Depression in Elderly: Role of Quality of Life, Orientation to Life, and Locus of Control

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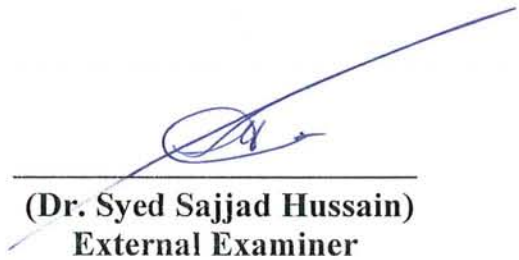

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

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Sana Mumtaz

ABSTRACT

Depression is identified as one of the major mental health problem for elderly around the world. In Pakistan, geriatric depression is still less addressed problem. The aim of present study was to identify the predictive role of orientation to life, locus of control, and quality of life in depression among elderly. Mediating role of quality of life in between orientation to life and locus of control in predicting depression was also explored. Comparison between elderly residing in old-homes and community settings, and socio-demographic differences on depression, orientation to life, locus of control, and quality of life were also examined. Moderating role of place of residence for orientation to life and locus of control in predicting depression was explored too. Research was carried out in two phases; Pilot Study and Main Study. Participants (N= 292) of the current study were taken from old-homes (n = 87) and community (n = 205) including both men and women; age ranging from 60 to 110 years. Measures used included Urdu version of Geriatric Depression Scale by Itrat, Taqui, Qidwai, and Qadri (2007), World Health Organization Quality of Life Scale by Khalid and Kausar (2008), Levenson Internality, Powerful Others, Chance Scale by Younis (2003), and Life Orientation Test by Ayub (2004) along with demographic sheet. All the instruments used in the study had sound psychometric properties. Results revealed psychological health, physical health, and social relationships domains of QOL, orientation to life, internal, and powerful others domain of locus of control as significant predictors of depression. Quality of life emerged as mediator in between orientation to life and internal locus of control in predicting depression. Also it was found that participants of old- home had more depression, more belief in powerful others and chance locus of control, and lower quality of life overall and in three domains that is psychological health, social relationships, and environment. Place of residence emerged as moderator in between orientation to life and quality of life in predicting depression. Depression was more common in women, illiterate, economically dependent, participants having more physical health problems and those without partner. Findings are discussed in the light of implications for elderly depression.

INTRODUCTION

Chapter 1

INTRODUCTION

The 20th century can be termed a 'population ageing' era. Elderly population in the developed and industrialized countries has witnessed a rapid increase (Dubey, Bhasin, Gupta, & Sharma, 2011). Factors responsible for the increase in elderly population include higher birth rate, declining mortality rate, and improved life expectancy. This can be attributed to medical advancements and better health care (Shyam & Yadev, 2006). The worldwide trend of increased elderly population and improved life expectancy has also influenced Pakistan. Despite socio-economic instabilities, the average lifespan has improved in Pakistan. According to a report of World Population Data Sheet (2014), by 2050 Pakistan with an estimated population of 348 million, would be soon ranked 6th on population scale. In last 50 years, lifespan has risen by almost 30 years and will approach close to 72 years by 2023 (Sabzwari & Azhar, 2010). As a result, ageing phenomenon in Pakistan has become very significant and can no longer be ignored. It is, therefore, imperative to anticipate the social and psychological needs of this elderly group in Pakistan, in order to meet their growing needs and improve their quality of life (QOL). In 2013, a UN- backed survey called Global Age Watch Index, for the first time collected global data on the well-being of elderly and Pakistan was ranked as the third worst in the world for a person to grow old in. This ranking is pretty alarming and shows our ill preparedness to deal with the bulge in the elderly population.

The present and projected increase in the proportion of elderly calls for more focus on their physical, financial, psychological, and sociological adjustment issues. An aging population experiences increased prevalence of physical impairments, chronic diseases, mental illnesses, and other co-morbidities (Bhamani, Karim, & Khan, 2013).Specifically, some of the major issues faced by elderly during old age include various health problems (Zafar,Ganatra,Tehseen,& Qidwai, 2006), economic dependency (Qureshi & Arif, 2001), living below poverty line (Ali & Kiani, 2003), spousal death (Monk, Pfoff, & Zarotney, 2013), resistance to care (Potts, Richie, & Kaas, 1996), memory degradation, decline in interest, fright of death, irritability, restlessness, loss of

occupation, seclusion, insecurity, loss of caring and supportive relationships (Saraswathi & Prakasamma, as cited in Jancy, 2012), and institutionalization (Gull & Dawood, 2013).

These different social issues and physical problems faced by elderly in old age ultimately lead to poor QOL which further pave way to different psychological and psychiatric disorders in them. Depression is the most dominant psychiatric disorder in the elderly (Bhamani et al., 2013; Lee, Choi, Jung, & Kwak, 2000; Lee& Shinkai, 2005). In both the developing countries and developed world, the depression in elderly is expected to score second place on Disability Adjusted Life Years (DALYs) by 2020 and become foremost cause of disability by 2030 (World Federation for Mental Health, 2012). However, at psychological level, it is actually different personal cognitive resources like locus of control (LOC) and orientation to life (optimism/ pessimism) that has been shown to be responsible for developing depression in an individual (Beck, 1967; Rotter, 1954). Therefore, these cognitive resources can be employed in positive way by elderly people to cope with their typical hardships and guarantee their psychological wellbeing. Keeping in mind depression's high prevalence rate in elderly and strong negative impact on elderly's QOL, the present research attempts to study the predictive role of orientation to life and LOC in depression among elderly and the mechanism through which these cognitive variables effect depression. The present research will also make a comparison between elderly living in institutions (old homes) and community settings on these study variables as research evidences show strong negative impact of institutionalization on mental health of elderly (Mathew, George, & Paniyadi, 2009; Srivastava & Swetha, 2002).

Depression

Depression is characterized by gloominess, decline of pleasure or interest, guilt feelings, disturbed sleep or appetite, fatigue, low self-esteem, and poor concentration. It is a common mental disorder that affects the QOL among elderly people (World Health Organization [WHO], 2012). Although depression is a considered a serious condition for all age groups, but for elderly people, it is often concomitant with other co-morbid conditions, such as physical disability (Chiu, Ames, Draper, & Snowdon, 1999),

dementia (Beyond Blue, 2007), and anxiety (Bryant, Jackson, & Ames, 2008) which worsen the state of distress experienced by older individuals and those responsible to take care of them. In older adults, several types of depressive disorders have been noticed to occur frequently like Major Depression, Psychotic Depression, Subsyndromal Depressive Symptoms, Vascular Depression, Depression-Executive-Dysfunction, and Dysthymia (Alexopoulos et al., 1997; Delano-Wood & Abeles, 2005; Devanand et al., 1994; Flint & Rifat, 1998; Marano, 2002).

Major Depression is a serious disorder, which may occur in elderly people either from earlier period in life, or as a new instance in which case it is termed as "late onset" depression. This is described by feelings of dejection and displeasure that persists for at least two-week period (American Psychiatric Association [APA], 2000). *Psychotic Depression* is most common in late life and elderly adults (Alexopoulos, et al., 2002). It is characterized by hallucinations and delusional state and is often linked with Major Depression. Relapse and recurrence are very frequent in elderly people with Psychotic Depression (Flint & Rifat, 1998). Some older adultsare diagnosed with *Subsyndromal Depressive Symptoms*, who experience few depressive symptoms, but not quite enough to be diagnosed with Major Depression. Such depressive symptoms below the threshold of diagnosable criteria, still have a very significant impact on the elderly people' QOL (Delano-Wood & Abeles, 2005). A recently acknowledged type, *Vascular Depression* is found in persons over 60 years old, who suffer from cardiovascular disease as a part of illness (Marano, 2002). In older adults, it is marked by a different presentation than Non-Vascular Depression. According to Alexopoulos et al. (1997), "late- onset depression associated with vascular risk factors is characterized by cognitive dysfunction, disability, retardation, lack of insight, and limited depressive ideation" (p. 564). Krishnan, Hays, and Blazer (1997) made similar conclusion regarding Vascular Depression and found out that vascular depression patients are most often elderly, nonpsychotic, having a late-onset depressive disorder and greater cognitive dysfunction. *Depressive Executive-Dysfunction (DED)* syndrome first reported by Alexopoulos et al. (2002) originates in frontal lobe dysfunction, which results in a specific kind of depression in the elderly. It is characterized by symptoms of reduced speech fluency, difficulty with naming, retarded psychomotor reaction, anhedonia, and paranoia. The geriatric depression and executive

dysfunction are interrelated in this case and create a distinct syndrome. The authors (Alexopoulos et al., 2002) concluded that: "Depressive symptomatology, and especially psychomotor retardation and loss of interest in activities, contributed to disability in Depressive Executive-Dysfunctionpatients, whereas these depressive symptoms did not influence the functioning of depressed patients without significant executive impairment" (p. 102). Another depressive disorder *Dysthymia*, has been cited as a distinct type of geriatric depression because of its different presentation in older adults from younger population. In a study by Devanand et al. (1994), significant percentage of elderly dysthymic patients were not found to have any symptoms when they were young.

Apart from various forms of elderly depression, there is also difference in the manifestation of depression in elderly in comparison to younger population. A number of studies have shown that elderly people do not always exhibit the same symptoms as younger populations. A major reported difference is that older adults may not reveal or show extreme grief (Gareri, Fazio, & DeSarro, 2002; Laidlaw, Thompson, Dick-Siskin, & Thompson, 2004). An absence of such wellknown symptom that is sadness or grief may lead to depressive disorders being overlooked among elderly. The symptoms more typical of geriatric depression include loss of pleasure, behavioral changes, lack of appetite, somatic complaints, cognitive dysfunction, and the marked presentation of negative personality traits (Blazer, 2005). The United States Department of Health and Human Services, Surgeon General's Report (1999) specified that the manifestation of depression in older people is different from those of younger age group in a sense that in older people, the somatic symptoms of depression are more prominent than psychological symptoms. Therefore, this warrants to pay attention to depression among elderly and factors leading to it in an age group focused study.

Prevalence of depression. Epidemiology of depression in older age shows inconsistent results. 122 research papers' review in this area, reported prevalence of depressive disorders ranged from 1% to 49% in elderly population (Djernes, 2006). In a study conducted among community-dwelling elderly in Korea using Geriartic Depression Scale (GDS), the prevalence of depression among the participants was found out to be

63%. In this sample, 21% had severe depressive symptoms and women were found to suffer more from depression than men (Kim, Choe, & Chae, 2009).

Another study done among the elderly in Rizal province of Phillipines, investigated the prevalence of geriatric depression and associated socio-demographic and clinical conditions. The cross-sectional sample (N = 196) of the elderly population (aged 60 years and above) comprised of 122 women and 74 men. The depression was found among 6.6% of elderly population (Josef, Cruz, & Salandanaan, 2011).

A study in Netherlands was conducted to estimate the prevalence and risk-factors for depression in elderly. It included 330 Turkish, 299 Moroccan, and 304 Dutch adults (aged 55–74 years), who were interviewed using the Center for Epidemiologic Depression Scale (CES-D). The prevalence of self-reported depressive symptoms was very high for migrants in the elderly population, 33.6% for Moroccan and 61.5% for Turkish. Thus ethnicity was identified as a strong independent risk factor (Wurff et al., 2004).

In developing countries, depression is expected to rank as the 2nd most prevalent mental disorder in the elderly by the year 2020 (Desjarlais, 2001). The magnitude of this elderly problem in developing countries is much greater than what is being reported. While in United States, the prevalence of depression in the elderly is as high as 40%, in developing country like Pakistan, 66% of elderly population suffer from this condition (Javed & Mustafa, 2013). A recent study employed the 15- item GDS on 953 individuals (above 60 years old) in Karachi, Pakistan. It showed the prevalence of depression to be 40.6% with a higher preponderance (50% vs. 32%) in females compared with males (Bhamani et al., 2013).

A similar study by Mubeen, Henry, and Qureshi (2012), in Karachi, Pakistan on 284 community dwelling elderly concluded that 16.5% of respondents suffered from while another 23.6% possessed symptoms suggestive of depression. However it was found out to be more common among men than in women, a finding contrary to the most recent researches.

The wide-ranging figures reported for prevalence of depression in elderly population are mainly due to methodological dissimilarities (Beekman, Copeland, & Prince, 1999), which include factors like varied definition of depression, the sample sizes and the sampling strategies (Pirkis et al., 2009).

Correlates of elderly depression. Various researches have explored the sociodemographic and other factors associated with depression among elderly. Researches done over the period of time have shown association of gender, education, marital status, economic dependency, number of physical health problems, social (environmental) support, lonliness, and resistence to care with depression. A description of these factors is given below:

Gender has been found to be an important socio-demographic correlate of elderly depression with women outnumbering men in experiencing depression in Jamaica (Gibson, Neita, Abel, James, & Shearer, 2013), Nigeria (Shittu et al., 2014), and India (Pandit et al., 2013). However, research done in Pakistan on 284 community dwelling elderly showed a reverse pattern with men outnumbering women in experiencing depression (Mubeen et al., 2012) which prompts the need to investigate it further specially with reference to indigenuous context.

Education has been found to be another important socio-demographic correlate of elderly depression with depression more common in elderly with no formal education (Pandit et al., 2013; Shittu et al., 2014) or low level of education (Park et al., 2012).

*Economic dependency*has also been related to elderly depression both in the West and East.Especially with reference to Pakistan, the rising poverty levels in Pakistan are most likely to affect the elderly population, which lack economic and social support. According to current estimates, 33% population in Pakistan is living below or on poverty line (Qureshi & Arif, 2001). The elderly people are generally the poorest among the population. They lack socio-economic opportunities due to their decreased participation and dwindling ability (Ali & Kiani, 2003). So poverty along with economic dependency further worsens the situation for elderly. Empirical evidences show that depression is high among elderly who are economically dependent (Maqsood,, Flatt, Albert, Maqsood,

& Nizamuddin, 2013; Pandit et al., 2013; Udayar, Devika, Konduru, & Patil, 2014) as dependency on others to meet one's basic needs can be a source of distress in elderly's life (Maqsood et al., 2013).

Marital status is yet another socio-demographic variable having a role in depression. Research done by Pandit et al. (2013) in India has shown that depression is more prevalent among singles, either unmarried or divorced. A study in China conducted by Yan et al. (2011) has also concluded that the widowed, divorced, and never-married elderly people compared with married ones are at a greater risk for depression. Among elderly unmarried category, widowed people had a higher risk for depression than those who never married. Research has also shown that psychological impairments, specially depressive symptoms, as well as mortality risk is increased after the death of an elderly spouse (Monk et al., 2013). A study performed in Pakistan indicated that 77% men and 19% women suffered severe depression during three months after the death of spouse. Thus these evidences prove marital status as an important correlate of elderly depression.

Number of physical health problems that an elderly face in old age also affect their mental health leading to depression. A study from Pakistan comprising of 402 elderly people above 65 years demonstrated the prevalence of chronic illnesses with age necessitating medical care. Peltzer and Mafuya (2013) found that in elderly sample, chronic ailments (angina, asthma, arthritis, and night-time sleeplessness) were positively linked with self-reported depressive symptoms. Similar findings have been reported by Rodic, Meyer, and Meinlschmidt (2015) showing the importance of physical health in determining mental health among elderly.

Social (environmental) support has a pronounced effect in developing elderly depression. Lack of social support has been shown to be responsible for depression. A group study was performed in an urban setting of Japan on people aged 70 years or above ($N = 2730$) to determine if there is any link between lack of social support and incidence of depression. The results showed that elderly people who lack social support in Japanese urban community, are at increased risk of depression (Koizumi et al., 2005). In Pakistan the change in norms and family structure over the period of time had an effect on the

available social support to elderly segment of society. Research showed that elderly who did not consider their children as future support were twice as likely to be depressed as those considering their children to be securityin old age (Bhamani et al.,2013), thus demonstrating the importance of social support for elderly.

Lonliness is another of important variable that has a relation with depression. Lonesomeness and solitude has become a pressing global problem that impacts social well-being and health of individuals (Victor et al., 2002). Many studies have concluded that elderly people face a higher risk of loneliness due to death of spouses and close friends and onset of morbidity, ailments and disability, which preclude or impede social involvement (Dykstra, Van Tilburg, & de Jong Gierveld, 2005). A study conducted in India on 55 elderly people (men and women) to examine the connection among depression, loneliness, and sociability, revealed that the depression and loneliness are significant linked (Singh & Misra, 2009). Another study conducted by Singh and Kiran (2013) also concluded that loneliness is a significant issue for elderly widows compared to their married counterparts, who are at a greater risk of mortality, illness and depression than the later. In Pakistani society also, the present change in family structure, values and norms has inculcated feelings of lonliness and social isolation among elderly (Siddiqui, Anwar, & Perveen, 2009).

Resistance to care is another issue of elderly (Eriksson & Andershed, 2008) which might affect elderly's mental health. Resistance to care is defined as "the repertoire of behaviors with which persons withstand or oppose the efforts of a caregiver" (Mahoney et al., 1999, p. 28). In postmodern Western society, individual freedom, autonomy, and self-determination are considered essential values. These values have been promoted in public health and nursing as well, which aim to provide needed support and help to people (Backman & Hentinen, 1999). However, the desire to be independent and strong may lead elderly who are dependent to show resistance to such care. Resistance-to-care behaviors are very common phenomena. A US study conducted onnursing home occupants suffering from dementia (N=23,837), reported that 9% of the sample showed resistance-to-care behaviors (Volicer, Bass, & Luther, 2007). However most literature on resistence to care is found in the West and on individuals of nursing

homes as cited above and there is dearth of researches on this phenomena on elderly of developing countries like Pakistan.

In many of these studies discussed above (Koizumi et al., 2005; Pandit et al., 2013; Park et al., 2012; Udayar et al., 2014), GDS was used to measure depression in elderly which shows this scale's widespread use to measure elderly depression.

Depression has serious impact on QOL of individuals. Its consequences include social withdrawal; loneliness; decreased satisfaction and pleasure; increased dependency on health and homecare, cognitive impairment, constraints on activities of daily living (ADL), risk of suicide and increased rate of mortality (Conwell, 2001; Guillaume, 2011). Elderly populations over 55 years, has shown four times higher rate of mortality when suffering from depression than without it (WHO, 2001). So in short, depression exerts strong negative influence on elderly's QOL.

