.

Panic/Agoraphobia (Panic/Ag)(*n* = 9)

Item No.	Statements
12	My child complains of suddenly feeling that he/she cannot breath although there is no reason for that.
19	My child suddenly trembles and shivers though there is no reason for this.
25	My child feels fear if he/she has to travel in car, bus or train.
27	My child is afraid of being in crowdy places (e.g., shopping malls, cinemas, buses, crowdy play grounds).
28	Suddenly my child feels fear without any reason.

30	My child suddenly complains of dizziness and faintness although there is no reason for that.
32	My child often complains of sudden rise in heart beat without any reason.
33	My child worries that he/she will suddenly feel fear although there is no reason of fear.
34	My child is afraid of being in small and narrow places for example small rooms and tunnels.

Obsessive Compulsive Disorder (OCD)(*n* = 6)

Item No.	**Statements**
13	My child keeps on checking if he/she has done work right (like switching off a button or locking the door).
17	My child cannot get rid of rubbish and bad thoughts out of his/her mind.
24	My child has to think a special/specific thought (like any word or number to stop having something wrong/bad).
35	My child has to do something again and again (like washing his/her hands, keeping things clean and putting them in an order).
36	My child feels disturbed because of bad and foolish thoughts or pictures in his/her mind.
37	My child has to do something in the right way to stop bad things from happening.

Physical Injury Fears (PhInj)(*n* = 5)

Item No.	**Statements**
2	My child is afraid of dark.
16	My child is afraid of dogs.
21	My child is afraid of going to the doctor or dentist.
23	My child is afraid of heights (e.g., being on the peak of mountain).
29	My child is afraid of insects or spiders.
39	Is there anything else of which your child is really afraid of? You are requested to write what is that thing and fill it that how many times he is afraid of it?

Appendix-M

Spence Child Anxiety Scale (Urdu Version)

ہدایات: سوالنامہ میں دے گئے بیانات کوغور سے پڑھیں اور سامنے دیے گئے جوابات میں سے آپ کے خیال میں جو جواب اس بچے کے کردار کی درست عکاسی کرتا ہے اس پر ( ) کا نشان لگائیں۔

برائے مہربانی تمام سوالات کے جواب دیں۔

نمبر شمار	بیانات	کبھی نہیں	کبھی کبھی	اکثر	ہمیشہ
.1	میرا بچہ/بچی چیزوں کے بارے میں پریشان رہتا/رہتی ہے۔	___	___	___	___
.2	میرا بچہ/بچی اندھیرے سے ڈرتا/ڈرتی ہے۔	___	___	___	___
.3	جب میرے بچہ/بچی کے ساتھ مسئلہ ہوتا ہے تو وہ معدے میں عجیب قسم کی کیفیت محسوس کرنے کی شکایت کرتا/کرتی ہے۔	___	___	___	___
.4	میرا بچہ/بچی خوف محسوس کرنے کی شکایت کرتا/کرتی ہے۔	___	___	___	___
.5	میرا بچہ/بچی گھر میں اکیلے ہونے پر ڈر/خوف محسوس کرے گا/کرے گی۔	___	___	___	___
.6	میرا بچہ/بچی خوفزدہ ہوتا ہے جب اس کو کوئی ٹیسٹ دینا ہوتا ہے۔	___	___	___	___
.7	میرا بچہ/بچی خوفزدہ ہوتا ہے جب اس کو عوامی بیت الخلاء (public toilet) استعمال کرنا پڑتا ہے۔	___	___	___	___
.8	میرا بچہ/بچی مجھ سے یا ہم سے دور ہونے پر پریشان ہوتا/ہوتی ہے۔	___	___	___	___
.9	میرے بچے کو اس بات سے ڈر محسوس ہوتا ہے کہ وہ لوگوں کے سامنے بے وقوف نہ بن جائے۔	___	___	___	___
.10	میرا بچہ/بچی سکول میں بری کارکردگی کے بارے میں پریشان ہوتا/ہوتی ہے۔	___	___	___	___
.11	میرا بچہ/بچی پریشان ہوتا/ہوتی ہے کہ ہمارے خاندان میں کسی کے ساتھ کچھ بُرا ہو جائے گا۔	___	___	___	___
.12	میرا بچہ/بچی اچانک یہ محسوس کرنے کی شکایت کرتا/کرتی ہے کہ وہ سانس نہیں لے سکتا/سکتی جبکہ اس کی کوئی وجہ نہیں ہوتی۔	___	___	___	___
.13	میرا بچہ/بچی مسلسل چیک کرتا رہتا/رہتی ہے کہ اُس نے کام صحیح کیا ہے (جیسے بجلی بند کرنا یا دروازے کو تالا لگانا)۔				

