PARENTING PRACTICES AND BEHAVIORAL PROBLEMS AMONG ADOLESCENTS HAVING PARENTS WITH PSYCHOPATHOLOGY: ADOLESCENTS' COPING AND EFFORTFUL CONTROL AS MODERATORS

By

FAZAILA SABIH

Dr. Muhammad Ajmal

National Institute of Psychology

Centre of Excellence

Quaid-i-Azam University

Islamabad-Pakistan

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By

FAZAILA SABIH

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Centre of Excellence
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University of: Quaid-i-Azam University, Islamabad

Student Name: Fazaila Sabih Signature: ____________

Examination Committee

External Examiners:

1. Name: Dr. Thomas M. Achenbach
   Professor of Psychiatry and Psychology University of Vermont, 1 South Prospect Street Burlington, VT 05401-3456, USA
2. Name: Dr. Karen L. Bierman
   Evan Pugh University Professor, Director, Child Study Center, The Pennsylvania State University, University Park, PA 16802, USA

Internal Examiners:

1. Name: Dr. Tanvir Akhtar (HOD, Department of Psychology, Foundation University, Rawalpindi Campus). House No. 198, Lane No. 07, Askari-10, Rawalpindi.
2. Name: Dr. Mumtaz Fatima Jaffary, House No. 52/2 Street. No. 22 Sector I, Airport Housing Society, Rawalpindi.

Supervisor Name: Prof. Dr. Muhammad Anis-ul-Haque Signature: ____________

Name of Dean/HOD: Prof. Dr. Anila Kamal Signature: ____________

FOREIGN EVALUATORS

Dr. Thomas M. Achenbach
Professor of Psychiatry and Psychology
University of Vermont,
1 South Prospect Street Burlington,
VT 05401-3456, USA
Email: Thomas.Achenbach@uvm.edu

Dr. Karen L. Bierman
Evan Pugh University Professor
Director, Child Study Center
The Pennsylvania State University
University Park, PA 16802, USA
Email: kb2@psu.edu

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By

FAZAILA SABIH

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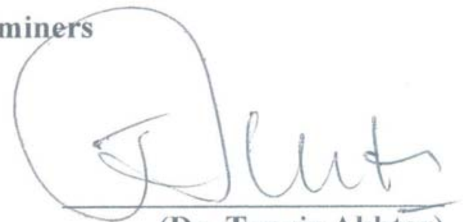

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Dr. M. Anis-ul-Haque

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Dedicated to

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ABSTRACT

Mental disorders studied in offspring research typically show familial aggregation of psychiatric and psychological problems. A large body of research suggests that symptoms of mental illness in parents become reflected in family and parent–child interactions, affecting the nature and quality of caregiving and, in turn, both short- and long-term child outcomes (Beardslee, Gladstone & O'Conner, 2011; Downey & Coyne, 1990; Goodman & Gotlib, 1999, 2002). There is reason to believe that these parenting processes are part of a larger set of factors that contribute to patterns of intergenerational transmission of problems (Zahn-Waxler, Duggal & Gruber, 2002). Despite the tremendous work on parent–child interactions and emotional behavioral outcomes in children of parents with psychopathology in Western countries, there was an extreme scarcity in Pakistan for empirical support for this area of research. The present research aims to examine differences in parenting practices and behavioral problems among adolescents having parents with psychopathology (Major Depressive Disorder & Schizophrenia) and without psychopathology. It also investigated the association between parenting practices and behavioral problems among adolescents having parents with psychopathology. Moreover, it attempts to explore moderating role of adolescents' coping and effortful control on the relationship between parenting practices and behavioral problems among adolescents having parents with psychopathology. The present research was conducted in two phases. The phase-I aimed at establishing psychometric properties of measures used in the present study. The findings of the pilot study indicated that all the Urdu translated scales of the

present study supported the evidence of reliability and suggested appropriateness and relevance of these measures for Pakistani culture. Phase-II aimed to test the hypotheses of present research. Sample of the main study consisted of 348 parents and their adolescent children divided into two groups (Clinical Group i.e., Parents with Psychopathology =173, Control Group i.e., Parents without Psychopathology =175). The clinical group was selected from different psychiatric departments and clinics from the twin cities of Rawalpindi and Islamabad. Urdu translated version of Alabama Parenting Questionnaire (APQ) for both parent and adolescent reported parenting practices, Youth Self Report (YSR) for adolescent reported behavioral problems, Brief COPE to assess adolescent reported coping strategies and Effortful Control subscale of Early Adolescent Temperament Questionnaire-Revised Short Version (EATQ-R) to assess effortful control were used for information collection. Results of present research indicated that parents with psychopathology reported less positive involvement/parenting and more negative/ineffective discipline and deficient monitoring. The adolescents having parents with psychopathology also reported elevated levels of behavioral problems (internalizing and externalizing problems) as compared to adolescents having parents without psychopathology. The findings also indicated that positive involvement/parenting was significantly negatively associated with internalizing and externalizing problems whereas negative/ineffective discipline and deficient monitoring were significantly positively associated with externalizing problems. The findings further suggested significant positive association between deficient monitoring and internalizing problems. However, the findings of the present research could not suggest significant association between negative/ineffective discipline and internalizing problems. The main effect of coping strategies and

effortful control on behavioral problems among adolescents indicated significant association in the expected direction. The results of moderation analyses revealed that problem-focused coping, positive coping, and effortful control mitigated the potential impact of negative parenting practices (i.e. negative/ineffective discipline and deficient monitoring) on externalizing problems whereas denial exacerbated this relationship. The results further indicated that problem-focused coping, religious coping, denial and effortful control also moderated the relationship between positive/involvement parenting and externalizing problems. However, interactive effect of avoidant coping on the relationship between any aspect of parenting practices and behavioral problems among adolescents was not supported in the present study. Furthermore, the moderating role of coping strategies and effortful control on the relationship between parenting practices and internalizing problems was not found. It is concluded that problem-focused coping, positive coping, religious coping and effortful control have served as important moderators between parenting practices and externalizing problems. Despite its limitations, the results of this study are promising and significantly contribute to the existing literature. The implications are discussed for the implementation of effective preventive interventions with at risk families and children.

Chapter I

INTRODUCTION

Interest in the association between parenting practices and developmental outcomes in children has long been a fundamental concern of social scientists. This is a reality regardless of the direction of an individual's basic developmental orientation whether it is genetic or environmental as the two orientations lay a remarkable emphasis on parental characteristics and influence. Understanding the manner in which parental psychological characteristics can affect the developing child's emotional and behavioral adjustment has grown immensely over the last decade (Factor & Wolfe, 1990).

Parents are the primary caregivers as well as central to the family's functioning. They have the most important influence on the lives of their children. They are viewed as the primary source of socialization and much of what parents do strongly influences children's social, emotional and psychological adjustment. Affectionate parent-child relationship and an atmosphere of appreciation, compassion, and understanding promote positive emotions in children that provide a foundation for the healthy social relationships formed by the children in later life. A child develops a sense of trust or mistrust according to whether his basic, physical as well as emotional needs are met satisfactorily at home. A child, whose own emotional needs are catered properly, is more responsive to the emotions of others (Maccoby, 1992).

For any child, experiencing life with a parent who has a mental illness is the most distressing event as the children of parents whose parents have mental illness may experience a home environment that is often very hostile, chaotic, and threatening. The experience of this home environment may be different from many other children. The perception of this experience is best illustrated by the Falkov (2004) who said *"the children of parents whose parents have mental illness live with the symptoms, behaviors and expressions of mental illness. They see it and feel it"* (p.55). These parents may be withdrawn and emotionally unavailable to their children (Jacobsen & Miller, 1998; Oyserman, Mowbray, Allen-Meares, & Firminger, 2000). The impaired psychological functioning of parents may interfere with parenting quality (Lovejoy, Graczyk, O'Hare, & Neuman, 2000) and have substantial impact on the entire family especially children. The dysfunctional patterns of parenting in these parents may augment the overall risk to their families' psychological wellbeing and their children's poor physical, psychological, emotional, behavioral, and social development at all ages (Beardslee, Versage, & Gladstone, 1998; Beardslee et al., 2011; Downey & Coyne, 1990; Gladstone, Boydell, Seeman, & McKeever, 2011; Herbert, Manjula, & Philip, 2013; Mattejat & Remschmidt, 2008; Reupert & Mayberry, 2007).

Parental psychopathology is now considered to be the important point of intervention for at-risk children and youth. Psychopathologists are not only trying to uncover underlying causes of parental psychopathology but also trying to minimize its deleterious effects on the psychological functioning and development of children. Most of the research in the field of psychopathology is focusing on identification,

prevention and intervention of adverse social and psychological outcomes in children of parents with psychopathology (Christiansen, Anding, Schrott, & Rohrle, 2015; Fraser, James, Anderson, Lloayd, & Judd, 2006; Gladstone & Beardslee, 2009; Siegenthaler, Munder, & Egger, 2012).

The present research is an effort aimed at investigating the differences in parenting practices and behavioral problems among adolescents having parents with psychopathology and without psychopathology. The study also intends to find association between parenting practices and behavioral problems among adolescents having parents with psychopathology. Moreover, it attempts to explore moderating role of adolescents' coping and effortful control on the relationship between parenting practices and behavioral problems among adolescents having parents with psychopathology.

Parental Psychopathology

The term 'psychopathology' is defined as scientific study of mental disorders which is used to understand the origins of mental disorders, how they develop and the symptoms they produce in a person. According to Goldman (2000) psychopathology is defined as *"the study of mental disorders and abnormal thoughts, feelings and behavior"* (p. 107). The term parental psychopathology in the present study is defined as parental mental disorders like major depressive disorder and schizophrenia according to the diagnostic criteria of DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association [APA], 2013).

Mental illness includes a variety of psychiatric symptoms that are not only persistent and pervasive but also functionally incapacitating in different life skills such as family life, social relationships, education, and occupation. None other disorders are as common and disabling as mental disorders. These disorders affect a large proportion of the whole life course and have an enduring impact on the individuals affecting every facet of their life such as personal and domestic life, workplace, self-care and independent living. Individuals with mental disorders often cannot function in optimal ways as mental disorders interfere with their ability to work, relating to family and friends, leisure activities and overall productivity (Johnson, 1997).

The dilemma of mental disorders in adults is compounded when these adults are parents, because of its enduring effect on parenting as well as the impact on the well-being of their children. The burden of suffering is greater for the parents as well as for other family members. The disabling effects of parental psychopathology are not only limited to the affected individual but also go beyond to the broader family context particularly the children who are dependent on the parents for caregiving, nurturance, and material support. Under these circumstances, parental psychopathology becomes a multigenerational problem that can have serious biological, psychological, behavioral, and social consequences, especially for their children. Once disturbed, parents have not only an impact on their own likely human capital, but also on social capital, and their decisions on allocating their resources. These factors have a short and long-term effect on the wellbeing of whole family (England & Sim, 2009).

The problem becomes even more pronounced in a country like Pakistan, where there is no support from the state (i.e., institutional support like other welfare states) coupled with the lengthy duration of child dependence on the parents till the age of 25 or even above. The common practices to depend on parents/family for everyday need including education, food, clothing, shelter, health care, and even marriage etc, continue on well into adulthood and significantly affect the lives of parents as well as children. The situation here in Pakistan, is quite different from the western perspective or developed nation. The adolescents here are more dependent on their parents as compared to their counterparts in other western or developed countries.

The manifestation of parental mental disorders can be mild or it may be severe and long-term hampering their ability to deal and cope with daily household tasks. There are a range of parental mental disorders including schizophrenia and other psychotic disorders, depressive disorders, bipolar disorders, personality disorders, anxiety disorders, and substance use disorders etc. The present study has focused on parental major depressive disorder (MDD) and schizophrenia according to the diagnostic criteria of DSM-5 (APA, 2013). First a brief overview of these disorders is presented below.

Major Depressive Disorder. Major depressive disorder (MDD) is among the most common, universal, highly prevalent, often recurrent, and debilitating psychological disorder with major health, social and economic consequences. It is among the greatest challenges of modern health and a leading cause of disability (Lopez, Mathers, Ezzati, Jamison, & Murray, 2006). Worldwide, 350 million people

of all ages become ill with depression (World Health Organization [WHO], 2012). In Pakistan, information on prevalence of mental illness is not available. However, according to WHO (2011) in Pakistan, neuropsychiatric disorders are estimated to be 11.9%. A systematic review showed, in the community population the general profile of mental illnesses depicts an overall 34% mean prevalence of anxiety and depressive disorders, serious mental illnesses like schizophrenia and bipolar disorders account for 1- 2% of the population (Mirza & Jenkins, 2004).

MDD is more common among females than men; approximately 1.5 to 3 times higher rates of MDD have been reported in females beginning in early adolescence than males (APA, 2013). Approximately 60% individuals meeting criteria for MDD exhibit severe impairment of daily functioning. Impairment associated with depression is long-lasting and badly affects the various domains of a person's life including home and family life, work life, interpersonal relationships, capability for self care and hygiene, and disrupts independent living (Kessler et al., 2003).

Criteria for classifying MDD are established by the DSM-5 (APA, 2013) which requires symptoms of depression must be present persistently for at least 2 weeks. These symptoms include persistent sad or depressed mood and loss of enjoyment in daily activities. For the diagnosis of MDD additional symptoms include changes in appetite, sleep, weight, and concentration, feelings of worthlessness, suicidal ideation, psychomotor retardation or agitation.

Depression is a multifaceted and complex disorder caused by an interaction of multiple processes such as genetic, biological, psychological, cognitive, behavioral,

interpersonal, and social. Depression results due to interaction of both physiological as well as psychological processes. Biological, psychological and social factors all significantly contribute to the development and prognosis of depression.

The evidence for genetic transmission of depression is strong suggesting that a biological vulnerability can be inherited. The recent estimate of heritability of major depression is 37% showing greater influence of genetic factors (Bienvenu, Davydow, & Kendler, 2011). Twin studies and adoption studies indicate that the illness is more among biological offspring than in adopted offspring. Among twins, concordance rate for the monozygotic twins is higher (60-70%) than the dizygotic twins (20%). Family studies report higher incidence of depressive illness (20%) among parents, siblings and children of affected individuals than the normal controls (6%) [Namboodiri, 2009].

Depressive disorder is often associated with changes in brain neurotransmitters or brain functions. In the past decades studies have shown that disruptions in the delicate balance of neurotransmitter substances may lead to depressive disorders. Three important neurotransmitters are norepinephrine, dopamine and serotonin. This hypothesis suggests that a low level of these neurotransmitters in the brain is associated with depression (Thase, Jindal, & Howland, 2002). Other physiological conditions which may trigger depression include pregnancy, child birth, menopause and acute and systemic illnesses (Namboodiri, 2009).

Freud (1917) hypothesized that depression could occur in response to imagined or symbolic losses. According to him, potential for depression is created in

childhood and early unresolved losses result in difficulty in dealing with loss in later years. Neurotic parents who are inconsistent, inconsiderate, and lack in warmth build an unpredictable, hostile environment for the child. Consequently, the child becomes alone, confused, helpless and angry by turning it inwards. In the psychoanalytic view, depression is described as "anger turned inwards" or against oneself. Psychodynamic theorists have also emphasized the importance of poor early mother-infant relationship in establishing a vulnerability to depression. Infants separated from mother at an early age are more prone to depression in later years (Kring, Johnson, Davison, & Neale, 2010).

According to cognitive theorists (Beck, 1967), the depressed mood is a result of negative thoughts and disturbance in cognitive patterns. Because of these negative and dysfunctional cognitive patterns, individual develops a negative triad in which he/she views the self, the environment and the future in a pessimistic way. According to Beck (1967) model, people with depression acquire depressogenic schemas or dysfunctional beliefs, which they develop during childhood and adolescence based on their experiences with parents and significant others. Children who lost a parent or who had poor parenting are more prone to develop such depressogenic schemas.

Behaviorists (Lewinsohn, 1974) assume that reinforcement is an important contributing factor in the development of a healthy and well-adjusted personality and depression develops as a result of significant loss and the consequences of inadequate or insufficient reinforcement. Seligman (1974) described the phenomenon of depression as learned helplessness. He suggested that when organisms are confronted with uncontrollable aversive situations, they acquire a sense of helplessness.

Consequently, this sense of learned helplessness impairs their performance even when situations are controllable and could lead human beings to depression.

Studies also indicate that social factors including negative and stressful life events, for instance, death of a loved one, separation or divorce, unhappy marriage, problems at work, unemployment, lack of social support, immigration, wars, and natural disasters may also trigger depression (Monroe & Harkness, 2005; Wishman & Bruce, 1999).

Schizophrenia. Schizophrenia is a complex, disabling, chronic, and severe mental disorder. It is related to diverse deficits in thought processes, perceptions, social skills and emotional responsiveness. Schizophrenia *"is a disorder characterized by disturbances in thought, emotion, and behavior – disorganized thinking, in which ideas are not logically related; faulty perception and attention; a lack of emotional expressiveness or, at times, inappropriate expressions; and disturbances in the movement and behavior, such as dishelved appearance"* (Kring et al., 2010, p. 320). Schizophrenia is a multifarious syndrome which unavoidably has an overwhelming impact not only on the life of the affected individual but also the entire family. This disorder is linked with impairments in almost every facet of daily functioning such as person's thoughts, speech, perception, judgment ability, and movements. It also disrupts the major areas of functioning such as person's social, interpersonal, and occupational life. The life time risk to develop illness is about 0.3%-0.7% (APA, 2013), and the incidence is between 10 and 15 per 1,000,000 per year and it affects men slightly

more than women. The illness is more prevalent in patients having lower socioeconomic status (Kirkbride et al., 2006).

The characteristic symptoms of schizophrenia include a variety of cognitive, behavioral, emotional, social and occupational dysfunctions. Schizophrenia is a heterogeneous disorder; there is no single specific symptom of schizophrenia that must be present to make the diagnosis. According to the DSM-5, diagnosis of schizophrenia is made; when a clinician recognizes a constellation of signs and symptoms (hallucinations, delusions, disorganized speech, grossly disorganized behavior and diminished emotional expression) that are associated with an individual's impaired social and occupational functioning (APA, 2013).

Genetic studies (family, twin and adoption studies) have consistently documented the major genetic contribution of the schizophrenia. (Riley & Kendler, 2010). Family studies indicated that the risk of having illness is 10 times higher in the first degree relatives (siblings) of schizophrenic patients. The risk is six times and two times more in second and third degree relatives respectively. If one parent has schizophrenia there is 6-10 times more risk of the illness for the offspring which becomes up to 50 times more when both parents are affected (Kendler, Karkowski-Shuman, & Walsh, 1996). Twin studies reveal that the concordance rate for the monzygotic twins is 40-50%, whereas about 10% for the dizygotic twins (Cardno & Gottesman, 2000). Adoption studies have also shown that there is 10 times more chance to inherit the illness compared to the children of mothers having no illness (Kety, Wender, Jacobsen, & Kinney, 1994).

Research has also highlighted the role of certain neurotransmitters (dopamine, norepinephrine, serotonin and glutamate) in the etiology of schizophrenia. Patients with schizophrenia have an overactivity of the dopamine transmission, increased norepinephrine activity, and excess and deficiency of serotonin in the brain. (Nevid, Rathus, & Greene, 2014).

Despite the prominent genetic component, many epidemiological and other studies show that environmental factors, especially pre-and perinatal ones are also important in the etiology of schizophrenia (McGrath & Murray, 2010). Research has shown that the fetuses exposed to maternal influenza during the second trimester and the individuals who experienced obstetric complications such as hypoxia, antepartum hemorrhage, low birth weight, diabetes, and Rhesus incompatibility are more likely to develop schizophrenia. Studies have also suggested that fetuses exposed to maternal influenza during the second trimester are also at an increased risk of schizophrenia (Brown et al., 2004).

Serious pathology of the family environment (broken homes, unstable parents and eccentric child-rearing practices) is a consistent finding in many studies. Discordant relationships between father and mother as well as faulty communication patterns by parents may also be implicated in the etiology of schizophrenia. The conflicting and confusing nature of communication which is termed as “double-bind communication” and high levels of expressed emotion also augment the symptoms of schizophrenia and have been implicated in predicting relapse in patients with schizophrenia. Relapses are more common in the patients with schizophrenia whose families are intolerant with them and make critical comments about their illness, who

report more trauma and abuse in their childhood. Psychological stress by interacting with genetic or neurobiological vulnerability also significantly contributes to the development of schizophrenia thus supporting diathesis-stress theory for schizophrenia. Other psychosocial factors include social isolation, negative life events and difficulties, migration and lowest socioeconomic status, all these stresses precipitate illness in a susceptible individual (Kring et al., 2010).

Mechanism of Risk Transmission

Outcomes for children of parents with psychopathology are heterogeneous, and parental psychopathology may interact with numerous other variables to influence child outcomes (Beardslee et al., 1998). A number of genetic/biological and environmental factors have been identified that explicate the role of parental psychopathology in children's psychosocial development. The intergenerational transmission of psychopathology is an intricate and multipart process (Serbin & Karp, 2004). There are many theoretical models that elucidate the connection between parental psychopathology and psychosocial negative outcomes in children. These can broadly be categorized as: the medical/biological model and the environmental/contextual model.

The medical/biological model intended to focus on the genetic and biological causes. This model presumes that within the individual, there are biological structures that primarily act as causative agents for the intergenerational transmission of psychopathology (Mullan & Murray, 1989). A number of investigations have

established that certain mental illnesses run in families and have an inherited component. The children whose parents have these mental illnesses become more susceptible to develop different psychosocial problems (Biederman et al., 2001; Kendler & Diehl, 1993). Family studies (McGuffin & Katz, 1989; Weissman, Warner, Wickramaratne, Moreau, & Olfson, 1997), twin studies (Kendler, 1993), and adoption studies (Kendler & Gardner, 1997) provide evidence of genetically-based risk in the transmission of mental illness from parent to children.

The contextual/environmental model, on the other hand emphasizes the recognition of those interpersonal and interactional mechanisms that are associated with the parental psychopathology. This model highlights the importance of the non-genetic and non-biological factors that contribute significantly to the transmission of risk for psychosocial difficulties in the children. Literature suggests that there are many contributing factors which are related to the parental psychopathology and child outcomes. The most important of these include interparental relationship, parenting practices, and family functioning. Many studies have shown that parenting practices are impacted by parental psychopathology, and have a strong influence on child outcomes (Lovejoy et al., 2000; Richters & Weintraub, 1990). Rutter (1985) pointed out that the proximal mechanism through which risk is transmitted from depressed parents to the offspring is through their interactions with their children, and this remains true. The consequences of inadequate parenting including negative behaviors and indifferent attitudes toward the child lead to suboptimal social, emotional and cognitive development in children (Roustit, Campoy, Chaix, & Chauvin, 2010). Researchers have observed that psychiatric illness can adversely affect parent-child

relations and that this may be one of the potent mechanisms by which risk for psychopathology is passed on from parent to the child (Goodman & Gotlib, 1999).

Goodman and Gotlib Integrated Model. Goodman and Gotlib (1999) in a comprehensive review proposed an integrated model of how parental psychopathology is transferred to the offspring and what may be the possible mechanisms. In the developmentally sensitive model, they have discussed these issues and highlighted the four important mechanisms explaining the intergenerational transmission of risk. One of the four mechanisms is genetic. This mechanism explains that genetic vulnerability for depression may be either direct, indirect, or both. First, genetic vulnerability may be direct by inheriting DNA from depressed mother that affects the biological mechanisms of the child. Second, genetic liability might be indirect, by inheriting vulnerability factors for depression such as particular personality traits or cognitive or interpersonal styles that increase the risk of depression.

The second mechanism of the risk transmission across generations asserts children of mothers with depression inherently have dysfunctional neuroregulatory mechanisms which hamper the healthy development of emotional and self regulation processes and as a result enhance the susceptibility to develop psychopathology. This mechanism assumes that either through inheritance of dysfunctional neuroregulatory mechanisms or unfavorable prenatal conditions, these children may become vulnerable to the increased risk of developing depression and other psychiatric disorders.

The third mechanism of risk transmission highlighted by Goodman and Gotlib (1999) concerns the offspring's exposure to parental maladaptive affect, cognitions, and behavior. Due to the presence of depressive behaviors, affect, and cognitions, the depressed parent is unable to meet the social, emotional and psychological needs of the child. They use dysfunctional patterns of interaction and communication while interacting with child. This mechanism highlights the role of parenting and maintains that inadequate parenting by the disturbed parent significantly contributes for developing impaired interpersonal functioning and dysfunctional cognitive styles in children, thus putting them at higher risk for development of depression and other psychiatric problems.

The fourth mechanism of risk transmission highlights the function of chronic stresses in the homes of depressed parents that have an effect on the quality of family relationships and make the children vulnerable to the development of psychopathology. Theses stresses include social or interpersonal stresses such as exposure to violence, rejection, abuse, marital and family discord, financial burdens, and job problems.

In light of above models, it can be concluded that parenting is an important mechanism through which risk of parental psychopathology is transferred to the children. Hence, assuming that parental psychopathology affects the parenting practices of the parents, present study contributes to the existing literature by examining parenting practices of parents with psychopathology and intends to focus on identifying the differences between parenting practices of parents with psychopathology (MDD & Schizophrenia) and parents without psychopathology.

Parental Psychopathology and Parenting Practices

The term parenting refers to the dynamic acts of caring, nourishing, nurturing, protecting and guiding the child through the course of development. Parenting is comprised of all the tasks involved in raising a child to an independent adult. It involves continuous series of interactions between parent and child thus taking responsibility for the physical, emotional, psychological, and developmental needs of children. Parenting is a multifaceted activity comprising various particular behaviors, tasks, and actions employed by parents that work separately or mutually to influence child outcomes (Barness & Olson, 1985). Effective parenting is characterized by warmth, affection, nurturance, responsiveness, autonomy, consistence, age-appropriate monitoring, and effective discipline, (Eshel, Daelmans, de Mello, & Martines, 2006; Oyserman et al., 2000). Literature suggests that responsive parenting characterized by appropriate, prompt, and contingent interaction between parent and child is linked with healthier psychosocial outcomes in adolescents (Eshel et al., 2006).

In the parenting literature, there are two important perspectives on which research has focused: one dimensions of parenting and the other parenting typologies. Dimensions are used to classify parenting practices or behaviors (for example warmth, involvement, affection, punishment, and supervision/monitoring), on the other hand typologies are described as combinations of parenting dimensions, for instance authoritative parenting style is a constellation of supportive parenting that

include involvement, affection, warmth, consistency, and monitoring (Hoeve et al., 2009).

Parenting behaviors or practices are the specific, goal-directed actions which have direct impact on the child (e.g., discipline, control and monitoring, pressure, warmth) and through which parents perform their parental duties such as promoting and guiding children's socialization, whereas parenting styles incorporate parents' attitudes, beliefs and expectations for child behavior and thereby influence the context in which parenting occurs e.g, authoritative style versus authoritarian styles (Brenner & Fox, 1999; Darling & Steinberg, 1993; Metsapelto, Pulkkinen, & Poikkeus, 2001). The present study intends to examine parenting practices such as "positive involvement/parenting", "negative/ineffective discipline", and "deficient monitoring". Parenting practices such as provision of structure and monitoring are particularly important during adolescence. These parenting practices have also been examined in order to identify which specific child-rearing characteristics are linked to adolescent behavioral outcomes with the purpose of contributing to the existing literature in discovering effective interventions for the parents with psychopathology.

Parenting is accompanied by challenges and opportunities and might be taxing for normal parents, but for the parents with psychopathology it can be experienced as added stress and burden. The mental illness in parents may considerably affect their parenting efficiency as well as the capacity to meet children's needs. They have to counter extra stresses and challenges associated with their mental health and the possible effect on their personal resources, interpersonal relationships, coping

capacity as well as social and economic levels of function that lead to substantial added stress for them (Jessop & De Bondt, 2012; Reupert & Maybery, 2011).

Parenting practices are influenced by the parental psychopathology and parenting has a dominant impact upon children outcomes. Studies demonstrates parents having psychopathology exhibit numerous deficits and impairments in parenting including less emotional expressiveness and decreased verbal responsiveness than parents without psychopathology (Goodman & Brumley, 1990). Further, parents with psychopathology exhibit elevated parenting stress, inappropriate affective responses, less positive emotions, more irritability, increased expression of sadness, and dampened nurturance (Goodman & Gotlib, 1999, 2002; Maybery & Reupert, 2009; Oyserman et al., 2000).

Jacobson, Miller, and Kirkwood (1997) discussed the risk factors for children of parents with psychopathology, including the parents' unrealistic ideas and expectations about the child's behavior or development, difficult reading and responding to the child's emotional cues, scapegoating or targeting the child, and parent-child role reversal. At very basic levels mothers with parental psychopathology have less adequate parenting skills than the mothers without psychopathology, including less emotional availability, reciprocity, positivity, encouragement and responsiveness (Mowbray, Oyserman, Bybee, & MacFarlane, 2002).

In a qualitative study by Thomas and Kalucy (2003), surveying 28 parents with serious or chronic mental illness, it was found that lack of parental energy, social mobility and motivation was associated with little interaction with children, poor

insight into the children’s needs, poor insight into the impact of the illness upon children, isolation and impaired socialization of the children and a lack of children’s understanding of their parents’ illness.

Although mental illness in general may diminish one’s parenting capabilities, there are also the symptoms of specific diagnosis to consider such as MDD and schizophrenia. A number of authors have reported on the effects of these specific disorders on parenting.

Parental depression has negative impact on family functioning and parenting. The literature suggests that lack of positive affect and excesses in negative affect in parents can lead to difficulties in parenting. For mothers suffering from MDD, their overall lack of energy can negatively impact their ability to organize and interact with their child. In addition, depressed mothers may avoid social interaction, which in turn isolates their children and deprives them of adequate socialization (Keitner & Miller, 1990; Lovejoy et al., 2000).

Research examining parents with a history of clinical depression has provided evidence of disturbed parenting at all developmental stages (see Gotlib & Goodman, 1999, for a review), with the most impaired parenting evident in infancy (Cohn et al., 1986; Field, 1992) and adolescence (Weissman & Paykel, 1974). A number of studies and reviews have reported that depressed mothers experience difficulties in their parenting role (Brennan, Le Brocque, & Hammen, 2003; Cummings, Keller, & Davies, 2005; Dumas, Gibson, & Albin, 1989; Goodman & Brumley, 1990; Middleton, Scott, & Renk, 2009; Lovejoy et al., 2000; Seguin, Manion, Cloutier, McEvoy, & Cappelli, 2003).

The research has shown that relative to healthy caregivers, depressed caregivers tend to display qualities of parenting that are linked with problems in children's social, emotional and cognitive development (Maccoby & Martin, 1983). Deficits in parenting may be characterized by decreased intensity of parent-child interaction, and inadequate attention towards the physical and emotional needs of children (Downey & Coyne, 1990), lack of parental involvement, responsiveness and lower levels of sensitivity to their children (Johnson, Cohen, Kasen, Smailes, & Brook, 2001; Lovejoy et al., 2000; Murray & Cooper, 2003; Weissman & Jensen, 2002), decreased effectiveness with communication and more critical behavior (Gordon et al., 1989) as well as increased hostility and more negative and fewer positive parent-child interactions (Goodman & Brumley, 1990).

Mowbray et al. (2002) describes depressed mothers as having the propensity to be more critical, inconsistent and non-interactive than well mothers. Langrock and colleagues (2002) emphasize parental withdrawal (avoidant or unresponsive behavior towards the child) and intrusiveness as core manifestations of maternal depression, which result in children's use of a variety of mechanisms. Depressed mothers appear to be more punitive (Murray & Cooper, 2003), more irritable and hostile, less engaged and attuned to their children (Lovejoy et al., 2000) and exhibit more inconsistent and extreme parenting styles; they could be overly permissive or highly reactive while parenting (Errazuriz Arellano, Harvey, & Thakar, 2012). They are unable to address their children's needs while coping with the burden of their own depressive symptoms.

Depressed mothers are poor in limit setting and disciplining their children as compared to healthy mothers; they are more likely to employ negative discipline strategies and control strategies such as coercive, hostile, and harsh parenting styles (Kochanska, Kuczynski, Radke-Yarrow, & Welsh, 1987), sometimes alternating with lax under control (Dumas et al., 1989). These disturbances in parenting are linked with a number of cognitive, personal, interpersonal, emotional, and relational problems in children. This evidence has been summarized in many comprehensive literature reviews (Beardslee et al., 1998; Downey & Coyne, 1990; Goodman & Gotlib, 1999).

Although fewer studies has focused on parent-child interactions in samples of depressed parents with adolescents than with infants and younger children; however, substantial evidence is available to suggest similar parenting impairments with this age group. Some studies have established that depression in parents is related to dysfunctional parenting of adolescents (Gordon et al., 1989; Seguin et al., 2003; Simons, Lorenz, Wu, & Conger, 1993). Depression leads to disruption in parenting of adolescents and depressed mothers display withdrawn and intrusive behaviors and this unpredictability in parenting behaviors is perceived as stressful by the adolescents (Gelfand & Teti, 1990; Jaser et al., 2005; Pelaez, Field, Pickems, & Hart, 2008). A study by Jaser and colleagues (2008) also illustrated that mothers having history of depression tend to show more antisocial and disengaged parenting behaviors as compared to mothers who do not have any history of depression.

Compared to living with healthy parents, experience of living with depressed parents for adolescents is quite stressful and taxing. These parents are more likely to

exhibit less supportive, more unpredictable, negative, and intrusive parenting behaviors (Cummings et al., 2005). Exposure to these negative parenting behaviors significantly creates a constantly stressful environment for adolescents of depressed parents (Hammen, Brennan, & Shih, 2004). Prior research has revealed that this highly stressful environment in these families is related to elevated levels of internalizing and externalizing problems in children (Jaser et al., 2005, 2007; Langrock et al., 2002).

Schizophrenia is a debilitating disorder which may also have many ramifications for overall parenting ability. Various studies have shown that mothers with schizophrenia are low on mother–child interaction, and have poor child rearing practices (Gearing, Alonzo, & Marinelli, 2012; Goodman, 1987; Niemi, Suvisaari, Tuulio-Henriksson, & Lonnqvist, 2003; Wan, Abel, & Green, 2008). Mothers with schizophrenia have been characterized as less involved and less capable of creating a positive environment for children (Oyserman et al., 2000) and the prognosis of these mothers is poor, particularly in situations where there is a lack of adequate social support.

Symptoms of schizophrenia which likely compromise parenting capacity are the negative symptoms including decreased energy, motivation, and inability to organize, and the positive symptoms for example hallucinations and delusions. Such symptoms may cause an affected parent to avoid socialization and leave them unable to provide adequate childcare. The psychotic symptoms of schizophrenia may have an effect on the mother-child relationship through numerous mechanisms such as hallucinations, delusions, abnormal expressions of emotion, blunted affect, passivity

experiences, behavioral disorganization, and demanding preferential treatment make the mother emotionally and physically unavailable to the child (Gearing et al., 2012).