Quality of Life (QOL)

QOL of elderly people has remained the focus of research all over the world in the past few years. According to Medical Education Research Centre, Iran (as cited in Mckee, Matlabi, & Parker, 2012), QOL is considered as a measure of wellbeing by researchers in different fields like social gerontology, environmental health, and is particularly useful to policy makers and practitioners who want to monitor the wellbeing and progress of their people. According to Fayers and Hays (2005), different definitions of QOL exist in the literature which range from general definitions to more specific definitions and also there exist different methodological approaches to measure the construct of QOL. There is no single universal definition of QOL, but everybody agrees that QOL is a construct that is based on both objective/ subjective factors and also both personal/ social factors.

The WHO (1996) has defined QOL as: " Individual's perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns" (p. 5). Shortly, it is " The degree of satisfaction or sense of well-being people experience in a specific environment"

(Roppanen & Joensuu, 2012, p. 28). As described earlier, according to Farquher (1995), QOL is based on both objective and subjective parameters. Happiness, wellbeing, and personal achievement along with some other parameters explain the subjective aspect of QOL because they involve observer bias, while satisfaction of basic needs and those dimensions that could be measured objectively without the subjective opinion of individual constitute the objective side of QOL.

Subjective QOL can be conceptualized as a multidimensional construct that describes an individual's subjective perception of his or her physical and psychological health, as well as his or her social functioning, environment, and condition of life in general. For elderly also, QOL is a holistic concept based on their physical, psychological, emotional, and social health; so encompassing a range of dimensions. Researches show the different factors effecting QOL of elderly include elderly people's income, personal ailments (Savirasarid, 2008), health status, socio-economic isolation, spirituality (Sin, Logerfo, Belza, & Cunninghum, 2004), problems or conflicts in family environment, lack of shelter and financial security,gender bias and over-tapped resources (Dongre & Deshmuk, 2008).

Physical Health is an important factor in determining elderly QOL (Bowling, 2008; Laidmae &Tammsaar, 2013; Nejati et al., 2008; Oberoi, 2010).Laidmae and Tammsaar (2013) found that women showed higher incidence of bone and connective tissue diseases and stress symptoms. The majority of the respondents in their research sample complained about sleep disorders (90%). Oberoi (2010) in his study done on 50 community dwelling elderly also found physical health to be among the most affected domain in terms of QOL. The component in the physical domain -the need for elderly to take medical treatment to function in their daily life- was endorsed by 76% elderly in his research sample.

Apart from physical health, *Psychological Health* is another important area affecting elderly QOL. For elderly persons, the perception of being worthless and feeling lonely are accompanied by lower assessment of QOL (Laidmae & Tammsaar, 2013).In study of Oberoi (2010), 42% of the elderly people under study had feelings like

depression, anxiety or mood swings. It has been found that the QOL of the elderly depends to a considerable extent on their positive outlook on life (Laidmae & Tammsaar, 2013).

Social relationships can be regarded as another important area that affects elderly QOL. Being dependent or a feeling of being a burden on society was a prominent feeling among community dwelling elderly sample in India (Oberoi, 2010). Having good social relationships and contacts were regarded as important by elderly in London (Bowling, 2008). Another study found similar results in which low frequency of relationships with friends was associated with a decline in QOL of elderly (Garcia, Banegas, Perez-Regadera, Cabrera,&Rodriguez-Artalejo, 2005).

Environment is also important for elderly QOL. Better health related QOL was seen among those who were urban residents, those with high personal income and living in large households (Joshi, Avasthi, & Kumar, 2003). Feeling of not being safe in daily life was the highly endorsed category in another research conducted on elderly (Oberoi, 2010) highlighting the importance of satisfaction with different facilities provided by environment in determining elderly's QOL.

Correlates of QOL. Various researches done have identified some correlates of perceived QOL. Studies show association of gender, education, marital status, physical health problems, social (environmental) support, lonliness and resistence to care with perceived QOL.

Gender as a socio-demographic variable has been found to be associated with QOL. Researchers found in their studies that QOL of women was lower than men (Abbasimoghadam, Dabiran, Safdari & Djafarian, 2009; Orfila et al., 2006; Singh & Srivastava, 2014). Orfila et al. (2006) found that due to a higher prevalence of disability and chronic conditions found in women, they had lower scores than men on health related QOL and functional capacity.

Education also has a pronounced impact on QOL of elderly. Education promotes a better QOL because it develops a person intellectually and enables him to adapt in his

social environment more easily (Alexandre, Cordeiro, & Ramos, 2009). A descriptive/correlational study was conducted in Tehran taking 5600 people who were aged 60 years or older as sample to investigate the QOL and its relation to socio-demographic factors. Results showed that QOL was positively associated with education level (Abbasimoghadam et al., 2009). Another study conducted in India (Kumar & Majumdar, 2014) also showed similar results where low QOL was observed among those with no schooling. But Dos Santos, Pavarini, Brigola, DeSouza Orlandi, and Inouye (2014) found no association of education in the form of adult literacy programmes with QOL.

Marital status also effects elderly QOL. Kumar and Majumdar (2014) observed low QOL among elderly without partner. Farzianpour, Arab, Hosseini, Pirozi, and Hosseini (2012) also found in their study conducted on elderly that QOL was significantly high for elderly living with their spouse and or children and are worse for those who were widowed. However, Trentini et al. (2011) found no relation of marital status with QOL of elderly which prompts the need to investigate it further.

Physical health problems show strong link with elderly QOL. Gureje, Kola, Afolabi, and Olley (2008) found in their study done on Nigerian elderly that functional disability and self-rated overall health were the most important predictors of QOL. Kumar and Majumdar (2014) found that QOL was significantly low among those suffering from physical disorders like low vision, musculoskeletal disorder, and impaired activities of daily living. Similar results were found by Smith, Sim, Scharf, and Phillipson (2004) in which perception of one's health significantly affected QOL of elderly. Fatigue, impaired mobility, urinary incontinence, visual impairment and dyspnea had the worst effect on the QOL of the aged people found in a Pakistani study (Zafar et al., 2006).

Social (environmental) support also has strong impact on elderly QOL. Adequate social support in the form of both material and emotional support, is important for elderly to have a healthy old age (Chong, Woo, & Kwan, 2006). Lack of social support is a risk factor that increases an elderly's vulnerability to get diseases and early mortality

(Tomaka, Thompson, & Palacios, 2006), thus resulting in lower QOL. Gureje et al. (2008) found that social factors such as social support and social participation, were the strongest predictors of QOL in old age.

Lonliness is another important correlate of elderly's QOL.Elderly often express negative feelings and loneliness. This negativity stems from their ageing process and different social stereotypes that ultimately influence their QOL(Newton, 2006). Due to this reason, loneliness can be regarded as an important parameter to estimate QOL and vice versa (Ekwall, Sivberg, & Hallberg, 2005). Low QOL has been found among elderly with high score on lonliness scale (Singh & Srivastava, 2014; Smith et al., 2004).

Resistence to care is another variable that might affect QOL of elderly. Resistance-to-care behaviors demonstrated by elderly not only cause serious problems for them but also for people who look after them. Specifically for elderly, such behaviors can result in different health issues like dehydration, malnutrition, weight loss, skin breakdown, constipation, and other health problems (Potts et al., 1996), thus affecting their QOL. But very limited work has been done on it and its effect on QOL of elderly.

All these different socio-demographic variables and mental health indicators will be explored in present research in relation to QOL as showing possible association with QOL in the light of previous researches.The empirical evidences provided above show the increased focus of researchers around the world in exploring QOL of elderly. QOL is found to be linked with psychological wellbeing and more specifically depression (see Johnson, 2013).

Relationship of QOL and depression. A number of researches has been conducted in the past to find out the association between QOL and depression. According to Penninx et al. (2001), psycho-geriatric research results of 1999 proved that depression had the most profound effect on QOL of the elderly, even more than some other serious health conditions.

Chan, Cheu, Chein, Thompson, and Lam (2006) conducted a cross-sectional descriptive survey in China on sample of 80 elderly people in psychiatric outpatient

clinics who were diagnosed with depressive disorder. The scale used to measure perception of QOL was Hong Kong Chinese World Health Organization Quality of Life Scale-Brief Version (WHOQOL- BREF). It was found that participants scored low on different domains of QOL like meaningfulness of life, concentration and thinking, life enjoyment, work capacity, and energy. Results further revealed that sufferers of depression in the study had low ratings of QOL when compared with persons with chronic physical problems and healthy persons.

Another cross-sectional study done in China included two groups of participants; 40 outpatients from mental hospital with depressive disorder (aged 60 years and above) and 44 control participants who did not have any psychiatric disorder in the past were taken. The results of the study showed that the depressive group scored lower than the control group on the scores of the four domains of QOL and the overall QOL and general health facet of World Health Organization Quality of Life Scale (WHOQOL- BREF). It was found that patients with depressive disorder were more apt to express dissatisfaction with their QOL due to presence of negative thoughts (Chang, Liang, Chen, & Lu, 2006).

Srapyan (2003) conducted study in Yerevan to determine whether depression was associated with QOL of the elderly people of that area. Results revealed that depression was negatively associated with physical health domain and mental health domain score of the QOL.Similarly Lin et al. (2014) conducted research in China on elderly in-patients admitted to a Geriatric Evaluation and Management Unit from 2009 to 2010 to find out association of late-life depression and QOL. Results of the study revealed that more the depressive symptoms participants possessed, more they stayed in hospital, and female gender had a positive association with QOL.Another study was conducted in Turkey to find out the association of depression with different domains of QOL. It was found that the scores of different aspects of QOL important to elderly measured by WHOQOL-OLD scale like intimacy (which examines peoples' relations with other people and social assistance), social participation and autonomy were reduced due to presence of depression and it was found that more the depression participants had, less their capacity to participate in societal activities and to build personal and private relations (Soyuer & Argun, 2013).

Other studies done by Gore, Mcalinden, and Mukhtar et al. (as cited in Mukhtar & Hashim, 2010) have also suggested that depression could negatively affect individual's QOL. The relation can be vice versa also, that is perception of QOL can lead to depression. As Beck cognitive theory of depression shows that negative perceptions about oneself, others and one's world can lead to depression. Most of the research work has been done on impact of depression on QOL and one finds scarcity of researches where the opposite path that is effect of QOL on depression has been explored. Research by Kamran and Fife-Schaw (2014) done on renal transplant recipients in Pakistan shows that the relation between QOL and depression is two way with both predicting one another. Some researches quoted below has been done on the predictive role of QOL in depression, but they have taken only single or limited facets of QOL as predictors of depression and one finds scarcity of researches in which the impact of variety of dimensions of QOL upon depression has been investigated in a single study.

Jeung, Myoung, and Young (2009) conducted a cross-sectional descriptive study on community dwelling elderly (N = 295) in Korea. Aim of study was to examine the relationship between physical and socio-environmental variables and depression. Elderly were taken from Korean welfare centers and two public health centers. Depression prevalence rate of 63% was observed in participants. Out of total sample, 21% elderly showed severe depressive symptoms with more number of women than men. Perceived health status (which is one of the dimensions of QOL) proved as the powerful predictor of depression

Another study was conducted using type 2 diabetic patients sample (N = 792) with age range 65 years or above, who were enrolled in Medicare Health Maintenance Organization of Southeastern, US. Health Risk Assessment questionnaire was administered to elderly. Results showed that out of total sample, about 17% were suffering from depression. Also it was found that poor health related QOL was associated with higher risk of depression in patients (Pawaskar, Anderson, & Balkrishnan, 2007).Ganatra, Zafar, Qidwai, and Rozi(2008) conducted research in Karachi, Pakistan using a sample of 402 people aged 65 and above who were visiting the Community Health Center of the Aga Khan University. Geriatric Depression Scale was

used to measure depression level of participants. Results of the study showed that perceived financial problems and inadequately fulfilled spiritual needs were important predictors of depression.Yeung, Ching, and Chung (2010) conducted study on 187 Chinese elderly people residing in nursing homes. Aim of study was to identify personal, physical, social and psychosocial predictors of depression. Results showed that 17.6% participants had a high level of depression. Along with other variables, financial strain was a variable that significantly increased the presence of depression whereas strong support networks along with high self-esteem (both dimensions of perceived QOL) reduced the presence of this disorder.

From aforementioned researches, it is clear that although some factors of QOL have been identified as predictors of depression in some researches, but as QOL as a whole has not been taken as predictor of depression so the relative contribution of different facets of QOL in predicting depression is not much clear and needs to be investigated further which is the aim of present study.These studies also show that QOL is a multidimensional concept having different facets. That is why the present study has employed World Health Organization Quality of Life Scale (WHOQOL- BREF) to measure elderly QOL as this scale covers four broad domains of QOL that is *Physical Health, Psychological Health, Social Relationships and Environment* in order to have a holistic account of elderly QOL.The extent to which QOL and depression are linked in an individual depends largely on their personal cognitions (coping resources). One of those cognitions is LOC.

Locus of Control (LOC)

Certain cognitive variables have been found to be linked to QOL and mental health. One example is LOC. LOC is the tendency of an individual to attribute various events happening in his life to internal (personal) or external (environmental) factors (Kostka & Jachimowicz, 2010). According to Hayley, Drake, Bentall, and Lewis (2003), *internal LOC* is based on the belief that failures or successes that one experiences in life are directly the result of behaviors which are under an individual's personal control. On

the other hand, individuals with an *external LOC* are more likely to attribute events and outcomes in their lives to "external" factors like chance or other people.

Earlier LOC was described as a unidimensional continuum where on one hand is internal LOC, while on other end is external LOC. It can also be defined as "a circumscribed self-appraisal pertaining to the degree to which individuals view themselves as having some causal role in determining specified events" (Lefcourt, 1982, p. 183). However, a person may be scoring higher on either of the one LOC i.e internal or external which shows his inclination towards either of the LOC. For this purpose, different scales have been devised like Rotter Internal-External Locus of Control Scale (1966), Levenson Internality, Powerful Others, Chance Scale devised (1973), and Multidimensional Health Locus of Control (1978). In current study Levenson Internality, Powerful Others, Chance Scale devised by Levenson (1973) has been employed to measure construct of LOC. This scale basically measures three dimensions of LOC, that is internal, chance and powerful others. Powerful others and chance are two dimensions of external locus of control. Specifically chance LOC measures the degree to which a person attributes events to luck, chance or fate, while powerful others LOC measures the extent to which person attributes events occurring in life to influential or powerful people around him.

Whether a person has an internal or external LOC, has an effect on his wellbeing. Elderly who have internal LOC report better health despite having illnesses (Pilisuk, Montgomery, Parks, & Acredolo, 1993), are more compliant in taking medicines and have high perceived QOL (O'hea et al., 2005), have better mental health, and more assertiveness in their behaviours (Devin, Farbod,, Asadi, & Basirat, 2013), are more satisfied with their jobs, and show less stress (Schafer, & McKenna,1991). On the other hand, external LOC has been shown to be responsible for high level of death anxiety (Cotter, 2003), suicide (Marks as cited in April, Dharani, & Peters, 2012), less happiness in their lives (April et al., 2012), have more self-pity behaviours and cannot cope with circumstances in realistic terms (Phares as cited in Bozorgi, 2009), and depression (Hui, 1996).

Correlates of Locus of Control. Some research work has been conducted on socio-demographic correlates of LOC in different samples. Researches found strong link of education and genderwith LOC.

A research was done in Iran taking 120 diabetic patients as sample to determine their LOC. It was shown by results that men had more internal LOC, while women possessed more chance LOC. It was also found that more the age of participants and their education level, more internal LOC they had, while more the education level, less chance LOC they possessed (Morowatisharifabad, Mahmoodabad, Baghianimoghadam, & Tonekaboni, 2010).Wehmeyer (1993) conducted study in US taking 104 adolescents with learning disabilities as sample. Aim was to examine gender differences on LOC scores for participants. Significant gender differences were found on LOC score. It was found that girls scored higher than boys on external LOC.

Study was conducted taking U.S. residents as sample (N = 1,421) to find out the influence of different variables like marital and employment statuses, education, religious involvement, health and financial satisfaction, on perceived control of individuals. It was revealed that 67 percent of sample's lower perceived control could be attributed to lower education and higher rates of widowhood and retirement. Also it was found that more financially satisfied and religiously involved participants were, higher the perceived control they reported (Schieman, 2001). There is dearth of literature regarding elderly, so one of the aims of present study is to explore the association of socio-demographic variables like gender and education with LOC in elderly.

Relationship of LOC with depression and QOL. A number of studies have been conducted to find out the association between LOC and depression. Research suggests that people who suffer from certain mental disorders, such as depression and anxiety have problems with perceived control, and people who are psychologically healthy are more likely to have a greater internal LOC as compared to psychologically unhealthy individuals (Roddenberry & Renk, 2010). A number of studies (Holder & Levi, 1988; Jaswal & Dewan, 1997; Kalantarkousheh, Alinezhadi, UsefyNezhad, & Taherian, 2013; Reynaert et al., 1995; Zawawi & Hamaideh, 2009) have shown that there

is a negative link between internal LOC and depression. On the other hand, some researches (Beekman et al., 2000; Benassi, Sweeny, & Dufour, 1988; Benson & Deeter, 1992; Hui, 1996; Yu & Fan, 2014) have shown a positive link between external LOC and depression. With respect to elderly sample, limited work has been done on association of LOC and depression. A study was conducted by Hui (1996) on elderly living alone in Hong Kong (N= 93) to investigate the roles of LOC, social support, and self-esteem in the relationship of stress with depression. Results showed that external LOC was significantly positively correlated with depression.

LOC is not only linked to depression but also to QOL. A study was done in Jamaica on persons suffering from sickle cell disease to find out the relationship between LOC, QOL, and depression. Hierarchical regression analyses showed that internal LOC was associated with higher score on QOL scale and less depression (Gibson et al., 2013).Another study was done in India on migraine patients to find out the association between LOC, alienation and QOL. Findings indicated that migraine patients have high external LOC than internal LOC and they believe that whatever happens in their lives, occurs due to chance or fate. Such patients also have low QOL and they feel alienated from their social environments (Gupta, Kumar, Pradhan, & Mohaptra, 2009).Another study was done in U.K. on paediatric heart transplant recipientsto investigate the relationship between QOL, self-concept and LOC. It was found that better the QOL participants reported, more internal LOC and positive self-concept they possessed (Wray, Orrells, Latch, & Burch 2010).Adams (1989) found out predictors of self- esteem and LOC in sample of Mexican American women. The results of the study showed that relationship satisfaction (a dimension of QOL) was an important predictor of LOC.