نمبر شمار	بیانات	کبھی نہیں	کبھی کبھی	اکثر	ہمیشہ
.14	اکیلے سونے کی صورت میں میرے بچے کو ڈر لگتا ہے۔	____	____	____	____
.15	میرے بچہ/بچی کو صبح سکول جانے میں مشکل ہوتی ہے کیونکہ وہ گھبراہٹ یا خوفزدہ (Nervous) محسوس کرتا/کرتی ہے۔	____	____	____	____
.16	میرے بچہ/بچی کو کتوں سے ڈر لگتا ہے۔	____	____	____	____
.17	میرا بچہ/بچی اپنے دماغ سے فضول یا برے خیالات نہیں نکال پاتا/پاتی۔	____	____	____	____
.18	جب میرے بچہ/بچی کو کوئی مسئلہ ہوتا ہے تو وہ اپنے دل کی تیز دھڑکن کی شکایت کرتا/کرتی ہے۔	____	____	____	____
.19	میرا بچہ/بچی اچانک سے کپکپانا اور لرزنا شروع کر دیتا/دیتی ہے جب کہ اس کی کوئی وجہ نہیں ہوتی۔	____	____	____	____
.20	میرا بچہ/بچی پریشان رہتا/رہتی ہے کہ اس کے ساتھ کچھ برا ہوگا۔	____	____	____	____
.21	میرا بچہ/بچی ڈاکٹر یا ڈینٹسٹ کے پاس جانے سے ڈرتا/ڈرتی ہے۔	____	____	____	____
.22	جب میرے بچہ/بچی کو مسئلہ ہوتا ہے تو کپکپی محسوس کرتا/کرتی ہے۔	____	____	____	____
.23	میرے بچہ/بچی کو اونچی جگہوں سے ڈر لگتا ہے (جیسے پہاڑ کی چوٹی پر ہونا)۔	____	____	____	____
.24	کچھ برا ہونے سے روکنے کے لئے میرے بچے کو کوئی خاص سوچ سوچنی پڑتی ہے مثلاً کوئی نمبر یا الفاظ وغیرہ۔	____	____	____	____
.25	میرے بچے کو اگر کار، بس یا ٹرین میں سفر کرنا پڑ جائے تو وہ خوف محسوس کرتا ہے۔	____	____	____	____
.26	میرا بچہ/بچی پریشان رہتا/رہتی کہ دوسرے لوگ اس کے بارے میں کیا سوچتے ہیں۔	____	____	____	____
.27	میرا بچہ/بچی پرہجوم جگہوں پر ہوتے ہوئے ڈر محسوس کرتا/کرتی ہے (مثلاً خرید فروخت کی جگہ، سینما، بسیں، مصروف کھیل کے میدان)۔	____	____	____	____
.28	اچانک بغیر کسی وجہ کے میرا بچہ/بچی خوفزدہ محسوس کرتا/کرتی ہے۔	____	____	____	____
.29	میرا بچہ/بچی کیڑوں یا مکڑیوں سے ڈرتا/ڈرتی ہے۔	____	____	____	____
.30	میرا بچہ/بچی اچانک چکر آنے اور بے ہوشی طاری ہونے کی شکایت کرتا/کرتی ہے جب کہ اس کی کوئی وجہ نہیں ہوتی۔	____	____	____	____
.31	میرا بچہ/بچی خوفزدہ محسوس کرتا/کرتی ہے جب اسے اپنی جماعت کے سامنے بات کرنی پڑتی ہے۔	____	____	____	____
.32	میرا بچہ/بچی بغیر کسی وجہ کے اچانک دل کی دھڑکن تیز ہو جانے کی شکایت کرتا/کرتی ہے۔	____	____	____	____
.33	میرا بچہ/بچی پریشان ہوتا ہے کہ وہ اچانک خوف محسوس کرے گا/گی جبکہ ڈرنے کی کوئی وجہ نہیں ہوتی۔	____	____	____	____
.34	میرا بچہ/بچی چھوٹی اور تنگ جگہوں مثلاً سرنگوں اور چھوٹے کمروں میں ہونے سے خوفزدہ ہوتا/ہوتی ہے۔				

نمبر شمار	بیانات	کبھی نہیں	کبھی کبھی	اکثر	ہمیشہ
35.	میرے بچے کو کچھ چیزیں بار بار کرنی پڑتی ہیں (مثلاً اپنے ہاتھ دھونا اور چیزیں صاف کرنا اور ایک خاص ترتیب سے رکھنا)۔	____	____	____	____
36.	میرا بچہ/بچی ذہن میں برے اور بے وقوفانہ خیالات یا تصاویر کی وجہ سے پریشان ہوتا/ہوتی ہے۔	____	____	____	____
37.	میرے بچے کو کچھ چیزیں صحیح طریقے سے کرنی پڑتی ہیں تاکہ بری چیزوں کو ہونے سے روک سکے۔	____	____	____	____
38.	میرے بچے کو ڈر لگے گا اگر اس کو ساری رات کے لئے گھر سے دور رہنا پڑے۔	____	____	____	____
39.	کیا اس کے علاوہ کوئی اور چیز ہے جس سے آپکا بچہ/بچی واقعی خوفزدہ ہوتا/ہوتی ہے۔ آپ سے گذارش ہے کہ لکھیے وہ کیا چیز ہے اور پُر کیجیے کہ وہ اس چیز سے کتنی بار ڈرتا/ڈرتی ہے۔	____	____	____	____

Appendix-N

Child Behavior Checklist/6-18 (Urdu Version)

جائزہ رپورٹ برائے تربیت اطفال بہ عمر 6 تا 18

بچے/بچی کا پورا نام	پہلا	درمیانی	آخری

بچے/بچی کی جنس	بچے/بچی کی عمر	بچے/بچی کا نسلی گروہ یا علاقائیت
☐ لڑکا ☐ لڑکی		

آج کی تاریخ	بچے/بچی کی تاریخ پیدائش
مہینہ_____ دن _____ سال _____	مہینہ_____ دن _____ سال _____

اسکول کی جماعت: _____

اسکول نہیں جاتا/جاتی: ☐

بچے/بچی کے رویّوں کے متعلق اپنی رائے کا اظہار کیجئے۔ اگرچہ کہ دوسرے اس سے اتفاق نہ کریں صفحہ نمبر دو پر دی گئی جگہ پر اور سوال کے سامنے اپنے اضافی خیالات کا آزادانہ اظہار کیجئے۔ خیال سے تمام سوالات کے جواب دیجئے۔

والدین کے کام کی نوعیت اگر چہ ابھی کام نہ کرتے ہوں (واضح کیجئے مثلاً آٹو میکینک، اسکول ٹیچر، خاتون خانہ، مزدور، لیتھ مشین آپریٹر، جوتا فروش، فوج کا جوان)

والد کے کام کی نوعیت: _____

والدہ کی کام کی نوعیت: _____

فارم بھرنے والے کا نام: (پورا نام لکھیے) _____

آپ کی جنس: ☐ مرد ☐ عورت

بچے/بچی سے آپ کا رشتہ:

☐ حقیقی ماں/ باپ ☐ سوتیلے ماں/باپ

☐ نانا/نانی، دادا / دادی ☐ متبنی ماں/باپ

☐ رضاعی ماں/ باپ ☐ دیگر وضاحت کیجئے۔

I۔ برائے مہربانی اُن کھیلوں کا ذکر کیجئے جن میں آپ کا بچہ بہت زیادہ حصّہ لینا پسند کرتا/ کرتی ہے مثلاً تیراکی، بیس بال، اسکیٹنگ، اسکیٹ بورڈ، سائیکل سواری، کرکٹ، ہاکی، فٹبال وغیرہ

کوئی نہیں ☐

اپنے ہم عمر بچوں کے مقابلے میں وہ ہر کھیل میں تقریباً کتنا وقت دیتا/دیتی ہے

اپنے ہم عمر بچوں کے مقابلے میں وہ ہر کھیل کو کتنا بہتر انجام دیتا/دیتی ہے

	اوسط سے کم	اوسط	اوسط سے زیادہ	نہیں معلوم	اوسط سے کم	اوسط	اوسط سے زیادہ	نہیں معلوم
ا۔ _____	☐	☐	☐	☐	☐	☐	☐	☐
ب۔ _____	☐	☐	☐	☐	☐	☐	☐	☐
ج۔ _____	☐	☐	☐	☐	☐	☐	☐	☐