Research has revealed significant differences in parenting practices of normal and schizophrenic mothers. Literature suggests that schizophrenic mothers are likely to exhibit less positivity and more negative affect, are less responsive, and more involved. They are less energetic and sensitive towards the needs of children, are more isolated, silent, distant, self-absorbed, demanding or intrusive with their children emotionally (Goodman & Brumley, 1990; Walker & Emory, 1983; Wan et al., 2007). They provide less nurturance, expressiveness, and environmental stability, (Seeman, 2002), have significantly poor child-rearing environment when compared to normal control mothers (Goodman, 1987; Niemi et al., 2003), show less spontaneous behavior, and provide little sensory and motor stimulation to their children (Hipwell & Kumar, 1996; Riordan, Appleby, & Faragher, 1999). Research reports that due to this dysfunctional parent-child interaction, mothers with schizophrenia are rated by their children as less caring and overprotective (Helgeland & Torgersen, 1997).

Studies have also revealed “affectionless control” - a maladaptive bond in parents with schizophrenia. This maladaptive pattern of bonding is characterized by more overprotection and less care (Willinger, Heiden, Meszaros, Formann, & Aschauer, 2002). The results of a high-risk study showed that the family environment in families with schizophrenic parent was unstable, disorganized and unpredictable (Weintraub, 1987). Literature further suggests that mothers with schizophrenia report low levels of social support and provide less stability for their children that may have

enduring effect upon their children's social, emotional, cognitive, and behavioral development (Bosanac, Buist, & Burrows, 2003; Walker & Emory, 1983).

Malhotra, Kumar, and Verma (2015) conducted a study in families of mother with schizophrenia having children between age 5-16 years and found that the mothers with schizophrenia had poor psychosocial environment and distorted intrafamilial relationship (e.g., lack of warmth, more intrafamilial discord, hostile attitude towards the children, and physical abuse), poor communication with their children and abnormal upbringing (such as poor monitoring/supervision, overprotection, overindulgence, and inappropriate pressure) as compared to normal control families.

Some studies have reported that mothers with schizophrenia demonstrate greater deficits in interactions with their children than mothers with other mental disorders. For example, according to some studies mothers with schizophrenia were more remote, silent, self-absorbed, verbally and behaviorally intrusive, less sensitive, and indifferent than depressed mothers (Riordan et al., 1999; Hipwell & Kumar, 1996). However, some other researchers have reported that there are few differences between parenting quality of depressed mothers and schizophrenic mothers (Goodman & Brumley, 1990). They found that both schizophrenic and depressed mothers were less involved and unresponsive than healthy mothers, however, the overall quality of mother–infant interaction was poorest among schizophrenic mothers. Sameroff and colleagues (1987) also found that both mothers with schizophrenia and depression were less spontaneous with their infants as compared to healthy mothers. Some other studies have also suggested the similar findings that

both parental depression and parental schizophrenia carry similar psychosocial risks for children (Rutter & Quinton, 1984; Sameroff, Seifer, & Zax, 1982; Watt, Grubb, & Erlenmeyer-Kimling, 1984).

Impact of Parental Psychopathology on Adolescents

It is believed that children are more susceptible to the possible negative effect of parental psychopathology at the postnatal period and the transitional period of adolescence. Young infants' brain growth is swiftly developing during the postnatal period, and despite immaturity infants are very much vulnerable to the quality of caregiver's interaction with them (Gale, O'Callaghan, Godfrey, Law, & Martyn, 2004). Thus infants are very much susceptible to the impacts of any negative factor such as parental psychopathology that disrupts the capability of their caregivers to provide them optimal care. The second period is the adolescence during which a huge number of critical physiological, physical, and psychosocial developmental changes occur. These changes make adolescents susceptible to the adverse effects of parental psychopathology. Simultaneously, according to the developmental researchers adolescents are exposed to the most common emotional disorders such as depression and anxiety. The prevalence of these disorders drastically increases during this vulnerable period of life (Rutter et al., 2010).

Various studies have confirmed the link between parental psychopathology and the augmented risk to the young infants in the postnatal period (Murray & Cooper, 2003) and in the critical and rapidly changing phase of adolescence

(Beardslee et al., 1998; Halligan, Murray, Martins, & Cooper, 2007; Murray & Cooper, 2003). Considering the importance of crucial period of adolescence, the present study has focused to study the effect of parental psychopathology specifically on adolescents. First a brief overview of transitional period of adolescence and behavioral problems among adolescents will be presented, and then the impact of parental psychopathology on adolescents with special reference to behavioral problems will be described.

Transitional Period of Adolescence. Adolescence is a distinct transitional period in human development linking childhood to adulthood that's why it is the focus of present study. This transition involves profound physical, physiological, psychological, emotional, social and intellectual changes. Adolescence can be defined as *"a developmental period of transition between childhood and adulthood that involves biological, cognitive, and socio-emotional changes"* (Santrock, 2005). The adolescence period divided into three developmental periods is usually classified categorized as early adolescence with the age range of 10–13, middle adolescence 14–17, and late adolescence from about age 18 through 21 years. It is a general concept that adolescence starts with remarkable biological changes of puberty whereas ends with socio-culture processes such as marriage and family formation, completing education, and entering into the work force. (Smetana, Campione-Barr, & Metzger, 2006).

The developmental changes that occur during adolescence cause varying levels of disturbances in them and make them more vulnerable to psychological stress

because of the rapid pubertal changes (Walker, Sabuwalla, & Huot, 2004). Interplay among multiple factors such as pubertal growth, changes in social roles, and school transitions profoundly affect the developmental outcomes and mental health of adolescents. They often face number of crises and dilemmas. Sometimes they have feelings of insecurity, and are unsure of themselves in their status and consequently become aggressive, self-conscious and withdrawn (Simmons & Blyth, 1987).

Adolescents not only experience common developmental challenges as part of normal development, they are also exposed to many conflicting situations. In the process of understanding and dealing with the world and to adapt to cultural expectations of becoming an adult, they encounter multiple sources of stress (Compas, Orosan, & Grant, 1993). In the process of making and sustaining good interpersonal relationships with parents/peers/teachers, they may experience difficulties and a sense of incapacity. They may show unusual and inappropriate behaviors along with feelings of persistent unhappy/depressed mood even under normal circumstances. In general, the behavioral problems such as quarreling, using abusive language, delinquent and antisocial behaviors are visible in school situation. The increased prevalence of emotional and behavioral symptoms in adolescents substantially affects their appropriate academic and personality development (Bongers, Koot, van der Ende, & Verhulst, 2003).

Behavioral Problems among Adolescents. The period of adolescence is marked by increase in several psychological problems (such as depressed mood, irritability, anxiousness, and adjustment-related issues) and risk behaviors such as

substance use and conduct disorder (Lerner & Steinberg, 2004). Literature suggests that the origins of many major disorders among adult populations lie in childhood or adolescence. Therefore, adolescence is considered the most vulnerable period for the development of mental health problems (Kessler et al., 2005). It is the point in time when risk of reoccurrence in adolescent disorders with highly persistent symptoms may be high (Dunn & Goodyer, 2006; Essau, 2007). Psychological maladjustment in adolescents may present itself as behavioral problems. These behavioral problems can be categorized by the developmental researchers as internalizing problems and externalizing problems. (Achenbach & Edelbrock, 1978; Cicchetti & Toth, 1991).

Externalizing problems *"are the behaviors characterized by an under control of emotions including difficulties with interpersonal relationships and rule-breaking as well as displays of irritability and belligerence"* (Achenbach & Edelbrock, 1978). Externalizing behavioral problems are immensely observable, disruptive, disturbing, and troubling behaviors including physical, verbal, and relational aggression, bullying, rebelliousness, thievery and destruction. These behaviors can be extremely disturbing and intimidating to others and adolescents when troubled demonstrate such externalized behaviors. As compared to girls, boys exhibit more blatant externalizing behaviors (Linda, 2009).

Internalizing problems are defined as *"an over control of emotions including social withdrawal, demand for attention, feelings of worthlessness or inferiority, and dependency"* (Achenbach & Edelbrock, 1978). In internalizing behaviors the problematic energy is directed toward the self and person performs the acts that harm him/her as opposite to pouring out at others. Internalizing behaviors incorporate

variety of symptoms related to problems and syndrome which *"signify problems within the self, such as anxiety, depression, somatic complaints without known medical cause, and withdrawal from social contact"* (Achenbach & Rescorla, 2001, p.93). Internalizing problems can be more flimsy in appearance, subtle and hard to notice than the more obvious and observable externalizing behaviors. Adolescent girls have approximately four times higher prevalence for internalizing problems than boys (Linda, 2009).

Effect of Parental Mental Illness on Children. Extensive clinical literature has confirmed that millions of children and adolescents are living in homes where at least one parent has a mental illness (Mayberry et al., 2005). Parental psychopathology is now considered one significant aspect of family functioning that plays an important role in children's development. Parental psychopathology has been found to significantly influence children and the impact of parental psychopathology on the children and adolescents has been extensively studied. (Beardslee et al., 1998; Frye & Garber, 2005; Garber, Ciesla, McCauley, Diamond, & Schloredt, 2011; Goodman, et al., 2011; Haller & Chassin, 2011; Kouros & Garber, 2010).

Numerous studies suggest that children whose parents have mental ill have much increased prevalence of psychiatric disorders than children of mentally healthy parents (Beardslee, et al., 1983; Rutter et al., 1999). The offspring of parents with psychopathology are liable to have higher risk for developing many prenatal, cognitive, intellectual, familial, interpersonal, emotional, and psychosocial problems and deficits which have impact on the mental health and well being of these children

(Goodman, 1984; Goodman & Gotlib, 1999; Malhorta et al., 2015). The issue of effect of parental psychopathology on offspring is relevant to both mothers and fathers, although mostly investigations have centered upon mothers (Ramchandani & Psychogiou, 2009), and the literature on the fathers' impact is scarce. Studies have demonstrated that both maternal and paternal depression was similarly associated with children adjustment problems and more impaired parent-child communications (Jacob & Johnson, 1997).

The parental psychopathology affects the children in several ways. They are more likely to have social skills deficits such as social adjustment problems, social isolation, poor self-esteem, and difficulties in work/job/marital life. They face more psychological issues such as emotional instability, aggressive behavior, childhood trauma, more negative life events including abuse, neglect, isolation, and guilt. Their parenting experiences with their parents are pretty inadequate and negative. Their parents employ dysfunctional parenting strategies. They have to spend additional time in taking care of their mentally ill parents. They receive less support from others, and more stigma related to their parents' mental illness (Gopfert, Webster, & Seeman, 2004).

The children exposed to parental psychopathology are at a considerably higher risk of having poor physical, psychological, and social health than children in families where parents are not having any psychopathology. Recent research consistently reports increased rates of emotional, behavioral, and other developmental problems in these children relative to those living in the general community (Beardslee et al., 1998; Cicchetti, Rogosch & Toth, 1998; Connell & Goodman, 2002; Donatelli,

Seidman, Goldstein, Tsuang, & Buka, 2010; England & Sim, 2009; Goodman et al., 2011). Many studies have also reported higher rates of psychiatric disorders in children of parents with psychopathology than children of parents without psychopathology (Lieb, Isensee, Hofler, Pfister, & Wittchen, 2002; Mattejat & Remschmidt, 2008; McLaughlin et al., 2012; Weissman et al., 1997).

Effect of Parental Depression on Children. Studies that have addressed the issue of effect of parental psychopathology have mainly focused on parental depression. Depression is among the most common mental disorders and there is almost 45% estimated lifetime risk of developing depression and related disorders among children who have a depressed parent (Hammen, Burge, Burney, & Adrian, 1990). The association between parental depression and a range of adverse psychosocial outcomes among offspring has been extensively reported in a number of systematic reviews and studies (Beardslee et al., 1998, 2011; Gelfand & Teti, 1990; Goodman et al., 2011; Goodman, 2007; Goodman & Gotlib, 1999, 2002; England & Sim, 2009).

Research has consistently found that parental depression augment the risk of emotional and behavioral outcomes in children (Elgar et al., 2004). It is a strong predictor of depression and other psychiatric disorders in offspring. These children are at a greater risk for developing a variety of socio-emotional and adjustment related problems. They tend to have compromised social, emotional, and intellectual development, are further prone to internalizing/externalizing problems, attachment related issues, and cognitive impairments and deficits (Beardslee et al., 1998;

Cicchetti et al., 1998; Cummings & Davies, 1994; Downey & Coyne, 1990; Elgar et al., 2004; Goodman et al., 2011; Teti, Gelfand, Messinger, & Isabella 1995). These children are more likely (2 to 5 times) to report behavioral problems than children of healthy parents (Weissman et al., 1997).

It is reported in the literature that till early adolescence, children of depressed mothers have significantly elevated levels of mood disorders as well as internalizing and externalizing problems comparative to those whose mothers are not having depression or any history of depression. According to a review, children of depressed parents are 4 more times likely to report mood disorder as compared to children of parents without depression. Another review showed, there are almost 61% children of such parents who can develop a psychiatric disorder till reaching at the period of adolescence (Beardslee et al., 1998).

In a meta-analytic review of literature regarding internalizing and externalizing problems among children of fathers and mothers with psychopathology, Connell and Goodman (2002) also found significantly heightened rates of externalizing/internalizing problems amongst children of depressed parents. In another recent meta-analysis Goodman and colleagues (2011) examined the effect of maternal depression on different domains of children's psychological functioning. The results indicated that these children had higher levels of internalizing and externalizing problems. Further, they were quite high on negative affect/behavior and general psychopathology.

Cummings, Cheung, and Davies (2013) reported that parental depression increases the parents' negative expressiveness towards their children, which

subsequently leads to emotional insecurity and internalizing symptoms among children (e.g., depression and anxiety). It is well documented that parental depression is also linked to children's risk of developing externalizing behaviors such as aggressive and antisocial behavior (Kouros & Garber, 2010; Piche, Bergeron, Cyr, & Berthiaume, 2011). Parents' experiences further support these findings. Langrock et al. (2002) investigated involuntary responses and coping styles in the children who were experiencing the stress of living with a depressed parent. Both adolescents and parents reports were collected. The parents' reports suggested that there was a high incidence of anxiety, depression, and aggressive behavior among these children. Children also experienced stress related to parental withdrawal behaviors (not as available emotionally/physically to their children) and intrusiveness (e.g., parents who were upset, angry or easily frustrated).

Earlier studies also provide evidence of continually reported higher levels of depression, other internalizing problems, and conduct problems in children of depressed mothers (Welner, Welner, McCrary, & Leonard, 1977). Similarly, longitudinal studies also reported high levels of depression and other psychiatric problems such as conduct disorders, substance abuse disorders, and anxiety disorders among adolescents of depressed parents than in normal control families. Lee and Gotlib (1989) evaluated the mothers with clinical depression and their 7-13 years old children and found that children of depressed women were having more behavioral difficulties compared to healthy controls. In another 10 month follow-up study, Lee and Gotlib (1991) found that children of mothers with MDD demonstrated increased internalizing and externalizing problems and high levels of mood symptoms and

somatic complaints. Weissman and colleagues (1997) also reported that offspring of depressed parents have higher prevalence of major depression, anxiety disorders such as phobias and panic disorder, and alcohol dependence than children of healthy parents. Another longitudinal study found that adolescent children who were exposed to maternal depression were almost 5 times more likely to develop depression than the children in control group (Pawlby, Hay, Sharp, Waters, & O'Keans, 2009).

Mostly, researchers have investigated the relationship between maternal depression and mental health outcomes in children. Less frequently examined, although equally important, is the impact of fathers' depression on their children. Connell and Goodman (2002) conducted a meta-analysis to study the impact of paternal versus maternal psychopathology on child behavior. They reported that the mothers' and fathers' psychopathology was equally associated with their children's externalizing behaviors. They also suggested a slightly stronger association between mothers' psychopathology and internalizing problems in children as compared to fathers' psychopathology. Kane and Garber (2009) reported that depressive symptoms in both fathers and mothers were associated with children's internalizing and externalizing symptoms. Jacobs and his colleagues (2013) also reported that both maternal and paternal depression is linked with greater risks of internalizing disorders in their children; noteworthy, fathers' depression had a more negative impact if the depression occurred when the child was aged 18 or older, while no difference in child's age at onset was reported for maternal depression.

Effect of Parental Schizophrenia on Children. Having a parent with schizophrenia is also positively related to later maladjustment. The home environment of children of parents with psychotic disorders is quite often chaotic, unpredictable, and characterized and lack of consistency. These children experience occasional absence of parents at home due to hospital admissions. Their parents often display more fluctuations in mood and behavior (Rutter et al., 2010). Schizophrenia in mothers is associated with impaired mother–child interactions. In addition to the positive and negative symptoms of psychosis, schizophrenic women often report multiple affective, cognitive, behavioral, and interpersonal, problems that hamper their best parenting quality. The disturbed interparental relationship, maladaptive bonding patterns, increased maternal insensitivity, and aggressive behavior not only negatively affect the child rearing process but also adversely affect the development of adaptive and healthy personality in children. Severely incapacitating social functioning, low self esteem, and performance deficits further enhance the problem. This type of chronic and severe illness in parents may make cause children to develop psychological, social-emotional, and behioral problems (Reupert & Maybery, 2007; Willinger et al., 2002).

High-risk studies have documented that children of parents with schizophrenia report more functional impairment. According to a review of high-risk studies there are significant differences in development patterns of children of schizophrenic parents and children of healthy parents (Niemi et al., 2003). These children repeatedly perform poorer in motor, Sensorimotor, and cognitive areas of functioning, have impaired intellectual development, are more likely to have poor developmental

outcomes (Yoshida, Marks, Craggs, Smith, & Kumar, 1999), and are less social and friendly when compared with children of healthy mothers (Walker & Emory, 1983).

Compared to parental depression, fewer studies have focused on evaluation of internalizing and externalizing outcomes in offspring of schizophrenic parents. However, some high-risk studies have revealed high levels of neuropsychological abnormalities, neuromotor and cognitive deficits, aggressive behavior, impaired social relationships, and social withdrawal in children of parents with schizophrenia (Hans, Auerbach, Styr, & Marcus, 2004; Niemi et al., 2003; Tarbox & Pogue-Geile, 2008). Further studies have indicated that during early childhood, these children display both internalizing and externalizing problems (Miller et al., 2002; Niemi, Suvisaari, Haukka, & Lonnqvist, 2005).

Several other studies illustrated that children of mothers with schizophrenia have increased rates of internalizing and externalzing symptoms. They tend to be more hyperactive, depressive, and immature. They have more social adjustment problems, emotional symptoms, attentional problems, social inhibition, and other severe neurological symptoms than children of healthy mothers (Niemi et al., 2003, 2005; Vafaei & Seidy, 2003; Yoshida et al., 1999).).

Earlier studies also found that high-risk children of parents with schizophrenia were less emotionally stable and mature than controls, furthermore these children demonstrated more impairment in affective expression and verbal communication (Rolf, 1972), manifested greater aggressive and delinquent behavior, and more social withdrawal and social incompetence than children of healthy parents (Weintraub & Neale, 1984; Walker, Downey, & Bergman, 1989). Another study found multiple

cognitive, attentional, and social impairments in children of parents with schizophrenia. Further, these children were more emotionally upset and exhibited greater behavioral disturbance, distractibility, and lower social competence as compared to normal control group (Weintraub, 1987).

Malhotra et al. (2015) evaluated 30 children and adolescents of mothers with schizophrenia and found high levels of internalizing problems, externalizing problems as well as other problems (such as attention problems, social problems, and thought problems) as compared to control group. In another study, Shah, Kamat, Sawant, and Dhavale (2003) examined differences in the neurobehavioral functioning, cognitive functioning, attention, intelligence, and social behavior in children schizophrenic parents and children of healthy parents. The results indicated that children of schizophrenic parents demonstrated more behavioral and social problems (especially withdrawn behavior), poor attention, disordered thoughts and lower intelligence as compared to the children of mentally healthy parents.

Another longitudinal study conducted behavioral observations of children of parents with psychosis and parents without psychosis. They observed that children of parents with psychosis exhibited elevated rates of emotional and behavioral problems compared to children of healthy parents, especially at age 7 there was a significant increase in externalizing problems in male children of parents with psychosis (Donatelli et al., 2010).

Association between Parenting Practices and Behavioral Problems

During adolescence, changes in the nature of parent-child relationship occur that are important for healthy development of adolescents. The literature emphasizes the continual importance of relationships with parents where disruptions in adolescent behavior constitute the renegotiation of family boundaries. The contemporary conceptualizations of adolescence describe it as a period when attachment to parents remains important, even as bids for increased autonomy are being made (Steinberg, 1990). In the process of gaining independence from the family, adolescents spend more time with peers and the dependency on parents may shift to dependence on peers (Allen et al., 2006). Despite increasing independence, and emotional separation from the parents as a central developmental task, family specially parents are seen as fundamental determinant of adolescents' psychological well being and social-emotional adjustment. Even in the most individualistic cultures, parents have significant influence on the choices adolescents make, and the values they cherish in their lives (Collins & Laursen, 2004).

Interactions between parent and child have been the most influential determinants of child development. The nature of adolescent-parent relationship and its impact on adolescents' development is among the most common and well researched topics. The quality of adolescents' relationships with their parents is thought to have long-term impacts on emotional functioning throughout the life span (Ainsworth, 1989). During adolescence, adolescent-parent relationships undergo significant transformations and period of adolescence is perceived by parents as the

most difficult, demanding, challenging, and taxing stage of child rearing (Buchanan et al., 1990).

The period of adolescence can be challenging for both parents and children and the parenting during adolescence keep on influencing the behaviors into adulthood. Therefore, it is essential to understand the importance of maintaining high quality parenting in this crucial period of development. Keeping in mind this importance, the present study has focused to study the relationship between parenting practices and behavioral problems (internalizing/externalizing) among adolescents. A large amount of research evidence illustrates that certain parenting practices are linked with internalizing and externalizing problems among adolescents and have long-term consequences across the life course. The present study has focused on three types of parenting practices: 1. positive/involvement parenting, 2. negative/ineffective discipline and, 3. deficient monitoring.

Parenting acts as both positive and negative predictor of adolescents' maladjustment. Parenting is optimal when parents show warmth and acceptance towards their children, have bidirectional communication with their children, maintain age appropriate control and monitoring, and encourage social responsibility. Parenting behaviors and practices are associated with adolescent adjustment and problem behavior (Collins & Laursen, 2004; Darling & Steinberg, 1993; Gaertner, Fite, & Colder, 2010; Lansford, et al., 2003; Reitz, Deković, & Meijer, 2006; Simons-Morton, Chen, Hand, & Haynie, 2008).

Research has consistently documented that authoritative parenting, which includes consistent expectations, reasonable demands, and the expression of warmth

and affection, has long been established as integral for optimal child functioning and psychosocial adjustment (Baumrind, 1966; 1978), and is associated with low levels of child conduct and aggressive behavior problems (Kotchick & Forehand, 2002). Many studies have reported that the adolescents whose parents employ authoritative parenting are more mature and engage less in risk-taking behavior and antisocial activities (Baumrind, 1991; Maccoby & Martin, 1983; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). Conversely, parenting that lacks these key aspects (i.e., characterized by inconsistency, poor monitoring, harsh/inappropriate discipline, low warmth) has been consistently related to more child behavioral problems at various developmental stages (Baumrind, 1978; Ge, Best, Conger, & Simons, 1996; Wasserman, Miller, Pinner, & Jaramillo, 1996).

Parenting practices that are positive including love, affection, support, nurturance, involvement, gratifying the child's needs, and encouragement of autonomy facilitate healthy psychological, social and emotional adjustment among children and adolescents (Bayer, Sanson & Hemphill, 2006; Frick, Christian & Wooten, 1999; Gaertner et al., 2010). Parental warmth/involvement is the extent, to which the adolescents are loved and accepted, how frequently the parents helped them with something important, and carefully attended and listened to their viewpoint (Maccoby & Martin, 1983). The associations between supportive parenting and adolescent functioning have been well reported in the parenting literature. Parental support and warmth are negatively associated with behavioral problems (Barnes & Farrell, 1992; Pettit, Bates, & Dodge, 1997). Research has also found that parental support during adolescence is thought to be associated with decreased depressed

mood, irritability, and anxiety later in the young adulthood (Aquilino & Supple, 2001; Barber, Olsen, & Stolz, 2005; Skopp, McDonald, Jouriles, & Rosenfield, 2007).

Negative parenting practices such as ineffective, inconsistent, and harsh discipline as well as poor and deficient monitoring has been regarded as risk factors for the problem behavior in adolescents (Arnold, O'Leary, Wolff, & Acker, 1993; Catalano & Hawkins, 1996; Dodge, Pettit, & Bates, 1994; Lansford et al., 2003; Miller-Lewis et al., 2006; Pettit et al., 1997; Snyder et al., 2005). Negative parenting has been linked with both internalizing and externalizing problems (Berg-Nielsen, Vikan, & Dahl, 2002), but the relation between negative parenting and externalizing outcomes in children has received the strongest support in the literature (Dodge et al., 1994; Ehrensaft et al., 2003; Frick et al., 1999; Patterson, Capaldi & Bank, 1991). Negative parenting plays a key role in the developmental trajectory of externalizing problems since early childhood throughout adolescence. Specifically, coercive parent-child interchanges emerge through increased negative coercive parenting and, during adolescence (i.e., a high risk time for externalizing problems); youth problem behaviors accelerate through deviant peer affiliations (McMahon, Wells, & Kotler, 2006).

Mills and Rubin (1998) proposed that parenting practices such as low levels of behavioral control (parental limit setting and supervision of children's activities) are significant predictor of externalizing problems among adolescents. The research shows that behavioral control is linked with lower levels of externalizing problems among adolescents (Aunola & Nurmi, 2005; Laird, Criss, Pettit, Dodge, & Bates, 2008; Richards et al., 2004).

Parental monitoring is defined as parental behavior that involves being aware of the children's activities, whereabouts, friends, and conduct (Dishion & McMahon, 1998). Parental monitoring is very important during the developmental period of adolescence and in combination with consistent discipline; warmth and involvement can protect children from externalizing problems (Dishion & Bullock, 2002; Masten & Coatsworth, 1998). Research suggests that poor parental monitoring or supervisory neglect is strongly linked with aggressive behaviors in children (Knutson, DeGarmo, Koeppl, & Reid, 2005; Patterson & Stouthamer-Loeber, 1984). Research has additionally documented the importance of parental monitoring in preventing externalizing problems among school age children and adolescents (Patterson, 1982).

Several other studies reveal that negative and harsh discipline is associated with both internalizing (depression and low self-esteem) and externalizing behavioral problems (conduct disorder). For example, harsh discipline is significantly related to increased incidence of depression and aggressive/deviant behavior among adolescents (Bender et al., 2007), whereas inconsistent discipline strategies employed by parents may even unintentionally reinforce the development of adolescent's externalizing problems such as conduct problems, aggressive, antisocial activities and noncompliant behavior (Patterson, Reid & Dishion, 1992). Inconsistent discipline has also been associated with adolescent anxiety and depression (Dwairy, 2008) and externalizing behaviors such as delinquent acts (Dodge, Coie, & Lynam, 2006).

Role of Moderating Factors

A moderator is *"a variable that affects the strength and/or direction of the relation between a predictor and a criterion variable"* (Baron & Kenny, 1986, p. 1174). Literature examining the role of moderating variables in the connection between stresses and maladjustment is basically concerned with recognizing the factors that may increase or decrease the possibility of developing psychological symptoms (Holmbeck, 1997). Research has highlighted this fact that despite exposure to parental psychopathology, many children remain free of psychopathology. They do not develop psychiatric symptoms and other psychological problems (Weissman et al., 1997). To examine the risk and resilience processes among high-risk populations, in the last few decades, the research has started to focus on a transactional perspective that involves the continuing reciprocal transactions among diverse biological, psychological, and social characteristics. This perspective intends to highlight the role of child characteristics that may interact dynamically with the environment to enhance or reduce the likelihood of developing any adverse outcomes (Cicchetti & Toth, 1998; Sameroff & MacKenzie, 2003).

Goodman and Gotlib (1999), in a comprehensive review proposed a model that gives a useful framework for understanding both risk and resilience processes among children of parents with psychopathology. They identified multiple mediating and moderating variables. Mediators are the mechanisms of risk that result from parental mental illness. These are the variables that place the child at risk and eventually lead to psychopathology. Moderating factors are the variables that are not

directly linked with parental psychopathology, but can aggravate the child outcomes. The important child characteristics in the Goodman and Gotlib (1999) model include child's temperament, gender, intellectual and social-cognitive abilities (such as interpersonal skills and social competence), problems solving abilities and coping skills. In their review, the authors have highlighted the lack of empirical evidence regarding the role of child characteristics as moderators between contextual factors and child outcomes.

Given that parenting practices are strong predictors of later children maladjustment, it is important to identify the child characteristics (personal and process) that may enhance the risk for negative outcomes such as behavioral problems. It is now widely recognized that children are not just considered as subservient recipients of the contextual factors, they play very important role in their socialization processes. Early research examined the direct associations of children characteristics and outcomes, whilst current studies have begun to explore the potential interactive effect between children and their environment (Sanson, Hemphill, & Smart, 2004). Thus, this research study intends to examine the possible moderating role of adolescents' personal factors like coping and effortful control on the relationship between different forms of parenting practices and behavioral problems among adolescents having parents with psychopathology. Considering how these two adolescent characteristics interact with parenting to predict behavioral problems may be particularly important because these two characteristics may serve to amplify or mitigate the effects of parenting practices in distinct ways. These factors are highly neglected in research; their potential importance underscores the need to

study these variables. To researcher's knowledge, up till now, no study has concentrated on exploring the moderating role of these two potential variables between the relationship of parenting practices and behavioral problems among adolescents particularly with reference to high risk group.

Coping. Coping involves utilizing various cognitive, emotional, and behavioral strategies while dealing with daily stressors/problems. Coping include all those covert and overt repertoires of behavior through which individuals can actively alleviate, prevent, or respond to stress. Coping refers to *"Constantly changing cognitive and behavioral efforts to manage specific external and /or internal demands that are appraised as taxing or exceeding the resources of the person"* (Lazarus & Folkman, 1984, p.141).

Coping is a dynamic, vigorous, and goal-directed mechanism that involves a person's conscious efforts to decrease the frequency of a stressful and threatening stimulus/event (Lazarus & Folkman, 1984). Coping strategies are the processes to diminish or modify sources of stress and distressful emotions while combating stress. Coping strategies are typically viewed as being either cognitive or behavioral in nature. According to Ebata and Moos (1991) cognitive coping strategies include activities such as logical analysis of the stressor, positive reappraisal, cognitive avoidance, and resigned acceptance. Behavioral coping strategies include activities such as guidance/support seeking, problem solving, seeking alternative rewards, and emotional discharge. Coping strategies are broadly divided into two groups: active or problem-focused coping (directly acting on/dealing with the stressor or the cause of

stress) and passive or emotion-focused coping (Regulating emotional states that result from the stressful event) [Compas, 1987].

It is widely acknowledged that adolescence is characterized by numerous developmental changes that may tax emotional and cognitive resources. Adolescents' ability to cope efficiently with stress is considered as an essential part of resilience and is vital in influencing patterns of positive growth and development (Werner, 1989). Diverse psychosocial maladjustment outcomes are frequently documented in the transitional period of adolescence (Rutter & Smith, 1995). Therefore, the identification of risk and protective factors in adolescents who are experiencing adjustment problems is necessary to facilitate and foster healthy psychosocial adjustment.

Coping strategies can act as protective or risk factors regarding healthy adjustment and psychological well-being of adolescents (Masten, Best, & Garmezy, 1990; Seiffge-Krenke, 1995). Earlier studies have documented that problem-focused coping is linked with healthy psychosocial adjustment, better psychological well-being as well as decreased internalizing and externalizing symptoms among adolescents. On the contrary, emotion-focused coping that is indicative of emotional dysregulation is related to greater emotional, behavioral, and social maladjustment related issues (Braun-Lewensohn et al., 2009; Windle & Windle, 1996).

Ebata and Moos (1991) examined the relationship of coping strategies with overall well being among adolescents. Controlling for stressor characteristics, they concluded that problem-solving and guidance/support seeking were related to better overall adjustment and diminished distress. They further noted that the adolescents

who used more avoidant-oriented strategies for example emotional discharge, avoidance, and resigned acceptance reported elevated levels of distress.

Another study examining the association between the use of differing coping strategies and parent and self reported behavioral problems among adolescents reported that using problem-solving was negatively linked with behavioral problems (Fournet, Wilson, & Wallander, 1998). A longitudinal study showed that less use of approach coping and more use of avoidant coping predicted the development of depression among adolescents (Seiffe-Krenke & Klessinger, 2000).

In children of depressed parents, research has examined three types of coping strategies (primary, secondary control and disengagement coping). Numerous studies reported that higher use of secondary control coping strategies such as cognitive reappraisal, acceptance, and distraction are linked with decreased internalizing problems in children of depressed parents (Fear et al., 2009; Langrock et al., 2002; Jaser et al., 2005, 2007, 2008). A recent study also found that use of primary control coping strategies was related to lower levels of depression among adolescents having mothers with and without a history of depression (Jaser et al., 2011).

Conversely, studies have shown disengagement coping strategies (avoidance, social withdrawal) are associated with more maladjustment including more sadness, anger, aggression, and depressive symptoms amongst adolescents (Agoston & Rudolph, 2011; Downey, Johnston, Hansen, Birney, & Stough, 2010; Garber, Braafladt, & Weiss, 1995; Santiago & Wadsworth, 2009; Silk, Steinberg & Morris, 2003). Sandler, Tein, and West (1994) also reported that there was a significant

positive relationship between avoidant coping and higher rates of anxiety, depression, and antisocial behavior problems among adolescents.

Moderating Role of Coping. Numerous prospective, longitudinal studies have established that parental psychopathology is a risk factor for emotional and behavioral problems among adoelscents (Anderson & Hammen, 1993; Burstein, Ginsberg, & Tein, 2010; Weissman et al., 1997, 2006; Williamson, Birmaher, Axelson, Ryan, & Dahl, 2004). At the same time, there are many children who grow up in homes with parental psychopathology but do not develop impairments. It is in fact the balance of risk factors and protective resources that determines outcome (Beardslee, 2002; Hammen, 1991). Since the relationship between parental psychopathology and adverse outcomes in offspring is not apparent in all children, the researchers started to explore the variables that may temperate this relationship (Burt et al., 2005; Suveg, Shaffer, Morelen, & Thomassin, 2011). Studies on genetic, environmental, and individual risk factors for psychological problems also point to a remarkable finding that not all individuals develop the disorder when exposed to risk factors. Consequently, the current research has shifted the focus of attention towards the identification of those potential protecting factors that can act as sources of resilience in the face of known risk.

Parental psychopathology is associated with a stressful, chaotic, and unpredictable home environment for children (Weissman & Olfson, 2009) and they are exposed to disrupted parenting behaviors associated with parental psychopathology. Literature suggests that children whose parents have

psychopathology are particularly exposed to two stressful parenting behaviors while interacting with their children: withdrawn behaviors including avoidance, emotional and physical unavailability and intrusive behaviors such as irritability, over involvement and over protection (Hammen et al., 2004; Jaser et al., 2005, 2008).

On the basis of extensive aforementioned theoretical findings, it can be concluded that parental psychopathology is associated with poor parent-child interactions and has deleterious effect on parenting. Parenting is an important and significant mechanism through which parental psychopathology may have negative impact on children (Goodman & Gotlib, 1999, 2002). Hence, it is important to identify protective and risk factors for planning and developing evidence-based preventions and interventions. Utilization of effective coping strategies can be an essential resource in developing resilience in individuals who are living under chronic stress (e.g., having a parent with psychopathology).