It can be seen that these studies have been done mostly with samples suffering from different diseases and very limited work has been done on association of LOC with QOL in elderly sample. Kostka and Jachimowicz (2010) conducted study in Poland in the three groups of participants aged 65 years and above out of which 110 were healthy elderly residing in communities, 112 were residents of a long-term care home, and 102 were independent elderly who voluntarily themselves decided to live in veteran home. Aim of study was to describe the relationship of dispositional optimism, health LOC, and

self-efficacy with QOL in elderly participants who were different from each other in terms of residence and disability level. Results showed that Powerful others and Chance dimension of external LOC were significantly correlating with QOL in veteran home group, while Internal LOC was most significant correlate of QOL in long-term care home inhabitants.

Aforementioned researches show LOC to be linked to both depression and QOL. Very limited work has also been done on the mediating role of QOL between LOC and depression. A study was conducted in China in which the mediating effect of self-esteem (a dimension of QOL) was explored in the relationship between LOC and depression. Sample was (N = 457) Chinese university students out of which 232 were men and 225 were women. Analyses indicated that self-esteem and depression were important correlates of external LOC. It was revealed by structural equation modeling that the influence of LOC on depression was partially mediated by self-esteem (Yu& Fan, 2014). So,when a person has external LOC, he/she is more likely to suffer from depression because his self-esteem becomes low. In other words his cognition related to self becomes negative and this provides a fertile ground for developing depression.

As the association of LOC with depression has not been much focused in elderly people, therefore one of the aims of present study is to determine the predictive role of LOC with depression in elderly of indigenuous context. Another aim of present research is to study perception related to one's QOL mediating for one's LOC in developing negative mood status.Apart from LOC, another of the cognitive (coping) resource that is also related to QOL and stress-appraisal is orientation to life.

Orientation to Life

Orientation to life is another term used for optimism and pessimism. *Optimism* has been found to have an adaptive value whereas pessimism has been found to be a maladaptive construct by researches done over the period of time (Carver, Scheier, & Segerstrom, 2010; Scheier & Carver, 1985; Scheier, Carver, & Bridges, 1994). Some researchers like Dember, Martin, Hummer, Hui, and Melton (1989) have described optimism-pessimism as being a positive or negative view of life. The most acknowledged

definition of optimism/ pessimism was proposed by Scheier and Carver (1985) which is based on outcome expectancies. According to their concept, optimism is trait of expecting that the chances that good events will occur is greater than the chances of the occurrence of bad events, while pessimism is tendency to expect greater incidences of bad events to occur than good ones. It is actually expectancies that determine that whether the person will continue striving or will give up in a situation. Individuals who hold positive expectations about the future will continue to strive as they feel that struggle will yield positive results. On the other hand, individuals who do not believe anything good to happen in future, will also withdraw their efforts and will give up as they believe that nothing good is going to happen despite all efforts (Scheier & Carver, 1985). The authors also suggested that it is actually outcome expectancies that are the best predictor of a person's behavior instead of the basis on which those expectancies depend. Alternatively put, what is important is the generalized optimistic or pessimistic trait itself, that is whether a person is optimistic or pessimistic and not why people expect good things to happen in their lives like attributing good things to good luck, working hard, being favored by God (Scheier & Carver, 1987). There are two kinds of optimism according to social psychologists; "dispositional optimism" and "situational" or "comparative" optimism. *Dispositional optimism* refers to the general hopeful outlook about life held by a person while *situational optimism* refers to optimism with respect to certain situation or activity (Radcliffe & Klein, 2002).For example, there is a person who has a general positive outlook on life in a sense that he views every situation that he faces, positively. On the other hand, there is another person who may not be optimistic about everything, but certain events. For example, he/she might express the view that he would get admission in college of his/ her choice, despite that the competition is very high. With respect to this event, he/she would be regarded as situationally optimistic even though he/she was not dispositionally optimistic. The present study has employed Orientation to Life Scale (LOT)developed by Scheier and Carver (1985) for the measurement of optimism/pessimism dimension. This scale measures dispositional optimism as according to Scheier and Carver definition of optimism/ pessimism, it is a relatively stable trait that does not vary in different contexts. Studies done by Bailey, Eng, Frisch, and Snyder (2007) and Chang and Sanna (2001) have provided evidence that

optimism is related to less negative affect and greater life satisfaction, and pessimism has been related to greater negative affect and less life satisfaction.

Correlates of orientation to life. Research show significant role of gender, education, and marital status in orientation to life. A study was done with students (N = 193) taken from three high schools of rural area of Pennsylvania to find out *gender-related* differences in the self-esteem and optimism levels of adolescents. Results showed that girls scored lower than boys on both variables that is self-esteem and optimism (Puskar et al., 2010).

Mahasneh, Al-Zoubi, and Batayeneh (2013) conducted study in Jordan taking 534 undergraduate students as sample to find out the relationship between optimism/ pessimism and personality traits of extraversion, introversion, neuroticism, and emotional stability and also to find out the prevalence of optimism and pessimism in the sample according to the gender, level of study, academic specialization, and GPA of students. Results showed that statistically significant differences were found between boys and girls with boys scoring high on optimism than girls. Also statistically significant differences were found between the students according to their academic level (first, second, third, and fourth) for the variable of optimism and it was found that optimism increased with each academic level.

Coll and Draves (2008) conducted a study to examine the relationship between three variables that is a person's optimism level, his world view, and demographic features. Sample of the study was based on US university students (N = 163). Results showed that *married* participants were more optimistic than single who in turn were more optimist than divorced participants. Another study was conducted on breast cancer survivors (N = 722) to examine the association between marital status and optimism, which was measured using the Life Orientation Test-Revised. Results showed that unmarried cancer survivors had lower scores for optimism than married breast cancer survivors who were most recently diagnosed (within five years) with cancer (Croft, Sorkin, & Gallicchio, 2014).

With respect to elderly sample, Singh and Shukla (2014) conducted research to examine the level of optimism among institutionalized elderly men and women. Sample was based on 200 elderly with age range of 62-72 yrs who were staying in various old homes of Delhi. Results showed that a majority of the elderly population had high level of optimism. Gender differences were also seen in the sample and it was found that women were more optimistic as compared to men.

So these different empirical evidences provide support that optimism is more prevalent among men, more educated, and married people. But these researches have been conducted with student population or ill patients, so the present study aims to explore the association between these socio-demographic variables and orientation to life in elderly because limited research is found and also as research conducted with elderly (Singh & Shukla, 2014) shows different results than other samples.

Relationship of orientation to life with depression and QOL. Scheier and Carver (1987) suggested that optimism and physical health or well-being are linked may be due to the fact that optimists use more effective coping strategies when they face a stressful situation which promotes their physical and mental wellbeing.It has been found that women who are optimistic, have less depression and distress, after having an abortion (Cozzarelli, 1993), a failed in vitro fertilization treatment (Litt, Tennen, Affleck, & Klock, 1992), and the birth of a child (Fontaine & Jones, 1997). Men who were optimists experienced greater subjective well-being and general QOL compared with pessimists after five years of coronary artery bypass surgery (Scheier & Carver, 1992). Women who were optimists reported better mood and more life satisfaction than pessimists twelve months after the same surgery, (King, Rowe, Kimble, & Zerwic, 1998). Similar findings were obtained with patients diagnosed with cancer; optimism predicted less adjustment problems (Christman, 1990). Optimism was associated with a higher QOL in survivors of thyroid cancer (Kung et al., 2006).

Researches also show that optimists differ from pessimists because they have higher self-esteem (Brissette, Scheier, & Carver, 2002), better perceptions about the quality of their interpersonal interactions (Raikkonen, Matthews, Flory, Owens, & Gump,

1999), and higher self-efficacy (Cozzarelli, 1993). Students who had higher optimism level that was measured at the beginning of the first semester of college, were prospectively found to have smaller increase in stress and depression and greater increase in perceived social support during the first semester of college. It was also found that optimists experienced superior adjustment than pessimists because of increase in social support and greater use of positive re-interpretation (Brissette et al., 2002). Mishra (2010) found in his research done in India on 426 participants, men and women of 15 to 70 years of age that optimism, different domains of QOL, and life satisfaction were positively correlated with each other. Results also indicated that, after controlling all demographic variables, optimism significantly predicted life satisfaction and QOL of sample living in urban and rural settings of India. Research done by Imtiaz (2012) in Pakistan on elderly showed that optimism and wellbeing were positively correlated.

With respect to elderly sample, a prospective cohort study with a follow-up period of 15 years was done by Giltay, Zitman, and Kromhout (2006). Aim of study was to find out the protective effect of three variables that is dispositional optimism as a personality trait which was defined in terms of generalized positive outcome expectancies; future orientation, and life engagement on the development of depression in community-dwelling elderly men (N = 464) aged 64 to 84 years. Results showed that dispositional optimism demonstrated itself as a predictor for a lower cumulative incidence of depressive symptoms in the elderly sample.

Study was conducted with three groups of elderly participants with age ranging from 65 years and above to find out the relationship of dispositional optimism, self-efficacy and health LOC with QOL. In the sample, 110 were healthy community-dwelling elderly, 112 were residents of a long-term care home and 102 were independent elderly who voluntarily decided to live in veteran home. Results showed that more the elderly participants were dependent and higher the level of institutionalization they were experiencing, lower the QOL they had. It was also found that optimism / pessimism was associated with QOL in all three settings where the elderly were residing in (Kostka & Jachimowicz, 2010).

Orientation to life has been shown by researches to be linked to both depression and QOL, and it will be explored further in present research as one finds scarcity of researches on elderly in Pakistan. Very limited work has also been done on the mediating role of QOL between orientation to life and depression. Mosher, Prelow, Chen, and Yackel (2006) conducted study with 133 Black college students to examine the mechanism through which optimism effect psychological adjustment specifically depression. It was revealed by results that social support (a dimension of QOL) and avoidant coping mediated the relation of optimism and depressive symptoms. This study provides evidence that when a person is optimistic, he/she does not suffers from depression because he perceives things like his social relationships positively and is satisfied with the kind of support he gets from others. This positive perception protects him from depression. So taking QOL and its different dimensions as a mediator between orientation to life and depression can be a fruitful area to study in present research due to scanty work done. In many of these studies cited above, Life Orientation Test (LOT) scale was used to measure orientation to life (Bailey et al., 2007; Brissette et al., 2002; Mishra, 2010; Mosher et al., 2006) which shows its widespread use in research. Therefore, in current research also, LOT scale is used to measure orientation to life in elderly.

Theoretical Framework

The empirical evidences provided above support the notion that depression is a common problem of elderly. Different psychological theories have been put forward to explain the etiology of depression. Some theories specifically focus on person's cognitions as factor responsible behind depression which is the aim of present research. Among all these theories, Beck's cognitive theory of depression and Rotter's social learning theory seem to be one of the most relevant theories to explain the role of QOL, orientation towards life (optimism / pessimism), and LOC as cognitive factors having a possible role in depression as a psychological disorder.

Beck's cognitive theory of depression. Beck proposed the cognitive theory of depression in 1967. The central assumption in this theory is that depression is

fundamentally a cognitive disorder, which is characterized by three negative self-beliefs: *(1) A negative view of the self* in which the person suffering from depression, believes himself to be imperfect, deficient, and worthless; *(2) A negative view of the world* in that the depressed individuals think that the world is making stressful and unreasonable demands upon them; and *(3) A negative view of the future* when such people are pessimistic about their future well-being and believe that they lack ability to attain desired ends. Beck referred to these beliefs as the *negative cognitive triad* and assumed that the feelings of worthlessness, external compulsion and hopelessness are the central aspect of all types of depression. Beck attributed other aspects of depression, such as affective troubles (e.g., intense sorrow and grief), motivational disorders (e.g., passivity and withdrawal), and somatic complaints (e.g., sleeplessness), to these primary beliefs (Beck, Rush, Shaw, & Emery, 1979).

Beck also emphasized that beliefs comprising *negative cognitive triad*, have a spontaneous manifestation. In a depressed person, they appear "out of nowhere" without provocation or conscious awareness. As the depression gets worse, such beliefs also become more intrusive and repetitive. In extreme cases, they almost dominate cognitive process, and the depressed individual can no longer engage in normal activities or concentrate. Beck argued that in order to treat depression, these negative thoughts must be monitored, making note of when they arise and under what conditions. In this way, one can possess control over these thoughts and tackle them (Beck et al., 1979).

Beck (1979) also noted that a negatively biased information processing perpetuate these negative cognitive beliefs. According to him, depressed people possess a negative self-schema that leads them to process information obtained from their surroundings in a negatively biased and distorted way. They focus more on the negative aspects of their life and construe events in self-defeating manner. In this way, a negative self-schema explains "why a depressed patient maintains his pain-inducing and self-defeating attitudes despite objective evidence of positive factors in his life" (p.12).

Dysfunctional beliefs –a manifestation of Beck's negative cognitive triad, can be regraded excessively rigid beliefs about oneself and the world. These involve naïve and

perfectionistic thinking founded in early childhood. Such an individual tend to think in negative terms about oneself: "If I do not perform as well as others, it means that I am an inferior human being," or "My value as a person derives mainly from what others think of me" (Beck et al., 1979). According to Beck, a person with these acquired absolutistic beliefs is vulnerable to depression later in life. For example, imagine that an elderly person experiences loss of social support in the form of non-caring attitude of his family members or his family members not taking enough time out to spend with him. If the elderly person possesses a matching dysfunctional attitude ("I am worthless if a person does not pay attention to me"), he would begin to interpret the situation in unrealistically negative terms. The person may assume excessive responsibility for the situation, selectively recall all those situations where he has been neglected by his family and so forth. Such information processing biases lead to the negative cognitive triad (a negative view of oneself, one's life, and one's future), which triggers other aspects of depression.

So Beck's cognitive theory of depression demonstrates the fact that as a person suffers from depression, his cognitions become negative or negative perceptions leads to depression. He starts to view every aspect of his current and future life in a negative fashion and expresses dissatisfaction with it. Such a person is dissatisfied with his own image, with the world around him comprising of his relationships with others or other's attitude towards him or the kind of environment in general provided to him. He is also dissatisfied with his future seeing it as dark and with no hopes. Or it can also be said that his perceived QOL is low and his attitude towards future (life orientation) is pessimistic. So according to this theory, perceived QOL and life orientation can be two factors having a role in depression.

Number of researches (e.g., Abela & D'Alessandro's, 2002; Moilanen's 1995) have been done to test Beck's cognitive theory of depression rendering strength to its assumptions over the period of time and clarifying the role of negative thoughts related to oneself, world, and future in depression. These studies were basically done on adolescents and one finds dearth of researches where Beck theory has been applied and tested on elderly sample, so it will be a fruitful area to explore. Apart from QOL and life

orientation, another cognitive factor that can play a possible role in depression is LOC. Julian Rotter social learning theory clarifies its role in depression.

Social learning theory. Julian Rotter's social learning theory (1954) conceptualized LOC to explain how reinforcement and the resultant effects influence behavior. Rotter proposed that an individual's future behavior almost always depends on how he perceives the consequences (reinforcements) of that behavior. Infact individuals differentially perceive reinforcements/fulfillments and interpret them based on personal experiences. "That is, over the course of a person's life experience, he is believed to develop a relatively stable faith in his ability, or lack thereof, to exercise control over the things which happen to him in general" (Reynolds, 1976, p. 222). An individual's perception of outcomes can be either internally or externally instituted; meaning that a person may perceive the outcomes (rewards) as being "contingent upon his own behavior or attitudes (internally oriented) or as being controlled by forces outside of himself and may occur independently of his own actions, a function of luck (externally oriented)" (Rotter, 1982, p.171). For example, if an elderly person does not enjoy good relations with his son or daughter in law, an internally oriented elderly person will assume equal responsibility for his bad relations while an externally oriented person will blame his luck or his children for the bad relations. Rotter assumed that a perceived external LOC was responsible for neurotic instability.

Number of empirical evidences (Griffin, 2014; Richardson, Field, Newton, & Bendell, 2012;Zawawi & Hamaideh, 2009) provided over the period of time render support to Rotter concept of LOC and its possible role in depression. These studies conducted with either student populations or pregnant women showed external LOC to be predictive of depression. However, one finds scarcity of research work on elderly sample(Hui, 1996; Kostka & Jachimowicz, 2010)regarding LOC construct which can be a fruitful area to be explored further.

So these two theories suggest that depression is actually the result of interplay of negative subjective perceptions of a person about himself, the world, his future, and his personal control over events. Subjective perceptions of a person about himself and the

world, as explained earlier, can also be referred to as perceived QOL. Perceptions about future refers to a person's orientation to life. Personal control over events is actually a person's LOC. A description of these variables has been provided before.

Role of Institutionalization

People around the world age in different contexts and settings depending on their circumstances and available support. They may spent their entire life in the community with their family or they may have to move to a Long Term Care facilities or old homes when they reach their old-age (Gull & Dawood, 2013).Pakistan is a traditional and socially cohesive society and elderly are very much valued and respected here. Normally, it is considered duty of the eldest son to take care of his parents when they reach old-age. However, in some segments of society, norms have changed. Younger generation now prefers to live in nuclear families instead of joint ones. This has created problems for the elderly as they find no one to take care of them in their old-age and they are left alone. As a result, they are left with no option, but to move to some institution or old-home where they can be taken care of. One can notice a very rapid increase in the number of such institutions or old-homes all over the world and also in Pakistani society. These old homes do provide shelter to old people, but they are definitely not a solution for all their problems. Elderly people face many problems in old age which are physical, psychological, and social in nature. They also face issues related to their general well-being and QOL (Gull & Dawood, 2013). Research done by Zafar et al. (2006) shows that whenever living arrangement of elderly changes, it also causes a change in the way people perceive or rate their physical and psychological health and their social relationships due to change in available support. A number of studies have been done to find out the differences in institutionalized and non-institutionalized elderly in terms of QOL, depression, and other indices of well-being. Some of them are cited below.