II۔ برائے مہربانی کھیلوں کے علاوہ اپنے بچے کے دیگر مشغلوں اور سرگرمیوں کا ذکر کیجئے مثلاً ٹکٹ جمع کرنا، گڑیا، کتابیں، پیانو بجانا، دستکاری گاڑیاں، کمپیوٹر، گانا، پینٹنگ وغیرہ [ریڈیو سننا اور ٹی وی دیکھنا شامل نہ کریں]

کوئی نہیں ☐

اپنے ہم عمر بچوں کے مقابلے میں وہ ہر کھیل یا مشغلے میں تقریباً کتنا وقت دیتا/دیتی ہے۔

اپنے ہم عمر بچوں کے مقابلے میں وہ ہر کھیل یا مشغلے کو کتنا بہتر انجام دیتا/دیتی ہے۔

	اوسط سے کم	اوسط	اوسط سے زیادہ	نہیں معلوم	اوسط سے کم	اوسط	اوسط سے زیادہ	نہیں معلوم
ا۔ _____	☐	☐	☐	☐	☐	☐	☐	☐
ب۔ _____	☐	☐	☐	☐	☐	☐	☐	☐
ج۔ _____	☐	☐	☐	☐	☐	☐	☐	☐

III۔ برائے مہربانی اگر آپ کے بچے کا تعلق کسی تنظیم، کلب، ٹیم یا گروپ سے ہے تو اس کا ذکر کیجئے۔

کوئی نہیں ☐

اپنے ہم عمر بچوں کے مقابلے وہ ان سرگرمیوں میں کتنا کُھرتیلا/کُھرتیلی ہے۔

	اوسط سے کم	اوسط	اوسط سے زیادہ	نہیں معلوم
ا۔ _____	☐	☐	☐	☐
ب۔ _____	☐	☐	☐	☐
ج۔ _____	☐	☐	☐	☐

یقین کرلیں کہ آپ نے تمام سوالات کے جواب دے دیئے ہیں اس کے بعد اگلے صفحے پر جائیں

Appendix-O

INSTRUCTIONS FOR URDU TRANSLATION OF (ICU-P)

I am a PhD Scholar at National Institute of Psychology and for the partial fulfillment of PhD thesis titled "Psychosocial functioning of children with childhood behavioral problems", you are requested to translate the items given in the scale into Urdu by following the instructions given below:

Translate all items from English to Urdu by trying to keep content equivalence between both versions. You are requested to use simple Urdu words in order to maintain moderate comprehension level. Translate items without any change or substitution of item in the original text.

Thank you.

Appendix-P

ITEMS OF CALLOUS-UNEMOTIONAL TRAITS (PARENT VESION) GIVEN TO BILINGUALS FOR TRANSLATION INTO URDU

Callousness (*n* = 11)

Item No.	Statements
4	Does not care who he/she hurts to get what he/she wants.
8	Is concerned about the feelings of others.
9	Does not care if he/she is in trouble.
18	Shows no remorse when he/she has done something wrong.
11	Does not care about doing things well.
21	The feelings of others are unimportant to him/her.
7	Does not care about being on time.
20	Does not like to put the time into doing things well.
2	Does not seem to know “right” from “wrong”.
10	Does not let feelings control him/her.
12	Seems very cold and uncaring.

Uncaring (*n* = 8)

15	Always tries his/her best.
23	Works hard on everything.
16	Apologizes (says he/she is sorry) to persons he/she has hurt.
3	Is concerned about school work.
17	Tries not to hurt others feelings.
24	Does things to make others feel good.
13	Easily admits to being wrong.
5	Feels bad or guilty when he/she has done something wrong.

Unemotional (*n* = 5)

1	Expresses his/her feelings openly.
19	Is very expressive and emotional.
6	Does not show emotions.
22	Hides his/her feelings from others.
14	It is easy to tell how he/she is feeling.

Appendix-Q

FINAL SELECTED ITEMS AFTER URDU TRANSLATION OF ICU-P

Callousness (n = 11)

Item No.	Statements
4	اس بات کی پرواہ نہیں کرتا/کرتی کہ وہ اپنی خواہش کے حصول کے لیے کسی کو تکلیف پہنچا رہا/رہی ہے۔
8	دوسروں کے احساسات کی پرواہ کرتا/کرتی ہے۔
9	اگر مصیبت میں ہو تو اس کی پرواہ نہیں کرتا/کرتی۔
18	وہ غلطی کرنے پر ندامت کا اظہار نہیں کرتا/کرتی۔
11	پرواہ نہیں کرتا/کرتی کہ چیزوں کو اچھے طریقے سے کرے۔
21	دوسروں کے احساسات اس کے لئے غیر اہم ہیں۔
7	پابندی وقت کا خیال نہیں کرتا/کرتی۔
20	کام بہتر طریقے سے کرنے میں وقت لگانا پسند نہیں کرتا/کرتی۔
2	لگتا ہے وہ اچھے بُرے کی تمیز نہیں جانتا۔
10	اپنے احساسات کو خود کو کنٹرول نہیں کرنے دیتا/دیتی۔
12	بہت سرد مزاج اور دوسروں کا دھیان نہ رکھنے والا معلوم ہوتا/ہوتی ہے۔

Uncaring (n = 8)

Item No.	Statements
15	ہمیشہ بہترین کرنے کی کوشش کرتا/کرتی ہے۔
23	ہر کام سخت محنت سے کرتا/کرتی ہے۔
16	جس کسی کو تکلیف پہنچاتا/پہنچاتی ہے اس سے معافی مانگتا/مانگتی ہے۔
3	سکول کے کام کے لئے فکر مند رہتا/رہتی ہے۔
17	کوشش کرتا/کرتی ہے کہ کسی کے احساسات کو ٹھیس نہ پہنچائے۔
24	دوسروں کو خوش رکھنے کے لئے کام کرتا/کرتی ہے۔
13	آسانی سے اپنی غلطی تسلیم کر لیتا/لیتی ہے۔
5	کچھ غلط کرنے پر بُرا یا قصوروار محسوس کرتا/کرتی ہے۔

Unemotional (n = 5)

Item No.	Statements
1	کھل کر اپنے احساسات (feelings) کا اظہار کرتا/کرتی ہے۔
19	بہت جذباتی اور کھل کر اظہار کرنے والا/والی ہے۔
6	جذبات کا اظہار نہیں کرتا/کرتی۔
22	اپنے احساسات دوسروں سے چھپاتا/چھپاتی ہے
14	یہ بتانا آسان ہے کہ وہ کیسا محسوس کر رہا/رہی ہے۔

Appendix-R

FINAL SELECTED ITEMS AFTER BACK TRANSLATION OF ICU-P

Callousness (*n* = 11)

Item No.	Statements
4	Does not care who he/she is hurting someone for the fulfillment of his/her desire.
8	Is concerned about other feelings.
9	Does not care if he/she is trouble.
18	Does not show guilt after doing something wrong.
11	Does not care about doing things well.
21	The feelings of others are unimportant for him/her.
7	Does not care to be on time.
20	Does not like to spend time on working in a better way.
2	It seems that he does not know the difference of right and wrong.
10	Does not let own feelings to control himself/herself.
12	Seems very cold and uncaring of others.