Given that parenting practices of parents with psychopathology are a risk factor for behavioral problems, current study uniquely contributes to the existing literature by focusing on an important moderator (adolescents' coping) that has received little attention thus far. The studies exploring the role of moderators in the relation between parenting practices and youth problems, adolescents' coping is one important factor that has been ignored. There are reasons to believe that adolescents with maladaptive coping may be especially susceptible as compared to adolescents who use adaptive coping while dealing with stress of parental psychopathology; adolescents with maladaptive coping are more likely to report more behavioral

problems (internalizing and externalizing) and experience more social and academic impairments.

To researcher's knowledge, prior studies did not examined moderating role adolescents' coping on the association between parenting practices and adolescents' behavioral problems. Overall, research has demonstrated fairly consistent associations between coping and parenting (Eisenberg, Cumberland, & Spinrad, 1998; Kliewar, Sandler, & Wolchik, 1994; Meesters & Muris, 2004; Smith et al., 2006; Zimmer-Gembeck & Locke, 2007) as well as parenting and behavioral problems (Darling & Steinberg, 1993; Frick et al., 1999; Gaertner et al., 2010; Lansford et al., 2003; Maccoby & Martin, 1983) but coping as moderator in the association between parenting and behavioral problems has received very little attention. Examining the interaction between these variables is important given that it provides information about which coping strategies might cushion the negative impact of dysfunctional parenting on behavioral problems among adolescents in this high risk population especially in local context.

Research has demonstrated that adolescents' adaptive coping strategies buffer the negative effects of stressful events and consequently foster healthy psychological adjustment (Compas et al., 2001; Grant et al., 2006). The theoretical framework of resilience research has provided the foundation for many studies to examine the coping as moderator (Cicchetti & Garmezy, 1993; Garmezy, 1987; Rutter, 1987) and is useful in investigating the variables that can protect adolescents from the possible harmful effects of stressors and might assist in developing the beneficial prevention/intervention plans.

Studies exploring the moderating role of coping in adolescents found that positive reappraisal moderated the relationship between perception of stress and depression (Gomez, 1998; Kraaji et al., 2003; Rogers, Mary, & Holmbeck, 1997). Ng and Hurry (2011) found that use of problem solving and rejecting non-productive coping strategies emerged as protective factors against depression in the presence of stress among adolescents. Similarly, Blalock, and Joiner (2000) examined the moderating role of cognitive avoidance coping on the relationship between negative life events and depressive/anxious symptoms among undergraduate students. The results showed that the cognitive avoidance coping exacerbated this relationship indicating that female students who used more cognitive avoidance coping and exhibited higher stress were more prone to experience higher depressive symptoms.

Another study found that high level of primary coping buffered the negative effect of depressive symptoms in children of depressed parents (Dunbar et al., 2013). Paysnick and Burt (2015) found the evidence for buffering impact of problem-focused coping strategies against higher levels of emotional and behavioral problems for those adolescents displaying elevated physiological stress reactivity.

Effortful Control. The other important moderating factor in the present study is the regulative aspect of temperament, called effortful control (EC). The present research intends to study the moderating role of effortful control in the association between parenting practices and behavioral problems among adolescents having parents with psychopathology. Self-regulation may be a key to resilient development and can serve as a shielding factor for the adolescents who are exposed to the effects

of risk factors that may increase the likelihood of developing adjustment problems (Masten & Coatsworth, 1998). Hence, effortful control is a significant factor to consider in understanding adolescent's development in high-risk contexts and acts as a protective factor in mitigating the impacts of contextual risk such as dysfunctional parenting of parents with psychopathology.

The construct of effortful control has been of particular interest to developmental psychologists in the past two decades. Marry Rothbart first introduced it to describe a level of volitional control that emerges in children's development (Rothbart, 1989). This important set of temperament-based self-regulatory abilities is conceptualized as *"the efficiency of executive attention—including one's ability to inhibit a dominant response and/or to activate a subdominant response, to plan, and to detect errors by voluntarily modifying one's own attention and behavior"* (Rothbart & Bates, 2006, p.129). In her model of temperament, effortful control is conceptualized as a major form of self-regulation (Ahadi & Rothbart, 1994; Rothbart & Rueda, 2005).

Effortful control incorporates the use of skills to voluntarily focus and shift attention when desired. It also includes ability to inhibit inapt response that is termed as "inhibitory control". It further consists of "activation control" i.e., to perform a behavior whenever there is a strong tendency to avoid it. Effortful control includes diverse associated abilities (executive functioning skills) that can help in integrating information and planning. These capacities can then supplement successful adaptation and self regulation processes in distinct and diversified ways (Eisenberg, Spinard, & Eggum, 2010).

Developmental psychologists have well acknowledged the important contributing role of effortful control in the surfacing of adaptive and maladaptive behavioral patterns and its implications for social-emotional outcomes in children (Checa & Rueda, 2011; Coplan & Bullock, 2012; Eisenber et al., 2010; Swanson, Valiente, Lemery-Chalfant, 2012; Vasey et al., 2013). Over the past decade, research has largely revealed that high level of effortful control has been associated with increased academic performance, more social competence, facilitating prosocial behavior, bolstering conflict resolution skills, and increasing empathy and conscience among children and adolescents (Eisenberg, 2000; Spinard et al., 2006; Swanson et al., 2012; Valiente et al., 2011).

On the contrary, children with low levels of effortful control usually display increased externalizing problems such as aggressive behavior, high impulsivity, negative affect, and maladjustment (Calkins & Dedmon, 2000; Eisenberg et al., 2005). Eisenberg et al. (2001) examined association between children's effortful control and internalizing/externalizing problems, or no problems. The results indicated that low level of effortful control was related to more internalizing and externalizing problems.

Some investigators have reported that the link between effortful control and internalizing problems is inverse (Buckner, Mezzacappa, & Beardslee; 2009; Eisenberg et al., 2001, 2005, 2009; Muris, de Jong, & Engelen, 2004; Nigg, 2006). Effortful control has been found to correlate with internalizing problems, especially anxiety and children with weak behavioral inhibition systems are more anxious than children with strong behavioral inhibition systems (Gray, 1987). Similarly, low

attentional control has been associated with higher incidences of anxiety, fear, (Lemery- Chalfant et al., 2007), and depression (Lengua, Bush, Long, Kovacs, & Trancik, 2008). Attentional control in particular helps a child shift attention away from a distressing stimulus to control negative emotional arousal.

The literature has consistently established that effortful control is more strongly associated with externalizing problems than internalizing problems (Derryberry & Rothbart, 1997; Eisenber et al., 2001, 2009; Murray & Kochanska, 2002). Both cross-sectional and longitudinal studies have shown the strong evidence that deficits in effortful control are linked with children's externalizing behaviors (Kochanska & Knaack, 2003; Lengua, 2006; Lengua et al., 2008; Olson et al., 2005; Spinrad et al., 2007). Children prone to externalizing problems are high in impulsivity, have diminished attentional and socio-cognitive functioning, slow information processing, and are low on all or most facets of effortful control such as inhibitory, behavioral or attentional control (Dodge et al., 2006).

Moderating Role of Effortful Control. Effortful control can contribute as a moderator in the connection between different risk factors and psychosocial maladjustment. It can be helpful in modulating emotional and behavioral responses to stress by facilitating more productive and socially appropriate responses. Further, it may safeguard the strength of the distress by redirecting children's energy and attention in the best ways that help them deal with the experience of risk. (Eisenberg et al., 2003).

Effortful control is an important component of temperament hence it has been examined under the broader construct of “temperament” along with other components such as negative affectivity/emotionality and extraversion/surgency etc. Few studies have focused to examine the moderating effect of this single dimension in the association between parenting and adjustment among adolescents (Lengua, 2008; Lengua et al., 2008).

Research has highlighted the moderating role of temperament on the association between negative parenting such as inconsistent discipline and externalizing problems. For example, Lengua,Wolchik, Sandler, and West (2000) found that two important emperamental characteristics (high impulsivity and low positive emotionality) exacerbated the relationship between negative patterns of parenting and externalizing problems. Another study found that children with a “difficult” temperament style predicted aggressive and delinquent behavior in school-age children (Ramos, Guerin, Gottfried, Bathurst, & Oliver, 2005). In a related study, interaction of parental discipline and temperament among pre-adolescent boys was explored. The results indicated an interaction between parental discipline and child temperament indicating when parents were high on negative discipline; externalizing problems were also higher in children who were having difficult temperament relative to those with non-difficult temperament (Blackson, Tarter, & Mezzich, 1996).

Colder, Lockman, and Wells (1997) also reported multiple interactive effects of parenting and child temperament. The results indicated that association between parenting practices and child psychopathology was moderated by different aspects of child temperament. High activity level of children exacerbated the association

between poor parental monitoring and child aggression. Moderate or high fearfulness exacerbated the relationship between parental harsh discipline and aggression. High fearfulness also exacerbated the association between parental harsh discipline and child depression. Further, fearfulness moderated the association between both high and low levels of parental involvement and child depression.

Muhtadie, Zhou, Eisenberg, and Wang (2013) in a longitudinal study found that effortful control moderated the association between parenting styles and children's internalizing problems. The results showed that children low on effortful control were especially vulnerable to the negative effect of authoritarian parenting. In another study, Lengua (2008) examined the interactive effect of multiple dimensions of child temperament on the link between inconsistent discipline and physical punishment and adjustment problems in children. The results supported the moderating effect of effortful control on the parenting practices and child adjustment problems indicating effortful control buffered the possible negative effect of physical punishment and inconsistent discipline on the internalzing and externalizing problems.

Rationale of the Present Study

As highlighted in the above mentioned theoretical findings considerable empirical support exists documenting parental psychopathology interferes with parenting quality and is associated with a significant greater risk of behavioral problems and other psychopathology in children (Beardslee et al., 2011; Downey & Coyne, 1990; Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007; Goodman & Gotlib, 1999, 2002). Parents with psychopathology exhibit range of difficulties with parenting including decreased verbal and emotional responsiveness as well as more negative and unpredictable parenting behaviors such as irritability, harsh, punitive and inconsistent discipline, low warmth/involvement, nurturance and poor monitoring (Cummings et al., 2005; Gearing et al., 2012; Lovejoy et al., 2000; Mowbray et al., 2002; Oyserman et al., 2000). Children of these parents consistently show increased levels of developmental, emotional, and behavioral problems relative to those in the general community (Anderson & Hammen, 1993; Beardslee et al., 1998; Donatelli et al., 2010; Goodman et al., 2011; Maybery et al., 2005; Miller et al., 2002; Mordoch & Hall, 2002).

Although the evidence regarding impact of parental psychopathology on parenting practices and psychological problems in children is compelling, there is dearth of studies from Pakistan on this issue and is relatively a neglected area of research. Some relevant research work is available on the psychological problems of children of mentally ill parents (Khan, Hanif, & Tariq, 2014; Khan, Batool, & Saqib, 2014; Imran, Sattar, Amjad, & Bhatti, 2009) but no research evidence is available on

parenting practices of these parents. In a recent study, Imran and colleagues (2009) examined psychological problems in children of mentally ill parents and found that these children have almost two times higher rate of mental health problems (such as emotional difficulties, peer relationship problems, hyperactivity and conduct problems) compared to controls (55% versus 28%). Khan et al. (2014) also found that children of mentally ill parents had significantly higher rate of behavioral problems than children of mentally healthy parents.

The evidence of rising level of psychological problems among children of mentally ill parents in Pakistan as well as paucity of literature on this important issue highlights the need to study this overlooked area of research. It is important to study parenting practices of these parents and what kind of behavioral issues these children face particularly with reference to local context. Therefore, present study is designed with an aim to examine differences in parenting practices and behavioral problems among adolescents having parents with psychopathology and without psychopathology. Another important objective is to examine association between parenting practices and behavioral problems among adolescents having parents with psychopathology. Furthermore, this research also explores the moderating effect of coping and effortful control between parenting practices and behavioral problems among adolescents having parents with psychopathology. This study supplements to the existing body of literature by addressing several important gaps.

First, keeping in mind existing literature, the present study is designed with an aim to investigate the issue indigenously and intends to find differences in parenting practices and behavioral problems among adolescents having parents with

psychopathology and without psychopathology. Indigenously, many studies have been conducted to examine the relationship between parenting styles and adolescents' psychosocial adjustment (Akhter, Hanif, Tariq, & Atta, 2011; Fatima, & Sheikh, 2009; Kausar, & Shafique, 2008; Loona, 2013). Some research evidence is available on the prevalence of emotional and behavioral problems in children of normal parents (Hussein, 2008; Javed, Kundi, & Khan, 1992; Masood, 2008; Saleem & Mahmood, 2013) but no research has yet been undertaken to find out the association between parenting practices of parents with psychopathology and behavioral problems in children of these parents in local context.

Second, the most of research studying offspring of parents with psychopathology has been carried out on younger children (see Goodman & Gotlib, 1999, 2002 for a review) and adult offspring (Jacob & Windle, 2000; Mowbray, Bybee, Oyserman, MacFarlane, & Bowersox, 2006; Williams, 1998). Comparatively smaller amount of studies have focused on adolescent children of these parents (Cummings et al., 2005; Gordon et al., 1989; Jaser et al., 2005, 2007, 2008; Langrock et al., 2002). Furthermore, research has simultaneously studied both children and adolescents in the same sample, thus overlooking the important developmental differences between the period of childhood and adolescence. The lack of studies focusing on adolescent children of parents with psychopathology draws attention to focus on this group, since adolescence is a period of rapidly occurring changes both within the adolescent and in the context of adolescents (Lerner & Steinberg, 2004; Smetana et al., 2006). Further, in this transitional period, the link between parental psychopathology and the augmented risk to adolescents is confirmed by various

studies (Beardslee et al., 1998; Halligan et al., 2007; Murray & Cooper, 2003). Considering the importance of crucial period of adolescence, the present study has focused to study the effect of parental psychopathology specifically on adolescents.

During the last two decades, the research has started identifying sources of resilience rather than just elaborating sources of risk. Studies have shown that even within the high-risk population, not all children develop psychological disturbances (Weissman et al., 1997). Therefore, it is essential to identify protective factors in promoting resilience in individuals who are living under chronic stress (e.g., having a parent with psychopathology). However, relatively few studies have tired to explain the relation between risk factors and children outcomes by examining the role of moderators (see Goodman & Gotlib, 1999, 2002; Beardslee et al., 2011 for reviews).

Thus, the current study examines the moderating role of adolescent coping and effortful control on the association between parenting practices and behavioral problems among high risk group of adolescents. Considering how these two adolescent characteristics interact with parenting to predict behavioral problems may be particularly important because these two characteristics may serve to amplify or mitigate the effects of parenting practices in distinct ways. The inclusion of coping and effortful control as moderators in the current study will also help to identify the differential effect of these two variables on the relationship between parenting practices and adolescent outcomes such as behavioral problems. To researcher's knowledge, no study has yet investigated the moderating role of coping on the relation between parenting practices and behavioral problems among adolescents. So the present study is an attempt to examine these potentially important variables that

will provide empirically-based insight to understand the role of these moderating variables in increasing or decreasing the risk of behavioral problems among adolescents.

Finally, the present study will significantly contribute to the field of psychopathology as awareness created through indigenous research on important issues has significant social psychological impact and consequences and can lead to implementation of timely intervention and prevention. The present research will not only work as a preliminary effort for further studies in the area, but will also provide mental health workers some guidelines to help the parents with psychopathology and their children in the local context. Further, it will highlight the need for psychological interventions aimed at preventing negative psychological outcomes in adolescents by preventing and addressing negative parenting strategies and parental psychopathology.

Chapter II

RESEARCH DESIGN

The present study aims to examine differences in parenting practices and behavioral problems among adolescents having parents with psychopathology (MDD & Schizophrenia) and without psychopathology. Further it attempts to find association between parenting practices and behavioral problems among adolescents having parents with psychopathology. The moderating role of coping strategies and effortful control has been explored on the relationship between parenting practices and behavioral problems among adolescents having parents with psychopathology. This study was carried out in two phases:

1. Phase I - Pilot study
2. Phase II - Main study

Phase I - Pilot Study. This phase of study was conducted to pretest the study measures. To check the appropriateness and comprehension of the measures for the current study sample was also an objective. Another objective was to find out preliminary correlation among study variables.

Phase II - Main Study. In this phase of the study formulated hypotheses were tested.

PHASE – I: PILOT STUDY

This phase was conducted to see the appropriateness of Urdu translated versions of the instruments as well as to establish psychometric properties of these instruments.

Objectives

- To pretest all the study measures
- To establish psychometric properties of the instruments
- To find out preliminary correlation among study variables

Sample

The sample of pilot study consisted of 52 families (one parent and their adolescent child) further divided into two groups: clinical group (parents with psychopathology) and control group (parents without psychopathology). The clinical group of parents with psychopathology include 27 families: one parent either father or mother (Fathers =11 & Mothers =16) and their adolescent children (Males =14 & Females =13). Among 27 parents, 16 (59.2%) were having Major Depressive Disorder and 11 (40.7%) were having Schizophrenia. There were 6 (37.5%) fathers and 10 (62.5%) mothers in MDD group while there were 7 (63.6%) fathers and 4 (36.4%) mothers in Schizophrenia group. Parents with psychopathology were selected from psychiatric units of Pakistan Institute of Medical Sciences (PIMS) and Pakistan Atomic Energy Commission (PAEC) hospital in Islamabad. The control

group of parents without psychopathology include 25 families (one parent either father or mother, Fathers =11 & Mothers =14) and their adolescent children (Males =11 & Females =14). The control group of parents without psychopathology was selected from the general population of twin cities of Rawalpindi and Islamabad. The age range of parents in both groups was 33-60 (M =45.69, SD =7.32) and the age range of the children was 12-18 (M =14.86, SD =2.00). The participants were selected through purposive sampling technique.

The clinical group was diagnosed according to the diagnostic criteria of DSM-5 (APA, 2013) by the respective psychiatrist and clinical psychologists. Initially patients were referred by the psychiatrists according to required inclusion criteria. Diagnostic reliability of psychiatrist-referred sample was assessed by two psychologists independently who were blind to clinical status of the patients. Cohen's kappa coefficient for chance-corrected agreement between diagnoses of Major depressive Disorder (κ = 0.90, p < .001) and Schizophrenia (κ = 0.87, p < .001) was calculated indicating strong agreement. All patients were administered a psychological case history form to get detailed information about their psychiatric illness as well as to confirm the diagnosis. Finally, diagnosis was made on the basis of diagnostic criteria of DSM-5.

The minimum education level of participants was matriculation (ten years of education) in order to ascertain better understanding of measures used in the present study. The two groups were similar in terms of age, gender, education, family income, family size and family system. Only those individuals who matched (on

demographic variables) with the participants in the clinical group (parents with psychopathology) were selected as control group (parents without psychopathology).

Initially 81 families (44 parents with psychopathology and 37 parents without psychopathology) consented to participate in the pilot study. Later 17 parents with psychopathology and 12 parents without psychopathology were dropped out due to several reasons; they could not meet the eligibility criteria, refused to participate in the study, were no longer willing/interested to participate, could not complete the research forms, their adolescent children could not be approached. To be eligible, subjects had to meet the inclusion/exclusion criteria mentioned on pages (84-85).

Measures

In the pilot study, following measures were used. The detailed description of these measures is available on page (89-95) in the main study.

- Psychological Case History Form
- Mini Mental State Examination (MMSE)
- Alabama Parenting Questionnaire (Parent and Child Form)
- Youth Self Report (YSR)
- Brief COPE
- Early Adolescent Temperament Questionnaire-Revised (EATQ-R) Short Form

Procedure

The data for this phase of study was gathered from Rawalpindi and Islamabad. The clinical sample was selected from psychiatric departments of PIMS and PAEC hospital in Islamabad. First of all the concerned hospital authorities were contacted to get permission for data collection and the purpose of study was explained to them by the researcher. Then patients were approached through psychiatrists. Patients who fulfilled the inclusion criteria were selected for instrument administration. Both verbal and written consent was taken from all the patients. Only those patients were included who consented to participate in the study. The patients were seated in a separate room and were given verbal and written instructions. The research instruments and demographic information sheets were individually administered to the patients. Before the administration of study instruments, the researcher not only briefed about the purpose of study but also assured the confidentiality to the participants. The whole procedure took almost one hour with each patient.

The adolescents of parents with psychopathology were approached with the consent of their parents. Data from adolescents was collected in hospital setting as well as at their homes. The same standard procedure was applied to the adolescents as to their parents. Adolescents took 35-45 minutes to complete the instruments. Anonymity of the participants was maintained. Purposive sampling was done to include the participants. The control group (parents without psychopathology) was selected from the different institutes and organizations of Rawalpindi and Islamabad city. Standard procedure was applied to the control group as with the clinical group

and the scales were administered individually in the similar setting. The Data was analyzed through SPSS and results were compiled.

Ethical considerations were strictly followed and maintained throughout the research. Informed consent was taken by concerned authorities (Heads of respective psychiatric units). All participants joined voluntarily after giving verbal and written informed consent and could withdraw from study if they want. Confidentiality was assured to all participants (parents and adolescents). Parental consent was sought before approaching their adolescent children. Adolescents also gave their consent to participate in the study.

Results of Pilot Study

Pilot study was conducted to check the suitability of measures and to find preliminary correlation between parenting practices and behavioral problems among adolescents having parents with psychopathology and without psychopathology. The results of pilot study displayed in the following tables.

Table 1

Descriptive Statistics and Alpha Reliability Values of the Scales Used in Pilot Study (N= 52)

Variables	No. of Items	M	SD	A	Range		Skewness
					Potential	Actual	
Alabama Parenting Questionnaire							
Parent-Report							
Positive Involvement/Parenting	16	49.08	16.94	.82	16-80	21-76	-.113
Negative/Ineffective Discipline	11	24.67	6.98	.79	11-55	11-42	.476
Deficient Monitoring	8	16.27	6.33	.80	8-40	10-38	1.826
Child-Report							
Positive	16	41.94	14.69	.84	16-80	18-72	.143

Involvement /Parenting							
Negative/Ineffective Discipline	11	26.04	7.35	.78	11-55	15-43	.235
Deficient Monitoring	8	16.92	5.75	.79	8-40	10-36	1.253
Youth Self Report							
Internalizing Problems	31	17.61	5.41	.88	0-62	9-30	.189
Externalizing Problems	32	13.10	7.19	.89	0-64	5-37	1.611
Brief COPE							
Avoidant Coping	10	22.02	8.30	.72	10-40	11-38	.320
Problem-focused Coping	7	17.61	5.48	.75	7-28	8-27	-.189
Positive Coping	7	17.87	4.64	.73	7-28	8-26	-.369
Religious Coping	2	6.33	1.57	.72	2-8	3-8	-.443
Denial	2	3.92	1.71	.71	2-8	2-8	.367
EATQ-R Short Form							
Effortful Control	16	10.47	2.50	.72	1.0-16	5.30-13.53	-.286

EATQ-R Short Form = Early Adolescent Temperament Questionnaire – Revised Short Form

Note: The scores of effortful control scale are presented in mean scores.

Table shows the descriptive details with alpha coefficients and skewness of all the translated Urdu scales used in the pilot study. The values of alpha are moderate to high which indicate that the reliability coefficients are in satisfactory range. The values of skewness are in acceptable ranges and indicate that the data is normally

distributed (Field, 2009). It further suggests the relevance of Urdu translated scales for Pakistani sample.

Item-total Correlation and Corrected Item-total Correlation. In order to assess internal consistency of the scales, item-total correlations and corrected item-total correlations of all the scales/subscales were calculated (for tables and description see Annexure A).

Inter-scale Correlations Coefficient. To find preliminary correlation among study variables and to see trends and direction of relationship for all the scales inter-scale correlations coefficient was conducted.

Table 2

Correlation Matrix of all Study Variables (N = 52)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	PI/P-P	-	-.48**	-.49**	.77**	-.52**	-.48*	-.51**	-.46*	-.43**	.30*	.24*	.46**	-.13*	.60**
2	N/ID-P		-	.26*	-.43**	.62**	.24	.38*	.51**	.22	-.46**	-.53**	-.56**	.16	-.44**
3	DM-P			-	-.57**	.44**	.68**	.26	.41**	.42**	-.20	-.15	-.24	.34*	-.22*
4	PI/P-C				-	-.54**	-.17	-.48**	-.41**	-.45**	.44**	.37*	.38*	-.20	.71**
5	N/ID-C					-	.31*	.39*	.46**	.39*	-.41**	-.54**	-.43**	.23	-.56**
6	DM-C						-	.14	.42**	.29	-.18	-.13	-.15	.52**	-.47**
7	INT							-	.55**	.66**	-.33*	-.25	-.24	.53**	-.76**
8	EXT								-	.48**	-.37*	-.29	-.36*	.62**	-.67**
9	AC									-	-.34*	-.40**	-.14	.62**	-.67**
10	PC										-	.45**	.45**	-.32*	.42**
11	PC											-	.23*	-.10	.50**
12	RC												-	-.06	.69**
13	D													-	-.55**
14	EC														-

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

Note: PI/P-P = Positive Involvement/Parenting-Parent, N/ID-P = Negative/Ineffective Discipline-Parent, DM-P = Deficient Monitoring-Parent, PI/P-C = Positive Involvement/Parenting-Child, N/ID-C = Negative/Ineffective Discipline-Child, DM-C = Deficient Monitoring-Child, INT = Internalizing Problems, EXT = Externalizing Problems, AC = Avoidant Coping, PC = Problem-focused Coping, PC = Positive Coping, RC = Religious Coping, D = Denial, EC = Effortful Control

Discussion

The results of pilot study indicated that the relationship among study variables was theoretically consistent and in expected direction. The results indicated that positive involvement/parenting both child and parent reported have significant negative correlation with behavioral problems among adolescents, whereas negative/ineffective discipline and deficient monitoring both child and parent reported have significant positive correlation with behavioral problems among adolescents. Results also indicated the relationship of behavioral problems with coping strategies and effortful control. Behavioral problems are significantly negatively correlated with problem-focused, positive and religious coping, whereas positively correlated with avoidant coping and denial. Effortful control is significantly negatively correlated with behavioral problems among adolescents. Moreover, correlation matrix shows significant positive correlation between parent and child reported parenting practices indicating similarity of perception between parents and adolescents. Overall, the findings of the pilot study support the evidence of reliability for all Urdu translated versions of the scales as well as suggest appropriateness and relevance of these measures in the local context.

PHASE-II (MAIN STUDY)

The objective of the main study was to examine differences in parenting practices and behavioral problems among adolescents having parents with psychopathology (MDD & Schizophrenia) and without psychopathology. It also intended to find out the association between parenting practices and behavioral problems among adolescents having parents with psychopathology. Another objective was to explore the moderating role of adolescents' coping strategies and effortful control on the relationship between parenting practices and behavioral problems. Main study was primarily carried out to test the formulated hypotheses of the study.

METHOD

Objectives

The study was carried out keeping in view the following objectives:

1. To examine differences in parenting practices and behavioral problems among adolescents having parents with psychopathology (MDD & Schizophrenia) and without psychopathology.
2. To find out association between parenting practices and behavioral problems (internalizing and externalizing) among adolescents having parents with psychopathology.

3. To examine the main impact of coping strategies and effortful control on behavioral problems (internalizing and externalizing) among adolescents having parents with psychopathology.
4. To explore the moderating role of adolescents' coping strategies and effortful control on the relationship between parenting practices and behavioral problems among adolescents having parents with psychopathology.

Hypotheses

The following hypotheses were formulated for the present study.

1. Parents with psychopathology (MDD & Schizophrenia) will show less positive involvement/parenting as compared to parents without psychopathology.
2. Parents with psychopathology (MDD & Schizophrenia) will report high negative/ineffective discipline and deficient monitoring as compared to parents without psychopathology.
3. Adolescents having parents with psychopathology (MDD & Schizophrenia) will report higher levels of behavioral problems (internalizing and externalizing) as compared to adolescents having parents without psychopathology.
4. Positive involvement/parenting is negatively associated with behavioral problems among adolescents.

    4a. Positive involvement/parenting is negatively associated with internalizing problems among adolescents.

4b. Positive involvement/parenting is negatively associated with externalizing problems among adolescents.

5. Negative/ineffective discipline and deficient monitoring are positively associated with behavioral problems among adolescents.

   5a. Negative/ineffective discipline and deficient monitoring are positively associated with internalizing problems among adolescents.

   5b. Negative/ineffective discipline and deficient monitoring are positively associated with externalizing problems among adolescents.

6. Problem-focused, positive and religious coping are negatively associated with behavioral problems among adolescents.

   6a. Problem-focused, positive and religious coping are negatively associated with internalizing problems among adolescents.

   6b. Problem-focused, positive and religious coping are negatively associated with externalizing problems among adolescents.

7. Avoidant coping and denial are positively associated with behavioral problems among adolescents.

   7a. Avoidant coping and denial are positively associated with internalizing problems among adolescents.

   7b. Avoidant coping and denial are positively associated with externalizing problems among adolescents.

8. Effortful control is negatively associated with behavioral problems among adolescents.

8a. Effortful control is negatively associated with internalizing problems among adolescents.

8b. Effortful control is negatively associated with externalizing problems among adolescents.

9. Coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the association between parenting practices and behavioral problems.

9a. Coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the association between positive involvement/parenting and internalizing problems.

9b. Coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the association between positive involvement/parenting and externalizing problems.

9c. Coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the association between negative/ineffective discipline and internalizing problems.

9d. Coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the association between negative/ineffective discipline and externalizing problems.

9e. Coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the association between deficient monitoring and internalizing problems.

9f. Coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the association between deficient monitoring and externalizing problems.

10. Effortful control of adolescents will moderate the association between parenting practices and behavioral problems.

10a. Effortful control of adolescents will moderate the association between positive involvement/parenting and internalizing problems.

10b. Effortful control of adolescents will moderate the association between positive involvement/parenting and externalizing problems.

10c. Effortful control of adolescents will moderate the association between negative/ineffective discipline and internalizing problems.

10d. Effortful control of adolescents will moderate the association between negative/ineffective discipline and externalizing problems.

10e. Effortful control of adolescents will moderate the association between deficient monitoring and internalizing problems.

10f. Effortful control of adolescents will moderate the association between deficient monitoring and externalizing problems.

Operational Definitions of Variables

Parents with Psychopathology. Parents with psychopathology are operationally defined as clinical group having psychiatric disorders like MDD and Schizophrenia in accord with diagnostic criteria of DSM-5, APA, 2013.

Major Depressive Disorder (MDD). MDD is operationally defined in accordance with diagnostic criteria of DSM-5 (See Annexure B for detailed diagnostic criteria of MDD).

Schizophrenia. Schizophrenia is operationally defined according to the diagnostic criteria of DSM-5 (See Annexure B for detailed diagnostic criteria of schizophrenia].

Parents without Psychopathology. Parents without psychopathology are operationally defined as control group who have no history of psychiatric illness, never received any psychiatric treatment including medication and psychotherapy, and not having any history of psychiatric illness in their first degree relatives (e.g., parents). They were matched with the clinical group on the variables of age, gender, education, family monthly income, family size and family system.

Parenting Practices. Parenting practices are the specific, goal-directed behaviors and actions which have direct impact on the child (e.g., discipline, control, monitoring,

warmth, involvement, and positive reinforcement) and through which parents perform their parental duties such as promoting and guiding children's socialisation (Darling & Steinberg, 1993).

Parenting practices are operationally defined as scores on Urdu version of Alabama Parenting Questionnaire (APQ) which measures different parenting constructs namely, Positive Involvement/Parenting, Negative/Ineffective Discipline and Deficient Monitoring.

Behavioral Problems. Behavioral problems are *"the maladaptive emotional and behavioral patterns that are assessed in terms of internalizing and externalizing problems"* (Achenbach, 1991). Both internalizing and externalizing problems are operationally defined as scores on Urdu version of Youth Self Report (YSR). High scores indicate high level of internalizing and externalizing problems.

Coping. Coping is assessed in terms of coping strategies of adolescents which they use to deal with stress. Coping strategies refer to the *"specific conscious efforts, both behavioral and psychological that people employ to master, tolerate, reduce, or minimize stressful events/conflicts, solve personal and interpersonal problems"* (Lazarus & Folkman, 1984). In the present study, coping strategies are assessed on the Urdu version of Brief COPE, categorized into subscales of "avoidant coping", "problem-focused", "positive", and "religious coping" and "denial".

Effortful Control. The self-regulatory processes of temperament are called 'effortful control'. It is defined as '*'the ability to inhibit a dominant response to perform a subdominant response''* (Rothbart & Bates, 2006), it also includes processes of attention regulation and behavior regulation. The attention regulation refers to the capability to focus attention when needed and the behavior regulation is described as the ability to inhibit behavior when appropriate.

In present study effortful control is operationally defined as the scores on dimension of effortful control of Urdu version of Early Adolescent Temperament Questionnaire Revised (EATQ-R). The dimension of effortful control consists of subscales of attention, inhibitory control and activation control (Ellis & Rothbart, 2001).

Sample

The sample of main study consisted of 348 families (one parent and their adolescent child) divided into two groups: clinical group (parents with psychopathology) and control group (parents without psychopathology). The clinical group (parents with psychopathology) include 173 families: one parent either father or mother (Fathers = 74 & Mothers = 99) and their adolescent children. Among 173 parents, 107 (61.8%) were having Major Depressive Disorder (MDD) and 66 (38.2%) were having Schizophrenia. There were 34 (31.8%) fathers and 73 (68.2%) mothers in MDD group while there were 40 (60.6%) fathers and 26 (39.4%) mothers in Schizophrenia group. One adolescent was randomly selected from each family resulting in total number of 173 adolescents. Among adolescents 82 (47.4%) were boys and 91(52.6%) were girls. The mean age of parents

was 42.66 (*SD* = 3.86) and the age range of the adolescents was 12-18 years (*M* = 15.14, *SD* = 1.97). The minimum education level of participants was ten years of education in order to ascertain better understanding of measures used in the present study. The parents' education ranged from 10th grade to 16th or equivalent. The average income of the families was 45589.60/PKR per month. Among 173 families, 90 (52.0%) families were from joint family system and 83 (48.0%) were from nuclear family system. The family history of mental illness was present in 66 (38.2%) patients, whereas 107(61.8%) patients were not having any history of mental illness. Almost 49% of parents were having up to 3 children and 51% were having more than 3 children (for detailed demographic characteristics of clinical group see Annexure C).

Parents with psychopathology were selected from psychiatric units of Rawalpindi and Islamabad city including PIMS, PAEC Hospital, and Benazir Bhutto Hospital (BBH), Pakistan Railways Hospital and some private psychiatric clinics. The participants were selected through purposive sampling technique. The sample was diagnosed according to the diagnostic criteria of DSM-5 by the respective psychiatrist and clinical psychologists. Detailed case history interviews were conducted by trained clinical psychologists. Initially patients were referred by the psychiatrists according to required inclusion criteria. Then all patients who met eligibility criteria were further evaluated through psychological case history form to get detailed information about their psychiatric illness as well as to confirm the diagnosis. Diagnostic reliability of psychiatrist-referred sample was assessed by two clinical psychologists independently who were blind to clinical status of the patients. Cohen's kappa was calculated to determine the agreement between the two psychiatric records for the diagnoses of Major

depressive Disorder and Schizophrenia. There was strong agreement between the two raters on diagnoses of Major depressive Disorder ($\kappa = 0.91$, $p < .001$) and Schizophrenia ($\kappa = 0.88$, $p < .001$).