A study was conducted in Kerala, India on 150 elderly divided in two groups; the ones residing in institutions and the others residing in communities. Aim was to assess the stress level and QOL of elderly and also to find out the different coping strategies they used to deal with stress. The study revealed that institutionalized elderly were

experiencing greater level of stress and less QOL as compared to non-institutionalized ones (Mathew et al., 2009).Another study was conducted on 120 old people aged 65 years and above to find out that how the residential setting of elderly effect their emotional states and self-esteem and if there exist any gender differences on these variables of study. The total sample was divided into two groups; 60 elderly living in institutions and 60 living with their children. The results indicated that there was high anxiety,depression, and guilt feelings in institutionalized elderly than non-institutionalized ones(Srivastava & Swetha, 2002).

Kanwar and Chadha (1998) conducted a study to make comparison between elderly of old-homes (n = 60) and community settings (n = 60) on their psycho-social health. It was found that depression and loneliness feelings of institutionalized elderly was high than non-institutionalized ones revealing poor mental health of institutionalized elderly. Similarly Ghimire et al. (2012) conducted study in Nepal (N =110) to compare the prevalence of depression between elderly people living in old-age home and community setting. Out of total sample, (n = 55) were living in old home and (n = 55) were living in community setting. Socio-demographic interview schedule and Geriatric Depression Scale for measuring depression was employed for data collection. Results showed that prevalence rate of depression were 52.73% in old-age home and 25.45% in community.Similar work was done by Atkins, Naismith, Luscombe, and Hickie (2013) in Australia on elderly above 60 years living in residential and community settings. Aim was to identify the fixed and modifiable risk factors of QOL and psychological distress. Results showed that significant psychological distress was experienced by 15% of the residential sample and 7% of the community sample, hence revealing to be more common in residential settings.

Research by Hayat (2015) done on elderly living in different settings of old- age home and community setting revealed that wisdom and life satisfaction was higher in elderly living with their families while psychological distress was higher in elderly living in old- age homes.

Very limited work has been done to assess the LOC differences among institutionalized and non- institutionalized elderly. Grain (2001) conducted research on homebound and nursing home elderly to find out differences in their sense of control and life satisfaction. Results showed that there was statistically significant difference between the sense of control of elderly of two different settings with homebound elderly showing higher perceived control than nursing home residents. So due to limited work available, more work needs to be done to clarify the variation in LOC with respect to changing residential settings of elderly.

To conclude, empirical evidences provided above show the existence of difference on QOL and depression among elderly residing in old homes and community settings. With respect to LOC and orientation to life, there is scarcity of researches on differences on these variables among two different settings of elderly (Grain, 2001). So one of the aims of present study is to assess the differences on all these study variables between elderly of old-homes and community settings.

Conceptualization of Relationship between Depression, Orientation to life, LOC and QOL

The focus of the present research is to study the relationship between orientation to life, LOC, QOL, and depression among elderly living in institutions (old homes) and community settings. After a review of literature and brief description of Beck cognitive theory of depression and Rotter social learning theory, the conceptual framework for the present study is formulated.

As mentioned earlier, according to Beck theory of depression, negative perceptions about oneself, one's world and future leads to depression. Perceptions about oneself and one's world can be referred to as perceived QOL as QOL is actually satisfaction with different areas of life including physical and psychological health, social relationships or environment. Perceptions about future, either negative or positive, is orientation to life. Referring to Beck theory, orientation to life and QOL can be predictors of depression. The disabilities and losses that accompany the aging process, are the product of factors external to the elderly, over which one has little or no control.

However, orientation to life (optimism / pessimism) is a personality resource for which individual assumes a greater control and it is almost independent of the environment and life's conditions (Reker,1997). Infact, Frankl (1963) has suggested that while people are influenced by external circumstances, as individuals, they still maintain their own attitude toward life, and adopt a stance, even when they come across extreme atrocities in life. It is not surprising, therefore, that a person who possesses a positive attitude, would be less susceptible to depression.

A large body of research has already shown that optimism is negatively related to depression (Chang & Sanna, 2001; Garner et al., 2015; Hart,Vella, & Mohr, 2008; Steele & Wade, 2004) and pessimism has a positive link to depression (Brissette, Scheier, & Carver, 2002; Sha, 2006).Therefore the role of cognitive factors like orientation towards life, becomes important for lessening depression among elderly. The depression however is a complex phenomenon and its causes are difficult to resolve. The mechanism through which orientation towards life acts on depression is still vague and the type of intervening variables involved in this relationship are unclear (Giltay et al., 2006).There is empirical evidence which suggest that optimism has a positive effect on the QOL (Kung et al., 2006; Mishra, 2010). Many researches have also shown that different dimensions of QOL like perceived well-being, financial strain, spiritual vacuum, and health condition are predictors of depression (see e.g. Ganatra et al., 2008; Ha & Cho, 2014; Yeung et al, 2010; Kim et al., 2009).So keeping in view the link of all these variables, it might be assumed that orientation to life affects QOL which in turn affects depression. The mediating role of QOL between orientation to life and depression is therefore an interesting area to be explored.

On other hand, according to Rotter's social learning theory, external LOC is responsible for developing depression, therefore, it is another predictor of depression. Since the elderly population suffer from numerous physical, social and mental problems (see e.g., Cassum, 2014), the significance of LOC as personal resource increases manifold. Many research studies have shown that there is a negative relationship between internal LOC and depression (see e.g., Jaswal & Dewan, 1997; Kalantarkousheh et al., 2013; Zawawi & Hamaideh, 2009) and a positive connection between an external LOC

and depression (Beekman et al., 2000; Griffin, 2014; Yu & Fan, 2014). The LOC has also been linked to QOL; internal LOC is shown to be positively interrelated (Gibson, et al., 2013) and external LOC is negatively related to QOL (Gupta et al., 2009). However, researchers have not much addressed the question of mechanism through which LOC affects depression. Keeping in view the link of LOC with QOL and depression, the role of QOL as a mediator between LOC and depression also constitutes a research question explored in present study.

This study will also look at the moderating role of place of residence (oldhome or community setting) on the relation of three predictors of this study, that is, orientation to life, LOC, and QOL with depression as researches suggest that these psychological variables varies with respect to residence of elderly, either residing in old homes or community settings (see e.g, Grain, 2001;Mathew et al., 2009; Srivastava & Swetha, 2002).So studying different psychological variables in a model, to ascertain the complexity underlying development of negative mood status in elderly.

In short, the conceptual framework which guides this study, is illustrated as follows:

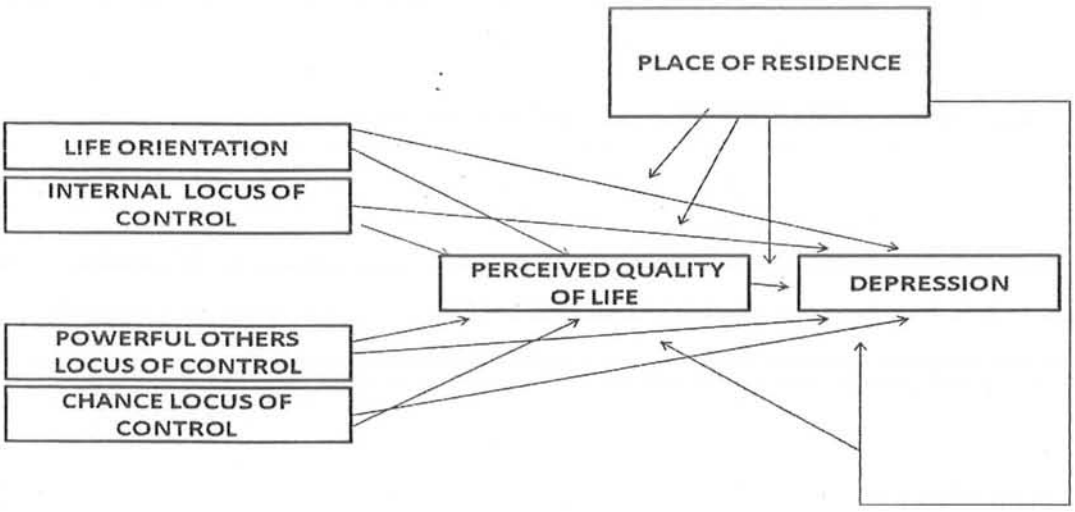

Figure 1. The conceptual framework for relationship of orientation to life, LOC, QOL and depression

Rationale of Study

Depression is identified as one of major and rising health problem for elderly people in both the developed societies and developing world. The elderly people above 55 years experiencing depression,are reported to suffer from four times higher mortality rate than those without depression (WHO, 2001). In Pakistan, the elderly population faces high degree of physical, social and psychological problems, which results in increased rate of disabilities, chronic ailments and psychiatric disorders leading to depression (Cassum, 2014). Past few years have witnessed, a multitude of research work being done in the area of geriatric depression in developing countries (see e.g., Das et al., 2014; Shivakumar & Balaji, 2013; Sinha, Shrivastava, & Ramasamy, 2013).In the context of Pakistan, however, geriatric depression is still an under-diagnosed and hence less addressed problem.It is not yet prioritized as major public health concern, despite its prevalence (Cassum, 2014). Majority of research work done in Pakistan is restricted to prevalence or socio-demographic characteristics of depression (Bhamani et al., 2013; Javed & Mustafa, 2013; Mubeen, et al., 2012) and there is scarcity of research work on psychological variables having a possible role in depression.

Pakistan like many other South Asian countries, is experiencing serious socio-economic challenges, high inflation rate, low savings, social security for few, and lack of health insurance for nearly all. All these factors make elderly group quite vulnerable. With increased urbanization and emergence of trend towards nuclear families, elderly population has also lost the safety net of extended family system (Jalal & Younis, 2012). In Eastern cultures, elderly people are provided care and support by the younger generation in the extended family system and leaving them alone in shelter homes, is considered unsocial practice. However in the last couple of years, the youth in Pakistan is migrating to seek improved employment opportunities, leaving behind their old parents. With no one to care for these elderly, they tend to live alone or shift to nursing homes for better care. The issue of institutionalized elderly in Pakistan, is a less researched area and their subjective conditions are not well assessed. Majority of the Western studies (see e.g., Snowdon & Lane, 2001; Ron, 2004) on the subject, indicate that elderly people residing in institutionalized units like nursing care and shelter homes are more likely to

suffer from depression, compared to elderly living in community settings. A study comparing elderly of old homes and household categories in Pakistan, have shown similar finding (Qadir, Haqqani, Khalid, Huma, & Medhin, 2014). The paucity of evidence and socio-demographic changes nevertheless make it necessary to examine the moderating effect of environment on depression in elderly population of Pakistan.

The national and international statistics of depression among elderly, suggests a dire need to identify the cognitive factors that contribute to elderly depression. Depression is a complex interplay of various variables. Therefore the present study aims to unreveal that complex phenomena by exploring the role of orientation to life and LOC in predicting depression and QOL as the pathway through which these variables effect depression. Although research work has been done on orientation to life and LOC as related to depression (Chang & Sanna, 2001; Garner et al., 2015; Hui, 1996). Researches are also available on the relation of these two variables with QOL (Gibson, et al., 2013; Gupta et al., 2009; Kung et al., 2006; Mishra, 2010). However, there is paucity of research evidence on the interplay of all these variables together in causing depression. Perceived QOL has mostly been taken as an outcome effected by depression in researches, and there is scarcity of work on how perceived QOL can play a role as mediator in causing depression. Also as perceived QOL is perception of a person related to self, and these perceptions can be changed by applying psychological interventions, therefore, exploring its role in elderly depression will have significant implications regarding psychological interventions for improving negative mood status among elderly. So studying in-depth the predictors of depression through exploring the mechanism through which these variables might effect depression, will be a unique contribution of this study.

In literature review, some other factors have also been shown to be strongly linked with the variables of current study that is depression, orientation to life, LOC, and QOL. These include some socio-demographic factors like gender, education, marital status and economic dependency; and some QOL related factors like loneliness, social (environmental) support, physical health issues, and resistance to care. The role of these

variables will also be studied, in order to get a more elaborate picture of the correlates of elderly depression in cultural context.

This study aims at highlighting the role of personal cognitive factors and perceptions related to LOC, orientation to life and QOL, while dealing with depression among elderly people. Understanding of these cognitive factors and the mechanism through which they operate on depression, can be utilized by counselors to improve the mental well-being of old people through planning different cognitive and behavioral interventions in which personal cognitive resource of the elderly people can be enhanced in order to reduce depression. Also a diverse sample for current study has been drawn from the elderly people living in old home as well as community settings, which will give a more holistic view of the prevalence of geriatric depression in indigenous context.

Chapter 2

METHOD

Present study was conducted to meet the following objectives:

Objectives

The objectives of this study were to:

1. Study predictive role of orientation to life, LOC, and QOL in experiencing depression among elderly.
2. Investigate the mediating role of QOL for orientation to life and LOC in predicting depression among elderly.
3. Study differences between elderly of old home and community setting on orientation to life, LOC, QOL, and depression.
4. Study moderating role of place of residence among elderly for orientation to life, LOC, and QOL in predicting depression.
5. Study the role of demographics variables (e.g., gender, education, marital status) in depression, orientation to life, LOC, and QOL.
6. Study the role of various indicators of mental health like economic dependency, lonliness, social (environmental) support, health issues severity, and resistence to care in depression and QOL.

Hypotheses

In order to achieve objectives of the study, on the basis of literature review it was hypothesized that:

1. Optimism negatively predicts depression among elderly.
2. External LOC (powerful others and chance) positively and internal LOC negatively predicts level of depression among elderly.
3. The QOL among elderly negatively predicts depression.

4. QOL has a mediating role for orientation to life in predicting depression among elderly.
5. QOL has a mediating role for internal, chance, and powerful others LOC in predicting depression among elderly.
6. Participants of old home have more depression, external LOC, and lower QOL than participants of community setting.
7. Place of residence has a moderating role for orientation to life in predicting depression among elderly.
8. Place of residence has a moderating role for internal, powerful others, and chance LOC in predicting depression among elderly.
9. Place of residence has a moderating role for QOL in predicting depression among elderly.
10. Women score high on depression and low on QOL, internal LOC, and optimism as compared to men.
11. Participants having low level of education score high on depression and low on QOL, optimism, and internal LOC as compared to participants having high level of education.
12. Participants who have single marital status score high on depression and low on QOL and optimism as compared to married participants.
13. Participants having more physical health problems score high on depression and low on QOL as compared to participants who have no or less physical health problems.
14. Participants who are economically dependent score high on depression as compared to participants who are economically independent.
15. Social (environmental) support correlate positively with QOL and negatively with depression.
16. Loneliness feeling correlate positively with depression and negatively with QOL.

Conceptual and Operational Definitions

Depression. According to DSMV, it refers to depressed mood during most of the day, fatigue or loss of energy, feelings of worthlessness or guilt almost every day, impaired concentration, indecisiveness, insomnia or hypersomnia almost every day, markedly diminished interest or pleasure in almost all activities, recurring thoughts of death or suicide, a sense of restlessness or being slowed down and significant weight loss or weight gain (American Psychiatric Association [APA], 2013).In present study, depression is defined in terms of scores on depression scale. Higher the scores on the scale, more is the depression.

Quality of life (QOL). The World Health Organization (WHO, 1996, p. 28) defines QOL as "an individual's perception of his/her position in life in the context of the culture and value systems in which he/she lives, and in relation to his/her goals expectations, standards, and concerns that is reflected in four domains:

Physical health described in terms of activities of daily living; dependence on medicinal substances and medical aids; energy and fatigue; mobility, pain, and discomfort; sleep, rest, and work capacity.

Psychological health described in terms of bodily image and appearance; negative and positive feelings; self-esteem, spirituality / religious / personal beliefs; thinking, learning, memory, and concentration.

Social relationships described in terms of personal relationships, social support, and sexual relationship.

Environment domain described in terms of financial resources, freedom, physical safety and security; health and social care accessibility and quality; home environment; opportunities for acquiring new information and skills; participation in and opportunities for recreation / leisure activities; physical environment (pollution / noise / traffic / climate); and availability of transport.

In this study QOL is described in terms of scores on the scale measuring QOL. Higher scores on the scale means better QOL.

Locus of control (LOC). It is referred to as the degree to which persons expect that a reinforcement or an outcome of their behavior is contingent on their own behavior or personal characteristics (Internal LOC) versus the degree to which persons expect that the reinforcement or outcome is a function of chance, luck, or fate (Chance LOC), or is under the control of powerful others (Powerful Others LOC), or is simply unpredictable (Rotter, 1966). Chance LOC and Powerful Others LOC both are type of External LOC. It is also defined as scores obtained on measure of LOC in respective domains.

Orientation to life. According to Scheier and Carver (1985), optimism – pessimism is a dimension of personality. It is a dispositional tendency to hold generalized expectancies for good and bad outcomes in important domains of one's life. It is operationally defined as scores on scale measuring orientation to life. Higher the scores on the scale, higher the optimism level.

Social (environmental) support. In current study, it is supporting elements of an elderly's environment like how much respect elderly receive from other people; how much they find their residential place clean; how much people around take time out to conversate with them; how much they can move around with their own choice; and get food of choice. All these indicators are found in literature that have been regarded important to mental well being of elderly. It is also defined as scores on questions measuring social support; higher the scores on questions, greater the social support.

Loneliness feeling. Subjective and negative feeling related to the person's own experience of deficient social relations (Green et al., 1992). It is also defined as score on question measuring lonliness; higher the score on question, greater the lonliness experience.

Resistence to care. The repertoire of behaviours with which persons withstand or oppose the efforts of care giver (Mahoney et al., 1999). It is also defined as score on

question measuring resistence to care; higher the score on question, less the resistence to care.

Research Design

The present research was a cross-sectional design utilizing quantitative approach through survey method for data collection. It was executed in two phases.

Phase (I) - Pilot study. This phase was executed with the objectives of ascertaining the suitability of the scales for target population of elderly; to establish their psychometric properties; to study general trend of relationships among study variables; and also to address any issues that might emerge during data collection.

Phase (II) - Main study. In this phase, large scale data were collected to test the hypothesis and meet objectives of research.

Pilot Study(Phase 1)

Objectives. Pilot study was conducted with the following objectives:

1. Exploring the comprehension, understanding, language difficulty level, and suitability of the instruments for elderly.

2. Establishing psychometric properties of the scales.

3. Studying general trend of relationship among variables of study that is depression, orientation to life, LOC, and QOL.

4. Evaluate feasibility, time, cost and data collection related issues that could be faced during study to improve upon the study design prior to Main study.