Uncaring (*n* = 8)

15	Always tries to do his/her best.
23	Does every task with hard work.
16	Apologizes every who he/she hurts.
3	Remains worried about school work.
17	Tries not to hurt others feelings.
24	Does work to make others happy.
13	Easily admits his/her mistake.
5	Feels bad or guilty when does something wrong.

Unemotional (*n* = 5)

1	Expresses his/her feelings openly.
19	Is very expressive and emotional.
6	Does not express emotions.
22	Hides his/her feelings from others.
14	It is easy to tell, how he/she is feeling.

Appendix-S

Inventory of Callous Unemotional Traits (Urdu Version)

ہدایات: سوالنامہ میں دے گئے بیانات کوغور سے پڑھیں اور سامنے دیے گئے جوابات میں سے آپ کے خیال میں جو جواب اس بچے کے کردار کی درست عکاسی کرتا ہے اس پر (✓) کا نشان لگائیں۔

برائے مہربانی تمام سوالات کے جواب دیں۔

نمبر شمار	بیانات	بالکل غلط	کسی حد تک صحیح	صحیح	بالکل صحیح
.1	کھل کر اپنے احساسات (feelings) کا اظہار کرتا/کرتی ہے۔	------	------	------	------
.2	لگتا ہے وہ اچھے بُرے کی تمیز نہیں جانتا/جانتی۔	-----	-----	-----	-----
.3	سکول کے کام کے لئے فکر مند رہتا/رہتی ہے۔	-----	-----	-----	-----
.4	اس بات کی پرواہ نہیں کرتا/کرتی کہ وہ اپنی خواہش کے حصول کے لیے کسی کو تکلیف پہنچا رہا/رہی ہے۔	-----	-----	-----	-----
.5	کچھ غلط کرنے پر بُرا یا قصوروار محسوس کرتا/کرتی ہے۔	-----	-----	-----	-----
.6	جذبات کا اظہار نہیں کرتا/کرتی۔	-----	-----	-----	-----
.7	پابندی وقت کا خیال نہیں کرتا/کرتی۔	-----	-----	-----	-----
.8	دوسروں کے احساسات کی پرواہ کرتا/کرتی ہے۔	-----	-----	-----	-----
.9	اگر مصیبت میں ہو تو اس کی پرواہ نہیں کرتا/کرتی۔	-----	-----	-----	-----
.10	اپنے احساسات کو خود کو کنٹرول نہیں کرنے دیتا/دیتی۔	-----	-----	-----	-----
.11	پرواہ نہیں کرتا/کرتی کہ چیزوں کو اچھے طریقے سے کرے۔	-----	-----	-----	-----
.12	بہت سرد مزاج اور دوسروں کا دھیان نہ رکھنے والا معلوم ہوتا/ہوتی ہے۔	-----	-----	-----	-----
.13	آسانی سے اپنی غلطی تسلیم کر لیتا/لیتی ہے۔	-----	-----	-----	-----
.14	یہ بتانا آسان ہے کہ وہ کیسا محسوس کر رہا/رہی ہے۔	-----	-----	-----	-----
.15	ہمیشہ بہترین کرنے کی کوشش کرتا/کرتی ہے۔	-----	-----	-----	-----
.16	جس کسی کو تکلیف پہنچاتا/پہنچاتی ہے اس سے معافی مانگتا/مانگتی ہے۔	-----	-----	-----	-----
.17	کوشش کرتا/کرتی ہے کہ کسی کے احساسات کو ٹھیس نہ پہنچائے۔	-----	-----	-----	-----
.18	وہ غلطی کرنے پر ندامت کا اظہار نہیں کرتا/کرتی۔	-----	-----	-----	-----
.19	بہت جذباتی اور کھل کر اظہار کرنے والا/والی ہے۔	-----	-----	-----	-----
.20	کام بہتر طریقے سے کرنے میں وقت لگانا پسند نہیں کرتا/کرتی۔	-----	-----	-----	-----
.21	دوسروں کے احساسات اس کے لئے غیر اہم ہیں۔	-----	-----	-----	-----
.22	اپنے احساسات دوسروں سے چھپاتا/چھپاتی ہے۔	-----	-----	-----	-----
.23	ہر کام سخت محنت سے کرتا/کرتی ہے۔	-----	-----	-----	-----
.24	دوسروں کو خوش رکھنے کے لئے کام کرتا/کرتی ہے۔	-----	-----	-----	-----

Appendix-T

اجازت نامہ برائے والدہ

میرا تعلق ادارہ نفسیات، قائداعظم یونیورسٹی اسلام آباد سے ہے جو کہ ایک تعلیمی اور تحقیقی ادارہ ہے اور اس کے زیر نگرانی مختلف نفسیاتی اور سماجی موضوعات پر تحقیقات کا کام کیا جاتا ہے۔ موجودہ تحقیق بچوں کے گھر میں مختلف کرداروں کے بارے میں ہے جو کہ عام مشاہدہ میں آتے ہیں۔ بحیثیت والدہ آپ کو بچے کا قریبی مشاہدہ کرنے کا موقع ملتا ہے۔ جس کے باعث آپ بچے کے بارے میں بہترین رائے کا اظہار کر سکتیں ہیں۔ یہ کتابچہ (Booklet) بچوں سے متعلق کچھ سوالناموں پر مشتمل ہے۔ ہر سوالنامہ بچوں سے متعلق کچھ بیانات پر مشتمل ہے۔ ہر بیان کے سامنے ممکنہ جوابات تحریر ہیں آپ سے درخواست کہ ہر بیان کو غور سے پڑھیں اور گزشتہ چھ ماہ کے دوران بچے کے کردار کو مدنظر رکھتے ہوئے سوالنامہ "الف"، "ب"، "پ" اور "ت" میں پوچھے گئے بیانات کا جواب دیں اور جو جواب بچے کے کردار کی جس حد تک عکاسی کرتا ہے اس کے سامنے (✓) کا نشان لگائیں۔