The control group (parents without psychopathology) include 175 families one parent (either father or mother, Fathers = 69 (39.4%) & Mothers =106 (60.6%) and their adolescent children. One adolescent was randomly selected from each family resulting in total number of 175 adolescents. Among adolescents 81 (53.7%) were boys and 94 (46.3%) were girls. The control group was selected from different institutes and organizations of Rawalpindi and Islamabad city. The selected participants were then screened with the help of psychological case history form for any possible indication of medical or psychiatric illness.

After careful matching for age, gender, education, family monthly income, family system and family size all the consenting parents were included in the study (for baseline comparison between clinical and control group on demographic variables see Annexure C). Only those individuals who matched with the participants in clinical group were selected as control. Mean age of parents was 42.29 ($SD = 3.38$) and the age range of the children was 12-18 ($M = 15.27$, $SD = 1.87$). Just like clinical group the minimum education level of participants of control group was ten years of education in order to ascertain better understanding of measures used in the present study. The parents' education ranged from 10th grade to 16th or equivalent. The average income of the families was 45622.86/PKR per month. Among 175 families, 75 (42.9%) families were from joint family system and 100 (57.1%) were from nuclear family system. Almost

47% of parents were having up to 3 children and 53% were having more than 3 children. The participants were selected through purposive sampling technique.

The semi-structured clinical interview was conducted with 329 psychiatric referrals and 156 families were excluded because they refused to participate or were no longer interested (31), could not fulfill criteria for MDD (26) or Schizophrenia (21), had other comorbid disorders (24), had a serious medical condition (9), parents could not complete the study measures (13), adolescent children could not be approached (11), target child was having intellectual or developmental disability (2), parents with cases of divorce, separation and death of one spouse (4), education below matric (10), or failure to meet adolescent age criteria (5). The final sample consisted of 173 parents who had psychopathology (MDD = 107, Schizophrenia = 66). The overall response rate for the clinical group was almost 53%.

Regarding selection of control group, 261 families volunteered to participate in the study, later 88 families were excluded because they refused to participate or were no longer interested (21), did not meet criteria for having no history of psychiatric illness (19), had a serious medical condition (11), parents could not complete the study measures (9), adolescent children could not be approached (8), parents with cases of divorce, separation and death of one spouse (3), education below matric (11), or failure to meet adolescent age criteria (6). The final sample consisted of 175 families who were without psychopathology. The overall response rate for the control group was 67%. The participants of the both clinical and control group were selected according to the following inclusion and exclusion criteria:

Inclusion/Exclusion Criteria for Clinical Group

Parents with psychopathology were selected according the following criteria:

- One of the parents with psychopathology (either father or mother) who received the diagnosis of either MDD or Schizophrenia according to the diagnostic criteria of DSM-5.
- Duration of illness at least one year
- Having at least one adolescent in the age range of 12-18 years
- Both parents alive and living together (i.e., with no case of divorce or separation or death of one spouse)
- Literate families with minimum education up to 10th grade
- Patients having any comorbidity, intellectual disability, organic brain damage, other serious medical conditions and alcohol or substance abuse were not included in the study.
- Further adolescents having any developmental disorder and/or intellectual disability, and any serious physical illness were also not included.

Inclusion/Exclusion Criteria for Control Group

Parents without psychopathology were selected based on following criteria:

- Parents who matched on age, gender, education, income, family size and family system with the clinical sample
- Who have no history of psychiatric illness, have never sought any kind of psychiatric/psychological treatment (psychotropic medication/psychotherapy)

- Who do not have any history of mental illness in first degree relatives (e.g., parents)
- Having at least one adolescent with the age range of 12-18 years
- Both parents alive and living together (i.e., with no case of divorce or separation or death of one spouse)
- Literate families with minimum education up to 10th grade
- Parents having any intellectual disability, organic brain damage, other medical conditions and alcohol or substance abuse were not included in the study.
- Further adolescents having any developmental disorder and/or intellectual disability, and any serious physical illness were also not included.

Ethical Considerations

All procedures performed in the study were according to the ethical standards of the institutional research committee (Quaid-i-Azam University, Islamabad, Pakistan) and comparable ethical standards. Ethical procedures were strictly followed and maintained throughout the research. The research proposal was approved by the Advance Studies and Research Board (AS & RB), Quaid-i-Azam University Islamabad. Permission was taken by concerned authorities (Heads of respective psychiatric units). All participants joined voluntarily after giving verbal and written informed consent and were free to withdraw from study at any point if they want. Confidentiality was assured to all participants (parents and adolescents). Parental consent was sought before approaching their adolescent children and adolescents' consent was also sought to participate in the study. Moreover, no monetary benefits were offered (for parent and adolescent consent form see Annexure D).

Measures of the Study

Diagnostic Assessment. The clinical sample was diagnosed as MDD or Schizophrenia according to criteria of DSM-5.

Psychological Case History Form. A psychological case history form was administered for the psychological assessment of the patients. It included information like reported problems and symptoms, psychopathology in the family, history of present illness, patients' medical history, family history, history of work, school, social, sexual history, type of disorder, duration of illness, medication and tentative diagnosis. This case history form was used to further confirm the diagnosis (See Annexure E).

Mini Mental State Examination. The Mini-Mental State Examination (MMSE) Urdu version (Awan et al., 2015) was used in the present study to assess cognitive impairment in the patients with schizophrenia. MMSE is a brief, standardized screening tool used to measure impairment in cognitions (Folstein, Folstein, & McHugh, 1975). The MMSE has 11 simple questions categorized into 7 cognitive domains. These domains include "orientation to time", "orientation to place", "registration of three words", "attention and calculation", "recall of 3 words", "language, and visual construction". Total score is 30, the classification of impairment levels is done as none (24-30); mild (18-23) and severe (0-17) and the cut off point is 24 [Dick et al., 1984]. Based on the screening of MMSE only those patients with schizophrenia were included

in the study who scored above the cutoff point. Low score indicate presence of cognitive impairment (See Annexure F).

Other Measures of Study

Demographic Information Sheet. Demographic information including age, gender and birth order of adolescents, family monthly income, family system, age, gender, education and occupation of parents, number of children and other information was sought form the parents (See Annexure G).

Alabama Parenting Questionnaire (APQ) Parent and Child Form. APQ (Shelton, Frick, & Wootton, 1996) Urdu version (Mushtaq, 2015) was used to examine parenting practices. Both parent and child forms are available and in the present research both forms were used. Cross-reporter measures of parenting practices were used to minimize the effects of reporter bias and shared method variance. The original APQ is a self-report measure of parenting and has 42 items. It measures six dimensions of parenting including "Parent Involvement", "Positive Parenting", "Poor Monitoring/Supervision", "Inconsistent Discipline", "Corporal Punishment", and "Other Discipline Practices". Both child and parent forms are scored on a "5-point Likert scale" (1= "never" to 5 = "always"). Higher scores indicate more use of that particular parenting dimension. APQ has good psychometric properties including internal consistency, convergent validity with other forms of the questionnaire (Shelton et al.,

1996), and good criterion validity (Dadds, Maujean, & Fraser, 2003; Frick et al., 1999; Shelton et al., 1996).

In the present study three factor structure APQ (Hinshaw et al., 2000) is used to assess parenting practices. It is divided into three factors: Positive Involvement/Parenting (positive parenting and involvement), Negative/Ineffective Discipline (inconsistent discipline and corporal punishment) and Deficient Monitoring (poor monitoring/ supervision). The Urdu version of APQ (Mushtaq, 2017) has good psychometric properties (See Annexure H).

Youth Self Report (YSR). To assess the behavioral problems among adolescents, YSR Urdu translation by Khan and Avan (2014) was used. YSR (Achenbach & Rescorla, 2001) is one component of ASEBA (Achenbach System of Empirically Based Assessment) - a multi-axial behavioral assessment procedure for behavioral and emotional problems in adolescents. YSR is a self-report measure and comprises of 118 questions, scored on a “3-point Likert scale” (0 = “absent”, 1 = “occurs sometimes”, 2 = “occurs often”). The YSR is used only with children 11-18 years. The YSR yields scores on two broadband scales: “Internalizing” and “Externalizing”, and eight empirically derived syndrome scales. In the present study “internalizing and externalizing scales” have been used. The “Internalizing Problems” scale includes the “Anxiety/Depressed”, “Withdrawn/Depressed”, and “Somatic Complaints” subscales whereas the “Externalizing Problems” scale includes “Rule-Breaking Behavior” and “Aggressive Behavior” subscales. The YSR has satisfactory internal consistency and test re-test reliability. The alpha value for the Internalizing scale is .91 and for the externalizing scale

is .92 (Achenbach & Rescorla, 2001). The Youth Self Report (YSR) has also acceptable content validity, convergent validity, and construct validity (Achenbach & Rescorla, 2001) [See Annexure I].

Brief COPE. The Brief COPE (Carver, 1997), Urdu version by Akhtar (2005) was used to assess the coping of adolescents. It is a shorter version of COPE Inventory (Carver, Scheier, & Weintraub, 1989) and has good psychometric properties. It consists of "28 items". The Brief COPE has "14 subscales" and items are scored on a "4-point Likert format" -"1 = Never", "2 = Very less", "3 = Sometimes", and "4 = A lot". Brief COPE (Urdu version) has been extensively used in local context and has well established psychometric properties (Aslam & Kamal, 2015; Fatima & Tahir, 2013; Nazir & Mohsin, 2013; Sabih, 2006; Shahid, 2012). In the present study, the 14 subscales were classified into five subscales: "Avoidant Coping", "Problem-Focused Coping", "Positive Coping", "Religious Coping", and "Denial Coping" as previously categorized (Nazir & Mohsin, 2013). On each subscale high score shows more use of that particular coping strategy and vice versa. (See Annexure J).

Early Adolescent Temperament Questionnaire-Revised (EATQ-R). The short version of EATQ-R (self-report), originally developed by Ellis and Rothbart (2001) and translated into Urdu by Mushtaq (2017), was used to measure effortful control. EATQ-R is an updated version of the EATQ (Capaldi & Rothbart, 1992). The complete scale has 65 items and assesses four higher order factors of temperament: 1). "Effortful Control", 2). "Surgency", 3). "Negative Affect", and 4). "Affiliativeness". Each factor is comprised

of certain subscales. The items of EATQ-R are rated on a “5-point Likert scale” ranging from “1= (almost never true)” to “5 = (almost always true)”.

The factor effortful control (EC) measures the regulative temperament and consists of subscales: “Attention”, “Inhibitory Control”, and “Activation Control” having 16 items. Mean scores of the subscales were computed to obtain final score of EC factor. Higher scores indicate higher level of effortful control and lower scores reflect low levels of effortful control. The internal consistency of the instrument is quite satisfactory with Cronbach’s alphas ranging 0.65 to 0.82 (Ellis & Rothbart, 2001). The Urdu version of EATQ-R (Mushtaq, 2017) has good psychometric properties (See Annexure K).

Procedure

The data for the main study was collected from different psychiatric units/clinics of Rawalpindi and Islamabad city. The clinical sample (parents with psychopathology) was selected from psychiatric departments of PIMS, PAEC hospital, BBH, Pakistan Railways Hospital, and private clinics in Rawalpindi and Islamabad city. First of all to get permission for data collection, the concerned hospital authorities were approached and purpose of study was explained to them. Then, the patients were approached through psychiatrists. Initially patients were referred by the psychiatrists according to required inclusion criteria. Then patients were administered psychological case history form by psychologists to get in-depth details about past and present history of their psychiatric illness and to further confirm the diagnosis and final diagnosis was made according to the diagnostic criteria of DSM-5. Patients who fulfilled the inclusion criteria were selected for instrument administration. Only those patients were included who consented to

participate in the study. Before the administration of all study measures, participants were explained the purpose of study. Both verbal and written consent was taken from all the patients and confidentiality was assured. The patients were seated in a separate room. They were given written as well as verbal instructions. The researcher kept answering and explaining every question of the participants. This procedure helped participants to overcome their hesitation as well as helped the researcher for building trust and rapport with them. The research instruments and demographic information sheets were individually administered to the participants. They were told that the information obtained from them will remain confidential. The whole procedure took almost one hour with each patient. Then adolescents of parents with psychopathology were approached with the consent of their parents. Adolescents also gave their consent. Data from adolescents was collected in hospital setting as well as at their homes. With some adolescents telephonic survey was conducted to get information about adolescent reported measures. The same standard procedure was applied to the adolescents as to their parents. Adolescents took 35-45 minutes to complete the instruments. Anonymity of the participants was maintained. Purposive sampling was done to include the participants.

The control group sample (parents with no psychopathology) was selected from the different institutes and organizations of the city Rawalpindi and Islamabad. Same standard procedure applied to the clinical group was followed with control group. The scales were administered individually in the similar testing situations. The sitting arrangement and other environmental variables were made identical throughout the study.

In the context of Pakistani culture, it is important to mention that researchers face multiple difficulties to conduct a study in the clinical setting. In Pakistan, still stigma and

isolation is attached with mental health disorders. It is quite difficult to obtain permission and consent from patients and caregivers because of trust and confidentiality related issues. Patients don't feel comfortable to disclose their personal information. The lack of funding, reluctant attitude of caregivers and patients, and at times uncooperative attitude of the clinicians limit the opportunity for increased sample size which was also the case in the present study.

Analysis Plan

The Data was analyzed through SPSS and results were compiled. Descriptive statistics, correlation analyses and hierarchical multiple regression analyses between the predictors and outcome variables were computed by using SPSS 21. The preliminary correlation coefficients were calculated to examine the associations between study variables. Hierarchical multiple regression analyses were conducted to test the prediction of study variables for the clinical sample. Univariate analyses of variance (ANOVAs) were used to examine the mean differences on the study variables. Multivariate analysis of variance (MANOVA) was used for multiple variables. MANOVA minimizes the possibility of Type-II error. Moderation analyses were also computed by following the procedure recommended by Hayes and Matthes (2009) through Process Macro in SPSS.

Chapter III

RESULTS

The aim of the main study was to find out differences in parenting practices and behavioral problems among adolescents having parents with psychopathology and without psychopathology. It was also intended to examine association between parenting practices and behavioral problems among adolescents having parents with psychopathology. Another objective was to explore the moderating role of coping strategies and effortful control on the relationship between parenting practices and behavioral problems among adolescents having parents with psychopathology. Main study was primarily conducted to test the formulated hypotheses of the study. The results of main study are presented into two sections. In the first section results related to preliminary analyses are illustrated, while in the second section the main analyses related to hypotheses testing are displayed.

Preliminary Analyses

In this section, to assure proper data entry the dataset was reviewed. Minimum and maximum ranges of variables were examined. To test normality of data for all variables analysis of skewness, kurtosis, histograms, mean scores, and standard deviations were done. The results indicated that all values were within the acceptable

range and scores for each measure were normally distributed providing the evidence that assumptions were not violated (Field, 2009).

Table 3

Descriptive Statistics and Alpha Reliability Values of the Scales Used in Main Study for Clinical Group (N= 173)

Variables	No. of Items	M	SD	α	Range		Skewness
					Potential	Actual	
Alabama Parenting Questionnaire							
Parent-Report							
Positive Involvement/Parenting	16	41.80	12.31	.84	16-80	19-71	.273
Negative/Ineffective Discipline	11	27.67	7.00	.80	11-55	15-44	.252
Deficient Monitoring	8	17.38	6.81	.81	8-40	8-33	.638
Adolescent-Report							
Positive Involvement/Parenting	16	34.65	11.12	.85	16-80	17-63	.351
Negative/Ineffective Discipline	11	30.41	7.76	.81	11-55	15-45	.116
Deficient Monitoring	8	19.33	6.82	.80	8-40	8-34	.310
Youth Self Report							
Internalizing Problems	31	19.39	7.88	.91	0-62	9-42	.692
Externalizing Problems	32	18.75	9.59	.90	0-64	8-51	1.054

Brief COPE							
Avoidant Coping	10	24.06	7.36	.74	10-40	12-38	.156
Problem-focused Coping	7	16.84	4.80	.75	7-28	9-27	.054
Positive Coping	7	15.99	4.10	.73	7-28	9-25	.237
Religious Coping	2	6.13	1.82	.76	2-8	2-8	-.674
Denial	2	4.38	2.03	.71	2-8	2-8	.330
EATQ-R Short Form							
Effortful Control	16	9.39	2.00	.72	1.0-16	5.30-13.70	.175

EATQ-R Short Form = Early Adolescent Temperament Questionnaire – Revised Short Form

Note: The scores of effortful control scale are presented in mean scores.

Table 3 shows the descriptive statistics of clinical group for all the main study variables and the corresponding alpha coefficients. The alpha values on all variables ranged from .71 to .91 depicting that all the measures of present study were sufficiently reliable for the measurement of constructs. The values of skewness are in acceptable ranges and indicate that the data is normally distributed (Field, 2009).

Table 4

Descriptive Statistics and Alpha Reliability Values of the Scales Used in Main Study for Control Group (N= 175)

Variables	No. of Items	M	SD	α	Range		Skewness
					Potential	Actual	
Alabama Parenting Questionnaire							
Parent-Report							
Positive Involvement/Parenting	16	57.75	10.79	.86	16-80	29-76	-.751
Negative/Ineffective Discipline	11	24.56	6.45	.81	11-55	12-42	.688
Deficient Monitoring	8	15.27	5.21	.80	8-40	8-33	.928
Adolescent-Report							
Positive Involvement/Parenting	16	50.08	11.39	.87	16-80	21-72	-.707
Negative/Ineffective Discipline	11	26.75	6.66	.82	11-55	14-43	.404
Deficient Monitoring	8	17.16	6.62	.81	8-40	9-33	.988
Youth Self Report							
Internalizing Problems	31	14.51	5.74	.91	0-62	6-35	.988
Externalizing Problems	32	12.83	5.84	.92	0-64	5-39	1.664
Brief COPE							
Avoidant Coping	10	19.06	7.26	.75	10-40	10-38	.800
Problem-focused Coping	7	19.27	5.31	.75	7-28	8-28	-.450

Positive Coping	7	18.00	4.62	.74	7-28	8-28	-.184
Religious Coping	2	6.71	1.38	.77	2-8	2-8	-.906
Denial	2	3.51	1.76	.73	2-8	2-8	1.112
EATQ-R Short Form							
Effortful Control	16	11.46	2.02	.73	1.0-16	6.20-13.67	-.940

EATQ-R Short Form = Early Adolescent Temperament Questionnaire – Revised Short Form

Note: The scores of effortful control scale are presented in mean scores.

The Table 4 displays the descriptive statistics and the corresponding alpha coefficients of the control group for all the main study variables. The values of alpha are moderate to high indicating that the reliability coefficients are in satisfactory range. The values of skewness show normal distribution of data.

Table 5

Correlation between Parent and Adolescent Reported Parenting Practices

Subscales	r
Clinical Group (n = 173)	
Positive Involvement/Parenting	.71**
Negative/Ineffective Discipline	.66**
Deficient Monitoring	.67**
Control Group (n = 175)	
Positive Involvement/Parenting	.73**
Negative/Ineffective Discipline	.67**
Deficient Monitoring	.69**
Total Sample (N = 348)	
Positive Involvement/Parenting	.81**
Negative/Ineffective Discipline	.69**
Deficient Monitoring	.68**

**$p < .01$

Table 5 shows significant positive correlation between parent and child reported parenting practices on subscales of Alabama Parenting Questionnaire (APQ). The relationship was in the expected direction.

Given the strong correlation pattern between parent and adolescent reports of parenting practices, both reports were combined for all further analyses. The parent and adolescent reports of parenting practices were combined for the reason that not only there

was strong correlation between the two reports, but also to avoid doubling of the complexity of the analyses. Combining measures would reduce the number of statistical tests conducted. For creating aggregated scores, both parent and adolescent reports of parenting practices were first standardized independently for each reporter. Such an approach assumes that the perceptions of both parent and child are of equal importance and both integral to a more accurate appraisal of parenting practices. Previous studies have documented the utility of combining APQ data across assessment formats (Frick et al., 1999; Latzman, Elkovitch, & Clark, 2009). In literature combining reporters has also been used to combine parent and child reports of other constructs such as behavioral problems and relational aggression (Hinshaw & Park, 1999; Lapre & Marsee, 2012; Lengua, 2008).

Table 6

Correlation on Alabama Parenting Questionnaire - Parent Form for Parents with Schizophrenia and their Spouse (n = 66)

Subscales	r
Positive Involvement/Parenting	.86**
Negative/Ineffective Discipline	.83**
Deficient Monitoring	.84**

$^{**}p < .01$

Table shows bivariate correlations for parents with schizophrenia and their spouse on Alabama Parenting Questionnaire-Parent Form. The magnitude of correlation ranges from .83 to .86. Results indicate that there is a significant positive correlation between schizophrenic patients' reports of parenting practices and their spouse's reports of parenting practices indicating that schizophrenic patients have reliably reported for their parenting practices. Hence, their self-reported parenting practices were included in the study to analyze the data.

Correlation analyses were carried out with demographic variables and the study variables. The results demonstrated that parents' gender was significantly negatively correlated with positive involvement/parenting and positively correlated with deficient monitoring, i.e., mothers scored higher on positive involvement/parenting whereas fathers scored higher on deficient monitoring. Parents' education was significantly positively correlated with positive involvement/parenting and negatively correlated with negative/ineffective discipline and deficient monitoring. Parents' education was also significantly negatively correlated with adolescents' internalizing and externalizing

problems. Gender of the adolescents was significantly positively correlated with negative/ineffective discipline, deficient monitoring, and externalizing problems, whereas significantly negatively correlated with internalizing problems. Age of adolescents was significantly negatively correlated with negative/ineffective discipline, deficient monitoring and externalizing problems, whereas positively correlated with internalizing problems (for details see Annexure L).

In clinical group significant positive correlation emerged between duration of parental illness and internalizing (r (173) = .450, p < .001), and externalizing problems (r (173) = .408, p < .001) among adolescents. Duration of parental illness also significantly negatively correlated with positive involvement/parenting (r (173) = -.513, p < .001), and positively correlated with negative/ineffective discipline (r (173) = .355, p < .001) and deficient monitoring (r (173) = .203, p < .001). Therefore, these variables were included as covariates in the main analyses. No significant correlation were observed for family monthly income, family system and family size with the predictor and criterion variables of the present study hence these variables were not included as covariates in further analyses.

In order to examine the association between the study variables, zero-order correlation was calculated (Table 7).

Table 7

Correlation Matrix of all Study Variables for Clinical and Control Group (N = 348)

		1	2	3	4	5	6	7	8	9	10	11
1	Positive Involvement/Parenting	-	-.62**	-.30**	-.51**	-.50**	-.43**	.52**	.41**	.58**	-.41**	.61**
2	Negative/Ineffective Discipline	-.65**	-	.35**	.41**	.48**	.41**	-.36**	-.39**	-.45**	.40**	-.50**
3	Deficient Monitoring	-.51**	.55**	-	.10	.58**	.29**	-.30**	-.44**	-.26**	.25**	-.36**
4	Internalizing Problems	-.54**	.32**	.07	-	.26**	.57**	-.44**	-.29**	-.50**	.45**	-.57**
5	Externalizing Problems	-.57**	.56**	.57**	.22**	-	.48**	-.49**	-.52**	-.47**	.50**	-.65**
6	Avoidant Coping	-.63**	.59**	.48**	.45**	.53**	-	-.34**	-.33**	-.42**	.53**	-.54**
7	Problem-focused Coping	.66**	-.51**	-.44**	-.46**	-.47**	-.67**	-	.59**	.54**	-.32**	.48**
8	Positive Coping	.60**	-.59**	-.44**	-.37**	-.40**	-.61**	.58**	-	.40**	-.35**	.52**
9	Religious Coping	.49**	-.40**	-.21**	-.39**	-.37**	-.39**	.38**	.45**	-	-.33**	.55**
10	Denial	-.50**	.44**	.18*	.48**	.33**	.48**	-.41**	-.59**	-.41**	-	-.47**
11	Effortful Control	.65**	-.57**	-.56**	-.43**	-.63**	-.52**	.58**	.47**	.36**	-.38**	-

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

Note: Correlations for clinical group (n= 173) are presented above the diagonal and correlations for control group (n= 175) are presented below the diagonal.

Table 8

Prevalence of Behavioral Problems among Adolescents having Parents with Psychopathology (MDD & Schizophrenia) and Without Psychopathology (N=348)

	With Psychopathology (n=173)		Without Psychopathology (n=175)	
	MDD (n=107)	SCHIZO (n=66)		χ^2
Level of Internalizing Problems	f (%)	f (%)	f (%)	
Normal	59 (55.1%)	38 (57.6%)	141 (80.6%)	
Borderline	25 (23.4%)	15 (22.7%)	18 (10.3%)	24.30^{***}
Clinical	23 (21.5%)	13 (19.7%)	16 (9.1%)	
Level of Externalizing Problems				
Normal	65 (60.7%)	37 (56.1%)	139 (79.4%)	
Borderline	22 (20.6%)	14 (21.2%)	21 (12.0%)	18.22^{**}
Clinical	20 (18.7%)	15 (22.7%)	15 (8.6%)	

$^{**}p < .001$, $^{***}p < .001$, $df = 4$

Note: MDD = Major Depressive Disorder, SCHIZO = Schizophrenia

Table 8 shows the prevalence of internalizing and externalizing problems among adolescents having parents with psychopathology (MDD & Schizophrenia) and without psychopathology. The results of Chi square analysis indicated that adolescents having parents with psychopathology (MDD & Schizophrenia) have significantly higher levels of internalizing and externalizing problems than the adolescents having parents without

psychopathology. For internalizing problems 21.5% and for externalizing problems 18.7% adolescents having parents with MDD fall in the clinical range. Similarly for internalizing problems 19.7% and for externalizing problems 22.7% adolescents having parents with schizophrenia fall in the clinical range.

Main Analyses (Hypotheses Testing)

It was hypothesized that parents with psychopathology (MDD & Schizophrenia) will show less positive involvement/parenting (H # 1), have high negative/ineffective discipline and deficient monitoring (H # 2) and report higher levels of behavioral problems (H # 3).

Demographic variables (Parents' gender and education, adolescents' gender and age) were significantly associated with the dependent variables; hence these variables were entered as covariates in MANCOVAs and ANCOVAs. The initial analysis for each dependent variable examined the main effects for the independent variable of type of illness (1 = parents with MDD, 2 = parents with Schizophrenia, 3 = parents without psychopathology). The findings are presented below in tables.

Table 9

Difference between Clinical Group (Parents with Psychopathology) and Control Group (Parents without Psychopathology) on Parenting Practices (N=348)

	Parents with Psychopathology (n =173)				Parents without Psychopathology (n=175)				
	Parents with MDD (n=107)		Parents with Schizophrenia (n=66)						
Variables	M	SD	M	SD	M	SD	F	p	η^2
Positive Involvement/Parenting	-0.93	1.59	-1.48	1.46	1.13	1.49	125.64	.0001	.424
Negative/Ineffective Discipline	0.27	1.77	0.80	1.97	-0.47	1.67	13.74	.0001	.075
Deficient Monitoring	0.28	2.02	0.42	1.72	-0.33	1.67	8.84	.0001	.049

df =2, 341

Note: MDD = Major Depressive Disorder

Table 10

Posthoc Analysis of Group Difference on the Parenting Practices (N=348)

Variables	(I) Psychopathology groups	(J) Psychopathology groups	Mean Difference (I-J)	(i-j)	S.E	*95% CI*	
						LL	UL
Positive Involvement/ Parenting	Parents with MDD	Parents with Schizophrenia	PMDD>PSchizo	0.41 NS	0.21	-0.10	0.91
	Parents with MDD	Parents without Psychopathology	PMDD<Parents without Psych	-2.05^{***}	0.16	-2.44	-1.66
	Parents with Schizophrenia	Parents without Psychopathology	PSchizo< Parents without Psych	-2.46^{***}	0.19	-2.92	-2.00
Negative/ Ineffective Discipline	Parents with MDD	Parents with Schizophrenia	PMDD<PSchizo	-0.39 NS	0.26	-1.02	0.24
	Parents with MDD	Parents without Psychopathology	PMDD>Parents without Psych	0.73^{**}	0.20	0.25	1.22

	Parents with Schizophrenia	Parents without Psychopathology	PSchizo>Parents without Psych	1.13***	0.24	0.65	1.70
Deficient Monitoring	Parents with MDD	Parents with Schizophrenia	PMDD>PSchizo	0.12 NS	0.22	-0.41	0.65
	Parents with MDD	Parents without Psychopathology	PMDD>Parents without Psych	0.66***	0.17	0.25	1.07
	Parents with Schizophrenia	Parents without Psychopathology	PSchizo>Parents without Psych	0.54**	0.20	0.06	1.03

*$p < .05$, **$p < .01$, ***$p < .001$, *NS* = Non significant

Note: PMDD = Parents with Major Depressive Disorder, PSchizo = Parents with Schizophrenia, Parents without Psych = Parents without Psychopathology

Parenting Practices: Parenting practices were assessed in this domain. MANCOVA for parenting practices yielded a significant main effect. Pillai's trace in MANCOVA showed a significant effect of type of illness on parenting practices, $V = 0.459$, $F(2, 341) = 33.81$, $p < .001$. Subsequent univariate analyses (ANCOVAs) revealed a significant main effect of parenting practices (Table 10). Bonferroni posthoc analyses revealed that parents with psychopathology (MDD & Schizophrenia) scored low on positive involvement/parenting and scored higher on negative/ineffective discipline and deficient monitoring than parents without psychopathology.

Table 11

Difference between Adolescents of Clinical Group (Parents with Psychopathology) and Control Group (Parents without Psychopathology) on the Behavioral Problems (N=348)

	Parents with Psychopathology (n = 173)				Parents without Psychopathology (n=175)				
	Parents with MDD (n=107)		Parents with Schizophrenia (n=66)						
Variables	M	SD	M	SD	M	SD	F	p	η^2
Internalizing Problems	19.63	7.52	19.02	8.47	14.51	5.74	25.98	.0001	.132
Externalizing Problems	17.87	8.82	20.17	10.65	12.83	5.84	28.12	.0001	.142

df =2, 341

Note: MDD = Major Depressive Disorder

Table 12

Posthoc Analysis of Group Differences on the Behavioral Problems (N=348)

Variables	(I) Psychopathology groups	(J) Psychopathology groups	Mean Difference (I-J)	(i-j)	S.E	*95% CI*	
						LL	UL
Internalizing	Parents with MDD	Parents with Schizophrenia	PMDD>PSchizo	0.30 NS	1.00	-2.11	2.70
	Parents with MDD	Parents without Psychopathology	PMDD>Parents without Psych	4.92***	0.77	3.08	6.77
	Parents with Schizophrenia	Parents without Psychopathology	PSchizo>Parents without Psych	4.63***	0.91	2.43	6.83
Externalizing	Parents with MDD	Parents with Schizophrenia	PMDD<PSchizo	-1.00 NS	1.12	-3.70	1.70
	Parents with MDD	Parents without Psychopathology	PMDD>Parents without Psych	5.22***	0.86	3.15	7.30
	Parents with Schizophrenia	Parents without Psychopathology	PSchizo>Parents without Psych	6.23***	1.03	3.75	8.70

$^{***}p < .001$, *NS* = Non significant

Behavioral Problems: Internalizing and externalizing problems were assessed in this domain. Pillai's trace in MANCOVA for the adolescent reported behavioral problems yielded a significant effect, $V = 0.189$, $F(2, 341) = 17.761$, $p < .001$. Subsequent univariate analyses (ANCOVAs) revealed significant main effects of internalizing problems, and externalizing problems (Table 12). Bonferroni posthoc analyses revealed that adolescents having parents with psychopathology significantly scored higher on internalizing and externalizing problems than adolescents having parents without psychopathology.

Hierarchical Multiple Regression Analyses

In order to investigate whether parenting practices were predictive of internalizing and externalizing problems among adolescents hierarchical multiple regression analyses were conducted. For hierarchical multiple regression analyses forced entry method was used. Each hierarchical multiple regression analysis consisted of two steps. First demographic variables (parents' gender and education, adolescents' gender and age) and duration of parental illness were entered as covariates, then in the second step parenting practices were entered to find out their unique contribution in predicting internalizing and externalizing problems over and above the demographic variables and duration of parental illness. The same entry procedure of predictors was applied throughout the analyses.

It was hypothesized that positive involvement/parenting is negatively associated with internalizing and externalizing problems among adolescents (H # 4a & 4b). Similarly, it was hypothesized that negative/ineffective discipline and deficient monitoring are positively associated with internalizing and externalizing problems

among adolescents (H # 5a & 5b). To test these hypotheses hierarchical multiple regression analyses were conducted (Cohen & Cohen, 1983). The findings of hierarchical multiple regression analyses are presented below in table 13 and table 14.

Table 13

Hierarchical Multiple Regression Analysis Predicting Internalizing Problems among Adolescents from Parenting Practices (n=173)

		Internalizing Problems	
	Predictors	ΔR^2	β
Step 1		.34***	
	Control Variables [a]		
Step 2		.10***	
	Positive Involvement/Parenting		-.22**
	Negative/Ineffective Discipline		.06
	Deficient Monitoring		.25**
Total R^2		.44***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

***p <.01, ***p <.001*

The hierarchical multiple regression revealed that at step 1, parents' education, gender of the adolescents and duration of parental illness contributed significantly to

the regression model F (5, 167) = 16.95, $p < .001$), accounting for 34% of the variance in internalizing problems. Adding the predictors (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) to the regression model explained an additional 10% of the variance in internalizing problems and this change in R^2 was significant, F (8, 164) = 16.14, $p < .001$). The results indicated that in model two positive involvement/parenting ($\beta = -.22$, $t = 2.45$, $p < .01$) is a significant negative predictor of internalizing problems, whereas deficient monitoring ($\beta = .25$, $t = 2.87$, $p < .01$) is a significant positive predictor of internalizing problems. Negative/ineffective discipline did not appear to be significant predictor of internalizing problems among adolescents. Together the two models accounted for 44% of the variance in internalizing problems.

Findings in table 13 indicated that positive involvement/parenting is negatively associated with internalizing problems, whereas deficient monitoring is positively associated with internalizing problems. The results further indicated that negative/ineffective discipline is not significantly associated with internalizing problems thus supporting hypothesis # 4a and partially supporting hypothesis # 5a.

Table 14

Hierarchical Multiple Regression Analysis Predicting Externalizing Problems among Adolescents from Parenting Practices (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.17***	
	Positive Involvement/Parenting		-.25**
	Negative/Ineffective Discipline		.16*
	Deficient Monitoring		.28***
Total R^2		.55***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$*p < .05$, $**p < .01$, $***p < .001$

Table 14 shows results of hierarchical multiple regression conducted to test hypotheses 4b and 5b. Step 1 variables contributed significantly to the regression model F (5, 167) = 20.72, $p < .001$), accounting for 38% of the variance in externalizing problems. Results further demonstrated that in Step 2, parenting practices (positive involvement/parenting, negative/ ineffective discipline and deficient monitoring) accounted for significant increase in the explained variance 17%

in externalizing problems, F (8, 164) = 25.77, p < .001). The results indicated that positive involvement/parenting (β = -.25, $t = 3.08$, p < .01) is a significant negative predictor of externalizing problems, whereas negative/ineffective discipline (β = .16, $t = 2.30$, p < .05) and deficient monitoring (β = .28, $t = 3.58$, p < .001) are significant positive predictors of externalizing problems.