Sample. Pilot study was carried out with 30 elderly with equal number from old homes and community settings of Rawalpindi and Islamabad. They were contacted through convenient purposive sampling. Inclusion criteria included elderly men and women above 60 years. Exclusion criteria included elderly people suffering from

intellectual disability and any cognitive impairment. There were 19 (63.3%) men and 11 (36.7%) women with age range from 60 years to 110 years ($M = 71.77$, $SD = 10.95$). The detail of sample characteristics for Pilot testing is given in Table 1.

Table 1

Sample Characteristics in Pilot Study (N=30)

Demographics	*f*	%
Educational qualification		
Illiterate	9	30
Primary	5	16.7
Middle	3	10
Matric	3	10
Intermediate	4	13.3
Graduation	3	10
Masters	3	10
Economic independence		
Independent	14	46.7
Dependent	16	53.3
Marital status		
Single	2	36.7
Married	11	67
Divorced	3	10
Widow/widower	14	46.7
SES (As reported by participants)		
Lower class	8	26.7
Middle class	22	73.3

Table 1 shows that in total sample, 9 (30%) people are illiterate while 3(10%) people have Masters level education. Majority of elderly participants in the sample are economically dependent on others, widow/ widower, and belong to middle class.

Instruments. Following instruments were administered on the sample along with demographic sheet:

Demographic sheet. A demographic sheet (see Appendix B) was designed to gain information about participant's age, gender, educational level, socio-economic status, employment status, income, social class, family system; physical and mental health problems and their duration; spouse's and family member illness; death of any loved one; drug use; and spending their free time. Demographic sheet also included Likert type questions as indicators of social support, lonliness, and resistence to care. The purpose of including these Likert type questions in the demographic sheet was to get a more elaborate view of elderly's QOL as these different dimensions has been shown by literature to be important for elderly's QOL.

World Health Organization Quality of Life Scale (WHOQOL- BREF). This questionnaire developed by WHO Quality of Life Group (1998) cover four broad dimensions of QOL including Physical Health (7 items), Psychological Health (6 items), Social Relationships (3 items) and Environment (8 items).It has a total of 26 questions. Each of these domains are rated on a 5-point response category. Reliability was good for each of the four domains (Cronbach alpha .66 to .84). Over a two to eight week period, test-retest reliability for the four domains was generally high that is α =.66 to .87 (WHOQOL Group, 1998). In the present study, WHOQOL- BREF Urdu version translated by Khalid and Kausar (2008) was used (see Appendix D). For this purpose permission was taken from WHO to use the translated version (see Appendix G).

Geriatric Depression Scale (GDS- Short Form). It was developed by Yesavage et al. (1983). In the present study, short form of GDS consisting of 15 questions which was developed in 1986 was used. Participants were asked to respond by answering *Yes* or *No* in reference to how they feel over the past week. Of the 15 items, 10 indicate the presence of depression when answered positively, while the rest (1, 5, 7, 11, and 13) were reverse scored. Scores of 0-4 are considered normal; 5-8 indicate mild depression; 9-11 indicate moderate depression; and 12-15 indicate severe depression. It takes 5-7 minutes to complete. The validity and reliability of the tool have been supported through both

clinical practice and research (Yesavage & Sheikh, 1986). In a validation study comparing the long and short forms of GDS for self- rating of symptoms of depression, both were successful in differentiating adults with depressionand without depression. The reliability of the scale was found to be .84. This tool has been tested and used extensively with older population, inclusive of healthy, physically ill and cognitively impaired older adults (Yesavage et al., 1983).Its Urdu version translated by Itrat, Taqui, Qidwai, and Qadri (2007) was used in present study (see Appendix C). GDS-15 has been validated in many different languages. Elderly, scoring 5 and above on GDS were considered to have depression, as this cutoff is reported to have high sensitivity and specificity in previous health based studies in Pakistan (Itrat et al., 2007; Zafar et al., 2006).

Levenson Internality, Powerful Others, Chance Scale (IPC).The IPC scale developed by Levenson (1973) has been used to measure the construct of LOC. This scale measures the extent to which the individual believes he is influenced by External factors while making decision (powerful others, fate, chance) or Internal factors (effort, personal ability). It contains 24 items. This questionnaire basically measures three dimensions of LOC that is Internal (1, 2, 3, 4, 5, 10, 19, 21), Chance (6, 7, 8, 9, 13, 22, 23, 24), and Powerful Others (11, 12, 14, 15, 16, 17, 18, 20). Powerful Others and Chance are two dimensions of External LOC. Items are scored on a 6 -point scale ranging from *very strongly disagree* (1) to *very strongly agree* (6). The scale yielded Kunder Richardson reliabilities of .64 for Internal subscale, .77 for Powerful Others subscale, and .76 for Chance subscale. Split half reliabilities were .62 for Internal, .66 for Powerful Others, and .64 for Chance subscales. Correlation among these scales indicated that Powerful Others and Chance subscale correlated moderately with each other (r = .59, p<.01) and both were negatively correlated to the Internal subscale. It is expected because both Powerful Others and Chance subscales reflect a belief not in one's own personal locus of control (Levenson, 1974).

It was translated in Urdu by Younis (2003). The scale(see Appendix F1) showed satisfactory psychometric properties with alpha reliability for Internal Locus of Control as .58, for Chance Locus of Control as .73, and for Powerful Others as .71. Total reliability of scale is .76 (Younis, 2003).

Life Orientation Test (LOT). For the measurement of optimism/pessimism dimension, this scale was developed by Scheier and Carver (1985). It contains 12 items about optimistic and pessimistic traits of personality based on 5 point Likert type scale ranging from 0 (*strongly disagree*) to 4 (*strongly agree*). It has four filler items (2, 6, 7, 10) whose scores are not added to the final score. Items numbers 3, 8, 9, and 12 are reverse scored. The total LOT score was the sum of the items numbers 1, 3, 4, 5, 8, 9, 11, and 12, with the lowest score being 0 and the highest being 32. The high score (above 17) indicates optimistic trait of personality and lowest score (below 17) shows pessimistic traits of personality. Cronbach's alpha of .78 and test-retest reliability of .60 over 12 months and .79 over 28 months were reported (Scheier, Carver, & Bridges, 1994). Its Urdu version translated by Ayub (2004) was used in this study (see Appendix E). Urdu version has satisfactory reliability with alpha coefficient of .62 as reported (Ayub, 2004).

Procedure. For the purpose of conducting research, old people residing in old homes and home settings were contacted. Specifically, for old-homes, permission was taken from heads of the institutions. The heads of old-homes proved to be very cooperative and researcher was allowed to approach the participants the same day. The elderly people in both settings, that is old homes and community setup, were very welcoming. Participants were briefed about the purpose of research and they were instructed about how to complete the questionnaires. Prior to completing questionnaires, written informed consent was taken (**see** Appendix A) and they were assured of confidentiality and anonymity. Booklet of questionnaires was administered in comfortable environment and order of questionnaires in booklet was changed every time to control order effect. Despite of the fact that participants were welcoming to researcher, some issues were faced during data collection. Majority of elderly people despite being educated, refused to fill the questionnaires by themselves and asked the researcher to read aloud the questions which they could answer. This made the data collection procedure quite hectic and time consuming for researcher as structured interview format was used for each participant. It took around 30 minutes to get each booklet filled.

Secondly, the participants showed their concern regarding scale measuring LOC. They reported that the items of the questionnaire were less relevant to them and more to

political or job scenario. They also showed their concern in understanding the language of same questionnaire. So the researcher had to put in lot of effort to make the participants understand items of LOC related scale. After completion of questionnaires, participants were appreciated for their cooperation and time. Data were then entered into SPSS 20 to carry out statistical analysis.

Results. To examine internal consistency of scales, Cronbach's alpha reliability estimates were computed. Pearson Product-Moment Correlations were computed in order to study the relationship of depression with orientation to life, LOC, and QOL. Cronbach's alpha reliability coefficients for each scale and intra and inter-scale correlations are given in Table 2.Table 2 indicates satisfactory reliability coefficients for all measures except Social Relationship domain of WHOQOL-BREF (α =.48). The low reliability estimates of 'Social Relationship' domain prompted to assess its item- total-correlations. Significant positive item to total correlations were observed for all the items with the composite score of its subscale ranging from .41 to .57 ($p< .01$), thus indicating inter-relatedness of items in subscale reflecting internal consistency. It was assumed that the low reliability of the subscale might have been due to small number of items in the subscale and small sample size.

Pearson Product- Moment Correlation was computed in order to study construct validity of measures through computing subscale to total correlation and to study the relationship of depression, orientation to life, LOC, and QOL (see Table 2). Table 2 reveals that depression has significant negative relationship with orientation to life showing that more optimistic an individual is, lower the level of depression. Depression has significant negative relationship in all domains with QOL, showing that higher the QOL, lower is the level of depression. Orientation to life has significant positive correlation with QOL in all domains, showing that more optimistic an individual is, better the QOL he possess. There is significant positive correlation of QOL with internal LOC, indicating that more internal LOC an individual have, better the QOL he possesses. While Powerful Others domain of External LOC has significant negative relationship with QOL, thus indicating that more an individual believes that his life is controlled by powerful others, more impaired his QOL is. The different domains of QOL have significant

correlations with each other and also with total score of QOL, thus indicating that having better QOL in one domain leads to better QOL in the other that also signifies the construct validity of the respective scale. Nonsignificant relationships are observed for internal, powerful others and chance LOC with depression and of chance and powerful others LOC with internal LOC. Chance and powerful others has significant positive relation with each other signifying that they both are part of external LOC.

Table 2

Cronbach's Alpha Reliability Coefficients and Inter-Scale and Intra- Scale Correlations for GDS, LOT, IPC and WHOQOL-BREF (N= 30)

Scale	No. of items	α	1	2	3	4	5	6	7	8	9	10
1.GDS	15	.88	_	-.71**	.36	.27	-.23	-.74**	-.52**	-.71**	-.59**	-.53**
2.LOT	12	.79		_	-.61**	-.32	.22	.66**	.38*	.54**	.65**	.54**
IPC												
3. Powerful Others	8	.78			_	.62**	-.01	-.44*	-.31	-.32	-.39*	-.34
4.Chance	8	.67				_	.30	-.16	-.01	-.18	-.19	-.09
5.Internal	8	.64					_	.48**	.51**	.45*	.28	.27
6.WHOQOL-BREF	26	.91						_	.80**	.82**	.86**	.59**
7.Physical	7	.85							_	.60**	.51**	.24
8.Psychological	6	.70								_	.61**	.31
9.Environment	8	.83									_	.53**
10.Social	3	.48										_

Note. GDS = Geriartic Depression Scale; LOT = Life Orientation Test; IPC = Internality, Powerful Others, Chance Scale; WHOQOL- BREF = World Health Organization Quality of Life Scale.
**p<.01.*p< .05.

Discussion. As discussed earlier, Pilot Study (N = 30) was conducted before the Main Study with the objective of finding out the feasibility of data collection procedure and suitability of the scales for the target population in terms of language comprehension, construct clarity, and relevance; and to study the psychometric properties of the scales. As for the comprehendibility of the scales, all of the scales used in the study were understandable by the elderly except for the IPC Scale. The translated version of IPC Scale did not seem to be appropriate for use with elderly population as the translation seemed to be difficult for elderly to understand and the items also seemed irrelevant with respect to elderly. Majority of the sample seemed either not to grab the meaning of the items or felt that the items were more related to political scenario or work place setting that had no relevance to them. For example, item no. 10 and 12 had words of leader or leadership which made the elderly feel that these items were related to politics and irrelevant to them. Similarly, item no. 6, 13, 16, 17, and 20 had difficult words and phrases of Urdu language which made it difficult for participants to grab meaning of sentence. Also nonsignificant relationships were observed for LOC scale with most of the variables in assumed direction. So it was decided to modify the scale in terms of simplifying the language and establishing construct relevance in order to use it conveniently in the Main study. The steps involved in the modification had been described in next chapter of Main study.

In order to calculate the internal consistency of the scales used in the present study, the Cronbach's alpha reliability coefficients were computed. It was found that the reliability estimates were good for all measures. Only the reliability coefficient of Social Relationship domain of WHOQOL-BREF Scale (α= .48) was low that may be because this domain contained only 3 items so the low reliability coefficient might be due to less number of items and small sample size. Item total correlations of social relationship domain were examined which gave significant item to total correlations for all items. Therefore it was decided to use WHOQOL- BREF in the Main Study in order to explore the QOL of elderly and subsequent assumed relationships.

In order to study the relationship among study variables, Pearson Product Moment Correlations were used. Significant positive correlations were observed between

depression and orientation to life. Similarly, QOL had significant positive correlation with internal LOC and orientation to life consistent with literature (Gibson et al., 2013; Gupta et al., 2009; King et al., 1998). Significant negative correlations were observed between QOL with powerful others and depression. All other correlations were found to be nonsignificant. It was assumed that the statistically nonsignificant relation of QOL with chance LOC and nonsignificant relation of internal, powerful others, and chance LOC with depression and of powerful others and chance LOC with internal LOC might be due to small sample size used in pilot testing and lack of understanding and relevance of LOC measure in present context. Therefore, it was decided that the relationship between these variables would be studied in Main Study by using a larger sample and modifying the scale.

Main Study(Phase 2)

The major purpose of the study was testing the hypothesis and achieving objectives written earlier in chapter 2.

Instruments. Following measures were used in Main Study. For details, see instrument section of Pilot Study (p. 43-45).

- Demographic sheet (see Appendix B)
- Urdu version of Geriatric Depression Scale (GDS; Itrat, Taqui, Qidwai, &2007; see Appendix C)
- Urdu version of World Health Organization Quality of life scale (WHOQOL- BREF; Khalid & Kausar, 2008; see Appendix D)
- Urdu version of Levenson Internality, Powerful Others, Chance Scale (IPC; Younis, 2003; see Appendix F1)
- Urdu version of Life Orientation Test (LOT; Ayub, 2004; see Appendix E)

In the Main Study, adaptation of IPC was done.

Adaptation of Levenson Internality, Powerful Others, Chance Scale (IPC). All of the instruments proved to be reliable and valid measures to study variables proposed in our study except Levenson Internality, Powerful Others, Chance Scale (IPC; Younis, 2003). As pointed out earlier in Pilot Study, that the scale did not seem to be appropriate for use with elderly population as they had problems with content understanding and its relevancy (see Appendix D). So in the light of observations made in Pilot Study, it was decided to modify the scale to get an appropriate measure for use in Main Study.This aim was achieved through following steps:

*Step 1 (Participant's Opinion).*To pinpoint the actual problem in content as faced by participants, the scale was administered to five elderly people to get their viewpoint about scale. All of these people were above 60 years and included three men and two women. The elderly people pointed difficulty in the scale items understanding and relevancy. The items that they particularly pointed out were item no. 6, 12, 13, and 16. According to them, these items were either ambiguous or were more related to political scenario or work place setting. For example item no. 6 was "My life is chiefly controlled by accidental happenings". The word "accidental" according to elderly was ambiguous. The researcher carefully observed and noted the queries of the elderly people.

*Step 2 (Subject Matter Expert's Opinion).*The scale was then distributed among five Subject Matter Experts (SMEs) to get their viewpoint about use of scale with elderly population. They all were PhD in Psychology and were faculty members of National Institute of Psychology. They were asked to comment if the scale was appropriate to be used with elderly people in its original form or should be modified and what kind of modifications to be made. They were also of the viewpoint that the scale should be adapted to make the content more simpler by replacing difficult words with easy words and items should also be made relevant to the elderly context. For example, item no. 6 with word *haadsati* [accidental], was giving a very negative connotation instead of reflecting the real meaning of "something occurring without planning". So it was decided to modify this scale in order to use it conveniently with our sample.

Step 3 (Committee approach). A committee approach was undertaken with three SMEs who were bilingual experts. Two were faculty members of National Institute of Psychology and one was M.Phil student. As the scale was already translated in Pakistan, so no major changes in the translation were made and SME's tried their level best to keep the translation as close to the original one as possible to preserve semantic equivalence of the items. It was only tried to make those items which seemed little irrelevant to be as relevant to the elderly in their context as possible through rephrasing them or clarifying them by putting one simple word explanation in brackets. For example, the word *haadsaati* [accidental] in item 6 was clarified for the sample by putting this word's simple explanation as *achanak ronma honay walay* [one that occurs atonce without planning] in bracket. In item 10, the word *qaid* [leader] was replaced altogether with the phrase *mera dusray logon par kitna control hai* [how much control I have on other people] as the word *qaid* [leader] seem to convey leadership meaning on broader or national level whereas the latter phrase seem to be more relevant to elderly in their home or otherwise context. Very similar change was made in item 12 as word *qaidana zimidari* [leadership responsibility] was replaced by phrase *rehnuma (incharge) nai bnaya jaega* [will not be made incharge].

In item 13, the phrase *itni hushkismat hun k sahih waqt par sahih jaga pohanch jaun* [am so lucky to reach the right place at the right time] was replaced by phrase *mujhay achay muwaqay khushqismati say sahih waqt aur sahih jaga par mil jaein* [luckily I get the right oppurtunities at right place and at right time], as the latter one is a better and more understandable translation of phrase 'getting oppurtunities at right time'. In item 16, difficult word of *paya-takmeel* [to complete] was replaced by word *mukamal krnay k liye* [to complete] as this is a more simpler and easy to understand translation. In item 17,*ba-asar* [influential] word was elaborated by putting word *taqatwar* [powerful] in bracket. Similar changes were made in item 18 as word *khaas*[important] was replaced by word *eham / taqatwar* [important/ powerful]. In item 20, the phrase *meri kaar ka haadsa* [my car's accident] was replaced by word *meray saath gaari ka haadsa* [car accident will happen to me] as this word more seem to convey the meaning of phrase 'whether or not I get into a car accident' in original English version (see

Appendix F4). So in total eight items out of twenty four items were modified in this way. Instructions of the scale were also modified and elaborated, so that the sample gets a better understanding of the content and meaning of the questions of the scale.

Step 4 (Back translation). The modified items of IPC Scale were then given to four bilingual experts for back translation. The aim of this step was to ensure that the modification done in items have not changed the original meaning of items. Three M.Phil scholars and one PhD scholar were contacted for this purpose. The back translated version (see Appendix F3) obtained from them were then compared with the original English scale and it was found that the newly modified scale (see Appendix F5) retained its equivalence with the original English version in terms of meaning it was conveying. After all these modifications, the scale was finalized to be used in Main study.