آپ سے درخواست ہے کہ تمام بیانات سے متعلق اپنے جوابات کا اظہار کریں۔ نیز جواب دینے کے لئے پانچ ممکنہ جوابات میں سے صرف کسی ایک پر (✓) کا نشان لگائیں۔ آپ کے جوابات مکمل صیغہ راز میں رکھے جائیں گے اور صرف ریسرچ کے سلسلے میں استعمال ہوں گے۔

نیز دوران ریسرچ اگر کسی موقع پر آپ ریسرچ میں شریک نہ ہونا چاہیں تو آپ کو اجازت ہوگی۔

آپ کا تعاون تحقیق میں مددگار ہوگا۔

شکریہ۔

دستخط والدہ

_____

_____

_____

دستخط ریسرچر

مس میمونہ اسماعیل

پی ایچ ڈی اسکالر

ادارہ قومی نفسیات، قائداعظم یونیورسٹی

اسلام آباد

Appendix-U

اجازت نامہ برائے والدہ

میرا تعلق ادارہ نفسیات، قائداعظم یونیورسٹی اسلام آباد سے ہے جو کہ ایک تعلیمی اور تحقیقی ادارہ ہے اور اس کے زیر نگرانی مختلف نفسیاتی اور سماجی موضوعات پر تحقیقات کا کام کیا جاتا ہے۔موجودہ تحقیق بچوں کے گھر میں مختلف کرداروں کے بارے میں ہے جو کہ عام مشاہدہ میں آتے ہیں۔ بحیثیت والدہ آپ کو بچے کا قریبی مشاہدہ کرنے کا موقع ملتا ہے۔جس کے باعث آپ بچے کے بارے میں بہترین رائے کا اظہار کر سکتیں ہیں۔یہ سوالنامہ بچوں سے متعلق کچھ بیانات پر مشتمل ہے۔ہر بیان کے سامنے ممکنہ جوابات تحریر ہیں آپ سے درخواست کہ ہر بیان کو غور سے پڑھیں اور گزشتہ چھ ماہ کے دوران بچے کے کردار کو مدنظر رکھتے ہوئے پوچھے گئے بیانات کا جواب دیں اور جو جواب بچے کے کردار کی جس حد تک عکاسی کرتا ہے اس کے سامنے (✓) کا نشان لگائیں۔

آپ سے درخواست ہے کہ تمام بیانات سے متعلق اپنے جوابات کا اظہار کریں۔نیز جواب دینے کے لئے ممکنہ جوابات میں سے صرف کسی ایک پر (✓) کا نشان لگائیں۔آپ کے جوابات مکمل صیغہ راز میں رکھے جائیں گے اور صرف ریسرچ کے سلسلے میں استعمال ہوں گے۔

نیز دوران ریسرچ اگر کسی موقع پر آپ ریسرچ میں شریک نہ ہونا چاہیں تو آپ کو اجازت ہوگی۔

آپ کا تعاون تحقیق میں مددگار ہوگا۔

شکریہ۔

دستخط والدہ

_____

_____

_____

دستخط ریسرچر

مس میمونہ اسماعیل

پی ایچ ڈی اسکالر

ادارہ قومی نفسیات، قائداعظم یونیورسٹی

اسلام آباد

Appendix-V

Child Demographic Information Sheet (For Parents)

بچے کا نام _____ جنس _____

بچے کی عمر _____ جماعت _____

والدین کی ازدواجی حیثیت شادی شدہ طلاق شدہ بیوہ

والدہ کی عمر _____ والد کی عمر _____

بچوں کی تعداد _____ بچوں میں اس بچے کا نمبر _____

والد کی تعلیمی قابلیت _____ والد کا پیشہ _____

والدہ کی تعلیمی قابلیت _____ والدہ کا پیشہ _____

والد کی ماہانہ آمدنی _____ والدہ کی ماہانہ آمدنہ _____

خاندانی نظام مخلوط (combined) علیحدہ (Separate)

پتہ: _____

فون نمبر: _____

Appendix-W

Child Demographic Information Sheet (For Teachers)

بچے کا نام_____ جنس_____

بچے کی عمر_____ جماعت_____

گزشتہ امتحان میں بچے کے حاصل کردہ نمبر:_____

سکول کا نام:_____

استاد کا نام:_____

Appendix-X

Permission of Authors for Scale Translation

Previous | Next | Back to Messages Mark as Unread | Print

Delete Reply Forward Spam Move...

Re: DBD Parent / Teacher Rating Scale

Monday, December 8, 2008 9:06 AM

From: "William E. Pelham, Jr." <pelham@acsu.buffalo.edu>

To: mamoona_ismail@yahoo.com

Cc: "Karen Morris" <kmorris2@buffalo.edu>

The scale can be downloaded from our website (see link below). It is in the public domain, so feel free to translate it. Please let me know if you do that and send me a copy of the translation and whatever work you do with it.

Regards,
Bill Pelham

On Dec 6, 2008, at 3:29 AM, mamoona ismail wrote:

> Dear Pelham,
>
> Hope u are fine. I am working on my Ph.D work in area of developmental psychopathology. I want to use your scale (**DBD Parent / Teacher Rating Scale**) after translating it into our language urdu. It will be useful in collecting information related to the behavior of Pakistani children. If possible, kindly send me your scale and allow me to translate and use it on Pakistani children.
>
> Sincerely,
>
> Mamoona Ismail
> Ph.D Scholar
> National Institute of Psychology,
> Quaid-i-Azam University, Islamabad.
> Pakistan

-Friday afternoon speaker series on Child and Adolescent Mental Health (videos on line)
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Visit our web page at:

http://ccf.buffalo.edu

William E. Pelham, Jr., Ph.D., ABPP
UB Distinguished Professor of Psychology, Pediatrics, and Psychiatry
Director, Center for Children and Families
State University of New York at Buffalo
318 Diefendorf Hall
3435 Main Street, Building 20
Buffalo, NY 14214