Findings in table 14 indicated that positive involvement/parenting is negatively associated with externalizing problems, whereas negative/ineffective discipline and deficient monitoring are positively associated with externalizing problems among adolescents thus supporting hypothesis 4b and 5b.

It was hypothesized that problem-focused, positive and religious coping are negatively associated with internalizing and externalizing problems among adolescents (H # 6a & 6b). Similarly, it was hypothesized that avoidant coping and denial are positively associated with internalizing and externalizing problems among adolescents (H # 7a & 7b). The findings are presented below in table 15 and table 16.

Table 15

Hierarchical Multiple Regression Analysis Predicting Internalizing Problems among Adolescents from Coping Strategies (n =173)

		Internalizing Problems	
	Predictors	ΔR^2	β
Step 1		.34***	
	Control Variables [a]		
Step 2		.24***	
	Avoidant Coping		.35***
	Problem-focused Coping		-.12
	Positive Coping		.02
	Religious Coping		-.15*
	Denial		.15*
Total R^2		.58***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$*p < .05$, $***p < .001$

Table 15 indicates prediction of internalizing problems by coping strategies among adolescents. The results displayed that avoidant coping (β = .35, $t = 5.25, p < .001$) and denial (β = .15, $t = 2.35, p < .05$) are significant positive predictors of internalizing problems, whereas religious coping (β = -.15, $t = 2.38, p < .05$) is a significant negative predictor of internalizing problems. However, problem-focused coping and positive coping did not emerge as significant predictors of internalizing

problems among adolescents. Step 1, variables accounted for 34% of the variance to the regression model *F* (5, 167) = 16.95, $p < .001$, whereas coping strategies explained 24% of the variance in internalizing problems at step 2 and this change in R^2 was significant, *F* (10, 162) = 22.13, $p < .001$. Findings in table 15 illustrates that hypothesis # 6a is partially accepted, whereas hypothesis # 7a is accepted.

Table 16

Hierarchical Multiple Regression Analysis Predicting Externalizing Problems among Adolescents from Coping Strategies (n=173)

		Externalizing Problems	
Predictors		ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.25***	
	Avoidant Coping		.15*
	Problem-focused Coping		-.14*
	Positive Coping		-.14*
	Religious Coping		-.20**
	Denial		.19**
Total R^2		.63***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$*p < .05$, $**p < .01$, $***p < .001$

Table 16 explains that avoidant coping (β = .15, $t = 2.48$, $p < .05$) and denial (β = .19, $t = 3.30$, $p < .01$) are significantly positively associated with externalizing problems, whereas problem-focused coping (β = -.14, $t = 2.05$, $p < .05$), positive coping (β = -.14, $t = 2.31$, $p < .05$) and religious coping (β = -.20, $t = 3.33$, $p < .01$) are significantly negatively associated with externalizing problems among adolescents thus supporting hypothesis # 6b and # 7b. Together the two models accounted for 63% of the variance in externalizing problems.

It was hypothesized that effortful control is negatively associated with internalizing and externalizing problems among adolescents (H # 8a & 8b). The findings are presented in table 17 and table 18.

Table 17

Hierarchical Multiple Regression Analysis Predicting Internalizing Problems among Adolescents from Effortful Control (n=173)

		Internalizing Problems	
	Predictors	ΔR^2	β
Step 1		.34***	
	Control Variables [a]		
Step 2		.15***	
	Effortful Control		-.47***
Total R^2		.49***	

Note. [a] Control variables include parents' education, gender and age of adolescents, duration of parental illness.

***$p < .001$

The results of hierarchical multiple regression revealed that at step 1, control variables contributed significantly to the regression model F (5, 167) = 16.95, $p < .001$, accounting for 34% of the variance. Adding the predictor (effortful control) to the regression model explained an additional 15% of the variance in internalizing problems and this change in R^2 was significant, F (6, 166) = 25.77, $p < .001$. The results indicated that effortful control ($\beta = -.47$, $t = 6.83$, $p < .001$) is significantly negatively associated with internalizing problems among adolescents thus supporting hypothesis # 8a.

Table 18

Hierarchical Multiple Regression Analysis Predicting Externalizing Problems among Adolescents from Effortful Control (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.21***	
	Effortful Control		-.56***
Total R^2		.59***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

****p < .001*

Table 18 illustrated that control variables explained 38% of variance *F* (5, 167) = 20.72, *p < .001* in step 1, results further indicated that effortful control explained an additional 21% of the variance in step 2, *F* (6, 166) = 40.74, *p* < .001. The results indicated that in step two effortful control (β = -.56, *t = 9.34, p < .001*) emerged as significant negative predictor of externalizing problems among adolescents. Together the two models accounted for 59% of the variance in externalizing problems.

Findings in table 18 indicated that effortful control is significantly negatively associated with externalizing problems among adolescents thus supporting hypothesis # 8b.

Moderation Analyses. An important objective of present study was to explore the moderating role of coping strategies and effortful control on the relationship between parenting practices and behavioral problems among adolescents having parents with psychopathology. Analyses to determine whether coping strategies and effortful control of adolescents moderated the relationship between parenting practices and adolescents' internalizing and externalizing problems followed the procedure recommended by Hayes and Matthes (2009) through Process Macro in SPSS. This procedure yields the significance of the change in R^2 produced by interactions between independent (Parenting Practices) and moderator variables (Adolescents' Coping Strategies and Effortful Control). The Process Macro also replaces the Baron & Kenny (1986) approach by examining the association between independent variable (Parenting Practices) and outcome variable (adolescents' behavioral problems) at low (-1 SD below the mean) and high (+1 SD above the mean) levels of the concerned

moderator. For all moderators we conducted models for internalizing and externalizing problems. Demographic variables (parents' gender and education, adolescents' gender and age) and duration of parental illness were entered as covariates in all moderation analyses. Only significant results are reported in tables below:

It was hypothesized that coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the relationship between parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and internalizing problems among adolescents (H # 9a, 9c, & 9e). The results of moderation analyses indicated that none of the coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) moderated the relationship between parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and internalizing problems among adolescents thus not supporting hypothesis # 9a, 9c and 9e.

It was hypothesized that coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the relationship between positive involvement/parenting and externalizing problems (H # 9b). The results of moderation analyses indicated that problem-focused coping, religious coping and denial moderated the relationship between positive involvement/parenting and externalizing problems among adolescents, whereas avoidant coping and positive coping did not moderate this relationship thus partially supporting hypothesis 9b. The findings are presented in tables 19-21.

Table 19

Moderating Effect of Problem-focused Coping on the Relationship between Positive Involvement/Parenting and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.16***	
	Positive Involvement/Parenting		-.34***
	Problem-focused Coping		-.28***
Step 3		.05***	
	Positive Involvement/Parenting x Problem-focused Coping		.31***
Total R^2		.59***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

****p < .001*

Table 19 shows the results of moderation analysis which illustrates significant interaction between independent and moderator variables. The results indicated that positive involvement/parenting × problem-focused coping interaction produced a significant change in R^2 for adolescents' externalizing problems {*F (8, 164) = 17. 73,* $\Delta R^2 = .05, p < .001$} indicating that the relationship between positive

involvement/parenting and externalizing problems is moderated by problem-focused coping. The interaction effect is further illustrated in Figure (2).

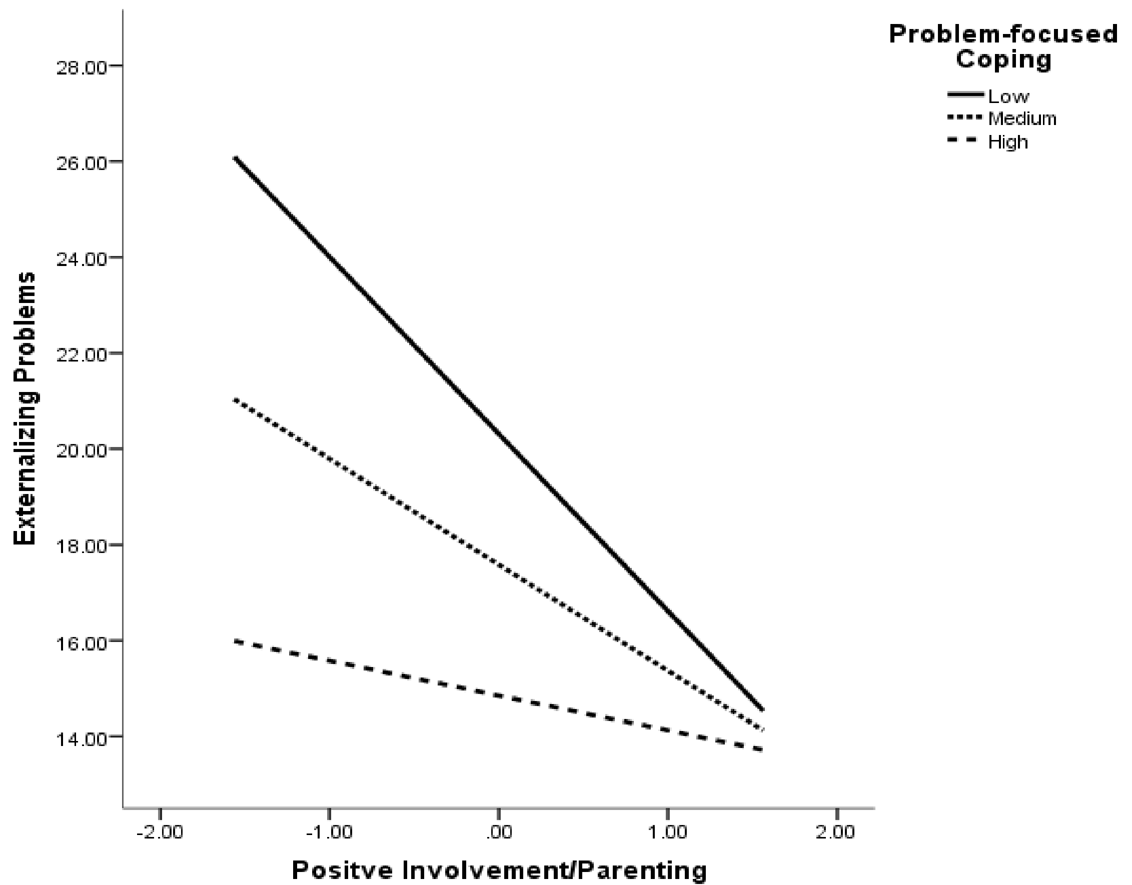

Figure 2. The moderating effect of problem-focused coping on the relationship between positive involvement/parenting and externalizing problems among adolescents.

The figure 2 illustrated that when problem-focused coping is high there is a non-significant relationship between positive involvement/parenting and externalizing problems, when problem-focused coping is low there is a strong significant negative

relationship between positive involvement/parenting and externalizing problems. The results indicated that externalizing problems would be low under the condition of high positive involvement/parenting and high problem-focused coping.

Table 20

Moderating Effect of Religious Coping on the Relationship between Positive Involvement/ Parenting and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.15***	
	Positive Involvement/Parenting		-.27**
	Religious Coping		-.29***
Step 3		.01*	
	Positive Involvement/Parenting x Religious Coping		.48*
Total R^2		.54***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$*p < .05$, $**p < .01$, $***p < .001$

Results in table 20 demonstrated the significant interaction between independent and moderator variables. The results indicated that positive involvement/parenting × religious coping interaction produced a significant change in R^2 for adolescents' externalizing problems {$F(8, 164) = 4.93$, $\Delta R^2 = .01$, $p < .05$}

indicating that the relationship between positive involvement/parenting and externalizing problems is moderated by religious coping. The interaction effect is further demonstrated in Figure (3).

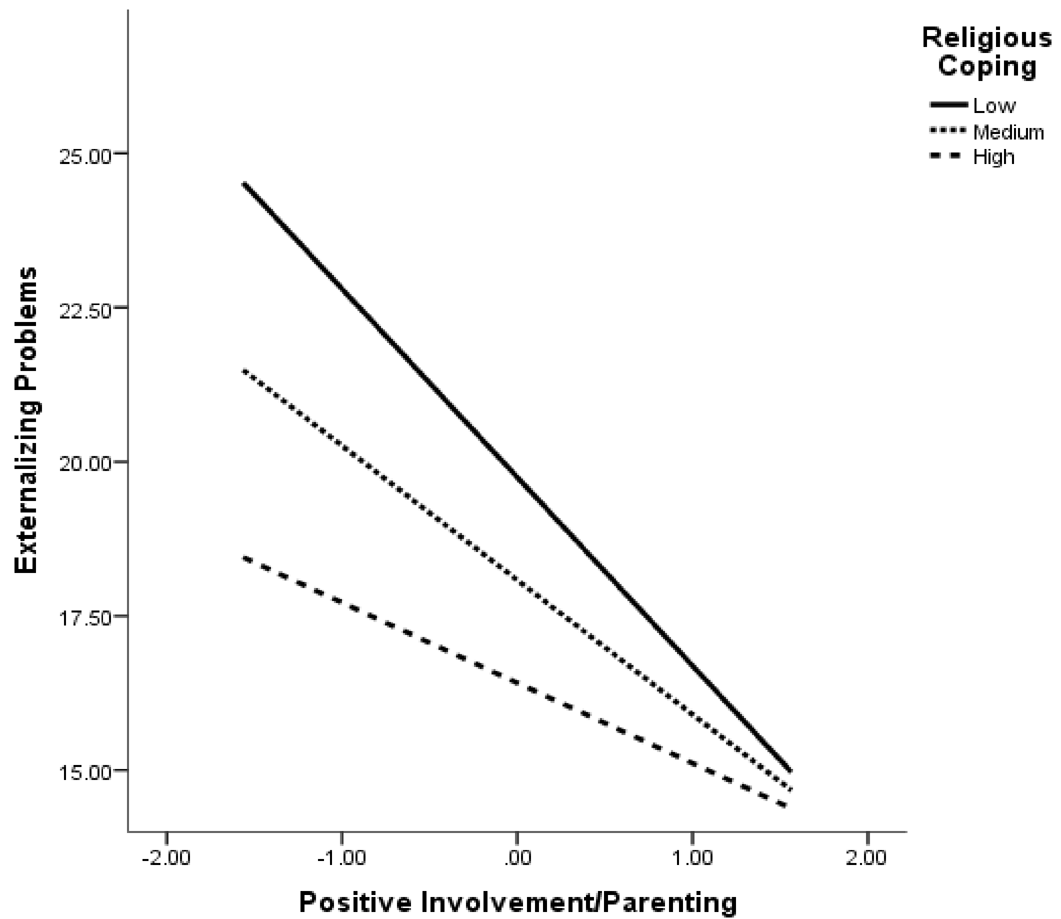

Figure 3. The moderating effect of religious coping on the relationship between positive involvement/parenting and externalizing problems among adolescents.

The figure 3 indicated that the relationship between positive involvement/parenting and externalizing problems would be relatively weaker when religious coping is high and relatively stronger when religious coping is low.

Table 21

Moderating Effect of Denial on the Relationship between Positive Involvement/Parenting and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.17***	
	Positive Involvement/Parenting		-.35***
	Denial		.29***
Step 3		.01*	
	Positive Involvement/Parenting x Denial		-.35*
Total R^2		.56***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$*p < .05$, $***p < .001$

Table 21 displayed the significant moderating effect of denial on the relationship between positive involvement/parenting and externalizing problems among adolescents. The results indicated that interaction between independent and moderator variables produced a significant change in R^2 for adolescents' externalizing

problems {F (8, 164) = 3.90, $\Delta R^2 = .01$, $p < .05$}. The interaction effect is further presented in Figure (4).

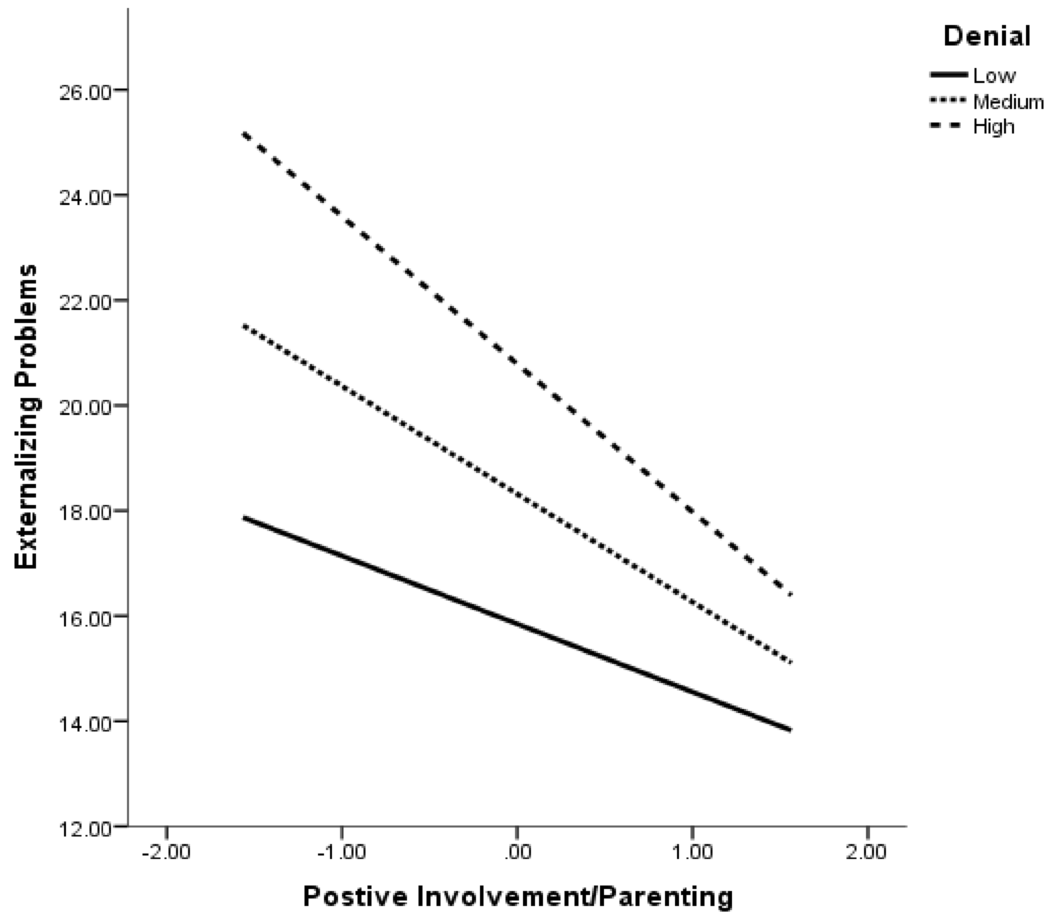

Figure 4. The moderating effect of denial on the relationship between positive involvement/parenting and externalizing problems among adolescents.

The figure 4 illustrated that externalizing problems would be high in case of low positive involvement/parenting and high denial and would be low in case of high positive involvement/parenting and low denial.

It was hypothesized that coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the association between negative/ineffective discipline and externalizing problems (H # 9d). The results of moderation analyses indicated that problem-focused coping, positive coping and denial moderated the association between negative/ineffective discipline and externalizing problems, whereas avoidant and religious coping did not moderate this relationship thus partially supporting hypothesis 9d. The findings are presented below in tables 22-24.

Table 22

Moderating Effect of Problem-focused Coping on the Relationship between Negative/Ineffective Discipline and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.17***	
	Negative/Ineffective Discipline		.31***
	Problem-focused Coping		-.31***
Step 3		.01*	
	Negative/Ineffective Discipline × Problem-focused Coping		-.14*
Total R^2		.56***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$*p < .05$, $***p < .001$

Table 22 shows significant moderation by problem-focused coping between negative/ineffective discipline and adolescents' externalizing problems. The results are indicating a significant change in R^2 (.01) with associated F and p values {$F(8, 164) = 5.62, p < .05$}. The interaction effect is further showed in Figure (5).

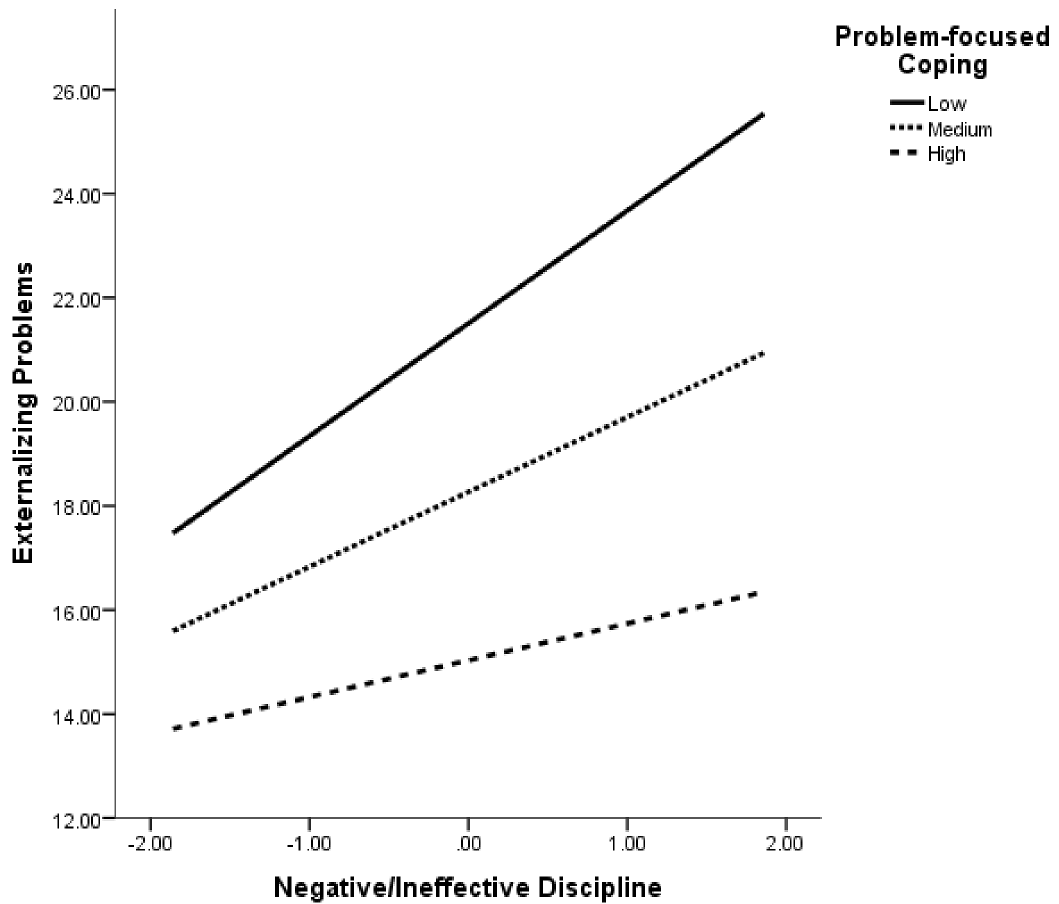

Figure 5. The moderating effect of problem-focused coping on the relationship between negative/ineffective discipline and externalizing problems among adolescents.

The figure 5 illustrated that the relationship between negative/ineffective discipline and externalizing problems is attenuated when problem-focused coping is high as compared to when problem-focused coping is low.

Table 23

Moderating Effect of Positive Coping on the Relationship between Negative/Ineffective Discipline and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.15***	
	Negative/Ineffective Discipline		.29***
	Positive Coping		-.27***
Step 3		.03**	
	Negative/Ineffective Discipline × Positive Coping		-.23**
Total R^2		.56***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$**p < .01$, $***p < .001$

Table 23 shows the results of moderation analysis which illustrates that negative/ineffective discipline × positive coping interaction produced a significant change in R^2 for adolescents' externalizing problems {$F(8, 164) = 10.22$, $\Delta R^2 = .03$, $p < .01$} indicating that the relationship between negative/ineffective discipline and externalizing problems is significantly moderated by positive coping. The interaction effect is further exhibited in Figure (6).

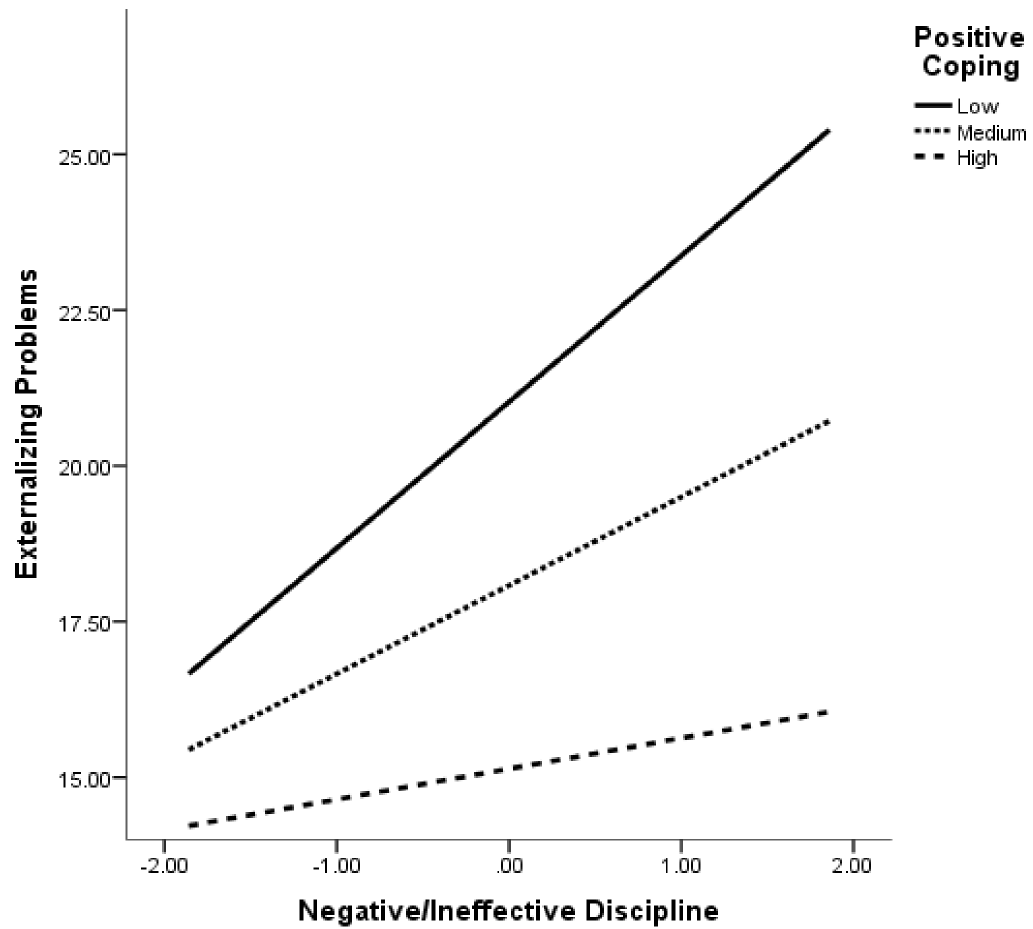

Figure 6. The moderating effect of positive coping on the relationship between negative/ineffective discipline and externalizing problems among adolescents.

The figure 6 illustrated that the relationship between negative/ineffective discipline and externalizing problems is mitigated in case of high positive coping as compared to low positive coping.

Table 24

Moderating Effect of Denial on the Relationship between Negative/Ineffective Discipline and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.16***	
	Negative/Ineffective Discipline		.28***
	Denial		.28***
Step 3		.01*	
	Negative/Ineffective Discipline × Denial		.27*
Total R^2		.55***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

**p* < .05, ****p* < .001

Table 24 is exhibiting the results of moderation analysis which was conducted to test hypothesis 10d. The results indicated a significant interactive effect of denial on the relationship between negative/ineffective discipline and externalizing problems among adolescents {$F\ (8, 164) = 4.20$, $\Delta R^2 = .01$, $p < .05$} thus supporting hypothesis 9d. The interaction effect is further illustrated in Figure (7).

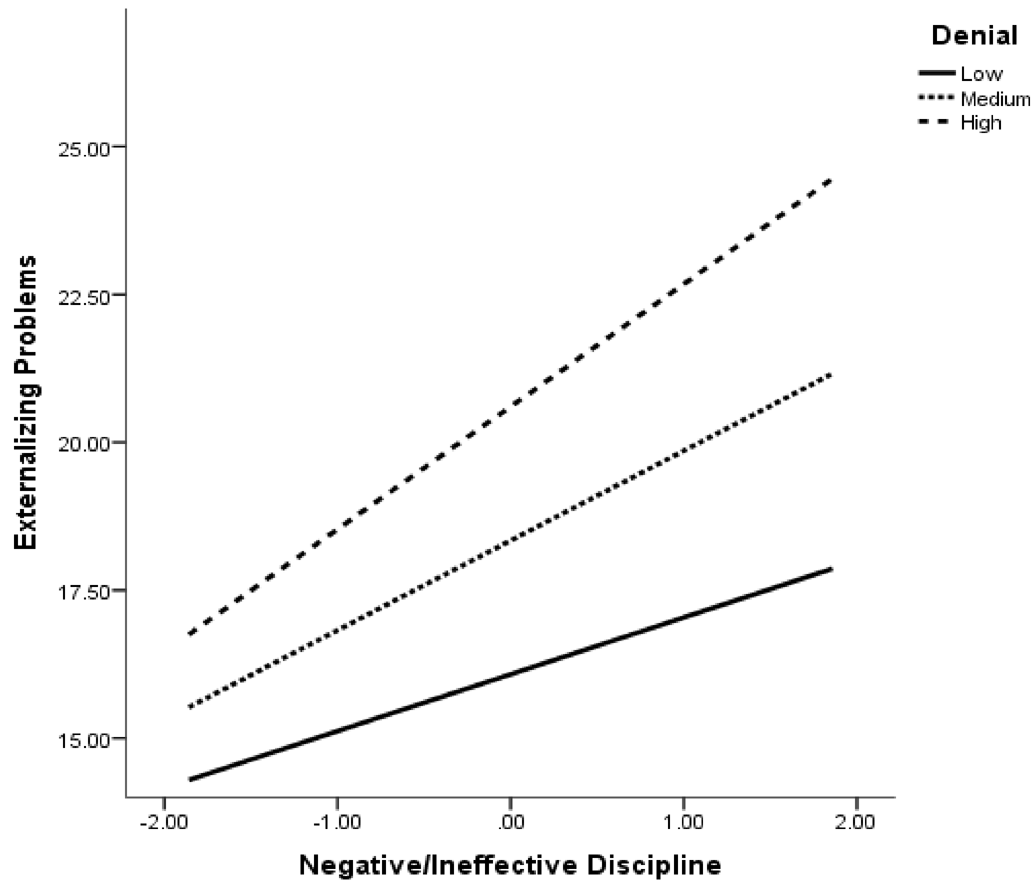

Figure 7. The moderating effect of denial on the relationship between negative/ineffective discipline and externalizing problems among adolescents.

The figure 7 illustrated that relationship between negative/ineffective discipline and externalizing problems is relatively stronger under conditions of high denial and weaker under conditions of low denial. The results indicated that denial exacerbates the relationship between negative/ineffective discipline and externalizing problems among adolescents.

It was hypothesized that coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) of adolescents will moderate the

association between deficient monitoring and externalizing problems (H # 9f). The results of moderation analyses indicated that problem-focused coping and positive coping moderated the association between deficient monitoring and externalizing problems, whereas avoidant coping, religious coping and denial did not moderate this relationship thus partially supporting hypothesis 9f. The findings are presented below in tables 25-26.

Table 25

Moderating Effect of Problem-focused Coping on the Relationship between Deficient Monitoring and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.16***	
	Deficient Monitoring		.36***
	Problem-focused Coping		-.28***
Step 3		.03***	
	Deficient Monitoring × Problem-focused Coping		-.20***
Total R^2		.57***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

****p < .001*

Table 25 demonstrates significant moderation by problem-focused coping between deficient monitoring and externalizing problems. The results indicated that deficient monitoring × problem-focused coping interaction produced a significant change in R^2 for adolescents' externalizing problems {$F (8, 164) = 12.55$, $\Delta R^2 = .03$, $p < .001$}. The interaction effect is further illustrated in Figure (8).

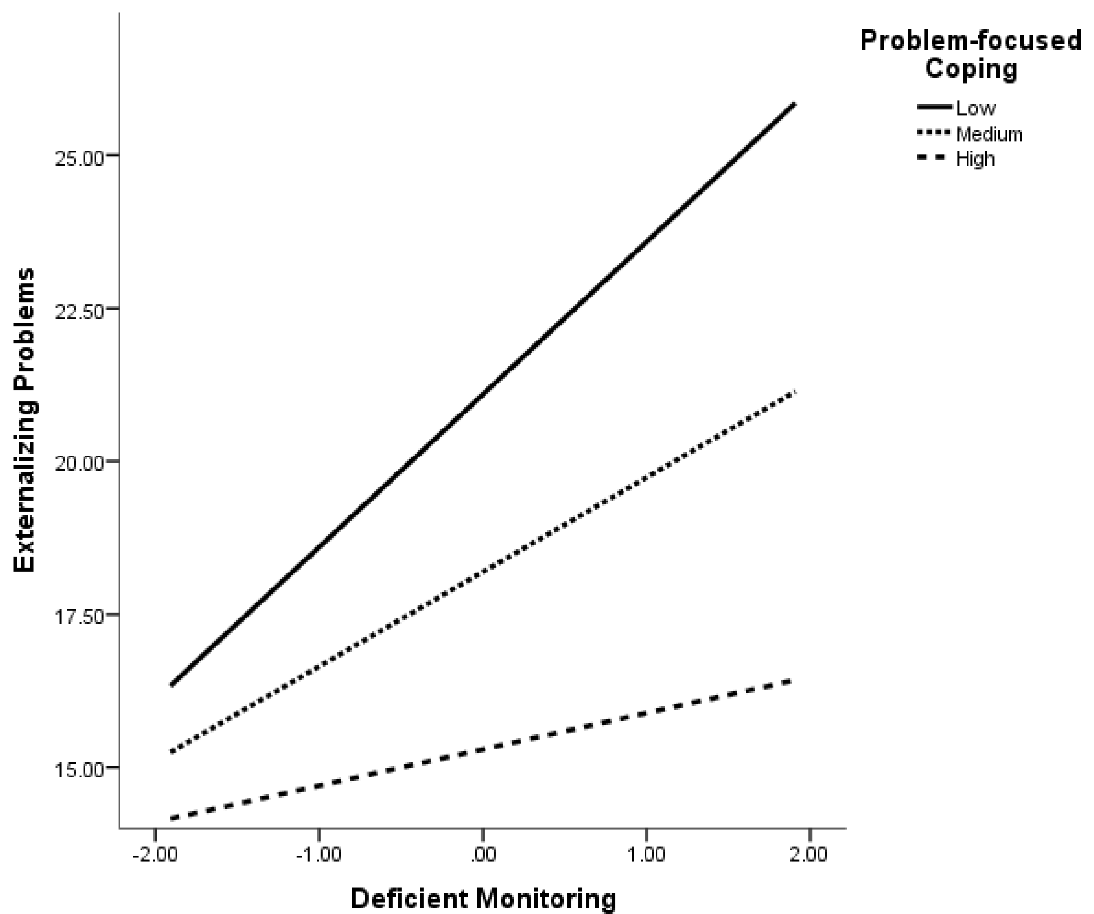

Figure 8. The moderating effect of problem-focused coping on the relationship between deficient monitoring and externalizing problems among adolescents.