Sample. The sample consisted of 292 participants, who were approached through purposive convenient sampling. Inclusion criteria included elderly men and women above 60 years residing in community settings and old homes. Exclusion criteria included elderly people suffering from intellectual disability and any cognitive impairment. Data were collected from205 (68.33%) elderly of community setting of Rawalpindi and Haripur and 87(29.8%) elderly from old age homes of Lahore and Rawalpindi. Sample included 198 (67.8%) men and 94 (32.2%) women, age ranging from 60 to 110 years (M = 68.38, SD = 8.80). See Table 3 for sample distribution along demographic variables.

Table 3 indicates that in the total sample majority of participants have done Matric, while very few have Masters level education. On examining the data it is found that vast majority of participants belong to middle class and are married.

Table 3

Frequencies and Percentages along Demographic Variables (*N*=292)

Demographics	*f*	%	Demographics	*f*	%
Age			SES (As reported by participant)		
60–80	261	89.4	Lower Class	49	16.8
81–110	29	9.9	Middle Class	231	79.1
Missing	2	7	Upper Class	8	2.7
Educational Qualification			Missing	4	1.4
			Marital Status		
Illiterate	67	22.9	Married	193	66.1
Primary	31	10.6	Unmarried	21	7.2
Middle	34	11.6	Divorced	7	2.4
Matric	74	25.3	Widow/ Widower	71	24.3
Intermediate	28	9.6			
Graduation	32	11.0			
Post-graduation	22	7.5			
Missing	4	1.4			

Procedure. Elderly people residing in old-age homes of Rawalpindi and Lahore and elderly people residing in community settings of Rawalpindi and Haripur were approached in order to collect data. Specifically for old homes permission was taken from heads of these institutions who proved to be very cooperative. Participants were briefed about the purpose of research and they were instructed about how to complete the questionnaires. Prior to completing questionnaires, informed consent was taken from old people and they were assured of their confidentiality and anonymity. A booklet comprising of consent form, demographic sheet and study instruments was administered in comfortable environment. Order of questionnaires in booklet was changed every time to control order effect. Structured interview format was used for ill- literate and

participants who were not comfortable in filling questionnaires themselves. Each participant took 20 to 30 minutes to complete the questionnaires. After completion of questionnaires, participants were appreciated for their cooperation and time. Some of them specially the ones in old homes, who during structured interview conduction became little depressed due to recall of bad past memories, were provided with counseling by the researcher. Data were then entered into SPSS 20 and AMOS 21 in order to carry out statistical analysis.

RESULTS

In order to achieve the stated objectives of the study and test the hypothesis, statistical analyses were conducted. Descriptive statistics were computed for all the scales used in the study in order to examine the overall trend of the data. Internal consistency of the scales was evaluated by computing Cronbach's alpha reliability estimates. Pearson Product Moment Correlations were computed in order to explore the relationships between different variables involved in the study. Stepwise linear regression was carried out to study the role of orientation to life, locus of control (LOC), and quality of life (QOL) in predicting depression. Structural Equation Modeling was conducted in AMOS to find out the mediating role of QOL in orientation to life and LOC in predicting depression. Heirarchical regression analysis was carried out to find out the moderating role of place of residence (old-home or community setting) in orientation to life and LOC predicting depression. Independent sample *t*- test and one way analysis of variance (ANOVA) were conducted to study group differences on study variables.

Descriptive Statistics for Prevalence of Depression

Prevalence of depression was computed along whole sample, by residence and by gender (see Table 4).

Table 4

Frequencies and Percentages along Prevalence of Depression (N = 292)

Variable	*f*(%)	Variable	*f*(%)
Whole population		Severe depression by residence	
Normal	125 (42.8)	Old-home	12 (13.79)
Mild depression	102 (34.9)	Community	9 (4.39)
Moderate depression	41 (14)	Severe depression by gender	
Severe depression	22 (7.5)	Men	13 (4.45)
		Women	9 (3.08)

GDS scale was applied on sample to examine their depression level which shows that 125(42.8%) lie in the category of normal people having no depression while 22(7.5%) people have severe depression. Also severe depression is more prevalent among men and participants of old homes.

Descriptive Statistics for Variables in Demographic Sheet related to Mental Health

Frequencies and percentages were computed for different variables given in demographic sheet that are important aspect of elderly's life and might create difference in their mental health (see Table 5).

Table 5

Frequencies and Percentages along Variables related to Mental Health (*N*= 292)

Variables	*f*	%	Variables	*f*	%
Economic independence			Family member having illness		
Economically independent	171	58.6	Yes	23	7.9
Economically dependent	111	38	No	244	83.6
Missing	10	3.4	Missing	25	8.6
Physical illnesses			Death of any loved one		
No illness	116	39.7	Death in last 6 months	120	41.1
One illness	134	45.9	No death in last six months	162	55.5
Two or more illnesses	46	15.8	Missing	10	3.4
Missing	1	0.3			
Illness Name			Spouse having illness		
No illness	116	39.7	Yes	66	22.6
Heart problems	39	13.4	No	193	66.1
Gastrointestinalproblems	10	3.4	Missing	33	11.3
Respiratory problems	7	2.4	Drug use		
Muscoskeletonproblems	25	8.6	Yes	90	30.8
Sugar	36	12.3	No	199	68.2
Disabled	5	1.7	Missing	3	1
Multiple problems	41	14.0			
Others (age related)	13	4.5			

Table 5 shows that in total sample of elderly, majority of people are economically independent relying either on their own savings, pensions or any other property. Majority have at least one physical illness but have spouse and family members having no chronic illness. Majority have not experienced death of their loved ones (close family members or friends) in the past six months and do not use any sort of drugs like *tobacco* or *hukka*.

Descriptive Statistics for Study Variables

Cronbach's alpha reliability coefficients and descriptive statistics for instruments used were computed on total sample. Descriptive statistics were computed on raw scores as well as also on transformed scores (that is, sum obtained on each scale and subscale was divided by their respective total number of items) (see Table 6).

Table 6

Descriptive Statistics for Scales on Total Sample (*N*=292)

			Raw	Transform	Range			
Scale	No. of items	α	*M(SD)*	*M(SD)*	Actual	Potential	Skew.	Kurt.
GDS	15	.81	5.73(3.57)	.38(.24)	0-15	0–15	.55	-.44
LOT	12	.72	19.16(4.12)	2.32 (.51)	5-29	0– 32	-.28	.05
IPC- Powerful Others	8	.83	28.09(6.45)	3.5 (.80)	8-48	8-48	.16	.84
Chance	8	.80	33.34(5.81)	4.11 (.73)	15-48	8-48	.06	.41
Internal	8	.74	33.25(5.18)	4.12 (.65)	14-48	8-48	.39	.81
WHOQOL-BREF	26	.90	89.30(12.95)	3.42 (.49)	54-121	26-130	-.13	-.09
Physical	7	.80	23.93(4.72)	3.41(.67)	9-35	7-35	-.44	.23
Psychological	6	.70	20.60(3.61)	3.40 (.60)	9-30	6-30	-.13	.66
Environment	3	.62	27.01(4.59)	3.37 (.57)	15-38	8-40	-.18	-.05
Social	8	.77	10.72(2.20)	3.57 (.73)	3-15	3-15	-.55	.22

Note. GDS = Geriatric Depression Scale; LOT = Life Orientation Test; IPC = Internality, Powerful Others, Chance Scale; WHOQOL- BREF = World Health Organization Quality of Life Scale; Skew. = Skewness; Kurt. = Kurtosis.

Table 6 indicates that all study variables are normally distributed. Results of skewness and kurtosis reveal that for GDS, LOT, IPC and WHOQOL-BREF scores, their values lie between the acceptable ranges of -1 to +1(Sherehiy, 2008). Mean and standard deviation for both raw and transformed score has been given. Transformed score has been calculated to measure intensity along each variable. Mean for transformed score of depression is lower than middle value showing that depression severity is less in overall sample. While it is higher for Chance and Internal LOCsubscales showing that most of the population is internally locused and has high chance LOC.High reliability estimates are observed for WHOQOL- BREF total score and good for its three subscales that is Physical health, Psychological health and Social relationships while satisfactory for Environment subscale. IPC and its subscales, LOT and GDS also have good reliabilitiesproviding proof for the internal consistency of the scales used in present study. As IPC scale went through modification process, so its item total correlation was also calculated to verify the construct validity of the newly modified instrument. Significant item total correlations are achieved for Internal LOC subscale ranging from .45 to .69, for Powerful Others LOC subscale ranging from.46 to .80 and for Chance LOC subscale ranging from .51 to.72. So these values provide proof for the construct validity of the newly modified IPC scale.

Relationship between Depression, Orientation to Life, Quality of Life and Locus of Control

Pearson Product Moment Correlations were computed in order to study the relationship betweendepression, orientation to life, LOC and QOL (see Table 7).Table 7 shows that significant negative correlations are observed between QOL and its all dimensions with depression. This shows that better the QOL an elderly person reports, the less depression he experiences. Internal LOC has significant negative relationship with depression while significant positive relationship of powerful others and chance LOC with depression is observed. This shows that more a person feels he can control the outcomes of his actions, the less depressed he is. Similarly, the more an elderly person feels his life is dependent on others or fate, the more depressed he feels. Orientation to

life also significantly negatively correlates with depression showing that the more optimistic an elderly person is, the less depressed he is.

Significant positive correlation is observed between internal LOC with QOL. This implies that more a person feels that he can control the outcomes of his actions, the better QOL he reports. Nonsignificant relation of chance and powerful others LOC (external LOC) with QOL is observed. However, powerful others LOC correlate significantly negatively with social relationship domain of QOL. This shows that more an elderly person believes that his life is controlled by powerful others, the more dissatisfied he is with his social relationships. Significant positive correlation is observed between optimism with QOL.This shows that the more a person is optimistic about his future, the better QOL he reports. The different domains of QOL also have significant positive correlations with each other thus indicating that having better QOL in one domain relates to better QOL in the other and reflecting upon the construct validity of the measure.

Table 7

Correlations between Depression, Orientation to Life, Locus of Control, and Quality of Life and Their subscales (N=292)

Variables	1	2	3	4	5	6	7	8	9	10
1. Depression	_	-.33**	.24**	.12*	-.17**	-.55**	-.43**	-.52**	-.35**	-.45**
2. Orientation to life		_	.03	.21**	.35**	.45**	.24**	.46**	.43**	.30**
3. LOC-Powerful Others			_	.56**	.16**	-.09	-.08	-.07	-.02	-.17**
4. Chance				_	.31**	.03	-.03	-.00	.10	.04
5. Internal					_	.38**	.28**	.36**	.32**	.29**
6. QOL						_	.79**	.83**	.82**	.67**
7. Physical							_	.53**	.43**	.36**
8. Psychlogical								_	.59**	.52**
9. Environment									_	.51**
10.Social										_

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

Differences along Gender on Study Variables

To explore the differences between men and women on study variables, independent sample *t*- test was used. This analyses was conducted to study gender differences in study variables, prior to other advance analysis in order to check either gender affect the outcome variable, that is depression and should it be controlled in further analyses. Table 8 presents the mean differences between men and women.

Table 8

Differences between Men and Women on Study Variables ($N = 292$)

Variables	Men ($n = 198$)	Women ($n = 94$)			*95% CI*		Cohen's d
	M (SD)	*M (SD)*	*t*(290)	*p*	LL	UL	
Depression	5.24 (3.48)	6.75(3.56)	-3.45	.00	-2.38	-.65	.43
Orientation to life	19.40 (4.20)	18.65 (3.93)	1.47	.15	-.26	1.77	-.18
Powerful others	28.48 (6.84)	27.27 (5.46)	1.50	.14	-.04	2.79	-.18
Chance	33.74 (6.12)	32.47 (5.00)	1.88	.06	-.06	2.60	-.22
Internal	33.98 (5.40)	31.69 (4.31)	3.90	.00	1.13	3.45	-.45
Quality of life	91.05 (13.50)	85.62 (10.87)	3.68	.00	2.52	8.34	-.43
Physical	24.61 (4.51)	22.48 (4.84)	3.67	.00	.99	3.26	-.46
Psychological	21.17 (3.71)	19.38 (3.07)	4.34	.00	.98	2.60	-.51
Social	10.93 (2.18)	10.29 (2.17)	2.32	.02	.10	1.18	-.29
Environment	27.18 (5.00)	26.63 (3.53)	1.08	.28	-.45	1.56	-.12

Note. CI = Confidence Interval; *LL* = Lower Limit; *UL* = Upper Limit.

Statistically significant differences are found between men and women with respect to their QOL total score, and physical health, psychological health and social relationships domain. Differences are also significant with respect to internal LOC and depression. Table 8 reveal men as having high QOL and better physical and mental

health and social relationships and are more internally locused and less depressed than women. Effect size is small for all variables except psychological health where it is medium. However, nonsignificant differences are found with respect to orientation to life, external LOC (powerful others and chance LOC) and environment related QOL. These findings thus provide partial support for hypothesis 10 of current study demonstrating women as having more depression, lower QOL, and less internal LOC than men but nonsignificant difference on optimism level is found between two genders.

Differences along Place of Residence on Study Variables

It was objective of the present study to explore the differences between elderly participants residing in old homes and community settings with respect to study variables, therefore, independent sample *t*-test was used to compute the differences between these two groups. This analysis was conducted prior to other advance analyses to establish whether place of residence should be controlled or not. Table 9 presents the mean differences between old home residents and community setting residents. The results in Table 9 show that statistically significant differences are found between participants from old home and community setting with respect to depression, chance and powerful others LOC, QOL total score and psychological health, social relationships and environment domain of QOL. Results show participants of old home as having more depression, more belief in powerful others and chance LOC, lower QOL overall and in three domains of QOL that is psychological health, social relationships and environment, thus providing complete support for Hypothesis 6 of current study. Effect size is small for all variables. Nonsignificant differences are seen in orientation to life, internal LOC, and physical health domain of QOL.

Table 9

Difference between Elderly Participants Residing in Old Homes and Community Settings on Study Variables (N = 292)

Variables	Old home (n=87)	Community (n=205)			CI (95%)		Cohen's d
	M(SD)	*M (SD)*	*t(290)*	*p*	LL	UL	
Depression	6.59 (3.88)	5.36 (3.37)	2.72	.01	.34	2.12	-.34
Orientation to life	19.24 (3.66)	19.12 (4.30)	.24	.81	-.91	1.16	-.02
Powerful others	29.97 (5.80)	27.29 (6.54)	3.31	.00	1.09	4.28	-.42
Chance	34.96 (5.90)	32.64 (5.63)	3.16	.00	.87	3.76	-.40
Internal	33.72 (5.22)	33.04 (5.15)	1.02	.30	-.62	1.97	-.13
Quality of life	85.22 (11.71)	91.03 (13.09)	-3.57	.00	-9.00	-2.60	.45
Physical	23.37 (5.38)	24.16 (4.39)	-1.20	.23	-2.08	.50	.16
Psychological	19.50 (3.15)	21.05 (3.69)	-3.42	.00	-2.44	-.66	.43
Social	9.99 (2.18)	11.03 (2.13)	-3.77	.00	-1.57	-.49	.48
Environment	25.80 (3.93)	27.51 (4.75)	-3.18	.00	-2.77	-.65	.37

Note. CI = Confidence Interval; *LL* = Lower Limit; *UL* = Upper Limit.

Predictors of Depression among Elderly

Stepwise linear regression was carried out in order to study the predictive role of orientation to life, external and internal LOC, and QOL in predicting depression. Step-wise regression analyses was preferred because there was no theoretical evidence available that explains some hierarchy of the study variables in predicting depression. For this purpose, the preliminary analyses were conducted to ensure no violation of normality, linearity, and homoscedasticity. Additionally, the correlations among the predictor variables that is life orientation, LOC, and QOL were examined and it was found that all the correlations were weak to moderate, but significant, thus multicollinearity was unlikely a problem. Similarly, depending upon strength of correlation coefficient, it was observed that the predictor variables were statistically correlated with depression (see Table 7), therefore, it was decided that the variables to be added to the regression model to ascertain the strongest predictors of depression among

all. Gender and place of residence were added as control variables in the model. Gender as categorical variable was coded as 1 for men and 2 for women. While place of residence was coded as 0 was given to community and 1 was given to old home. The regression statistics for the sample are given below (see Table 10).

Table 10

Step-wise Multiple Regression Predicting Depression from Orientation to Life, Locus of Control and Quality of Life among elderly ($N = 292$)

	Depression					
					95% CI	
Predictors	R^2	ΔR^2	β	F(df)	*LL*	*UL*
Step I	.07	.07		10.49*** (2, 289)		
(Constant)			3.25[a]		2.01	4.49
Gender			.21***		.72	2.43
Place of residence			.17**		.44	2.19
Step II	.35	.28		25.46*** (6, 285)		
Physical Health			-.18**		-.23	-.05
Psychological Health			-.31***		-.44	-.17
Environment			.05		-.06	.14
Social Relationships			-.23***		-.17	-.19
Step III	.36	.01		22.68*** (7, 284)		
Orientation to life			-.11*		-.19	-.00
Step IV	.39	.03		22.70*** (8, 283)		
Powerful Others			.19***		.05	.16
Step V	.39	.00		20.32*** (282,9)		
Internal LOC			.06		-.03	.11

Results in Table 10 indicate gender and place of residence as having 7% of variance for depression as control variable such that female gender and residence in old home predict more depression. The subscales of QOL (Physical Health, Psychological Health, Social Relationships, and Environment) entered at Step II after control variables, add 28% of the variance in depression and this change in R^2 is significant ($p < .001$). The β value of Psychological Health shows that this is the strongest negative predictor of depression among all of the subscales followed by Social Relationships and Physical Health which is the weakest negative predictor. The β value of Environment subscale is nonsignificant showing that it does not cause any variance in the outcome variable in combined role.

The addition of second predictor (Step III) that is orientation to life increases the value of R^2 with variance of 1% added in the regression model and this change is also significant ($p < .001$). The β value shows that this is a negative predictor of depression, that is with increase in optimism, depression decreases.

In the fourth step, Powerful Others is added to the model, 3% variance is added in the model and this change is also significant ($p < .001$) showing positive prediction. Lastly, in Step IV, Internal LOC, does not add to significant variance for the model. Chance LOC does not come out as predictor of depression in analysis.