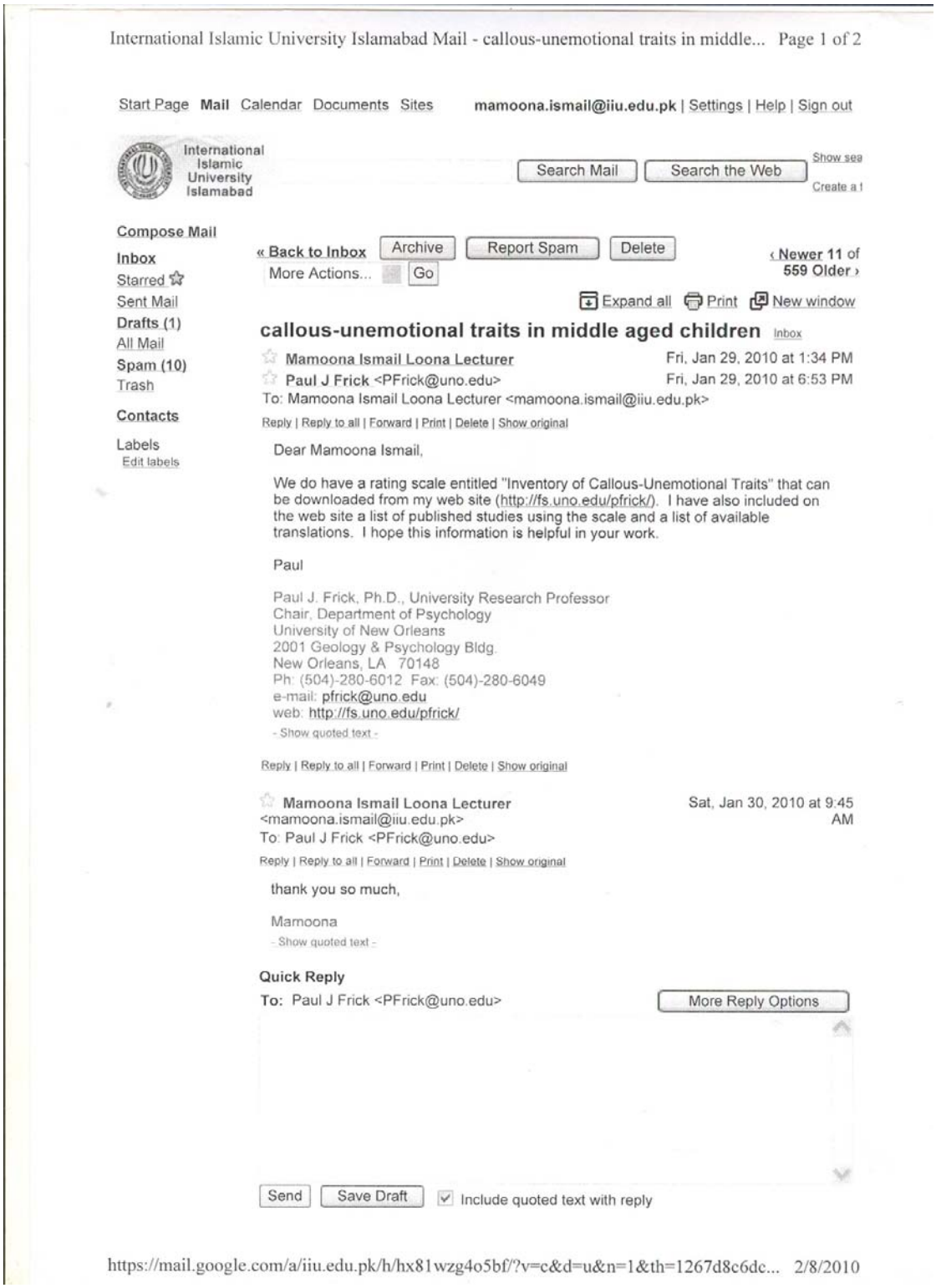
phone: 716-829-2244, extension 29
fax: 716-829-3692
email: pelham@buffalo.edu

--- On Mon, 8/10/09, Sue Spence <*s.spence@griffith.edu.au*> wrote:

> From: Sue Spence <s.spence@griffith.edu.au>
> Subject: Re: Spence Children's Anxiety Scale (SCAS
> To: "mamoona ismail" <mamoona_ismail@yahoo.com>
> Date: Monday, August 10, 2009, 1:17 PM
>
> Dear Mamoona
> you can access the scale at
> www.scaswebsite.com
>
> You are welcome to translate it, but you need to use forward translation using a bilingual person, and then have an independent bilingual person translate it back again. Where there are differences you need to explore the interpretations and ensure the translation is correct.
> If you translate it, you are not able to resell the scale for commercial purposes.
> Also it is helpful if you could send me a copy of the translation once you have some data about it, and I can put your translation on the website.
>
> With kind regards
>
> Sue

****
Professor Susan H Spence
Deputy Vice Chancellor (Academic)
2.17, Bray Centre
Nathan Campus
Griffith University
QLD 4111
Australia
Email: s.spence@griffith.edu.au
Phone: +61 7 3735 6427
Fax +61 7 3735 7507

From:	mamoona ismail <mamoona_ismail@yahoo.com>
To:	sues@psy.uq.edu.au
Date:	10/08/2009 05:45 PM
Subject:	Spence Children's Anxiety Scale (SCAS



International Islamic University Islamabad Mail - callous-unemotional traits in middle... Page 1 of 2

Start Page **Mail** Calendar Documents Sites **mamoona.ismail@iiu.edu.pk** | Settings | Help | Sign out

International Islamic University Islamabad

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Starred
Sent Mail
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Spam (10)
Trash

Contacts

Labels
Edit labels

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More Actions... | Go

Expand all | Print | New window

callous-unemotional traits in middle aged children Inbox

Mamoona Ismail Loona Lecturer Fri, Jan 29, 2010 at 1:34 PM
Paul J Frick <PFrick@uno.edu> Fri, Jan 29, 2010 at 6:53 PM
To: Mamoona Ismail Loona Lecturer <mamoona.ismail@iiu.edu.pk>

Reply | Reply to all | Forward | Print | Delete | Show original

Dear Mamoona Ismail,

We do have a rating scale entitled "Inventory of Callous-Unemotional Traits" that can be downloaded from my web site (http://fs.uno.edu/pfrick/). I have also included on the web site a list of published studies using the scale and a list of available translations. I hope this information is helpful in your work.