The figure 8 illustrated that the relationship between deficient monitoring and externalizing problems is attenuated when problem-focused coping is high relative to when problem-focused coping is low.

Table 26

Moderating Effect of Positive Coping on the Relationship between Deficient Monitoring and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.15***	
	Deficient Monitoring		.34***
	Positive Coping		-.24***
Step 3		.03***	
	Deficient Monitoring × Positive Coping		-.25***
Total R^2		.56***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

****p < .001*

Table 26 shows the results of moderation analysis which illustrates significant interaction between independent and moderator variables. The results indicated that the relationship between deficient monitoring and externalizing problems among

adolescents is moderated by positive coping. The interaction effect is further displayed in Figure (9).

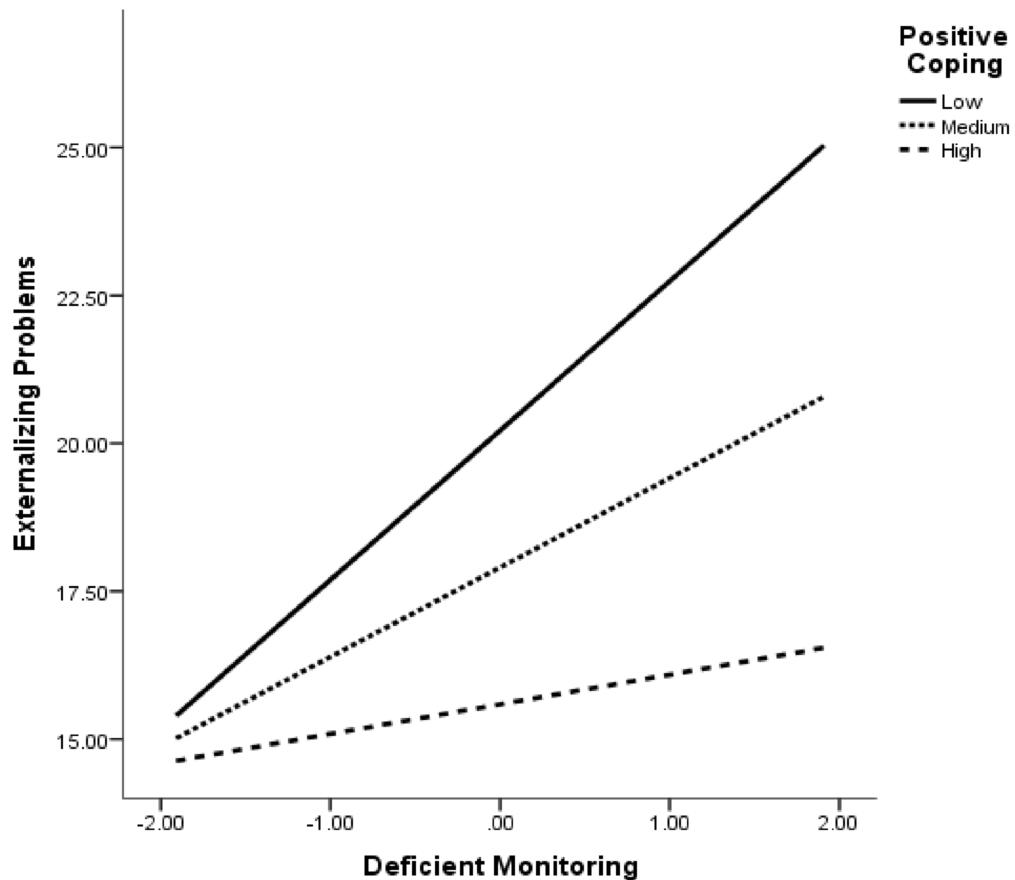

Figure 9. The moderating effect of positive coping on the relationship between deficient monitoring and externalizing problems among adolescents.

The figure 9 illustrated that the relationship between deficient monitoring and externalizing problems is relatively stronger in the case of low positive coping and weaker in the case of high positive coping. The results indicated that positive coping mitigates the relationship between deficient monitoring and externalizing problems among adolescents.

It was hypothesized that effortful control of adolescents will moderate the association between parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and internalizing problems among adolescents (H # 10a, 10c and 10e). The results of moderation analyses indicated that effortful control did not moderate the association between parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and internalizing problems among adolescents thus not supporting hypothesis # 10a, 10c and 10e.

It was hypothesized that effortful control of adolescents will moderate the association between positive involvement/parenting and externalizing problems (H # 10b). The results of moderation analyses indicated that effortful control moderated the association between positive involvement/parenting and externalizing problems among adolescents thus supporting hypothesis 10b. The findings are presented below in table 27.

Table 27

Moderating Effect of Effortful Control on the Relationship between Positive Involvement/Parenting and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.24***	
	Positive Involvement/Parenting		-.22**
	Effortful Control		-.48***
Step 3		.01*	
	Positive Involvement/Parenting × Effortful Control		.34*
Total R^2		.63***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$*p < .05$, $**p < .01$, $***p < .001$

The results in table 27 showed that positive involvement/parenting × effortful control interaction produced a significant change in R^2 for adolescents' externalizing problems {$F\ (8, 164) = 4.42$, $\Delta R^2 = .01$, $p < .05$} indicating that the relationship between positive involvement/parenting and externalizing problems is moderated by effortful control. The interaction effect is further illustrated in Figure (10).

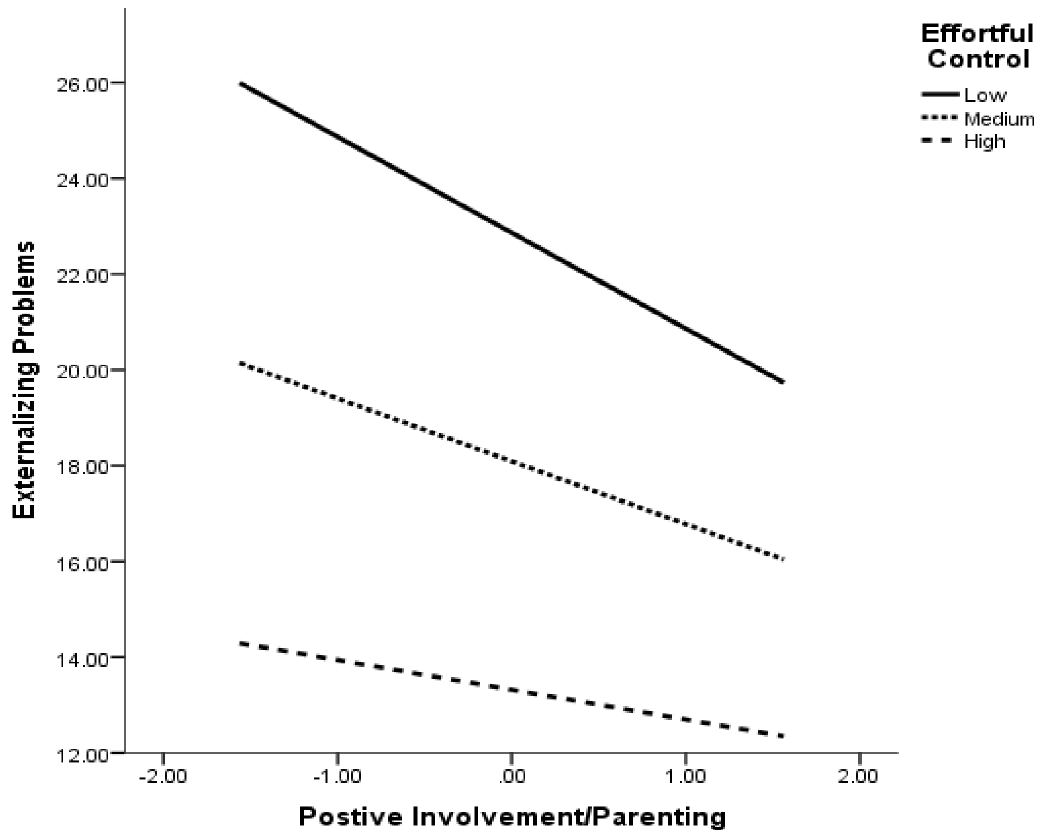

Figure 10. The moderating effect of effortful control on the relationship between positive involvement/parenting and externalizing problems among adolescents.

The figure 10 illustrated that the relationship between positive involvement/parenting and externalizing problems is relatively stronger in the case of low effortful control and weaker in the case of high effortful control. The results indicated that effortful control reduced the strength of relationship between positive involvement/parenting and externalizing problems among adolescents.

It was hypothesized that effortful control of adolescents will moderate the association between negative/ineffective discipline and externalizing problems (H #

10d). The results of moderation analyses indicated that effortful control moderated the association between negative/ineffective discipline and externalizing problems among adolescents thus supporting hypothesis 10d. The findings are presented in table 28.

Table 28

Moderating Effect of Effortful Control on the Relationship between Negative/Ineffective Discipline and Externalizing Problems among Adolescents (n=173)

	Predictors	Externalizing Problems ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.25***	
	Negative/Ineffective Discipline		.22***
	Effortful Control		-.49***
Step 3		.02**	
	Negative/Ineffective Discipline × Effortful Control		-.43**
Total R^2		.65***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

$**p < .01$, $***p < .001$

Table 28 demonstrated the significant moderating effect of effortful control on the relationship between negative/ineffective discipline and adolescents' externalizing

problems, this change in R^2 was significant {$F (8, 164) = 9.94$, $\Delta R^2 = .02$, $p < .01$}. The interaction effect is further illustrated in Figure (11).

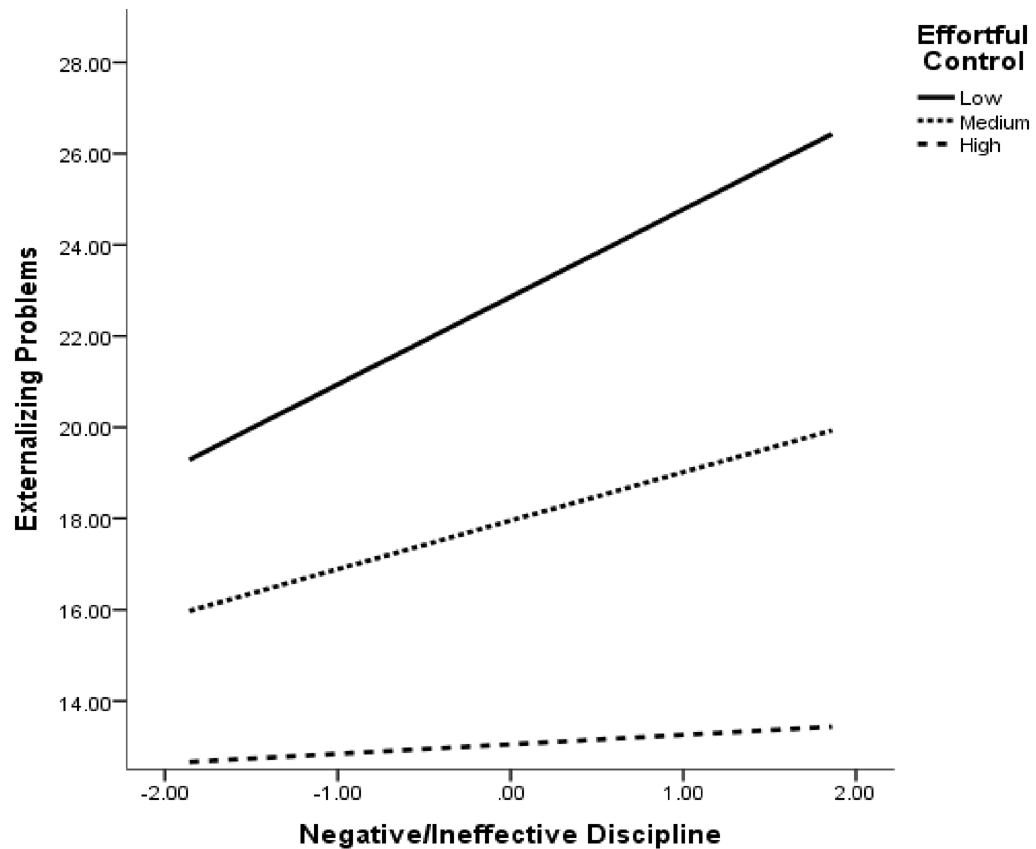

Figure 11. The moderating effect of effortful control on the relationship between negative/ineffective discipline and externalizing problems among adolescents.

The figure 11 demonstrated that the relationship between negative/ineffective discipline and externalizing problems is relatively stronger in the case of low effortful control and weaker in the case of high effortful control. The results exhibited effortful control attenuates the relationship between negative/ineffective discipline and externalizing problems among adolescents.

It was hypothesized that effortful control of adolescents will moderate the association between deficient monitoring and externalizing problems (H # 10f). The results of moderation analyses indicated that effortful control moderated the association between deficient monitoring and externalizing problems among adolescents thus supporting hypothesis 10f. The findings are presented below in table 29.

Table 29

Moderating Effect of Effortful Control on the Relationship between Deficient Monitoring and Externalizing Problems among Adolescents (n=173)

		Externalizing Problems	
	Predictors	ΔR^2	β
Step 1		.38***	
	Control Variables [a]		
Step 2		.25***	
	Deficient Monitoring		.25***
	Effortful Control		-.48***
Step 3		.06***	
	Deficient Monitoring × Effortful Control		-.63***
Total R^2		.69***	

Note. [a] Control variables include parents' gender and education, gender and age of adolescents, duration of parental illness.

****p < .001*

Table 29 displays that the relationship between deficient monitoring and externalizing problems is moderated by effortful control. The results indicated that deficient monitoring × effortful control interaction produced a significant change in R^2 for adolescents' externalizing problems {$F\ (8, 164) = 29.17,\ \Delta R^2 = .06,\ p < .001$}. The interaction effect is further demonstrated in Figure (12).

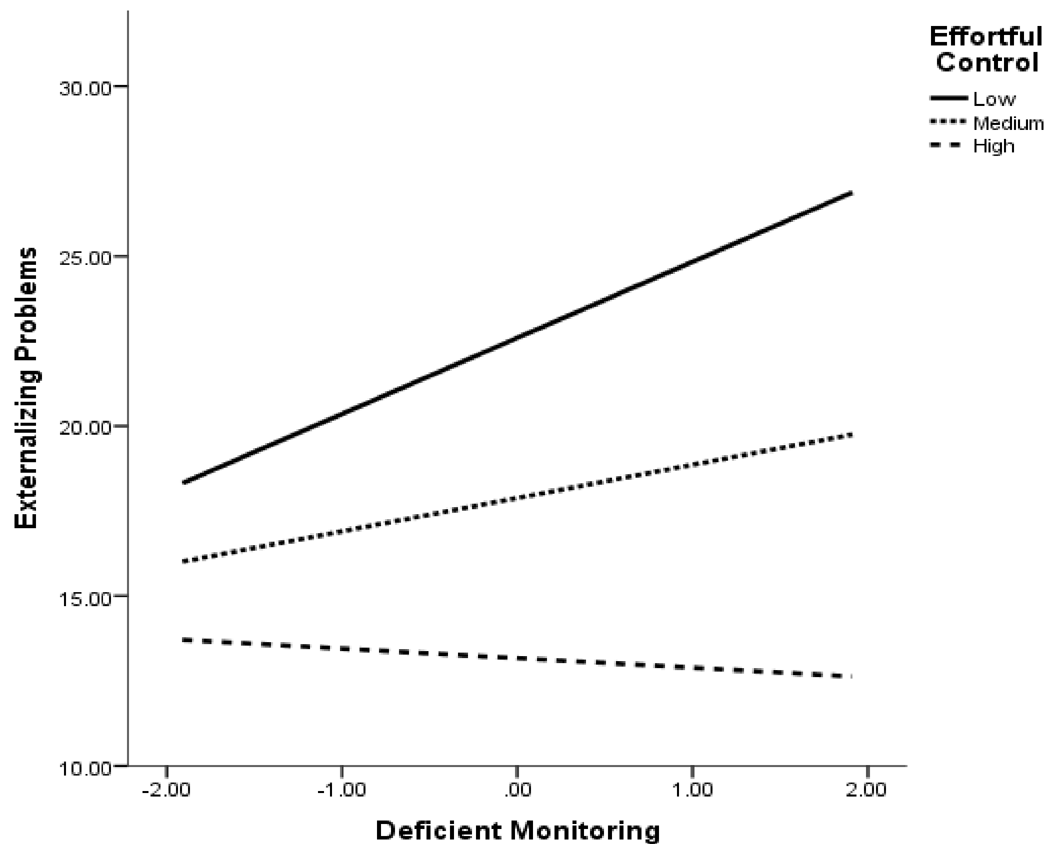

Figure 12. The moderating effect of effortful control on the relationship between deficient monitoring and externalizing problems among adolescents.

Figure 12 illustrated that the relationship between deficient monitoring and externalizing problems is mitigated when effortful control is high, relative to when effortful control is low.

Table 30

Summary of Hypothesized Relationships for all Main Study Analyses

Hypotheses	**Supported / Not Supported**
Hypothesis 1	Supported
Hypothesis 2	Supported
Hypothesis 3	Supported
Hypothesis 4a	Supported
Hypothesis 4b	Supported
Hypothesis 5a	Partially Supported
Hypothesis 5b	Supported
Hypothesis 6a	Partially Supported
Hypothesis 6b	Supported
Hypothesis 7a	Supported
Hypothesis 7b	Supported
Hypothesis 8a	Supported
Hypothesis 8b	Supported
Hypothesis 9a	Not Supported
Hypothesis 9b	Partially Supported

Hypothesis 9c	Not Supported
Hypothesis 9d	Partially Supported
Hypothesis 9e	Not Supported
Hypothesis 9f	Partially Supported
Hypothesis 10a	Not Supported
Hypothesis 10b	Supported
Hypothesis 10c	Not Supported
Hypothesis 10d	Supported
Hypothesis 10e	Not Supported
Hypothesis 10f	Supported

Chapter IV

DISCUSSION

There is substantial empirical evidence linking parental psychopathology with wide range of adverse psychosocial outcomes including internalizing and externalizing problems, academic problems, cognitive impairments and problems with social competence and peer relationships in children as well as disruptions in their parenting role (Downey & Coyne, 1990; Goodman et al., 2011; Hammen, 2009; Langrock, et al., 2002; Rogosch, Mowbray, & Bogat, 1992). Several studies have identified parents' psychiatric symptoms as risk factors for variety of emotional and behavioral problems in children and adolescents (Connell & Goodman, 2002; England & Sim, 2009). Keeping in mind the significance of problem, the present study is aimed to examine differences in parenting practices and behavioral problems among adolescents having parents with psychopathology (MDD & Schizophrenia) and without psychopathology. The current study also investigated association between parenting practices and behavioral problems among adolescents having parents with psychopathology. Further, this study explored the moderating role of coping strategies and effortful control of adolescents on the relationship between parenting practices and behavioral problems among adolescents having parents with psychopathology.

The study was conducted in two phases. The main objective of the first phase (the pilot study) was to determine psychometric properties of the measures to be used in the main study. The results of pilot study illustrated that the relationship among study variables was theoretically consistent and in expected direction. The reliability

coefficients showed that scales were internally consistent. Overall, the findings of the pilot study indicated that all the Urdu translated scales of the present study supported the evidence of reliability and suggested appropriateness and relevance of these measures in local context. The second phase (main study) of the study primarily aimed at testing formulated hypotheses.

An important strength of the present research design was the use of composite parent – adolescent scores for assessing parenting practices. Initially, both parent and adolescent reports of parenting were obtained to partly address the issue of reporter bias and shared method variance. Later, based upon the strong correlation pattern between parent and adolescent reports of parenting practices in the main study, both reports were standardized and aggregated for all further analyses to avoid complexity and to reduce the number of statistical analyses.

It was hypothesized that parents with psychopathology (MDD & Schizophrenia) will show less positive parenting and report high negative/ineffective discipline and deficient monitoring as compared to parents without psychopathology. The findings supported the hypotheses and revealed that parents with psychopathology reported less positive involvement/parenting, and more negative/ineffective discipline and deficient monitoring as compared to parents without psychopathology. These findings are consistent with the previous studies as it is well documented in the literature that parental psychopathology has deleterious effect on parenting practices and these parents have significantly less adequate parenting skills and experience difficulties in executing their parenting role (Goodman & Brumley, 1990; Jaser et al., 2008; Lovejoy et al., 2000). Mental illness regardless of diagnosis can impede their ability to perform parental role. The main issues for

parents with mental illness center on their capability to deal with their mental illness as well as simultaneously carrying out the parenting duties and responsibilities. Negative parenting by such parents is either characterized by under-involvement or over-involvement with their children as well as poor monitoring and ineffective discipline (Beardslee et al., 1998; Garber, 2005; Goodman & Gotlib, 1999). Many studies have reported that parental depression and schizophrenia is associated with wide range of inept parenting behaviors including lack of involvement and responsiveness, intrusive, hostile and punitive parenting, more rejection and less nurturance as well as more use of poor monitoring, ineffective and negative discipline (Elgar et al., 2007; Goodman, 1987; Kane & Garber, 2009; Seeman, 2004; Weissman & Jensen, 2002; Willinger et al., 2002).

As hypothesized, significant differences were found on internalizing and externalizing problems among adolescents having parents with psychopathology (MDD & Schizophrenia) and without psychopathology. According to self reports, adolescents having parents with psychopathology (MDD & Schizophrenia) reported substantially higher rates of internalizing and externalizing problems as compared to adolescents having parents without psychopathology. The findings highlight that the children of parents with psychopathology are at risk for both internalizing and externalizing problems. Consistency of the results can be seen in the existing literature on the elevated levels of internalizing and externalizing problem among children of parents with psychopathology. Previous studies have reported similar findings of significant impact of parental psychopathology on emotional and behavioral outcomes in children (Brennan, Hammen, Katz, & Le Brocque, 2002; Connell & Goodman, 2002; Cummings et al., 2005; Donatelli et al., 2010; Downey &

Coyne, 1990; Goodman, 1987; Goodman et al., 2011). Several reviews have also reported that the probability of developing mental illness in children and adolescents of parents with major depression is quite high even more than fourfold over that of the children of healthy parents (Beardslee et al., 1998; Beardslee, 2002; Beardslee, Gladstone, Wright, & Cooper, 2003). Further, children whose parents have depression are 2 to 5 times more likely to develop behavioral problems than children of healthy parents (Goodman et al., 2011; Weissman & Olfson 2009). Similarly, studies on children of parents with schizophrenia have reported that these children manifest greater aggressive behaviors and report more emotional and behavioral problems such as depressive symptoms, anxiety, hyperactivity, and are more prone to social inhibition (Niemi et al., 2005; Donatelli et al., 2010; Malhotra et al., 2015; Vafaei & Seidy, 2003).

Another important objective of the present study was to find association between parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and behavioral problems (internalizing and externalizing) among adolescents having parents with psychopathology. Parenting practices have been recognized as important contributor and key to facilitating healthy development in children. Much empirical research has highlighted the role of parenting practices in the development of behavioral problems among adolescents and has shown that certain parenting practices are associated with internalizing and externalizing outcomes among adolescents (Darling & Steinberg, 1993; Fletcher, Steinberg, & Williams, 2004; Gaertner et al., 2010; Hoskins, 2014; Patterson, 1982, Mills & Rubin, 1998; Snyder et al., 2005). The results of the present study were also in similar direction.

As expected the findings indicated that positive involvement/parenting was significantly negatively associated with internalizing and externalizing problems. There is considerable body of literature demonstrating that positive parenting characterized by warmth and nurturance, healthy involvement in children's lives, offering support, promoting autonomy and independence, and attending to the child's needs is associated with healthy psychosocial adjustment and results in lowering internalizing and externalizing problems in childhood and adolescence (Bayer et al., 2006; Boeldt et al., 2012; Eisenberg et al., 2005; Finkenauer, Engels, & Baumeister, 2005; Frick et al., 1999; Gaertner et al., 2010; Greenberger, Chen, Tally, & Dong, 2000; McFadyen-Ketchum, Bates, Dodge, & Pettit, 1996).

The current findings regarding association of negative/ineffective discipline and deficient monitoring with externalizing problems are also in line with the previous studies. The results indicated that both negative/ineffective discipline and deficient monitoring were significantly positively associated with externalizing problems among adolescents. The research has demonstrated a strong link between negative parenting practices (such as negative/ineffective discipline and deficient monitoring) and externalizing problems among adolescents (Eamon & Mulder, 2005; Gonzalez et al., 2012; Parke et al., 2004). Patterson, Reid, & Dishion (1992) also recommend that ineffective discipline strategies (such as scolding and poor monitoring) result in increased behavioral problems in children and antisocial behaviors in adolescents. They further demonstrated that externalizing problems in adolescents usually arise from the early experiences of negative parenting behaviors such as ineffective discipline, punitive and harsh parenting, poor supervision and corporal punishment. Several other studies have suggested that externalizing problems

such as aggressive and delinquent behavior develop from parenting practices such as lack of limit setting, use of inconsistent, punitive and harsh discipline practices, and not having knowledge of child's activities and behavior (Aunola & Nurmi 2005; De Kemp, Scholte, Overbeek, & Engels, 2006; Granic & Patterson, 2006; McKee et al., 2007; Patterson et al., 1991; Richards et al., 2004; Weiss, Dodge, Bates, & Pettit, 1992). According to the theoretical standpoint, the parents who use consistent and firm patterns of discipline promote and cultivate better compliance and self-regulation skills in their children. Consequently, their children report lower levels of externalizing behaviors. On the other hand, children who are exposed to parental lax control and deficient monitoring are unable to learn the valuable experiences in life that foster the healthy development of emotional and behavioral self control (Hart, Newell & Olsen, 2003).

The findings also supported the hypothesized relationship between deficient monitoring and internalizing problems among adolescents. Studies have also established a link between behavioral control (characterized by limit setting and monitoring) and child internalizing problems (Barber, 1996; Domenech-Rodríguez, Davis, Roderíguez, & Bates, 2006; Galambos, Barker, & Almeida, 2003; Ge et al., 1996; Kurdek, Fine, & Sinclair, 1994; Pettit, Laird, Bates, Dodge, & Criss, 2001). The possible explanation might be that inconsistent and ineffective parenting practices such as poor or deficient monitoring leave children to resolve their conflicts with avoidance, escape, and withdrawal, which as a result may exacerbate the development or of internalizing problems among adolescents (Downey & Coyne, 1990).

Contrary to the hypothesis, no significant association was found between negative/ineffective discipline and internalizing problems among adolescents.

Relative to externalizing problems, the literature regarding parental negative discipline strategies and internalizing problems is not as extensive or consistent but there is mixed evidence. Some studies have found a significant link between negative/inconsistent discipline and internalizing problems (Burstein, Stanger, Kamon, & Dumenci, 2006; Laskey & Cartwright-Hatton, 2009; Simons, Whitbeck, Beaman, & Conger, 1994). However, many other studies have failed to find a significant association between parental negative discipline strategies and internalizing symptoms (Garber, Robinson & Valentiner, 1997; McKee et al., 2008; Pettit et al., 2001).

The lack of evidence regarding association between negative discipline practices and internalizing problems in the present study may be owing to the fact that this study has focused on those parenting practices (e.g., warmth/involvement, monitoring, & discipline) that have been mostly originated from the research on parenting and externalizing problems, and are usually linked more with externalizing than internalizing problems (McKee et al., 2008; McMahon et al., 2006; McKee et al., 2008). According to existing available empirical findings the link between negative/ineffective discipline and externalizing problems has received relatively more attention and the support for the relationship between these variables is strongest (Barber, Olsen, & Shagle, 1994; Bosmans, Braet, Van Leeuwen, & Beyers, 2006; Burke, Pardini, & Loeber, 2008; Dodge et al., 2006; Reitz, Dekovic, & Meijer, 2006). Current study findings are also supporting the view that negative/ineffective discipline is more strongly associated with externalizing problems and the findings of the study sustain or strengthen the link between negative/ineffective discipline and externalizing problems.

The findings regarding association between parenting practices and behavioral problems among adolescents replicate and extend prior research evidence. It can be inferred from the findings that parenting practices significantly play a major role in accounting for the development of behavioral problems among adolescents and have conclusive effect on both internalizing and externalizing problems.

Another objective of the present study was to examine association between coping strategies and behavioral problems among adolescents. It was hypothesized that problem-focused, positive and religious coping are negatively associated with behavioral problems (internalizing and externalizing), whereas avoidant coping and denial are positively associated with behavioral problems among adolescents. The findings indicated that religious coping was significantly negatively associated with both internalizing and externalizing problems, whereas problem-focused coping and positive coping were significantly negatively associated with externalizing problems only. Furthermore, avoidant coping and denial were significantly positively associated with both internalizing and externalizing problems. The findings of present study regarding association between coping strategies and behavioral problems are also consistent with the existing research evidence.

In literature there is conflicting evidence regarding association between different coping strategies and emotional and behavioral outcomes in adolescents. Many studies have found a significant association of these coping strategies with emotional and behavioral problems in adolescents (Bradford, Vaughn & Barber, 2008; Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000; Ebata & Moose, 1991; Krattenmacher et al., 2013; Li, DiGiuseppe & Froh, 2006; Liu, Tein, & Zhao, 2004; Seiffge-Krenke & Klessinger, 2000; Sinha, Cnaan, & Gelles, 2007).

However, some other studies could not establish a significant link of behavioral problems with problem-focused coping strategies and primary control strategies (Compas, Worsham, Ey, & Howell, 1996; Horwitz, Hill, & King, 2011; Jaser et al., 2005, 2007; Langrock et al., 2002).

The literature suggests that the mixed findings regarding association between coping strategies and emotional and behavioral outcomes may be related to the adolescents' age, characteristics of the stressors such as the type of stressor (family vs peer vs academic stressors), the context of the stressor, or the perceived controllability of stressors. Based on the review of literature on developmental changes in coping, Fields and Prinz (1997) suggested that such inconsistencies may also reflect the variety of conceptualizations and operational definitions of coping strategies and the use of different methodologies employed for the studies.

Studies have illustrated that effortful control is an important child characteristic that plays a central role in the self regulation of emotions and related process. It modulates both internal emotion-related experiences and overt expressions of emotions, which enable children to have more voluntary control not only in choosing to act but also how to act (Rothbart & Rueda, 2005). Children will be less prone to exhibit aggressive behaviors, when they are able to regulate their behavior and attention (Eisenberg et al., 1998; Lengua, 2006). Prior studies have found a significant negative association between effortful control and internalizing and externalizing problems (Derryberry & Rothbart, 1997; Eisenberg et al., 2005, 2009; Lemery- Chalfant et al., 2007; Lengua, 2006; Lengua et al., 2008). The findings of the present study are also consistent with the literature indicating effortful control is

negatively associated with both internalizing and externalizing problems among adolescents.

Another important objective of the present study was to explore the moderating role of coping strategies and effortful control on the relationship between parenting practices and behavioral problems among adolescents. There is a noticeable absence of research analyzing the moderating role of coping strategies on the relationship between parenting practices and behavioral problems among adolescents. After having an extensive literature search, no literature was found on the said subject. Hence this study is an attempt to contribute to the existing literature by examining the moderating effect of coping strategies on the relationship between parenting practices and behavioral problems among adolescents. Due to lack of any empirical evidence, the hypotheses were formulated on the basis of related literature regarding moderating role of coping in stress – distress relationship. It was expected that problem-focused, religious and positive coping will act as buffer between the relationship of parenting practices and behavioral problems, whereas avoidant coping and denial will exacerbate this relationship. Particularly, it was intended to identify which coping strategies may increase or decrease the effect of dysfunctional parenting practices in the sample of adolescents having parents with psychopathology.

The results of moderation analyses indicated that none of the coping strategies (avoidant coping, problem-focused coping, positive coping, religious coping and denial) moderated the relationship between parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and adolescents' internalizing problems. However, findings exhibited that problem-focused coping moderated the relationship between all three aspects of parenting

practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and externalizing problems, whereas positive coping moderated the relationship between two aspects of parenting practices (negative/ineffective discipline and deficient monitoring) and externalizing problems. The denial moderated the relationship between two aspects of parenting practices (positive involvement/parenting and negative/ineffective discipline) and externalizing problems, whereas religious coping moderated the relationship only between positive involvement/parenting and externalizing problems among adolescents. Avoidant coping did not moderate the relationship between any aspects of parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and externalizing problems among adolescents. The problem-focused coping, positive coping and religious coping attenuated this relationship, whereas denial exacerbated this relationship.

The present research highlights the role of two important coping strategies (problem-focused coping and positive coping) which may serve to mitigate the effects of dysfunctional parenting (such as negative/ineffective discipline and deficient monitoring) on externalizing problems among adolescents having parents with psychopathology. The findings also reveal that denial coping strategy may further exacerbate the effect of negative parenting on externalizing outcomes among adolescents. The findings further indicated that problem-focused coping, religious coping, and denial moderated the relationship between positive/involvement parenting and externalizing problems. The present study acts as a pioneering endeavor in identification of certain coping strategies for adolescents having parents with psychopathology in dealing with the stressful environment created by dysfunctional

parenting practices. The future studies may extend these findings by further exploring this area of research and these coping strategies may be targeted for the intervention plans for children of parents with psychopathology. Interventions with adolescents might, on the basis of these findings, focus on increasing the use of adaptive coping strategies (such as positive coping, religious coping, and problem-focused coping) and reducing the use of maladaptive coping strategies (such as denial), perhaps by enhancing their positive perceptions of living with a parent having psychopathology.

It was hypothesized that effortful control would moderate the association between parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and behavioral problems (internalizing and externalizing) among adolescents. The findings indicated that effortful control moderated the relationship between all three aspects of parenting practices (positive involvement/parenting, negative/ineffective discipline and deficient monitoring) and externalizing problems rather than internalizing problems among adolescents. These findings are consistent with the previous studies (Eisenberg et al., 2005; Lengua, 2008; Lengua et al., 2000). These findings further explain that when effortful control interacts with positive involvement/parenting, it shields the adolescents from likelihood of developing externalizing problems. And when it interacts with negative parenting practices such as negative/ineffective discipline and deficient monitoring it mitigates the effect of negative parenting on externalizing problems. The findings imply that children high on effortful control can better modulate their emotional, behavioral, and cognitive reactions to negative parenting and incorporate their parents' expectations even when their parents' parenting strategies are not very effective.

The findings regarding moderating role of coping strategies and effortful control are consistent with differential susceptibility hypothesis of Belsky (2005). This hypothesis postulates that depending upon their personal characteristics; some children are more vulnerable to their parental socialization influences such as parenting practices. As it can be seen in present findings that children high on effortful control and adaptive coping strategies such as problem-focused, positive and religious coping are safeguarded by externalizing problems. These findings also support the transactional perspective which highlights the interplay between social, biological and psychological characteristics (Cicchetti & Toth, 1998). In the current study it is observed that adaptive coping strategies (positive coping, religious coping, and problem-focused coping) and effortful control interact with parenting practices and decrease the likelihood of developing externalizing problems. Whereas, maladaptive coping such as denial amplifies this effect and increases the likelihood of developing externalizing problems.