Thus, these findings provide partial support for Hypothesis 3 and 2 while complete support for Hypothesis 1 of study, demonstrating psychological health, physical health, and social relationships domains of QOL, orientation to life and powerful others domain of LOC as significant predictors of depression.

Model Testing

To explore the mediating role of QOL in orientation to life and LOC predicting depression as an outcome, model testing was conducted in AMOS 21. In the model, orientation to life, internal, powerful others and chance LOC, and depression were taken as observed variables as their composite scores were taken, whereas QOL was taken as latent variable with its subscales taken as observed variables in the model (see Figure 2).

The model generated an output with goodness of fit indices that determine whether the proposed model can be said to be a good model. The indices include; Relative Chi-Square (χ^2 ratio), Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Incremental Fit Index (IFI). Each of statistical measure explains how well the model is explaining the covariance. The acceptable ranges of goodness of fit indices CFI, TLI, IFI have to be greater than .90 and RMSEA to be from .05 - .08 (Browne & Cudeck, 1993). For χ^2 ratio, recommendations range from as high as 5.0 (Wheaton et al, 1977) to as low as 2.0 (Tabachnick & Fidell, 2007). Table 11 provides a summary of goodness of fit indices.

Table 11

Summary of Models Showing Goodness of Fit Indices

Model	χ^2 (df)	χ^2/ df	IFI	TLI	CFI	RMSEA	$\Delta\chi^2(\Delta df)$
M_1	244.92(27)	9.07	.72	.63	.72	.17	
							202.03(10)
M_2	42.89(17)	2.52	.96	.93	.96	.07	

Note. IFI = Incremental Fit Index.TLI = Tucker Lewis Index, CFI = Comparative Fit Index, RMSEA = The Root Mean Square Error of Approximation.

Table 11 shows that the initial model did not show a good fit to the data with χ^2 (df = 27) = 244.92, CFI=.72 and RMSEA= .17. To obtain model fit, all nonsignificant relations were deleted, that is the direct relationship of orientation to life, internal LOC, and chance LOC with depression and indirect relationship of powerful others and chance LOC with depression. Later on, as suggested by modification indices, covariances were added between error of subscales that is between error terms of Environment and Social Relationship and subscales which were conceptually related, that is covariance of orientation to life with internal LOC and between internal LOC and powerful others. After adding all these modifications, model fit improved significantly (see Model 2, Table 11).

The pictorial presentation of the fitted model is given in Figure 2.

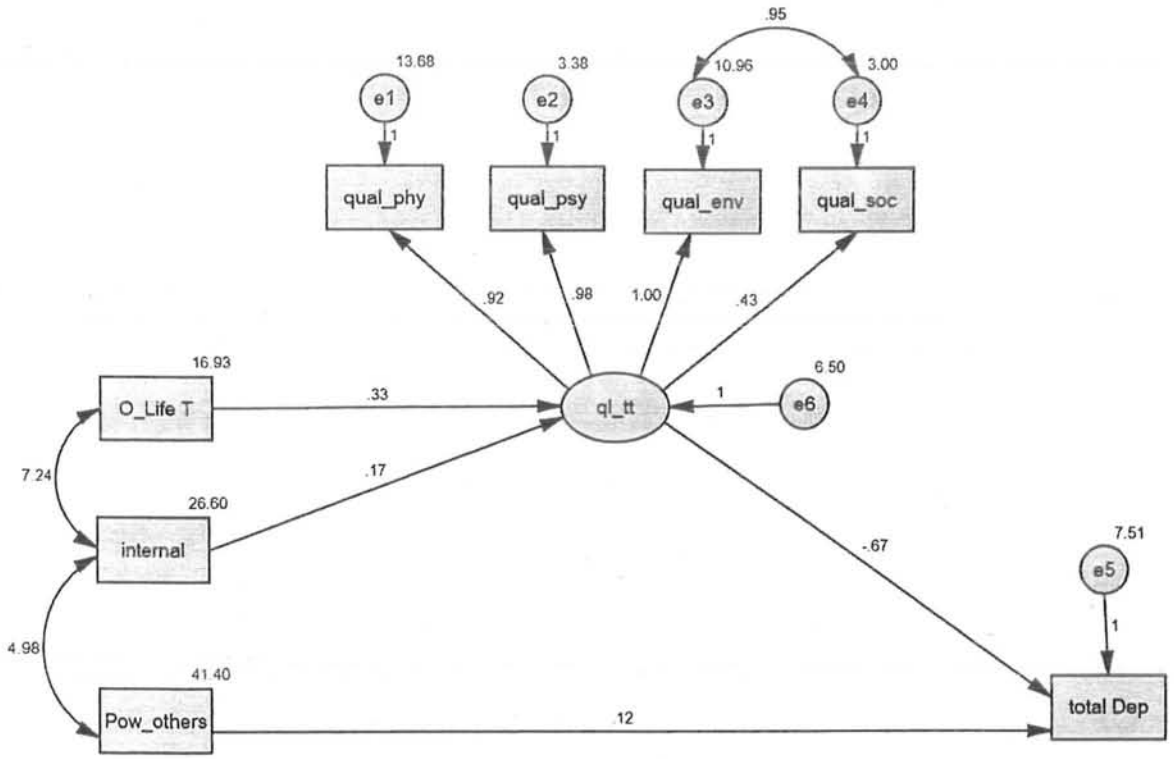

Figure 2. Mediating role of QOL for orientation to life and LOC (Chance, PowerfulOthers, and Internal) in predicting depression.O_Life T = orientation to life; Pow_others = powerful others; ql_tt = quality of life; Dep = depression.

Figure 2 represents the final model which is based on significant relations between all the variables. According to this model, internal LOC and orientation to life predict depression indirectly through QOL ($p < .01$), but not directly, while powerful others predict depression directly ($p < .01$) and not through QOL as an intervening variable. Chance LOC could not be seen in the final model because it could not demonstrate itself directly or indirectly as a predictor of depression and therefore deleted. The direct (without mediator) and indirect (with mediator) relationships between the variables are given in the Table 12. Table 12 shows that as optimism (β = -.26) and internal LOC (β = -.17) increases, depression decreases shown by the negative sign of β. While as belief in powerful others (β = .21) increases, depression also increases, shown by the positive sign ofβ. While QOL act as mediator with negative prediction, that is internal LOC and optimism effect depression through QOL, as QOL increases, depression decreases.

So from final model, complete support for Hypothesis 4 and partial support for Hypothesis 5 of study is achieved demonstrating QOL as a mediator of orientation to life and internal LOC with depression.

Table 12

Summary of Direct and Indirect Relationships between Orientation to Life, Chance LOC, Powerful Others LOC, and Internal LOC with Depression (*N*= 292)

	Depression	
Predictors	β Direct effect	β Indirect Effect
Orientation to life	-	-.26**
Internal LOC	-	-.17**
Powerful Others LOC	.21**	-

** $p < .01$.

Moderation of Place of Residence

For orientation to life in predicting depression. In order to demonstrate the impact of place of residence (whether a person lives in old home or community setting) as a moderator on the relationship between orientation to life as predictor and depression as an outcome, Heirarchical Multiple Regression analysis was conducted in SPSS version 20.

In a moderation analysis, the impact of a third variable, that is a moderator is analyzed which can change the strength or direction of the relationship of predictor and outcome (Baron & Kenny, 1986). Place of residence as moderator was coded as 0 was assigned to community and 1 to old home. Gender as a control variable was added in the first step. Gender was coded in such a way that 1 was assigned to men and 2 to women. While doing moderation, the issue of multicollinearity should be addressed. For this purpose, the predictor was centralized as suggested by Baron and Kenny (1986). Then the interaction term between predictor and moderator was computed. Later on Heirarchical Multiple Regression was done using Enter method to compute the moderating effect of place of residence for orientation to life in predicting depression (see Table 13).

Table 13

Heirarchical Regression Analysis for Moderation of Place of Residence in Life Orientation Predicting Depression (N = 292)

	Depression					
					95% CI	
Predictors	R^2	ΔR^2	β	$F(df)$	LB	UB
Block 1	.04	.04		11.92** (1, 290)		
Gender			.19**		.65	2.38
Block II	.16	.13		18.99*** (3, 288)		
Gender			.18**		.56	2.19
Orientation to life			-.31***		-.36	-.18
Place of residence			.17**		.51	2.16
Block III	.19	.02		16.63*** (4, 287)		
Gender			.19***		.67	2.28
Orientation to life			-.23***		-.30	-.09
Place of residence			.17**		.54	2.18
Orientation to life × Place of residence			-.17**		-.53	-.09

Note. β = Standardized regression coefficient; CI = Confidence interval.
*p< .05.***p< .001.

Table 13 shows that gender as a control variable entered in first block of regression analysis add 4% variance in the model. Orientation to life and place of residence were entered in the second block of the regression analysis. In the third block of the regression analysis, the interaction term between place of residence and orientation to life was entered and it explains a significant increase in variance in depression, that is 2%, t = -2.85, p < .01. Thus place of residence is a significant moderator for orientation to life in predicting depression providing support for Hypothesis 7 of the current study. Further, Figure 3 explains this moderation effect.

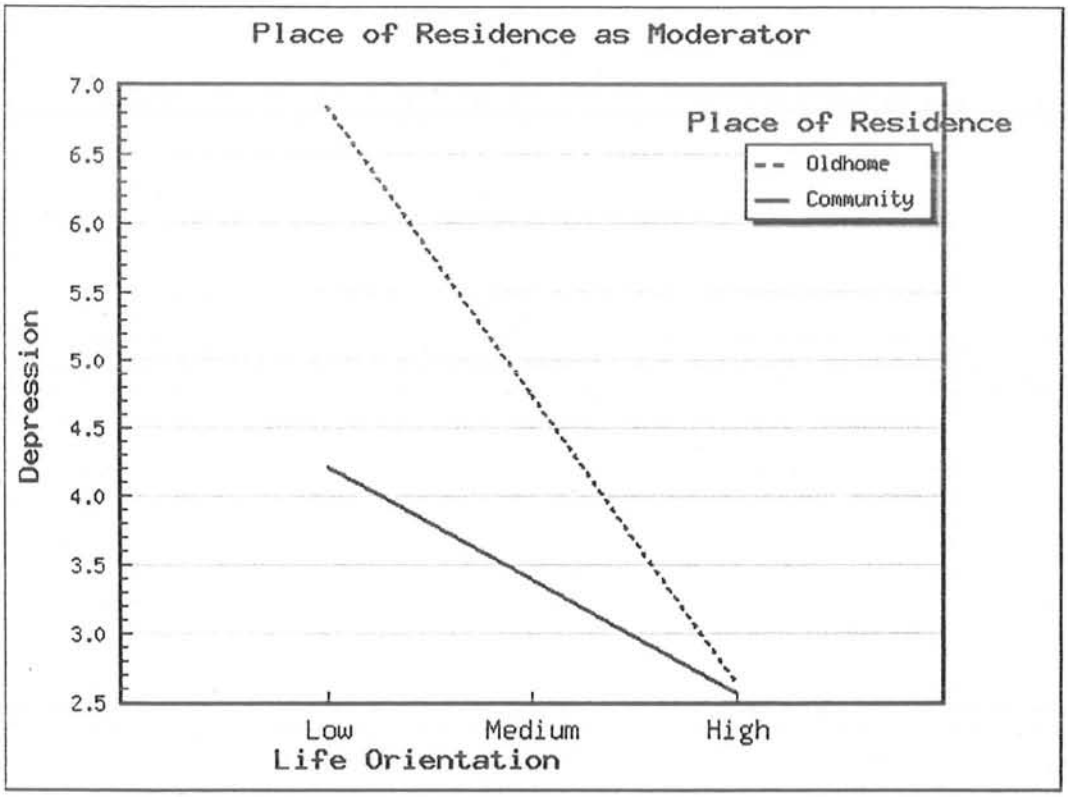

Figure 3. Modgraph presenting the relation between orientation to life and depression moderated by place of residence

Figure 3 explains that place of residence has a significant interaction effect with orientation to life in predicting depression. Point of intercept shows that the level of depression in elderly of old homes is already high as compare to elderly of community settings. As optimism level increases, so does the depression level decreases in elderly of both settings. But this decline in depression by increasing optimism is more pronounced in case of participants of old homes as shown by the slope (old home = -.51, t = -.05 at p = .95; community = -.19, t = -.04 at p = .96) of the modgraph which is sharper in case of old home residents. In the graph, there is a point of intersection. After this point, the relation of orientation to life with depression may become opposite for the participants of two settings, that is increasing optimism continues to lessen depression of participants of community setting at a uniform pace but for participants of old homes, this reduction in depression may not occur as sharply as before point of intersection. In other words, it can be said that the effect of intervention strategies of enhancing optimism is limited for

participants of old homes beyond a certain limit which may be due to other important factors that are responsible for inducing depression in elderly of old homes.

For quality of life in predicting depression. In order to demonstrate the impact of place of residence (whether a person lives in old home or community setting) as a moderator on the relationship between QOL as predictor and depression as an outcome, Heirarchical Multiple Regression analysis was conducted in SPSS version 20 by the same method described before (see page 67). Table 14 represents these findings.

Table 14

Heirarchical Regression Analysis for Moderation of Place of Residence in Perceived Quality of Life Predicting Depression (N = 292)

	Depression					
					95% CI	
Predictors	R^2	ΔR^2	β	F(df)	*LB*	*UB*
Block 1	.04	.04		11.92** (1, 290)		
Gender			.19**		.65	2.38
Block II	.32	.28		44.61*** (3, 288)		
Gender			.09*		.01	1.50
Quality of life			-.52***		-.17	-.12
Place of residence			.06		-.33	1.20
Block III	.34	.02		36.38*** (4, 287)		
Gender			.11*		.11	1.59
Quality of life			-.44***		-.15	-.09
Place of residence			.03		-.56	.98
Quality of life × Place of residence			-.17**		-.15	-.03

Note. β = Standardized regression coefficient; CI = Confidence interval.
*p< .05.***p< .001.

Table 14 shows that gender as a control variable add 4% variance in the model in the first block of regression analysis. QOL and place of residence were entered in the second block of the regression analysis. In the third block of the regression analysis, the interaction term between place of residence and QOL was entered and it explains a significant increasein variance in depression, that is 2%, t = -2.88, p< .01. The value of β(-.17) shows that as QOL increases, depression decreases. Thus place of residence is a significant moderator for QOL in predicting depression providing support for Hypothesis 9 of study. Figure 4 further explains this moderation effect.

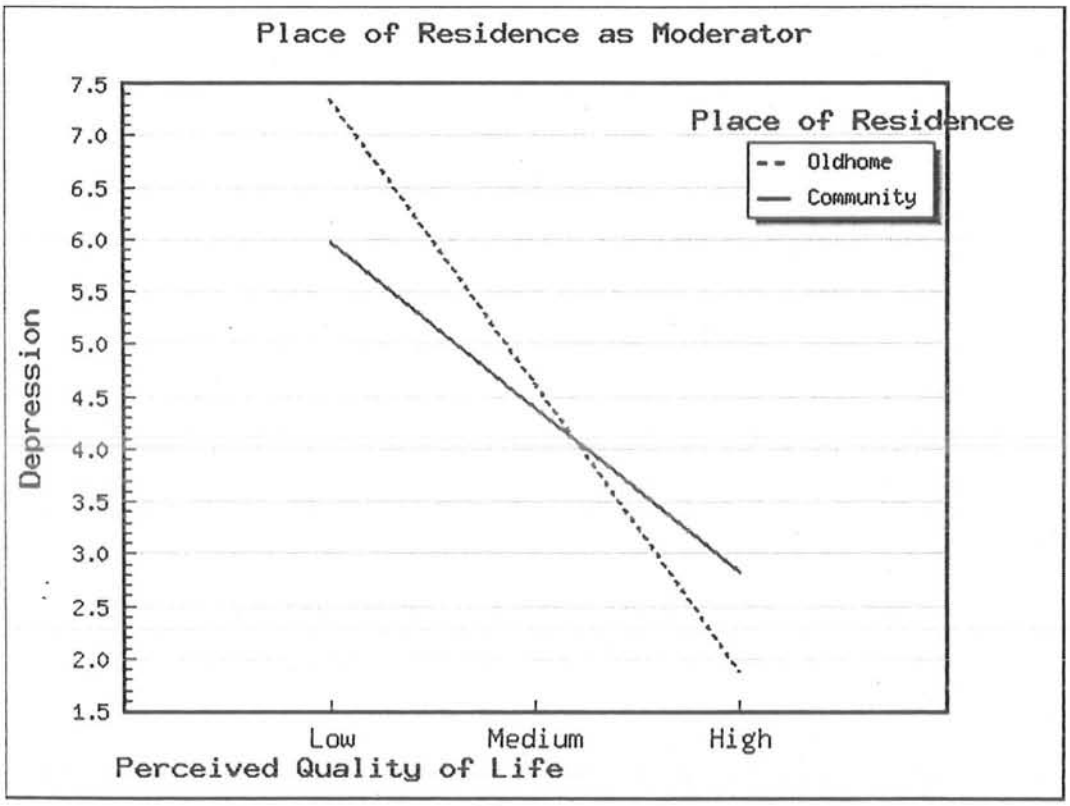

Figure 4. Modgraph presenting the relation between perceived quality of life and depression moderated by place of residence

Figure 4 explains that place of residence has a significant interaction effect with QOL in predicting depression. Point of intercept shows that the level of depression in participants of old homes is high as compare to elderly of community settings. As QOL increases, so does the depression level decreases in elderly of both settings, but this decline in depression by increasing QOL is more pronounced in case of participants of

old homes shown by the slope of the modgraph (old home = -.21, t = -.01 at p = .99; community = -.13, t = - . 009 at p = .99) which is sharper in case of old home residents. In the graph, there is a point of intersection. After this point, it can be seen that the relation of QOL with depression become opposite for the participants of two settings, that is increasing QOL continues to lessen depression of participants of community setting at a good pace, but for participants of oldhomes, this reduction in depression does not occur as sharply as before.In other words, it can be said that the effect of intervention strategies of increasing QOL is limited for participants of old-homes beyond a certain limit just like impact of optimism increasing strategies which may be due to other important factors that are responsible for inducing depression in elderly of old-homes.