Paul

Paul J. Frick, Ph.D., University Research Professor
Chair, Department of Psychology
University of New Orleans
2001 Geology & Psychology Bldg.
New Orleans, LA 70148
Ph: (504)-280-6012 Fax: (504)-280-6049
e-mail: pfrick@uno.edu
web: http://fs.uno.edu/pfrick/

- Show quoted text -

Reply | Reply to all | Forward | Print | Delete | Show original

Mamoona Ismail Loona Lecturer Sat, Jan 30, 2010 at 9:45 AM
<mamoona.ismail@iiu.edu.pk>
To: Paul J Frick <PFrick@uno.edu>

Reply | Reply to all | Forward | Print | Delete | Show original

thank you so much,

Mamoona

- Show quoted text -

Quick Reply

To: Paul J Frick <PFrick@uno.edu> | More Reply Options

Send | Save Draft | Include quoted text with reply

https://mail.google.com/a/iiu.edu.pk/h/hx81wzg4o5bf/?v=c&d=u&n=1&th=1267d8c6dc... 2/8/2010

TEST APPLICATION FORM

Name of Applicant Mamoona Ismail Loona

Name of Supervisor/Professor Prof. Dr. Anila kamal

Institution / Department National Institute of Psychology, QAU. Islamabad.

Test Required: (*title, year, author, edition, and publisher*):

Parental Authority Questionnaire, Babree (1997), NIP.

Purpose: Research / Teaching / Clinical Assessment / Any other

Topic of research / teaching _____

M.Sc./M.Phil./Ph.D./M.S./Diploma/Any other _____

Undertaking

This is hereby specified that the above mentioned information is correct. I applied for the above mentioned scale after appropriate research and consultation with my supervisor. I am convinced that this Test/Videos/Resource Material is especially relevant to my work. I also understand that I have to follow the copy rights requirements of the test developers and will not violate the ethics of research at any moment. This work is the intellectual property of the author / publisher. No part of this test may be reproduced or photocopied or disseminate or to republish without written permission from the author / publisher. I am also under obligation to share my data and research findings with the TRC of NIP.

Supervisor/Professor

Student

Permission granted for the above mentioned research only

COORDINATOR
Test Resource Centre
National Institute of Psychology
Centre of Excellence
Quaid-i-Azam University

Coordinator (Signature & Stamp)

Test Resource Centre

National Institute of Psychology, Quaid-i-Azam University

Appendix-Y

Permission Letters for Data Collection

بسم الله الرحمن الرحيم

Dr. Muhammad Ajmal

National Institute of Psychology

CENTRE OF EXCELLENCE, QUAID-I-AZAM UNIVERSITY
ISLAMABAD, PAKISTAN

Dated: 22.09.2007

Subject: Permission for Collection of Data for Research Purpose.

Dear Sir,

It is certificated that Ms. Mamoona Ismail Loona is a Ph.D Psychology Student at National Institute of Psychology, Quaid-i-Azam University Islamabad. She is undertaking her Ph.D research on **"Psychological Functioning of Children with Conduct Disorders"** under the supervision of Dr. Anila Kamal, Associate Professor. For this purpose she needs your cooperation and support in providing her the necessary facility for data collection from 3rd to 5th classes. The information collected from your organization will be used only for research purpose and will remain strictly confidential.

Your cooperation in this regard will be highly appreciated.

Yours sincerely

(Prof. Dr. Naeem Tariq)
Director

Location: Quaid-i-Azam University, (New Campus), Shahdra Road, (Off Main Murree Road), Islamabad, (Pakistan)
Telephones: 2230703, 2231685, 2230894; Fax: 2230704; Email: nip@nip.edu.pk; Web Site: http://www.nip.edu.pk

Dr. Muhammad Ajmal
National Institute of Psychology
CENTRE OF EXCELLENCE, QUAID-I-AZAM UNIVERSITY
ISLAMABAD, PAKISTAN

Dated: 05-10-2010

Subject: Permission for Collection of Data for Research Purpose

Dear Sir/Madam,

It is certified that Ms. Mamoona Ismail Loona is a Ph.D Psychology Student at National Institute of Psychology, Quaid-i-Azam University Islamabad. She is undertaking her Ph.D research on **"Psychological Functioning of Children with Conduct Disorders"** under the supervision of Prof. Dr. Anila Kamal, Director. For this purpose she needs your cooperation and support in providing her the necessary facility for data collection from 3rd to 5th classes. The information collected from your organization will be used only for research purpose and will remain strictly confidential.

Your cooperation in this regard will be highly appreciated.

Allowed
29-11-2010

Yours sinerely

(Prof. Dr. Anila Kamal)
Director

Location: Quaid-i-Azam University, (New Campus), Shahdra Road, (Off Main Murree Road), Islamabad, (Pakistan)
Telephones: 90644031, 2896013, 2896010-11; Fax: 2896012; Email: nip@nip.edu.pk; Web Site: http://www.nip.edu.pk

Dr. Muhammad Ajmal
National Institute of Psychology
CENTRE OF EXCELLENCE, QUAID-I-AZAM UNIVERSITY
ISLAMABAD, PAKISTAN

Dated: 05-10-2010

Subject: Permission for Collection of Data for Research Purpose

Dear Sir/Madam,

It is certified that Ms. Mamoona Ismail Loona is a Ph.D Psychology Student at National Institute of Psychology, Quaid-i-Azam University Islamabad. She is undertaking her Ph.D research on "**Psychological Functioning of Children with Conduct Disorders**" under the supervision of Prof. Dr. Anila Kamal, Director. For this purpose she needs your cooperation and support in providing her the necessary facility for data collection from 3rd to 5th classes. The information collected from your organization will be used only for research purpose and will remain strictly confidential.

Your cooperation in this regard will be highly appreciated.

Yours sinerely

(Prof. Dr. Anila Kamal)
Director

H.M. to help her collect the required data.
S. Mumtaz
27-11-10

Rafiullah
29/11/10

Dr. Muhammad Ajmal
National Institute of Psychology
CENTRE OF EXCELLENCE, QUAID-I-AZAM UNIVERSITY
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C.T.'s Pl. help her in completing her form work

Your cooperation in this regard will be highly appreciated.

27/10/10

Yours sincerely

(Prof. Dr. Anila Kamal)
Director

8663
26.11.10

26/XI

27/11/2010

Dr. Muhammad Ajmal
National Institute of Psychology
CENTRE OF EXCELLENCE, QUAID-I-AZAM UNIVERSITY
ISLAMABAD, PAKISTAN

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Yours sinerely

(Prof. Dr. Anila Kamal)
Director

بسم الله الرحمن الرحيم

Dr. Muhammad Ajmal
National Institute of Psychology
CENTRE OF EXCELLENCE, QUAID-I-AZAM UNIVERSITY
ISLAMABAD, PAKISTAN

Dated: 22.09.2007

Subject: Permission for Collection of Data for Research Purpose.