Limitations and Future Directions

The present study has several prominent strengths including use of both parent and adolescent reports for assessment of parenting practices, use of composite parent-adolescent scores for assessing parenting practices and inclusion of clinically diagnosed sample (parents with MDD and Schizophrenia). However, the results of study must be interpreted with some caution, and limitations of current research may give guidelines for future studies.

First, the present study was a cross-sectional type of study therefore causal conclusions can not be drawn about the association of parenting practices and adolescent behavioral problems (internalizing and externalizing). Future research should replicate the finding by incorporating longitudinal design.

Second, self reports of parents and adolescents for assessment of all study variables were used that may have several potential biases. The limited resources did not allow getting observer ratings. Further self reports have been used for adolescents' behavioral problems, coping strategies and effortful control; parent and teacher reports as well as observational measures to assess these variables can also be used by future researchers. Based on findings regarding parenting, it is recommend that parenting intervention programs should consist of those strategies that encourage use of positive parenting practices and may enhance parental involvement with their children. Further, these interventions may also target negative parenting practices. It is also suggested to examine the children's perception of the parenting practices in the local context, which may aid in identification and planning of interventions concerning the quality of the parent–child communication and overall relationship.

Third, the focus was only on behavioral problems as outcomes; future studies may examine impact of parenting practices on other psychosocial outcomes such as social cognitive skills, intellectual abilities, academic achievement, social-emotional competence and social skills in children of this high risk population.

Fourth, the present study indicated that parenting practices comparatively accounted for more variance in externalizing problems than internalizing problems. It should be noted that conceptualization of parenting practices is based on the particular approach used to assess parenting in this study and according to available research evidence; the parenting practices studied in the present research have been studied and linked more strongly with externalizing problems. Thus future studies should include broader range of parenting constructs such as psychological control, neglect, overprotection and guilt induction which tend to be more related to internalizing problems. Moreover, future studies should examine the mediating role of parenting practices between parental psychopathology and behavioral outcomes among adolescents.

Fifth, a general measure of coping was used to assess coping strategies, an indigenously developed scale regarding coping with parental psychopathology can better explain the links and understanding of how children of mentally ill parents cope with this chronically stressful environment.

Sixth, the present study has focused only on parenting practices, other aspects of family functioning such as poor communication patterns, interparental conflict, and chaotic home environments should also be the focus of future studies.

Seventh, the role of genetics is very important in the transmission of psychopathology from parents to the children, the present study could not focus on

this important variable. The future studies can conduct experimental studies on the role of genetics as mechanism of risk transmission from parent to the child.

Lastly, the future studies can extend and replicate the findings with other parental psychiatric disorders.

Conclusion and Implications

The purpose of the study was three fold. First, to examine differences in parenting practices and behavioral problems among adolescents having parents with psychopathology (MDD & Schizophrenia) and without psychopathology. Second, to find association between parenting practices and behavioral problems (internalizing and externalizing) among adolescents having parents with psychopathology. Third, to explore the moderating role of adolescents' coping strategies and effortful control on the relationship between parenting practices and behavioral problems among adolescents having parents with psychopathology. Overall, the findings indicate that parents with psychopathology tend to have more dysfunctional parenting practices and their adolescent children experience elevated rates of behavioral problems (internalizing & externalizing). This research emerges as the first step in filling the gap in the existing literature by examining the link between parenting practices and behavioral problems as well as exploring the moderating role of coping strategies and effortful control on the association between parenting practices and behavioral problems among vulnerable group of adolescents especially in the local context. The study contributes to the growing body of research by demonstrating that positive involvement/parenting is an important aspect of parenting to protect the adolescents

from both internalizing and externalizing problems, whereas negative parenting places children at risk for the development of externalizing behaviors.

This is an important finding and has implications for treatment and reinforces the need to focus on effective and age appropriate parenting practices for at risk adolescents. Specifically, psychosocial interventions should continually aim at improving the parent-adolescent relationship by enhancing positive parenting practices such as warmth, involvement, and consistency and decreasing the negative parenting practices such as negative/ineffective discipline and deficient monitoring. The findings further highlight the protective role of effective coping strategies (problem-focused coping, positive coping and religious coping) and effortful control that are particularly important in mitigating the potential effect of dysfunctional parenting (i.e. negative/ineffective discipline and deficient monitoring) on externalizing problems. The findings reveal a compelling evidence for the identification of protective child characteristics which may serve to buffer the negative impact of contextual factors. Therefore, intervention plans should also incorporate a component to help adolescents improve effortful control and to adopt more healthy and adaptive coping strategies. Coping skills training can be provided to the children to use healthy and adaptive coping strategies to deal with stress in their various life area such as family, school, peer, jobs, and communities.

The findings also draw the attention of mental health professionals towards recognizing the potential psychological impact of living with a mentally ill parent. Therefore there is a dire need to further explore the impact of parental psychopathology on offspring's psychosocial functioning that will have clinical relevance for effective preventive interventions with at risk families and children.

Further interventional studies are suggested to better understand the issue for future reference.

In summary, information gleaned from further studies involving identification of risk and resilience processes in high risk families can be of help to clinicians, counselors, clinical therapists and health service providers so that they can appropriately plan and mould the interventional strategies according to the needs of the population at risk. Specialized services for affected children may be set up either as an independent unit or may be incorporated in major psychiatric facilities across the country as preventive measures. The present research work will be useful for parents, teachers, educationists, and policy makers. Furthermore, it has implications in different areas of psychology including developmental psychopathology, clinical psychology, child development, social/cognitive psychology, and intervention/prevention science.

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ANNEXURES

Annexure A

Item-Total Correlation and Corrected Item-total Correlation (Tables and Description)

Table 1

Item-Total Correlation and Corrected Item-total Correlation for Positive Involvement/Parenting Subscale of Alabama Parenting Questionnaire - Parent Form (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
1	.80**	.78
2	.78**	.76
4	.70**	.68
5	.69**	.66
7	.66**	.63
9	.81**	.79
11	.50**	.47
13	.79**	.77
14	.68**	.65
15	.77**	.75
16	.74**	.72
18	.76**	.74
20	.68**	.66
23	.67**	.64
26	.64**	.61
27	.72**	.70

$^{**}P < .01$

Table shows the item-total correlation and corrected item-total correlation of the items on positive involvement/parenting subscale of Alabama parenting Questionnaire – Parent Form. All the items are significant at $p < 0.01$. Significant positive correlations suggest that all the items are correlated with the total subscale score. Item-total correlation ranged from .50 to .81.

Table 2

Item-Total Correlation and Corrected Item-total Correlation for Negative/Ineffective Discipline Subscale of Alabama Parenting Questionnaire - Parent Form (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
3	.54**	.42
8	.55**	.47
12	.64**	.57
22	.40**	.31
25	.48**	.42
28	.45**	.37
29	.67**	.56
31	.75**	.69
33	.66**	.61
35	.78**	.74
38	.42**	.35

***P < .01*

Table indicates the item-total correlation and corrected item-total correlation of the items pertaining to negative/ineffective discipline subscale of Alabama parenting Questionnaire –

Parent Form. The correlation of all the items is significant with the total subscale score. Item-total correlation ranged from .40 to .78.

Table 3

Item-Total Correlation and Corrected Item-total Correlation for Deficient Monitoring Subscale of Alabama Parenting Questionnaire - Parent Form (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
6	.61**	.55
10	.80**	.76
17	.54**	.45
19	.73**	.68
21	.73**	.66
24	.66**	.61
30	.78**	.74
32	.61**	.56

***P < .01*

Table demonstrates the item-total correlation and corrected item-total correlation of the items pertaining to deficient monitoring subscale of Alabama parenting Questionnaire – Parent Form. All the items are significantly correlated with the total subscale score. Item-total correlation ranged from .54 to .80.

Table 4

Item-Total Correlation and Corrected Item-total Correlation for Positive Involvement/Parenting Subscale of Alabama Parenting Questionnaire – Child Form (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
1	.64**	.62
2	.76**	.73
4	.79**	.77
5	.63**	.58
7	.58**	.53
9	.68**	.61
11	.74**	.65
13	.68**	.62
14	.77**	.74
15	.60**	.58
16	.81**	.79
18	.70**	.68
20	.73**	.67
23	.56**	.53
26	.60**	.53
27	.69**	.67

**$P < .01$

Table shows the item-total correlation and corrected item-total correlation of the items on positive involvement/parenting subscale of Alabama parenting Questionnaire – Child Form.

Significant positive correlations suggest that all the items are correlated with the total subscale score, showing the interrelatedness of the items of the scale. Item-total correlation ranged from .56 to .81.

Table 5

Item-Total Correlation and Corrected Item-total Correlation for Negative/Ineffective Discipline Subscale of Alabama Parenting Questionnaire - Child Form (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
3	.56**	.49
8	.53**	.46
12	.63**	.55
22	.58**	.49
25	.38**	.28
28	.51**	.41
29	.61**	.54
31	.64**	.56
33	.57**	.49
35	.65**	.58
38	.41**	.34

**$P < .01$

Table displays the significant positive item-total correlation and corrected item-total correlation of the items pertaining to negative/ineffective discipline subscale of Alabama parenting Questionnaire – Child Form. Item-total correlation ranged from .38 to .65.

Table 6

Item-Total Correlation and Corrected Item-total Correlation for Deficient Monitoring Subscale of Alabama Parenting Questionnaire - Child Form (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
6	.69**	.65
10	.76**	.72
17	.52**	.44
19	.79**	.75
21	.67**	.61
24	.51**	.42
30	.57**	.50
32	.69**	.65

***P < .01*

Table exhibits the item-total correlation and corrected item-total correlation of the deficient monitoring subscale of Alabama parenting Questionnaire – Child Form. All the items are significantly correlated with the total subscale score showing the internal consistency of the scale. The correlations ranged from .51 to .79.

Table 7

Item-Total Correlation and Corrected Item-total Correlation for Internalzing Subscale of Youth Self Report (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
1	.70**	.67
2	.66**	.63
3	.58**	.56
4	.53**	.49
5	.52**	.51
6	.71**	.66
7	.76**	.74
8	.48**	.44
9	.42**	.39
10	.60**	.57
11	.58**	.55
12	.66**	.65
13	.65**	.61
14	.62**	.60
15	.59**	.56
16	.49**	.46
17	.41**	.38
18	.53**	.50
19	.46**	.42

20	.59**	.57
21	.63**	.61
22	.59**	.57
23	.66**	.630
24	.64**	.61
25	.73**	.71
26	.65**	.63
27	.68**	.64
28	.64**	.60
29	.55**	.51
30	.46**	.44
31	.54**	.52

$**P < .01$

Table shows the item-total correlation and corrected item-total correlation of internalzing subscale of Youth Self Report. All the items are significantly correlated with the total subscale score. Significant positive correlations suggest that all the items are correlated with the total score indicating interrelatedness of the items of the respective scale. The correlations ranged from .42 to .76.

Table 8

Item-Total Correlation and Corrected Item-total Correlation for Externalzing Subscale of Youth Self Report (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
32	.67**	.65
33	.59**	.57
34	.69**	.67
35	.46**	.43
36	.52**	.49
37	.65**	.62
38	.72**	.69
39	.52**	.50
40	.73**	.70
41	.51**	.49
42	.77**	.74
43	.49**	.46
44	.49**	.47
45	.76**	.73
46	.55**	.52
47	.64**	.61
48	.74**	.72
49	.55**	.53
50	.68**	.66

51	.75**	.73
52	.77**	.73
53	.74**	.71
54	.78**	.75
55	.53**	.51
56	.79**	.77
57	.66**	.63
58	.48**	.45
59	.54**	.51
60	.69**	.67
61	.55**	.51
62	.57**	.55
63	.58**	.55

$^{**}P < .01$

Table demonstrates the item-total correlation and corrected item-total correlation of externalzing subscale of Youth Self Report. All the items are significantly correlated with the total subscale score showing the internal consistency of the scale. The correlations ranged from .46 to .79.

Table 9

Item-Total Correlation and Corrected Item-total Correlation for Avoidant Coping Subscale of Brief COPE (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
1	.52**	.45
4	.45**	.39
6	.46**	.38
9	.61**	.54
11	.37**	.32
13	.66**	.59
16	.70**	.65
19	.58**	.52
21	.56**	.49
26	.65**	.58

P < .01

Table displays the significant positive item-total correlation and corrected item-total correlation of the items pertaining to avoidant coping subscale of Brief COPE. Item-total correlation ranged from .37 to .70.

Table 10

Item-Total Correlation and Corrected Item-total Correlation for Problem-focused Coping Subscale of Brief COPE (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
2	.53**	.40
5	.62**	.49
7	.47**	.37
10	.55**	.46
14	.63**	.52
23	.63**	.55
25	.58**	.47

***P < .01*

Table shows the item-total correlation and corrected item-total correlation of the items on problem-focused coping subscale of Brief COPE. All the items are significant with subscale total score at $p < 0.01$, demonstrating the internal consistency of the items of the scale. Item-total correlation ranged from .47 to .63.

Table 11

Item-Total Correlation and Corrected Item-total Correlation for Positive Coping Subscale of Brief COPE (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
12	.54**	.45
15	.48**	.36
17	.57**	.47
18	.68**	.59
20	.55**	.44
24	.49**	.37
28	.55**	.45

$**P < .01$

Table demonstrates the item-total correlation and corrected item-total correlation of the items on positive coping subscale of Brief COPE. All the items are significantly correlated with subscale total score, showing the interrelatedness of the items. Item-total correlation ranged from .48 to .68.

Table 12

Item-Total Correlation and Corrected Item-total Correlation for Religious Coping Subscale of Brief COPE (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
22	.58**	.56
27	.67**	.64

$**P < .01$

Table shows the item-total correlation and corrected item-total correlation of the items on religious subscale of Brief COPE. All the items are significant at $p < 0.01$. Significant positive correlations suggest the internal consistency of the respective subscale. Item-total correlation ranged from .58 to .67.

Table 13

Item-Total Correlation and Corrected Item-total Correlation for Denial Subscale of Brief COPE (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
3	.61**	.59
8	.56**	.54

***P < .01*

Table exhibits the item-total correlation and corrected item-total correlation of the items on denial subscale of Brief COPE. All the items are significantly correlated with the subscale total score, showing the interrelatedness of the items. Item-total correlation ranged from .61 to .56.

Table 14

Item-Total Correlation and Corrected Item-total Correlation for Effortful Control Subscale of Early Adolescent Temperament Questionnaire-Revised (N = 52)

Item No.	Item-total Correlation	Corrected Item-total Correlation
1	.61**	.56
2	.60**	.58
3	.64**	.57
4	.58**	.52

5	.58**	.53
6	.60**	.54
7	.55**	.46
8	.54**	.52
9	.51**	.44
10	.51**	.47
11	.53**	.44
12	.67**	.62
13	.46**	.35
14	.58**	.47
15	.56**	.48
16	.59**	.52

$**P < .01$

Table shows item-total correlation and corrected item-total correlation of the items of effortful control subscale of Early Adolescent Temperament Questionnaire-Revised. All the items are significant at $p < 0.01$. Significant positive correlations suggest that all the items correlated with the total score of the scale and contribute to the measurement of the construct of effortful control. The correlations ranged from .46 to .67.

Annexure B

Diagnostic Criteria of Major Depressive Disorder (MDD) and Schizophrenia According to DSM - 5

Diagnostic Criteria of Major Depressive Disorder (MDD)

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning: at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful).

2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).

3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day.

4. Insomnia or hypersomnia nearly every day.

5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).

6. Fatigue or loss of energy nearly every day.

7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).

8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).

9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

C. The episode is not attributable to the physiological effects of a substance or to another medical condition.

Note: Criteria A – C represent a major depressive episode.

D. The occurrence of the major depressive episode is not better explained by schizoaffective disorder, schizophrenia, schizophreniform disorder, delusional disorder, or other specified and unspecified schizophrenia spectrum and other psychotic disorders.

E. There has never been a manic episode or a hypomanic episode.

Diagnostic Criteria of Schizophrenia According to DSM – 5

A. Two (or more) of the following, each present for a significant portion of time during a 1 -month period (or less if successfully treated). At least one of these must be (1), (2), or (3):

1. Delusions.

2. Hallucinations.

3. Disorganized speech (e.g., frequent derailment or incoherence).

4. Grossly disorganized or catatonic behavior.

5. Negative symptoms (i.e., diminished emotional expression or avolition).

B. For a significant portion of the time since the onset of the disturbance, level of functioning

in one or more major areas, such as work, interpersonal relations, or self-care, is markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, there is failure to achieve expected level of interpersonal, academic, or occupational functioning).

C. Continuous signs of the disturbance persist for at least 6 months. This 6-month period must include at least 1 month of symptoms (or less if successfully treated) that meet Criterion A (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms. During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or by two or more symptoms listed in Criterion A present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

D. Schizoaffective disorder and depressive or bipolar disorder with psychotic features have been ruled out because either 1) no major depressive or manic episodes have occurred concurrently with the active-phase symptoms, or 2) if mood episodes have occurred during active-phase symptoms, they have been present for a minority of the total duration of the active and residual periods of the illness.

E. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

F. If there is a history of autism spectrum disorder or a communication disorder of childhood onset, the additional diagnosis of schizophrenia is made only if prominent delusions or hallucinations, in addition to the other required symptoms of schizophrenia, are also present for at least 1 month (or less if successfully treated).

Annexure C

Demographic Characteristics of the Sample (Main Study)

Table 1

Demographic Characteristics of Clinical Group (Parents with Psychopathology)

Demographic Characteristics (*N= 173)*	MDD Group (*N= 107)*	SCHIZO Group (*N= 66)*
Parents' Characteristics	f (%) / Mean(SD)	f(%) / Mean(SD)
Age	43.03 (3.59)	42.07 (4.23)
Gender		
Fathers	34 (31.8%)	40 (60.6%)
Mothers	73 (68.2%)	26 (39.4%)
Education	11.74 (2.13)	11.64 (2.01)
High School (10 yrs)	59 (55.1%)	34 (51.5%)
Intermediate - Graduate (12-14 yrs)	37 (34.6%)	25 (37.9%)
Master's degree & Professional(16 yrs)	11 (10.3%)	7 (10.6%)
Family Monthly Income (in PKR)	45943.93 (19242.17)	45015.15 (17168.39)
Familial Structure		
Nuclear	54 (50.5%)	29 (43.9%)
Extended	53 (49.5%)	37 (56.1%)
Family Size (No. of Children)	4.63 (2.16)	4.05 (1.68)
Family History of Illness		
Present	37 (34.6%)	29 (43.9%)
Not Present	70 (65.4%)	37 (56.1%)
Duration of Illness in Years	3.02 (1.56)	4.06 (1.71)

Adolescents' Characteristics (*N= 173)*		
Age	15.33 (1.88)	14.83 (2.09)
Gender		
Boys	47 (43.9%)	35 (53.0%)
Girls	60 (56.1%)	31 (47.0%)
Age Groups		
Early Adolescence	21 (19.6%)	17 (25.7%)
Middle Adolescence	34 (31.8%)	24 (36.4%)
Late Adolescence	52 (48.6%)	25 (37.9%)

Note: MDD =Major Depressive Disorder, SCHIZO =Schizophrenia

Table summarizes the demographic characteristics of the clinical group (Parents with Psychopathology).

Table 2

Baseline Comparison between Clinical Group (Parents with Psychopathology) and Control Group (Parents without Psychopathology) on Demographic Variables (N=348)

Demographic Variables	Clinical Group (*N= 173)*	Control Group (*N= 175)*		
Parents Characteristics	%/Mean(SD)	%/Mean(SD)	t / χ^2	p
Age	42.66 (3.86)	42.29 (3.38)	.960	.338
Gender				
Fathers	74 (42.8%)	69 (39.4%)	.402	.526
Mothers	99 (57.2%)	106 (60.6%)		
Education in Years			.607	.544
High School (10 years)	93 (53.8%)	90 (51.4%)	.300	.861
Intermediate - Graduate (12-14 years)	62 (35.8%)	64 (36.6%)		
Master's degree & Professional(16 years)	18 (10.4%)	21 (12.0%)		
Family Monthly Income (in PKR)	45589.60 (18433.08)	45622.86 (21174.31)	.016	.988
Family System				
Nuclear	83 (48.0%)	100 (57.1%)	2.93	.087
Joint	90 (52.0%)	75 (42.9%)		
Family Size (No. of Children)	4.40 (2.00)	4.34 (1.91)	.321	.748

Adolescents' Characteristics				
Age in Years	15.14(1.97)	15.27 (1.87)	.630	.529
Gender				
Boys	82 (47.4%)	81 (53.7%)	.043	.835
Girls	91 (52.6%)	94 (46.3%)		
Age Groups				
Early Adolescence	38 (22.0%)	49 (28.0%)		
Middle Adolescence	58 (33.5%)	57 (32.6%)	1.83	.401
Late Adolescence	77 (44.5%)	69 (39.4%)		

Equivalence analyses were conducted for demographic variables. Chi-squares for categorical, and t-tests for continuous demographic variables showed non-significant differences between clinical and control group. No statistically significant findings were observed for any demographic variable including parents' age, gender, education, family monthly income, family system, family size, as well as for adolescents' characteristics such as age and gender.

Annexure D

Consent Form For Parents

محترم والدین

السلام علیکم!

میں قومی ادارہ نفسیات قائداعظم یونیورسٹی اسلام آباد میں Ph.D کی طالبہ ہوں۔ قومی ادارہ نفسیات قائد اعظم یونیورسٹی اسلام آباد ایک ایسا ادارہ ہے جو تدریس و تعلیم کے ساتھ ساتھ انسانی اور معاشرتی نفسیات سے متعلق مختلف موضوعات اور مسائل پر تحقیق بھی کرتا ہے۔ موجودہ تحقیق بھی اس سلسلہ کی ایک کڑی ہے جس کے لئے ہمیں آپ کا تعاون درکار ہے۔ امید ہے کہ آپ اپنے قیمتی وقت کا کچھ حصہ صرف کر کے شکریہ کا موقع دیں گے۔

ہم آپ کی خدمت میں کچھ سوالنامے پیش کر رہے ہیں۔ آپ سے درخواست ہے کہ سوالنامے کے ساتھ دی گئی ہدایات کو غور سے پڑھیں اور ان کی روشنی میں جوابی کالم میں نشان لگا دیں۔

ہم آپ کو یقین دلاتے ہیں کہ آپ کی فراہم کردہ معلومات صیغۂ راز میں رہیں گی اور صرف تحقیقی مقاصد کے لئے استعمال کی جائیں گی۔ نیز آپ کا ذاتی تشخص کسی مرحلہ پر ظاہر نہیں کیا جائے گا۔

آپ کے علاوہ آپ کے بچوں کو بھی اس تحقیقی کام میں شریک کیا جائے گا۔ اگر آپ اپنی اور اپنے بچے کی اس تحقیقی کام میں شرکت کے لئے راضی ہیں تو برائے مہربانی اس فارم پر دستخط کر دیں۔

آپ کے تعاون کا بے حد شکریہ۔

دستخط والد / والدہ: ___________________

Consent Form For Adolescents

عزیز بچو!

السلام علیکم!

میں قومی ادارۂ نفسیات قائداعظم یونیورسٹی اسلام آباد میں Ph.D کی طالبہ ہوں۔ قومی ادارہ نفسیات قائداعظم یونیورسٹی اسلام آباد ایک ایسا ادارہ ہے جو تدریس وتعلیم کے ساتھ ساتھ انسانی اور معاشرتی نفسیات سے متعلق مختلف موضوعات اور مسائل پر تحقیق بھی کرتا ہے۔ موجودہ تحقیق بھی اس سلسلہ کی ایک کڑی ہے جس کے لئے ہمیں آپ کا تعاون درکار ہے۔ امید ہے کہ آپ اپنے قیمتی وقت کا کچھ حصہ صرف کر کے شکریہ کا موقع دیں گے۔

ہم آپ کی خدمت میں کچھ سوالنامے پیش کر رہے ہیں۔ آپ سے درخواست ہے کہ سوالنامے کے ساتھ دی گئی ہدایات کو غور سے پڑھیں اور ان کی روشنی میں جوابی کالم میں نشان لگا دیں۔

ہم آپ کو یقین دلاتے ہیں کہ آپ کی فراہم کردہ معلومات صیغۂ راز میں رہیں گی اور صرف تحقیقی مقاصد کے لئے استعمال کی جائیں گی۔ نیز آپ کا ذاتی تشخص کسی مرحلہ پر ظاہر نہیں کیا جائے گا۔

اگر آپ اس تحقیقی کام میں شرکت کے لئے راضی ہیں تو برائے مہربانی اس فارم پر دستخط کر دیں۔

آپ کے تعاون کا بے حد شکریہ۔

دستخط: ________________

Annexure E

PSYCHOLOGICAL CASE HISTORY FORM

تاریخ:---------- فائل نمبر:----------

IDENTIFYING DATA

نام------------------ عمر:-------- جنس:---------- تعلیم:--------------

ازدواجی حیثیت:------------------ پیشہ:----------- مذہب:-------------

پتہ:--

فون نمبر:-------- ماہانہ آمدنی:-------------- دیگر ذرائع آمدن:------------

خاندان کی کل ماہانہ آمدنی:------------------ گھر میں زیرِ کفالت افراد کی تعداد:-------------

HISTORY OF PRESENT ILLNESS

موجودہ بیماری کی علامات:--

موجودہ بیماری کا دورانیہ:--

موجودہ بیماری کی ممکنہ وجوہات

کیا یہ بیماری اچانک شروع ہوئی؟ ہاں / نہیں

کیا اس بیماری کا تعلق کسی ذہنی الجھن یا پریشان کن واقعہ سے ہے؟ ہاں / نہیں

اگر ہاں تو وہ ذہنی الجھن یا پریشان کن واقعہ کیا ہے؟------------------------------------

----

نیند / بھوک Interests/ اور سماجی اور کام کے تعلقات پر موجودہ بیماری کا اثر

PAST PSYCHIATRIC HISTORY

کیا آپ کو ماضی میں بھی کوئی نفسیاتی بیماری ہوئی ہاں / نہیں

اگر ہاں تو کتنا عرصہ پہلے----------------

اس بیماری کی تشخیص/علامات کیا تھیں --

علاج کہاں سے کروایا؟ --

بطور علاج آپ نے کیا استعمال کیا --

کیا اس بیماری کی وجہ سے آپ کو ہسپتال داخل ہونا پڑا --

اگر ہاں تو کتنا عرصہ --

کیا وہ علاج فائدہ مند ثابت ہوا؟ ہاں / نہیں

کیا آپ نے کبھی کوئی نشہ کیا؟ ہاں / نہیں

اگر ہاں تو نشے کا نام بتائیں --

کیا اس نشے کا علاج کہیں سے کروایا؟ ہاں / نہیں

MEDICAL HISTORY

کیا آپ کو کوئی جسمانی بیماری ہے؟ ہاں / نہیں

اگر ہاں تو اس جسمانی بیماری کی تشخیص/علامات کیا ہیں؟ --

علاج کہاں سے ہو رہا ہے اور کیا علاج ہو رہا ہے --

کیا علاج سے فائدہ ہو رہا ہے؟ ہاں / نہیں

PAST MEDICAL HISTORY

کیا آپ کو ماضی میں کوئی جسمانی بیماری ہوئی؟ ہاں / نہیں

اگر ہاں تو اس کی تشخیص/علامات کیا تھیں؟ --

علاج کہاں سے کرایا اور کیا علاج کروایا --

FAMILY HISTORY

والد: والد کی عمر: ---------- تعلیم: ------------------ پیشہ: ------------

ماہانہ آمدنی: ------------------

اگر فوت ہو چکے ہیں تو ان کے انتقال کی وجہ لکھیں: --

والد کے انتقال کے وقت آپ کی عمر کیا تھی: --

آپ کے ان کے ساتھ تعلقات کیسے ہیں / تھے:--

والدہ: والدہ کی عمر:---------- تعلیم:------------- پیشہ:-------------------------

اگر فوت ہو چکی ہیں تو ان کے انتقال کی وجہ لکھیں:--

والدہ کے انتقال کے وقت آپ کی عمر کیا تھی:--

آپ کے ان کے ساتھ تعلقات کیسے ہیں / تھے--

آپ کے کتنے بہن بھائی ہیں:-------- بہنوں کی تعداد:------------- بھائیوں کی تعداد:-----------

بہن بھائیوں میں آپ کا نمبر:-----------------------

آپ کے ان کے ساتھ تعلقات کیسے ہیں؟--

کیا خاندان میں کسی کو کوئی نفسیاتی بیماری ہے۔ ہاں / نہیں

اگر ہاں تو آپ کے ساتھ رشتہ کیا ہے؟ --

بیماری کی تشخیص / علامات بتائیں؟ --

کیا خاندان میں کسی کو کوئی جسمانی بیماری ہے۔ ہاں / نہیں

اگر ہاں تو آپ کے ساتھ رشتہ کیا ہے؟--

بیماری کی تشخیص / علامات بتائیں؟--

PERSONAL HISTORY

جائے پیدائش:---------------------------- تاریخ پیدائش:-----------------

ابتدائی نشو و نما کے بتدریجی مراحل کے متعلق معلومات: --

آپ کا بچپن کیسا گزرا:--

بچپن کا سب سے ناخوشگوار واقعہ بتائیے:--

آپ پڑھائی میں کیسے تھے / تھیں؟--

تعلیمی استعداد:--

سکول ریکارڈ۔ صلاحیت / رویہ / سکول سے بھاگنا

اساتذہ کے ساتھ تعلقات--

بچپن میں آپ کی جسمانی صحت کیسی تھی؟ ---

کیا آپ کو بچپن میں ناخن کترنے کی عادت تھی؟ ---

بستر پر پیشاب کی عادت ---

انگوٹھا چوسنا یا کوئی اور عادت ---

آپ کو جنسی تعلقات کے بارے میں معلومات کس عمر میں ہوئیں ---

یہ معلومات آپ کو کیسے ہوئیں ---

کیا آپ کے کسی سے جنسی تعلقات ہیں یا رہے ہیں؟ ہاں / نہیں

اگر ہاں تو کب اور کس کے ساتھ ---

آپ کی شادی کب ہوئی ---

کیا یہ آپ کی پسند کی شادی ہے؟ ہاں / نہیں

شریک حیات کی عمر:------------------ تعلیم:------------------ پیشہ:------------------

ماہانہ آمدنی:------------------

اگر فوت ہو چکی / چکے ہیں تو ان کے انتقال کی وجہ لکھیں: ---

آپ کے ان کے تعلقات کیسے ہیں / تھے؟ ---

کیا ان کو کوئی نفسیاتی بیماری ہے / تھی؟ ہاں / نہیں

اگر ہاں تو اس نفسیاتی بیماری کی تشخیص / علامت بتائیں: ---

کیا ان کو کوئی جسمانی بیماری ہے / تھی؟ ہاں / نہیں

اگر ہاں تو اس جسمانی بیماری کی تشخیص / علامت بتائیں: ---

بچوں کی کل تعداد:------------------ بیٹے------------------ بیٹیاں------------------

ان کے ساتھ تعلقات کیسے ہیں:---

کیا ان کو کوئی نفسیاتی بیماری ہے؟ ہاں / نہیں

اگر ہاں تو اس نفسیاتی بیماری کی تشخیص / علامت بتائیں: ---

کیا ان کو کوئی جسمانی بیماری ہے؟ ہاں / نہیں

اگر ہاں تو اس جسمانی بیماری کی تشخیص / علامت بتائیں: ---

MENTAL STATE

ظاہری حلیہ / رویہ(Appearance and General Behavior):------------------------------

بات چیت/ گفتگو/بول چال (Speech):--

موڈ (Mood):--

شعوری آگاہی کا درجہ (Level of Consciousness):------------------------------------

سوچ سے متعلق مواد (Thought Content):--

غیر معمولی اعتقادات (Abnormal beliefs):---

ادراکی سمجھ کی خرابی (Disorder of Perception):-------------------------------------

بصیرت(Insight):--

DIAGNOSIS

MANAGEMENT PLAN

جسمانی/طبی معائنہ: --

نفسیاتی/ذہنی پیمائش: --

طریقہ علاج:

دوائی---

سائیکوتھیراپی--

Annexure F

Mini-Mental State Exam

مریض کا نام: ______________________ تاریخ: ______________

Orientation

	سکور
یہ کونسا سنہ ہے؟ موسم ۔ تاریخ ۔ دن ۔ مہینہ	5
آپ کہاں بیٹھے ہیں؟ ملک ۔ شہر، صوبہ ۔ ہسپتال ۔ منزل	5

Registration

میں آپ کے سامنے تین چیزوں کے نام لوں گی آپ نے وہ نام اُسی ترتیب سے دہرانے ہوں گے۔ سیب ۔ میز ۔ روپیہ (اگر مریض صحیح نہ دہرائے تو کم از کم پانچ ٹرائلز میں اسے یاد کروائیں)	3

Attention and Calculation

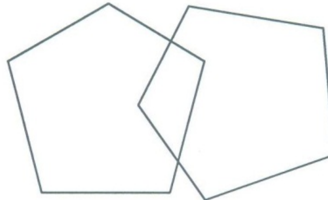
دس تک الٹی گنتی سنائیں۔	5

Recall

میں نے آپ کے سامنے تین چیزوں کے نام لئے تھے اور آپ نے بالکل صحیح دہرایا تھا۔ ان کو دوبارہ دہرائیں۔	3

Language

مریض کو دو چیزیں دکھائیں اور نام پوچھیں ۔ پنسل ۔ گھڑی۔	2
میں جو کچھ بولوں گی اُسے غور سے سنیں اور دہرائیں۔ اگر ۔ مگر اور نہیں ۔ لیکن	1
میں آپ کو ایک Command دوں گی آپ نے اس پر عمل کرنا ہوگا۔ کاغذ کو اپنے دائیں ہاتھ میں پکڑیں ۔ اس کو درمیان سے ایک تہہ لگائیں اور زمین پر پھینک دیں۔	3
مریض کو کارڈ پر لکھ کر دکھائیں کہ اپنی آنکھیں بند کرے۔	1
ایک جملہ لکھیں۔	1
اس ڈیزائن کو کاپی کریں۔	1



Total Score: 30

Annexure G

Demographic Information Sheet

والدین کے کوائف:

- آپ کا نام: ____________________
- آپ کی عمر: ____________________
- جنس: ____________________
- آپ کی تعلیم: ____________________
- آپ کا پیشہ / ذریعۂ معاش: ____________________
- شوہر/بیوی کا پیشہ/ذریعۂ معاش: ____________________
- ماہانہ آمدنی: ____________________
- آمدنی کے ذرائع: (i)________ (ii) ____________ (iii)__________
- خاندان کے کل افراد کی تعداد: ____________________
- بچوں کی تعداد: لڑکا________ لڑکی________ نارمل________ ذہنی معذور________
- کوئی اور معذوری: ____________________
- وجۂ معذوری: (i) پیدائشی________ (ii) حادثاتی________ (iii) کوئی اور وجہ________
- بچوں کی عمر: (i) ________ (ii) ________ (iii) ________ (iv) ________
  (v) ________ (vi) ________ (vii) ________ (viii) ________ (ix) ________
- کیا آپ کی شادی خاندان میں ہوئی ہے: ہاں________ نہیں________
- اگر ہاں تو شوہر/بیوی کے ساتھ آپ کا رشتہ ____________________
- خاندانی نظام: مشترکہ________ علیحدہ________
- رابطہ نمبر: موبائل نمبر________ گھر کا نمبر________
- رہائش کا پتہ ____________________
____