Dear Sir,

It is certificated that Ms. Mamoona Ismail Loona is a Ph.D Psychology Student at National Institute of Psychology, Quaid-i-Azam University Islamabad. She is undertaking her Ph.D research on **"Psychological Functioning of Children with Conduct Disorders"** under the supervision of Dr. Anila Kamal, Associate Professor. For this purpose she needs your cooperation and support in providing her the necessary facility for data collection from 3rd to 5th classes. The information collected from your organization will be used only for research purpose and will remain strictly confidential.

Your cooperation in this regard will be highly appreciated.

Yours sincerely

(Prof. Dr. Naeem Tariq)
Director

M. allange.
V.P (college)
Madam Kindly help the lady
Please
14-11-2007

Dr. Muhammad Ajmal
National Institute of Psychology
CENTRE OF EXCELLENCE, QUAID-I-AZAM UNIVERSITY
ISLAMABAD, PAKISTAN

Dated: 05-10-2010

Subject: Permission for Collection of Data for Research Purpose

Dear Sir/Madam,

It is certified that Ms. Mamoona Ismail Loona is a Ph.D Psychology Student at National Institute of Psychology, Quaid-i-Azam University Islamabad. She is undertaking her Ph.D research on **"Psychological Functioning of Children with Conduct Disorders"** under the supervision of Prof. Dr. Anila Kamal, Director. For this purpose she needs your cooperation and support in providing her the necessary facility for data collection from 3rd to 5th classes. The information collected from your organization will be used only for research purpose and will remain strictly confidential.

Your cooperation in this regard will be highly appreciated.

Yours sinerely

Allowed to contact the teachers of class 3rd to 5th. on 10/12

(Prof. Dr. Anila Kamal)
Director

26/11

Location: Quaid-i-Azam University, (New Campus), Shahdra Road, (Off Main Murree Road), Islamabad, (Pakistan)
Telephones: 90644031, 2896013, 2896010-11; Fax: 2896012; Email: nip@nip.edu.pk; Web Site: http://www.nip.edu.pk

Appendix-Z1

Permission for Using Child Behavior Checklist/6-18 (Urdu Version)

The University of Vermont

ASEBA
RESEARCH CENTER FOR CHILDREN, YOUTH, & FAMILIES, INC.
A NONPROFIT CORPORATION
1 SOUTH PROSPECT ST., BURLINGTON, VT 05401-3456
TEL. 802-264-6432; FAX 802-264-6433
EMAIL: mail@ASEBA.org
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If you have any questions, please call us at (802) 656-5130.

Sincerely,

Ramani Sunderaju

Ramani Sunderaju
Operations Manager

The University of Vermont
ASEBA
Research Center for Children, Youth & Families, Inc.
A Non-Profit Corporation
1 South Prospect Street, St Joseph's Wing (Room #3207), Burlington, VT 05401
Telephone: (802)656-5130 / Fax: (802)656-5131
Email: mail@aseba.org / Website: http://www.aseba.org

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Address is: National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan; e-mail: dranilakamal@gmail.com; telephone: (9251) 289 6010, 289 6013; fax: +9251 289 6012.

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(a) Upon thirty (30) days' written notice in the event that Licensee, their officers or employees violates any material provision of this License Agreement, including but not limited to, the confidentiality provisions and use restrictions in the license grant, and is unable to cure such breach during such thirty (30) day period; or

(b) In the event Licensee (i) terminates or suspends business; (ii) becomes subject to any bankruptcy or insolvency proceeding under Federal or state statute or (iii) becomes insolvent or becomes subject to direct control by a trustee, receiver or similar authority.

written, between the parties relating to this Agreement. This Agreement may not be modified or altered except by written instrument duly executed by both parties.

(b) Dates or times by which Licensor is required to make performance under this license shall be postponed automatically to the extent that Licensor is prevented from meeting them by causes beyond its reasonable control.

(c) This Agreement and performance hereunder shall be governed by the laws of the State of Vermont.

(d) No action, regardless of form, arising out of this Agreement may be brought by Licensee more than two years after the cause of action has arisen.

(e) If any provision of this Agreement is invalid under any applicable statute or rule of law, it is to the extent to be deemed omitted.

(f) The Licensee may not assign or sub-license, without the prior written consent of Licensor, its rights, duties or obligations under this Agreement to any person or entity, in whole or in part.

(g) Licensor shall have the right to collect from Licensee its reasonable expenses incurred in enforcing this agreement, including attorney's fees.

(h) The waiver or failure of Licensor to exercise in any respect any right provided for herein shall not be deemed a waiver of any further right hereunder.

Accepted and Agreed to:

LICENSOR:

Thomas M. Achenbach, Ph.D.

Signature: 

Title: Professor

Date: March 10, 2011

For License # 556-03-04-11

Accepted and Agreed to:

LICENSEE:

Mamoona Ismail Loona

Signature

Print name: Miss Mamoona Ismail Loona

Title: Lecturer

Address: National Institute of Psychology, Quaid-I-Azam University, Islamabad. Pakistan.

Date: March 05, 2011

Appendix-Z2

Permission to Exclude 5-items of Child Behavior Checklist/6-18 (Urdu Version)

6-10-10

Hi Mamoona,

We do not generally permit use of subsets of ASEBA problem items, because the data obtained with subsets would not be comparable to the normative, reliability, and validity data obtained with the standard set of items. The results obtained with subsets of items would also differ from the results obtained with the standard sets of items that have been used in thousands of studies.

Possible Exceptions

1. We would consider requests to omit up to about 8 problem items for special reasons, e.g., omission of alcohol and sex-related items for Muslim respondents.

2. We would consider requests to omit open-ended responses to items that specify "describe" (e.g., items 2, 9, 29) and to omit CBCL and TRF items 113 that request the respondent to write in additional problems.

3. We would consider requests to use subsets of competence and adaptive functioning items.

4. We would consider requests to omit the demographic items at the beginning of each form, although age and gender are needed to score scales in relation to age/gender norms.

If you would like to use the entire form, please let us know. You may also write an explanation why you want to use only some subscales and I can speak with Dr. Achenbach and see if he will approve it.

Ramani

****

Ramani Sunderaju
Operations Manager
ASEBA - Research Center for Children, Youth and Families
University of Vermont
1 South Prospect Street
St Joseph's Wing, Room # 3210B
Burlington, VT 05401
Telephone: (802)656-5137
Fax: (802)656-5131
http://www.aseba.org

-----Original Message-----

The University of Vermont

ASEBA
RESEARCH CENTER FOR CHILDREN, YOUTH, & FAMILIES, INC.
A NONPROFIT CORPORATION
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