بچے کے کوائف:

- نام ____________________
- عمر ____________________
- جنس ____________________
- تعلیم/جماعت ____________________
- بہن بھائیوں کی تعداد ____________________
- بہن بھائیوں میں آپ کا نمبر ____________________

Annexure H

Alabama Parenting Questionnaire (APQ)

(Parent Form)

ہدایات: درج ذیل بیانات آپکے خاندان کے متعلق ہیں۔ برائے مہربانی جو باتیں آپکے خاندان میں خاص طور پر پائی جاتی ہیں اُن کی نشاندہی کیجیے۔

ممکنہ جوابات ہیں 1) کبھی نہیں 2) بہت ہی کم 3) کبھی کبھار 4) اکثر اوقات 5) ہمیشہ

نمبر شمار	بیانات	کبھی نہیں	بہت ہی کم	کبھی کبھار	اکثر اوقات	ہمیشہ
1.	آپ اپنے بچے سے دوستانہ گفتگو کرتے ہیں۔					
2.	آپ اپنے بچے کو سراہتے ہیں جب وہ کوئی اچھا کام کرتا ہے۔					
3.	آپ اپنے بچے کو سزا کی دھمکی دیتے ہیں مگر اصل میں اُسے سزا نہیں دیتے۔					
4.	آپ رضا کارانہ طور پر اپنے بچے کی خاص کاموں میں مدد کرتے ہیں مثلاً کھیل، سکاؤٹ اور مذہبی سرگرمیاں وغیرہ۔					
5.	آپ اپنے بچے کے اچھے برتاؤ کے بدلے میں اُسے انعام دیتے ہیں یا کچھ اور خاص کرتے ہیں۔					
6.	آپ کا بچہ آپ کے لئے کوئی نوٹ نہیں چھوڑتا یا آپ کو نہیں بتاتا کہ وہ کہاں جا رہا ہے۔					
7.	آپ اپنے بچے کے ساتھ گیمز کھیلتے ہیں یا کوئی اور تفریحی کام میں حصہ لیتے ہیں۔					
8.	آپ کا بچہ سزا ہو جانے کے ڈر کے باوجود آپ کو بتا دیتا ہے کہ اُس نے کچھ غلط کر دیا ہے۔					

9.	آپ اپنے بچے سے پوچھتے ہیں کہ اسکول میں اس کا دن کیسا گزرا۔					
10.	آپ کا بچہ شام کو دیر تک باہر رہتا ہے یعنی اس وقت تک جب اُسے گھر پر ہونا چاہیے۔					
11.	آپ اپنے بچے کی ہوم ورک کرنے میں مدد کرتے ہیں۔					
12	آپ محسوس کرتے ہیں کہ اپنے بچے کو فرمانبردار بنانا بہت مشکل کام ہے۔					
13.	آپ اپنے بچے کی تعریف کرتے ہیں جب وہ کوئی اچھا کام کرتا ہے۔					
14.	آپ اپنے بچے سے اُس کے آئندہ آنے والے دن کے معاملات کے بارے میں پوچھتے ہیں۔					
15.	آپ اپنے بچے کو خاص سرگرمی (Special Activity) کے لیے لے کر جاتے ہیں۔					
16.	آپ اپنے بچے کے اچھے رویئے پر اُس کی تعریف کرتے ہیں۔					
17.	آپ نہیں جانتے کہ آپ کا بچہ کن دوستوں کے ساتھ باہر جاتا ہے۔					
18.	آپ اپنے بچے کو گلے لگاتے یا پیار کرتے ہیں جب وہ کچھ اچھا کرتا ہے۔					
19.	آپ کا بچہ گھر سے باہر جاتے وقت واپسی کے وقت کا تعین نہیں کرتا۔					
20.	آپ اپنے بچے سے اُس کے دوستوں کے متعلق بات کرتے ہیں۔					
21.	آپ کا بچہ رات کے وقت کسی بڑے کو ہمراہ لئے بغیر باہر جاتا ہے۔					

22.	آپ اپنے بچے کو مقررہ وقت سے پہلے سزا سے چھوٹ دے دیتے ہیں (مثلاً اپنے مقرر کردہ وقت سے پہلے پابندیاں اٹھا لیتے ہیں)۔					
23.	آپ کا بچہ فیملی کی سرگرمیاں Plan کرنے میں آپ کی مدد کرتا ہے۔					
24.	آپ اتنے مصروف ہو جاتے ہیں کہ یہ بھی بھول جاتے ہیں کہ آپ کا بچہ کہاں ہے اور کیا کر رہا ہے۔					
25.	آپ اپنے بچے کو سزا نہیں دیتے جب وہ کچھ غلط کر دیتا ہے۔					
26.	آپ اپنے بچے کے سکول کی میٹنگ (meeting) میں جاتے ہیں مثلاً Parent Teacher Meeting یا دوسری میٹنگز میں۔					
27.	آپ اپنے بچے سے اپنی پسندیدگی کا اظہار کرتے ہیں جب وہ گھر کے کاموں میں مدد کرتا ہے۔					
28.	آپ چیک (check) نہیں کرتے کہ آپ کا بچہ اُس وقت تک گھر آ جاتا ہے جس وقت تک اُسے آ جانا چاہیے۔					
29.	آپ اپنے بچے کو نہیں بتاتے کہ آپ کہاں جا رہے ہیں۔					
30.	امید کے برعکس آپ کا بچہ اسکول سے تقریباً ایک گھنٹہ دیر سے گھر آتا ہے۔					
31.	آپ اپنے بچے کو اپنے موڈ کے مطابق سزا دیتے ہیں۔					
32.	آپ کا بچہ کسی بڑے کی سرپرستی کے بغیر گھر میں اکیلا ہوتا ہے۔					
33.	آپ اپنے بچے کی ہاتھ سے پٹائی کرتے ہیں جب وہ کچھ غلط کر دیتا ہے۔					
34.	بدتمیزی کرنے پر آپ اپنے بچے کو نظر انداز کر دیتے ہیں۔					

					آپ اپنے بچے کو تھپڑ مارتے ہیں جب وہ کچھ غلط کر دیتا ہے۔	35.
					سزا کے طور پر آپ اپنے بچے سے پیسے یا اور کوئی مراعات واپس لیتے ہیں۔	36.
					آپ سزا کے طور پر اپنے بچے کو کمرے میں بھیج دیتے ہیں۔	37.
					آپ بچے کو بیلٹ یا کسی اور چیز سے مارتے ہیں جب وہ کچھ غلط کر دیتا ہے۔	38.
					جب آپ کا بچہ کچھ غلط کر دیتا ہے تو آپ اُس پر چیختے اور چلاتے ہیں۔	39.
					جب آپ کا بچہ بدتمیزی کرتا ہے تو آپ اپنے بچے کو تحمل سے سمجھاتے ہیں کہ جو رویہ اس کا تھا اس میں کیا غلطی ہے۔	40.
					آپ سزا کے طور پر اپنے بچے کو ایک کونے میں کھڑا ہونے یا بیٹھنے کو کہہ دیتے ہیں۔	41.
					سزا کے طور پر آپ اپنے بچے سے زیادہ کام کرواتے ہیں۔	42.

Alabama Parenting Questionnaire (APQ)

(Child Form)

ہدایات: درج ذیل بیانات آپکے خاندان کے متعلق ہیں۔ برائے مہربانی جو باتیں آپکے خاندان میں خاص طور پر پائی جاتی ہیں اُن کی نشاندہی کیجیے۔ اگر آپکے والد یا والدہ آپکے ساتھ نہیں رہ رہے تو ان کے متعلق سوالات کو آپ حل نہ کریں۔

ممکنہ جوابات ہیں 1) کبھی نہیں 2) بہت ہی کم 3) کبھی کبھار 4) اکثر اوقات 5) ہمیشہ

نمبر شمار	بیانات	کبھی نہیں	بہت ہی کم	کبھی کبھار	اکثر اوقات	ہمیشہ
1.	آپ اپنی والدہ سے دوستانہ گفتگو کرتے ہیں۔					
	a) کیا والد سے کبھی کرتے ہیں؟					
2.	جب آپ اچھا کام کرتے ہیں تو کیا آپکے والدین آپکو سراہتے ہیں۔					
3.	آپکے والدین آپکو سزا کی دھمکی دیتے ہیں مگر سزا نہیں دیتے۔					
4.	آپکی والدہ آپکے خاص کاموں میں مدد کرتی ہیں۔ مثلاً کھیل، اسکاؤٹ، مذہبی سرگرمیاں وغیرہ۔					
	a) کیا والد آپکی مدد کرتے ہیں؟					
5.	آپکے والدین آپکے اچھے برتاؤ کے بدلے میں آپکو انعام دیتے ہیں یا کچھ اور خاص کرتے ہیں۔					
6.	آپ کوئی نوٹ نہیں چھوڑتے یا اپنے والدین کو یہ نہیں بتاتے کہ آپ کہاں جارہے ہیں۔					

34.	بدتمیزی کرنے پر آپ کے والدین آپ کو نظر انداز کرتے ہیں۔					
35.	جب آپ کچھ غلط کرتے ہیں تو آپ کے والدین آپ کو تھپڑ مارتے ہیں۔					
36.	سزا کے طور پر آپ کے والدین پیسے یا اور کوئی مراعات آپ سے واپس لیتے ہیں۔					
37.	آپ کے والدین سزا کے طور پر آپ کو کمرے میں بھیج دیتے ہیں۔					
38.	جب آپ کچھ غلط کر دیتے ہیں تو آپ کے والدین آپ کو بیلٹ یا کسی اور چیز سے مارتے ہیں۔					
39.	جب آپ کچھ غلط کر دیتے ہیں تو آپ کے والدین آپ پر چیختے اور چلاتے ہیں۔					
40.	جب آپ بدتمیزی کرتے ہیں تو آپ کے والدین تحمل سے آپ کو سمجھاتے ہیں کہ جو رویہ آپکا تھا اُس میں کیا غلطی ہے۔					
41.	آپ کے والدین سزا کے طور پر آپ کو ایک کونے میں کھڑا ہونے کو یا بیٹھنے کو کہہ دیتے ہیں۔					
42.	سزا کے طور پر آپ کے والدین آپ سے زیادہ کام کرواتے ہیں۔					

24.	آپ کے والدین اتنا مصروف ہو جاتے ہیں کہ یہ بھی بھول جاتے ہیں کہ آپ کہاں ہیں اور کیا کر رہے ہیں۔					
25.	جب آپ کچھ غلط کر دیتے ہیں تو آپ کے والدین آپ کو سزا نہیں دیتے۔					
26.	آپ کی امی آپ کے سکول کی میٹنگ (meeting) میں جاتی ہیں مثلاً Parent Teacher Meeting وغیرہ۔					
	a) کیا آپ کے والد جاتے ہیں؟					
27.	جب آپ گھر کے کاموں میں مدد کرتے ہیں تو آپ کے والدین اپنی پسند کا اظہار کرتے ہیں۔					
28.	آپ گھر سے دیر تک باہر رہتے ہیں جس کا علم آپ کے والدین کو نہیں ہوتا۔					
29.	آپ کے والدین گھر سے جاتے ہوئے آپ کو یہ بتا کر نہیں جاتے کہ وہ کہاں جا رہے ہیں۔					
30.	اپنے والدین کی امید کے برعکس آپ سکول سے تقریباً ایک گھنٹہ دیر سے گھر آتے ہیں۔					
31.	آپ کے والدین اپنے موڈ کے مطابق آپ کو سزا دیتے ہیں۔					
32.	آپ گھر پر اکیلے بغیر کسی بڑے کے ہوتے ہیں۔					
33.	جب آپ کچھ غلط کر دیتے ہیں تو آپ کے والدین آپ کی ہاتھ سے پٹائی کرتے ہیں۔					

					آپکی والدہ آپ کو خاص (special) سرگرمی کے لئے لے کر جاتی ہیں۔	15.
					a) کیا آپ کے والد لے کر جاتے ہیں؟	
					آپ کے والدین آپ کے اچھے رویئے پر آپ کی تعریف کرتے ہیں۔	16.
					آپ جن دوستوں کے ساتھ وقت گزارتے ہیں آپکے والدین اُن سے واقف نہیں۔	17.
					جب آپ کچھ اچھا کرتے ہیں تو آپ کے والدین آپ کو گلے لگاتے یا پیار کرتے ہیں۔	18.
					آپ گھر سے باہر جاتے وقت واپسی کے وقت کا تعین نہیں کرتے۔	19.
					آپ کی والدہ آپ سے آپ کے دوستوں کے متعلق بات کرتی ہیں۔	20.
					a) کیا آپ کے والد کرتے ہیں؟	
					آپ رات کے وقت کسی بڑے کو ہمراہ لئے بغیر باہر جاتے ہیں۔	21.
					آپ کے والدین آپ کو مقررہ وقت سے پہلے سزا سے چھوٹ دے دیتے ہیں (یعنی اپنے مقرر کردہ وقت سے پہلے پابندیاں اٹھا لیتے ہیں)۔	22.
					آپ فیملی کی سرگرمیوں کو plan کرنے میں مدد دیتے ہیں۔	23.

7.	آپ اپنی والدہ کے ساتھ گیمز کھیلتے ہیں یا کوئی اور تفریحی کام میں حصہ لیتے ہیں۔					
	a) کیا اپنے والد کے ساتھ کرتے ہیں؟					
8.	غلطی کرنے کے بعد آپ اپنے والدین کو سزا ہوجانے کے ڈر کے باوجود بتا دیتے ہیں۔					
9	آپ کی والدہ آپ سے پوچھتی ہیں کہ اسکول میں آپکا دن کیسا گزرا۔					
	a) کیا آپکے والد آپ سے پوچھتے ہیں؟					
10.	شام کو آپ دیر تک باہر رہتے ہیں یعنی اُس وقت تک جب آپ کو گھر میں ہونا چاہیئے۔					
11.	آپکی والدہ آپکے ہوم ورک میں مدد کرتی ہیں۔					
	a) کیا آپکے والد آپکی مدد کرتے ہیں؟					
12.	آپکو فرمانبردار بنانے کے معاملے کو لے کر آپکے والدین ہار مان چکے ہیں کیونکہ یہ بہت مشکل کام ہے۔					
13.	جب آپ کوئی اچھا کام کرتے ہیں تو آپکے والدین آپکی تعریف کرتے ہیں۔					
14.	آپکی والدہ آپکے آئندہ آنے والے دن کے معاملات کے بارے میں آپ سے پوچھتی ہیں۔					
	a) کیا آپکے والد پوچھتے ہیں؟					

Annexure I

Youth Self Report (YSR)

ذیل میں ایک فہرست ہے جو بچوں / نوجوانوں سے متعلق سوالات پر مشتمل ہے۔ ہر سوال آپ کے موجودہ یا گزشتہ 6 مہینوں کے دوران ہونے والے رویوں کو بیان کرتا ہے۔ اگر سوال بالکل صحیح ہے تو 2 کے گرد دائرہ لگائیں۔ اگر سوال کچھ حد تک صحیح ہے تو 1 کے گرد دائرہ لگائیں اور اگر سوال بالکل صحیح نہیں ہے تو 0 پر دائرہ لگائیں۔

ممکنہ جواب: 0 = بالکل صحیح نہیں 1 = کچھ حد تک یا کبھی کبھی صحیح 2 = بالکل صحیح

نمبر شمار	بیانات	بالکل صحیح نہیں	کچھ حد تک یا کبھی کبھی صحیح	بالکل صحیح
1	میں بہت روتا/روتی ہوں۔	0	1	2
2	میں اسکول جانے سے ڈرتا/ڈرتی ہوں۔	0	1	2
3	مجھے کچھ غلط سوچنے یا کرنے کا خوف لگا رہتا ہے۔	0	1	2
4	میں محسوس کرتا/ کرتی ہوں کہ مجھے بہترین ہونا چاہیے۔	0	1	2
5	میں محسوس کرتا/ کرتی ہوں کہ کوئی مجھ سے پیار نہیں کرتا۔	0	1	2
6	میں محسوس کرتا/ کرتی ہوں کہ لوگ میرے پیچھے پڑے ہوئے ہیں۔	0	1	2
7	میں اپنے آپ کو کمتر یا بے کار سمجھتا/ سمجھتی ہوں۔	0	1	2
8	میں گھبرایا ہوا/ گھبرائی ہوئی یا بے چین رہتا/رہتی ہوں۔	0	1	2
9	میں بہت زیادہ خوف زدہ یا بے چین رہتا/رہتی ہوں۔	0	1	2
10	میں اپنے آپ کو قصوروار سمجھتا/ سمجھتی ہوں۔	0	1	2
11	میں بہت زیادہ حساس ہوں یا آسانی سے شرمندہ ہو جاتا/جاتی ہوں۔	0	1	2
12	میں خودکشی کے بارے میں سوچتا/سوچتی ہوں۔	0	1	2
13	میں بہت زیادہ پریشان رہتا/رہتی ہوں۔	0	1	2
14	میں بہت کم لطف اندوز ہوتا/ہوتی ہوں۔	0	1	2
15	میں دانتوں سے اپنے ناخن کترتا/ کترتی ہوں۔	0	1	2

2	1	0	میں اپنی عمر سے کم عمر بچوں کے ساتھ رہنا پسند کرتا/ کرتی ہوں۔	16
2	1	0	میں باتیں چھپاتا/چھپاتی ہوں۔	17
2	1	0	میں بہت ڈرپوک یا شرمیلا/شرمیلی ہوں۔	18
2	1	0	میں غیر توانا محسوس کرتا/ کرتی ہوں۔	19
2	1	0	میں ناخوش، اُداس اور غمگین رہتا/رہتی ہوں۔	20
2	1	0	میں دوسروں سے تعلقات بنانے سے پرہیز کرتا/ کرتی ہوں۔	21
2	1	0	مجھے ڈراؤنے خواب آتے ہیں۔	22
2	1	0	مجھے چکر آتے ہیں یا سر میں ہلکا پن محسوس کرتا/ کرتی ہوں۔	23
2	1	0	میں بغیر کسی وجہ کے بہت زیادہ تھکن محسوس کرتا/ کرتی ہوں۔	24
2	1	0	میں جسم میں درد محسوس کرتا/ کرتی ہوں۔	25
2	1	0	میں سر درد محسوس کرتا/ کرتی ہوں۔	26
2	1	0	میں متلی محسوس کرتا/ کرتی ہوں۔	27
2	1	0	مجھے آنکھوں کی بیماری ہے۔ تفصیل لکھیں۔ ______________________	28
2	1	0	مجھے جلد پر سرخ نشان پڑتے ہیں اور جلد کے دیگر مسائل ہیں۔	29
2	1	0	مجھے پیٹ کا درد محسوس ہوتا ہے۔	30
2	1	0	مجھے کبھی کبھی الٹی آتی محسوس ہوتی ہے۔	31
2	1	0	میں اپنے والدین سے چھپ کر نشہ آور چیزیں استعمال کرتا/ کرتی ہوں۔	32
2	1	0	کوئی بھی ایسا کام کرنے کے بعد جو مجھے نہیں کرنا چاہیے مجھے شرمندگی محسوس نہیں ہوتی۔	33
2	1	0	میں گھر، اسکول اور باہر کی پابندیوں کی خلاف ورزی کرتا/ کرتی ہوں۔	34

2	1	0	مجھے ایسی آوازیں سنائی دیتی ہیں جو دوسروں کو سنائی نہیں دیتیں۔ وضاحت کریں۔ ________________	35
2	1	0	میں اسکول کے علاوہ چند مخصوص جانوروں، حالات اور جگہوں سے خوف محسوس کرتا/ کرتی ہوں۔ وضاحت کریں۔ ________________	36
2	1	0	میں سکول کا کام اچھے طریقے سے نہیں کرتا/ کرتی ہوں۔	37
2	1	0	میں گھر سے بھاگ جاتا/جاتی ہوں۔	38
2	1	0	میں آگ لگا دیتا/دیتی ہوں۔	39
2	1	0	میں اپنے گھر سے چیزیں چراتا/چراتی ہوں۔	40
2	1	0	میں گھر سے اور باہر دوسری جگہوں سے چیزیں چراتا/چراتی ہوں۔	41
2	1	0	میں بدزبان اور بدکلام ہوں۔	42
2	1	0	میں جنسی تعلقات کے بارے میں سوچتا/سوچتی رہتی ہوں۔	43
2	1	0	میں تمباکو نوشی، تمباکو خوری اور نسوار لینے کا عادی ہوں۔	44
2	1	0	میں بغیر کسی وجہ کے سکول یا کمرۂ جماعت سے غیر حاضر رہتا/رہتی ہوں۔	45
2	1	0	میں بغیر کسی طبی وجہ کے دوا کا استعمال کرتا/ کرتی ہوں۔ (نشے اور سگریٹ کے علاوہ) وضاحت کیجئے۔ ________________	46
2	1	0	میں بہت بحث کرتا/ کرتی ہوں۔	47
2	1	0	میں دوسروں کو تکلیف دیتا/دیتی ہوں۔	48
2	1	0	میں بہت زیادہ توجہ حاصل کرنے کی کوشش کرتا/ کرتی ہوں۔	49
2	1	0	میں اپنی چیزیں توڑ پھوڑ دیتا/دیتی ہوں۔	50
2	1	0	میں دوسروں کی چیزیں توڑ پھوڑ دیتا/دیتی ہوں۔	51
2	1	0	میں اپنے والدین کی نافرمانی کرتا/ کرتی ہوں۔	52
2	1	0	میں اسکول میں اساتذہ کی نافرمانی کرتا/ کرتی ہوں۔	53

2	1	0	میں اکثر لڑائی جھگڑوں میں پڑ جاتا/جاتی ہوں۔	54
2	1	0	میں لوگوں پر حملہ آور ہوتا/ہوتی ہوں۔	55
2	1	0	میں بہت زیادہ چیختا/چیختی ہوں۔	56
2	1	0	میں ضدی ہوں۔	57
2	1	0	میرے جذبات اور احساسات بہت جلد بدلتے ہیں۔	58
2	1	0	میں بہت شکی مزاج ہوں۔	59
2	1	0	میں دوسروں کو بہت تنگ کرتا/ کرتی ہوں۔	60
2	1	0	میں بہت غصہ والا ہوں۔	61
2	1	0	میں لوگوں کو نقصان پہنچانے کی دھمکیاں دیتا/دیتی ہوں۔	62
2	1	0	میں دوسرے بچوں کے مقابلے میں زیادہ اُونچی آواز میں بولتا/ بولتی ہوں۔	63

Annexure J

Brief COPE

درج ذیل بیانات ان تمام طریقوں کے متعلق ہیں جو آپ اپنی زندگی میں ذہنی دباؤ سے نمٹنے کے لئے استعمال کرتے رہے ہیں۔ ہر بیان ذہنی دباؤ سے نمٹنے کے ایک خاص طریقے کی نشاندہی کرتا ہے۔ میں یہ جاننا چاہتی ہوں کہ ہر بیان جس طریقے کی نشاندہی کرتا ہے آپ اُس کو کس حد تک استعمال کرتے رہے ہیں۔ (کتنا زیادہ یا کتنی دفعہ)۔اس بنیاد پر جواب نہ دیں کہ طریقہ مفید ہے یا نہیں۔صرف اس بنیاد پر جواب دیں کہ آپ نے وہ طریقہ اختیار کیا یا نہیں۔ ہر بیان کے سامنے متبادل جوابی صورتوں میں سے کسی ایک کا انتخاب اُس خانے میں نشان (   ) لگا کر کریں۔

نمبر شمار	بیانات	کبھی نہیں	بہت کم	کبھی کبھی	بہت زیادہ
1	میں اپنے ذہن سے کچھ چیزوں کو نکالنے کے لئے دوسرے کاموں یا مشاغل کی طرف متوجہ ہو جاتا/جاتی رہی ہوں				
2	میں جس صورتحال میں ہوں اُس سے نکلنے کے لئے میں اپنی تمام کوششیں صرف کرتا/ کرتی رہی ہوں				
3	میں اپنے آپ سے کہتا/ کہتی رہی ہوں کہ یہ حقیقت نہیں ہے				
4	میں بہتر محسوس کرنے کیلیئے سکون آور اور نشہ آور ادویات استعمال کرتا/ کرتی رہی ہوں				
5	مجھے دوسروں سے جذباتی سہارا ملتا رہا ہے				
6	میں اس صورتحال سے نمٹنے کی کوششیں ترک کر دیتا/دیتی رہی ہوں				
7	میں صورتحال کو بہتر بنانے کی کوشش میں اقدامات کرتا/ کرتی رہی ہوں				
8	میں یہ یقین کرنے سے انکار کرتا/ کرتی رہی ہوں کہ ایسا ہو چکا ہے				
9	میں ایسی باتیں کہتا/ کہتی رہی ہوں جن سے میرے ناخوشگوار جذبات میں کمی آسکے				

				میں دوسروں سے مشورہ اور مدد حاصل کرتا/ کرتی رہی ہوں	10
				میں اس صورتحال سے نمٹنے کے لئے سکون آور اور نشہ آور ادویات استعمال کرتا/ کرتی رہی ہوں	11
				میں اس صورتحال کو مختلف پہلوؤں سے دیکھنے کی کوشش کرتا / کرتی رہی ہوں تا کہ یہ زیادہ مثبت نظر آئے	12
				میں اپنے آپ پر تنقید کرتا/ کرتی رہی ہوں	13
				میں صورتحال کے بارے میں کچھ کرنے کے لئے ایک حکمتِ عملی تلاش کرنے کی کوشش کرتا/ کرتی رہی ہوں	14
				میں کسی دوسرے سے آرام اور ہم خیالی حاصل کرتا/ کرتی رہی ہوں	15
				میں اس صورتحال پر قابو پانے کی کوشش ترک کرتا/ کرتی رہی ہوں	16
				جو کچھ ہو رہا ہے میں اُس میں کچھ بہتر پہلو دیکھنے کی کوشش کرتا/ کرتی رہی ہوں	17
				میں اس صورتحال کے بارے میں مزاح پیدا کرتا/ کرتی رہی ہوں	18
				میں اس صورتحال کے بارے میں کم سوچنے کے لئے کچھ نہ کچھ کرتا/ کرتی رہی ہوں جیسے فلم کے لئے جانا ٹی وی دیکھنا پڑھنا، دن میں خواب دیکھنا، سونا یا خریداری کرنا	19
				میں اس حقیقت کو تسلیم کرتا/ کرتی رہی ہوں کہ ایسا رونماء ہو چکا ہے	20
				میں اپنے منفی جذبات کا اظہار کرتا/ کرتی رہی ہوں	21
				میں اپنے مذہب یا روحانی عقائد میں سکون تلاش کرنے کی کوشش کرتا/ کرتی رہی ہوں	22

				صورتحال کے متعلق کچھ کرنے کے لئے میں دوسرے لوگوں سے مدد اور مشورہ لینے کی کوشش کرتا/ کرتی رہی ہوں	23
				میں اسی صورتحال کے ساتھ گزارہ کرنا سیکھتا/ سیکھتی رہی ہوں	24
				میں اس بارے میں بہت غور کرتا / کرتی رہی ہوں کہ کیا اقدامات لوں	25
				جو کچھ ہوا اُس کے لئے میں اپنے آپ کو قصوروار ٹھہراتا/ ٹھہراتی رہی ہوں	26
				میں عبادت اور دُعا کرتا/ کرتی رہی ہوں	27
				میں حالات کو مذاق میں اُڑاتا/ اُڑاتی رہی ہوں	28

Annexure K

Early Adolescent Temperament Questionnaire - Revised (EATQ-R) Short Form

درج ذیل میں ایسے بیانات دیئے جا رہے ہیں جو لوگ خود کو بیان کرنے کے لئے استعمال کرتے ہیں۔ یہ بیانات بڑی تعداد میں رویوں اور سرگرمیوں کی نشاندہی کرتے ہیں۔

نیچے دیئے گئے بیانات کے جوابات کے لئے اس پر دائرہ لگائیں جو آپ پر بہترین لاگو ہوتا ہے۔ ان میں کوئی جواب غلط یا صحیح نہیں ہے۔ لوگ ان بیانات کے حوالے سے اپنے احساسات میں ایک دوسرے سے بہت مختلف ہیں۔ برائے مہربانی اس جواب پر دائرہ لگائیں جو آپ کو اپنے بارے میں بالکل ٹھیک لگتا ہے۔

ممکنہ جوابات ہیں: ۱) تقریباً ہمیشہ غلط ۲) اکثر غلط، ۳) کبھی درست کبھی غلط، ۴) اکثر صحیح، ۵) تقریباً ہمیشہ صحیح

نمبر شمار	بیانات	تقریباً ہمیشہ غلط	اکثر غلط	کبھی درست کبھی غلط	اکثر صحیح	تقریباً ہمیشہ صحیح
1	میرے لئے ہوم ورک کے مسائل پر توجہ دینا آسان ہے۔					
2	وقت پر کام کرنا میرے لئے مشکل ہوتا ہے۔					
3	مقررہ وقت سے پہلے تحائف نہ کھولنا میرے لئے مشکل ہوتا ہے۔					
4	جب مجھے کوئی کسی کام سے روکتا ہے تو میرے لئے اس کام سے رکنا آسان ہوتا ہے۔					
5	میں اپنا کام شروع کرنے سے پہلے کچھ دیر کے لئے کوئی پُرلطف کام ضرور کرتا/ کرتی ہوں حالانکہ تب بھی جب مجھے ایسا نہیں کرنا چاہیے۔					

6	جتنا میں اپنے آپ کو کسی ایسے کام سے روکنے کی کوشش کرتا / کرتی ہوں جو مجھے نہیں کرنا چاہیے۔ اتنا ہی زیادہ امکان ہوتا ہے کہ میں وہ کام کروں۔					
7	اگر مجھے کوئی مشکل کام کرنے کو ملے تو میں اسے فوراً شروع کر دیتا/دیتی ہوں۔					
8	مجھے سکول میں ایک کلاس سے دوسری کلاس میں اپنی توجہ منتقل کرنے میں مشکل ہوتی ہے۔					
9	جب میں پڑھنے کی کوشش کر رہا/ رہی ہوں تو پیچھے سے آتی ہوئی آوازوں کو نظر انداز کرنا اور پڑھائی پر توجہ دینا مجھے مشکل لگتا ہے۔					
10	میں وقتِ مقررہ سے پہلے اپنا ہوم ورک مکمل کر لیتا/لیتی ہوں۔					
11	میں اپنے اردگرد مختلف معاملات پر بخوبی نظر رکھتا/رکھتی ہوں۔					
12	میرے لئے راز رکھنا آسان ہے۔					
13	میں منصوبوں پر عین اُس وقت کام کرنا چھوڑ دیتا ہوں جب وہ بالکل مکمل ہونے کے قریب ہوتے ہیں۔					
14	جب کوئی مجھے بتاتا ہے کہ کوئی کام کیسے کرنا ہے تو میں اس پر پوری توجہ دیتا/دیتی ہوں۔					
15	میں ایک کام کرنا شروع کرتا ہوں لیکن بھر اسے درمیان میں چھوڑ کر کوئی دوسرا کام کرنے لگتا ہوں۔					
16	میں اپنے منصوبوں اور مقاصد پر قائم رہ سکتا/سکتی ہوں۔					

Annexure L

Correlation of Demographic Variables with the Study Variables (N = 348)

	Variables	1	2	3	4	5	6	7	8	9	10	11	12
1	Positive Involvement/Parenting	-	-.65**	-.42**	-.59**	-.60**	-.14*	.42**	.10	.01	.08	-.02	.03
2	Negative/Ineffective Discipline		-	.46**	.43**	.54**	.09	-.37**	-.09	-.10	-.05	.12*	-.11*
3	Deficient Monitoring			-	.15**	.59**	.16**	-.25**	-.06	-.09	.02	.62**	-.17**
4	Internalizing Problems				-	.33**	-.10	-.26**	-.07	-.06	-.10	-.29**	.12*
5	Externalizing Problems					-	.18*	-.27**	-.10	-.09	-.07	.36**	-.25**
6	Gender-Parents						-	.03	.01	.05	-.02	.21**	-.07
7	Education in Years-Parents							-	.17**	.01	.01	-.09	.06
8	Family Monthly Income								-	.03	.10	-.05	.04
9	Family Size									-	.09	-.09	.06
10	Family System										-	.10	-.10
11	Gender-Adolescents											-	-.09
12	Age of Adolescents												-

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

Annexure M

Fazaila Sabih <fazaila.sabih@riphah.edu.pk>

Querry Regarding APQ

Paul J Frick <PFrick@uno.edu> Fri, Sep 12, 2014 at 12:33 AM
To: Fazaila Sabih <fazaila.sabih@riphah.edu.pk>

Dear Fazaila Sabih,

Thank you for your interest in using the Inventory of Callous-Unemotional Traits. Copies of the scale and all supporting information that is available can be obtained from my web site (address listed below). This includes a reference list of published studies using the scale, so that you can see the various ways it has been administered and scored. As you will see, most users have the parent complete separate forms for each child. You are welcome to use the scale in your research. All I ask is that you send me copies of any manuscript that you publish using the scale, so that I can keep an updated reference list on the scale.

Please let me know if you have any questions about this. Otherwise, I wish you the best in your work.

Paul

Paul J. Frick, Ph.D., University Distinguished 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://psyc.uno.edu/Faculty%20pages/Frick.html

From: Fazaila Sabih [fazaila.sabih@riphah.edu.pk]
Sent: Thursday, September 11, 2014 5:38 AM
To: Paul J Frick
Subject: Querry Regarding APQ

[Quoted text hidden]

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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Thomas M. Achenbach, Ph.D.

Signature:

Title: President, Research Center for Children, Youth & Families, Inc.

Date: 15 April 2014

For License # 992-04-03-14

Accepted and Agreed to:

LICENSEE:

Fazaila Sabih

Signature:

Print name: Fazaila Sabih

Title: PhD Scholar

Address: C/o Mushtaq Ahmed, S/o Fateh Muhammad, O-1016/A Haripura Mohalla Asghar Mall Road Rawalpindi.

Date: 09-04-2014

The University of Vermont

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Research Center for Children, Youth & Families, Inc.
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1 South Prospect Street, St Joseph's Wing (Room #3207), Burlington, VT 05401
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February 10, 2016: Amended License to Add 100 Administrations of the YSR with Expiration Date of August 31, 2016

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Fazaila Sabih <fazaila.sabih@riphah.edu.pk>

Urdu EATQ-R

Samuel Putnam <sputnam@bowdoin.edu> Sat, Jan 23, 2014 at 11:59 PM
To: "fazaila.sabih@riphah.edu.pk" <fazaila.sabih@riphah.edu.pk>

Dear Fazaila Sabih,

I just processed your request for access to the EATQ-R. Unfortunately, we do not currently possess a Urdu translation of the instrument. If you do develop such a translation, please consider sharing it with us, so that we can make it available (giving you credit for your work) to other researchers studying Urdu-speaking populations in the future.

I wish you the best with your upcoming study,

Sam Putnam

Sam Putnam Professor, Psychology Department
Chair, Institutional Review Board
Bowdoin College 6900 College Station Brunswick, ME 04011 207-725-3152