For powerful others, chance and internal locus of control in predicting depression. In order to study the impact of place of residence as a moderator on the relationship of powerful others, chance and internal LOC with depression, Heirarchical Multiple Regression analysis was conducted. The results show that place of residence is not a moderator for all three dimensions of LOC, thus rejecting Hypothesis 8 of current study. Nonsignificant increase in variance is observed for powerful others LOC $\Delta F = .57$, $\beta = -.05$, $p > .05$; chance LOC $\Delta F = 1.17$, $\beta = -.08$, $p > .05$; and internal LOC $\Delta F = .99$, $\beta = -.07$, $p > .05$.

Relationship of Social (Environmental) Support Indicators with Variables of Study

Some questions based on a 5 point likert type scale were part of the demographic sheet as important factors in mental health of elderly according to literature. These variables were receiving respect from others, clean residence, interaction with others, lonliness feeling, autonomy, food of choice, and resistence to care. Pearson Product Moment Correlation was computed in order to explore the relationship of these factors with variables of the study (see Table 15).

Table 15

Correlations of Social (Environmental Support) Indicators with Variables of Study (N=292)

Variables	DP	ORT	PO	C	I	QOL	PH	PSYH	EN	SR
Respect from others	-.31**	.13*	-.22**	-.21**	.17**	.35**	.21**	.31**	.23**	.39**
Clean residence	-.03	.09	-.03	-.04	.11	.21**	.09	.16**	.23**	.19**
Interaction with others	-.16**	.11	.05	.03	.12*	.27**	.16**	.21**	.28**	.27**
Loneliness feeling	.45**	-.09	.27**	.22**	-.08	-.28**	-.21**	-.29**	-.13*	-.29**
Autonomy	-.10	.19**	.01	.19**	.27**	.14*	.06	.12*	.13*	.21**
Food of choice	-.23**	.08	-.15*	-.04	.18**	.35**	.19**	.25**	.34**	.39**
Resistance to care	.11	.06	.21**	.12*	.04	-.04	.12*	.01	.04	-.04

Note. DP = Depression; ORT = Orientation to life; PO =Powerful Others, C = Chance; I=Internal; QOL = Quality of Life; PH=Physical Health; PSYH= Psychological Health; EN = Environment; SR = Social Relationships.

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

Table 15 shows that social (environmental) support indicators of respect from others, interaction with others and food of choice have significant positive association with depression, but indicators like clean residence and autonomy do not show significant relation with depression. It shows that more the elderly people feel that they are respected by people around them, feel that people around them take time out to conversate with them, and get food of their choice in meals, less depression they experience. Similarly environmental support indicators of respect from others, interaction with others, clean residence, autonomy, and food of choice have significant positive association with QOL.It indicates that more the elderly people feel that they are respected by people around them, have their homes or wherever they are living find those places clean, feel that people around them take time out to conversate with them, can go out freely with their own choice and get food of their choice in meals, more they perceive better QOL. These findings thus provide partial support for Hypothesis 15 of study as social support indicators of clean residence and autonomy do not show significant relation with depression.

Loneliness feelings have significant positive correlation with depression showing that more the elderly feel lonely, more the depression they have. Significant negative correlation is observed between loneliness feeling and QOL, means more the elderly people feel lonely, lower their QOL is. This finding thus provide complete support for hypothesis 16 of study.

One of the objectives of the study was to explore the relation of resistance to care with depression and QOL. Results show that nonsignificant correlation of resistance to care (do not like others help) is achieved with depression and QOL. However an interesting finding is that resistance to care correlate significantly positively with physical health domain of QOL. This shows that the more an elderly person is dissatisfied with his/her physical health, the more he/she likes to take help from others.

Some other interesting findings that are not part of main hypothesis of study are also evident from Table 15. As for as the association of orientation to life with these indicators is concerned, significant positive correlations are observed between orientation to life with respect from others and autonomy. It means that more optimistic the elderly are, more they feel that they are respected by people around them and can go out with their own choice. Other variables like clean residence, interaction with others, loneliness feeling, food of choice and resistance to care have nonsignificant correlation with orientation to life.

LOC also correlate with these indicators. Internal LOC correlates significantly positively with respect from others, interaction with others, autonomy and food of choice. Chance LOC correlate significantly negatively with respect from others and significantly positively with resistance to care. Powerful others correlates significantly negatively with respect from others and food of choice and significantly positively with liking others help dimension as variable related to mental health. It means that more elderly people believe that their life is controlled by powerful others, less they feel being respected and getting food of their choice and more they like to get help from other people.

Group Differences on Study Variables

Group differences were explored on all study variables that is depression, orientation to life, LOC, and QOL, by using ANOVA and Independent sample *t*- test. Purpose of exploring group differences on all study variables was to study the role of demographic characteristics in detail and to explore possible factors that might effect depression.

Differences along education. In order to explore the differences between elderly participants with respect to education on study variables, one way ANOVA was conducted. Participants were divided into illiterate (n = 67), upto matric (n = 139), and above matric (n = 82) groups. For the current analysis, categories of primary, middle and matric level of education were merged in one category of upto matric. Categories of intermediate, graduation and post-graduation were merged in one category of above matric participants. The mean differences between these groups are given in Table 16.

Table 16

Differences along Education on Study Variables ($\dot{N}$ = 292)

Variables	Illiterate (n = 67)	Upto matric (n = 139)	Above matric (n = 82)				95% CI		η^2
	M (SD)	*M (SD)*	*M (SD)*	*F*	(I-J)	Mean Difference (I-J)	UL	LL	
Depression	6.66 (3.90)	5.80 (3.26)	4.79 (3.58)	5.35**	1>3	1.88*	2.09	-.37	.04
Orientation to life	17.89 (4.00)	19.75 (4.22)	19.36 (3.84)	4.79**	2 >1	1.86*	-.43	-3.28	.03
Powerful Others	27.69 (5.14)	28.93 (7.25)	26.90 (5.92)	2.70	N.A				.02
Chance	32.68 (3.77)	34.67 (5.64)	31.54 (6.81)	8.45***	2>1	1.98*	-.00	-3.96	.06
					2>3	3.12*	4.98	1.27	
Internal	30.84 (3.70)	33.85 (4.87)	34.08 (6.09)	9.78***	2>1	3.00*	4.76	1.24	.06
					3>1	3.23*	5.18	1.29	
Quality Of Life	83.96 (12.27)	90.58 (11.88)	91.70 (14.23)	8.12***	2>1	6.62*	11.06	2.18	.05
					3>1	7.74*	12.66	2.82	
Physical	22.02 (4.83)	24.15 (4.23)	25.18 (4.96)	8.98***	2>1	2.13*	3.73	.52	.06
					3>1	3.16*	4.93	1.37	
Psychological	19.53 (3.30)	20.76 (3.65)	21.22 (3.61)	4.42**	2>1	1.23*	2.47	-.02	.03
					3>1	1.69*	3.07	.31	
Environment	25.78 (4.34)	27.58 (4.06)	27.13 (5.46)	3.52*	2>1	1.79*	3.39	.19	.02
Social	9.95 (2.51)	11.00 (1.97)	10.86 (2.22)	5.47**	2>1	1.04*	1.80	.28	.04
					3>1	.91*	1.75	.07	

Note. 1 = Illiterate; 2 =Upto matric; 3 = Above Matric.

***p< .001.**p< .01.*p < .05.

Table 16 reveal statistically significant differences among three groups in relation to depression, orientation to life, internal LOC, overall QOL and its domains, that is environment, physical health, psychological health, social relationships, and overall QOL. In order to study the pairwise comparisons among various groups for these variables, Tukey's post hoc test was applied. The results of pairwise comparisons are given in Table 16. The results of the study show that participants who are illiterate have more depression than literate participants (above matric). Literate participants (upto matric) are more optimistic than illiterate participants. Both group of participants (upto matric and above matric) have more internal LOC, better physical and psychological health, social relationships and overall QOL than illiterate participants. Effect size is small for all variables except chance LOC, internal LOC and physical health where it is medium. These findings thus provide complete support for Hypothesis 11 of current study.

Differences along physical health. In order to explore the differences between elderly people having no disease (n = 104), one disease (n = 134), and more than two diseases (n = 46) in relation to study variables, one way ANOVA was conducted. The mean differences between these groups are given in Table 17.

Table 17

Differences along Physical Health on Study Variables (N = 292)

Variables	No Disease (n = 104)	One Disease (n = 134)	Two or more diseases (n = 46)	F	(I-J)	Mean Difference (I-J)	95% CI		η^2
	M (SD)	*M (SD)*	*M(SD)*				UL	LL	
Depression	4.67 (3.34)	5.93 (3.38)	7.56 (3.87)	7.68***	2>1	1.25*	2.43	0.09	.07
					3>2	1.62*	3.15	0.10	
					3>1	2.88*	4.47	1.30	
Orientation to life	19.23 (3.84)	19.07 (4.35)	19.61 (4.17)	0.62	N.A				.00
Powerful Others	27.27 (5.79)	28.53 (7.26)	28.02 (4.80)	1.90	N.A				.02
Chance	33.05 (5.83)	33.55 (6.14)	33.46 (4.71)	0.18	N.A				.00
Internal	33.26 (5.47)	33.75 (5.01)	31.96 (4.44)	1.46	N.A				.02
Quality Of Life	92.67 (12.06)	88.71 (12.81)	82.75 (12.42)	7.10	1>3	9.92*	15.68	4.16	.07
Physical	25.71 (3.85)	23.55 (4.33)	20.43 (5.40)	16.62***	1>2	2.15*	3.63	0.68	.15
					1>3	5.27*	7.27	3.28	
					2>3	3.11*	5.05	1.19	
Psychological	21.24 (3.55)	20.48 (3.55)	19.48 (3.38)	2.65*	1>3	1.75*	3.40	0.12	.03
Environment	27.15 (4.72)	27.10 (4.59)	26.43 (3.92)	0.40	N.A				.00
Social	11.11 (2.03)	10.65 (2.19)	9.98 (2.45)	3.32*	1>3	1.13*	2.13	0.14	.03

Note. 1 = No disease; 2 = One disease; 3 = Two or more diseases.

***p< .001.**p< .01.*p < .05.

Table 17 reveal statistically significant differences among three groups of participants, that is having one disease, two diseases, and more than two diseases, in relation to depression, physical health, psychological health, social relationships, and overall QOL. In order to study the pairwise comparisons among various groups for these variables, Tukey's post hoc test was applied. The results of pairwise comparisons are given in Table 17. The results of the table show that as the number of diseases participants are suffering from increases, so does their depression level as participants having one disease have more depression than participants having no disease and participants having two diseases have more depression than the ones suffering from one disease. Participants having no disease have better overall QOL than participants having two diseases. Similar is for physical and psychological health and social relationships where participants having greater number of diseases scoreless as compare to participants having less or no disease. Effect size is small for all variables except depression, and QOL where it is medium. These findings thus provide complete support for Hypothesis 13 of current study.

Differences along financial independence. An objective of the present study was to explore the differences between financially dependent and independent elderly participants on study variables, therefore, independent sample *t*- testwas used to compute the differences between these two groups on study variables. Table 17 presents the mean differences between financially independent (n = 171) and dependent (n = 111) elderly participants.

Results in Table 18 show that statistically significant differences are found between two groups of participants with respect to depression, orientation to life, powerful others LOC, and QOL and its domains. Table 18 depicts financially dependent group as being more depressed and having more powerful others LOC as compared to financially independent group. However, financially independent group is more optimistic having better QOL in all domains, that is physical health, psychological health, social relationships, and environment. Effect size is small for all variables except QOL and its domains of psychological health, social relationships, and environment where it is

medium. Nonsignificant differences are found between these two groups on chance and internal LOC. This finding thus provide support for Hypothesis 14 of current study.

Table 18

Differences along Financial Independence on Study Variables (N = 292)

Variables	Financially dependent (*n*= 111)	Financially independent (*n* = 171)			95% CI		Cohen's d
	M (SD)	*M (SD)*	*t(290)*	*p*	*LL*	*UL*	
Depression	6.42 (3.87)	5.14 (3.27)	2.88	.00	.40	2.16	-.36
Orientation to life	18.32 (3.97)	19.88 (4.07)	-3.18	.00	-2.53	-.59	.39
Powerful others	29.04 (5.59)	27.32 (6.79)	2.23	.03	.20	3.24	-.27
Chance	33.86 (5.04)	33.09 (6.10)	1.14	.25	-.55	2.08	-.14
Internal	32.67 (4.74)	33.75 (5.43)	-1.71	.09	-2.32	.17	.21
Quality of life	85.05 (12.03)	92.60 (12.55)	-5.02	.00	-10.51	-4.59	.61
Physical health	23.11 (4.62)	24.58 (4.71)	-2.59	.01	-2.60	-.35	.31
Psychlogical health	19.56 (3.47)	21.39 (3.55)	-4.27	.00	-2.68	-.97	.52
Social relationships	10.10 (2.25)	11.21 (1.97)	-4.24	.00	-1.62	-.59	.53
Environment	25.58 (3.86)	28.12 (4.66)	-4.98	.00	-3.55	-1.54	.58

Note. CI = Confidence Interval; *LL* = Lower Limit; *UL* = Upper Limit.

Differences along marital status. An objective of the present study was to explore the differences between elderly participants with respect to marital status, so for this purpose the four categories of marital status present in demographic sheet, that is married, unmarried, divorced, and widowed were merged to form two categories of participants with partner (*n* = 193) and participants without partner (*n* = 99). This was done to cater the difference of sample distribution in different categories. Then independent sample *t*- test was used to compute the differences between these two groups on study variables. Table 18 presents the mean differences between the two groups with respect to marital status.

Table 19

Differences along Marital Status on Study Variables (N = 292)

Variables	With partner (*n*=193)	Without partner (*n*=99)			95% CI		Cohen's d
	M (SD)	*M (SD)*	*t*(290)	*p*	*LL*	*UL*	
Depression	5.37 (3.54)	6.43 (3.56)	2.40	.02	-1.92	-.19	.34
Orientation to life	19.39 (4.20)	18.71 (3.93)	1.37	.17	-.29	1.66	.18
Powerful others	27.79 (6.84)	28.68(5.58)	1.12	.26	-2.45	.66	.13
Chance	32.78 (5.54)	34.42 (6.18)	2.23	.03	-3.04	-.24	.28
Internal	33.67 (5.17)	32.42 (5.10)	1.96	.04	-.00	2.50	-.24
Quality of life	92.03 (12.69)	83.9 (11.79)	5.25	.00	5.03	1.06	-.65
Physical health	24.79 (4.32)	22.23 (5.00)	4.55	.00	1.45	3.68	-.56
Psychological health	21.26 (3.54)	19.30 (3.39)	4.52	.00	1.10	2.80	-.56
Social relationships	10.95 (2.20)	10.27 (2.11)	2.53	.00	.15	1.19	-.31
Environment	27.69 (4.65)	25.66 (4.16)	3.66	.00	.94	3.12	-.45

Note. CI = Confidence Interval; *LL* = Lower Limit; *UL* = Upper Limit.

Statistically significant differences in Table 19 are found between these two groups with respect to depression, internal and chance LOC, QOL and its domains. Table 18 depicts group with partner as being less depressed and having more internal LOC, and less chance LOC as compared to group without partner. Participants with partner also have better overall QOL in all domains as compared to participants without partner. Effect size is small for all variables except QOL and its domains of physical and psychological health, and environment. Nonsignificant differences are found between these two groups on powerful others LOC, and orientation to life. These findings thus provide partial support for Hypothesis 12 of current study.

Chapter 5

DISCUSSION

Depression is an important cause of disability all over the world (Moussavi et al., 2007). Geriatric depression in particular not only causes suffering and involves suicide risk; it also increases medical comorbity and disability among elderly individuals (Alexopoulos & Kelly, 2009). Depression is the most common psychiatric illness among Pakistani elderly (Bhamani et al., 2013), so in such a context the role of cognitive factors that could protect elderly from developing depression becomes very important. Keeping in mind, the above objective, the present research aimed to assess the role of orientation to life (optimism / pessimism), and locus of control (LOC) as protective cognitive elements for elderly depression because researches conducted in West have identified these factors as being very important for mental well being of individuals (Cozzarelli, 1993; Giltay et al., 2006; Hui, 1996;Yu & Fan, 2014),but not much work has been conducted considering these variables with elderly in Pakistani context. This study also intended to explore the mechanism through which orientation to life, and LOC effect depression by studying the role of quality of life (QOL) as a mediating factor. The present study included elderly residing in two different settings, that is community and old homes, so that the moderating role of place of residence for study variables orientation to life, LOC, and QOL in predicting depression could be studied. The role of socio-demographic variables and some other correlates like lonliness feeling, environmental (social support), and resistence to care with QOL and depression was also explored to get a more holistic view of elderly mental health in indigenuous context.

The present research was a quantitative research using survey method in which data were collected to explore the relationship among study variables as per the objectives of study. As part of present study, Pilot Study was conducted in Phase 1. The results of the Pilot Study showed that all of the scales used in the study were clear and comprehendible by the elderly except the Levenson Internality, Powerful Others, Chance Scale (IPC) scale. This scale was modified in Main Study in terms of language simplicity

and item relevance, to adequately address the phenomena in indigenuous context. After necessary modifications, the scale was considered as fit to be used in Main Study.

Main Study involved hypotheses testing and meeting other objectives of research. For this purpose, data were collected from 300 elderly people through purposive convenient sampling from Rawalpindi, Lahore and Haripur. The results of Main Study showed that the Cronbach's alpha reliability estimates were satisfactory for all the scales/ subscales used in the present study. However, the reliability estimates for Environment domain of WHOQOL- BREF Scale (α= .62) was slightly low. But it was near to the widely accepted cutoff that is α = .60 (Salvia et al., 2010). Item total correlations for the newly modified IPC scale were also calculated which showed significant correlations of all the items with their subscale total, providing proof for the construct validity (Nunnally & Bernstein, 1994) of the modified IPC scale. Its reliability was also good. Descriptives were also estimated which showed normal distribution of the data for all study variables with skewness and kurtosis with in the acceptable ranges of -1 to +1 (Sherehiy, 2008), hence, no issues of normality found in data. Mean for transformed score was low than middle value showing less intensity of depression experienced by participants. The possible reasons can be social desirability element as self-report inventory was used and participants might have controlled their actual experiences. Nonclinical population was targeted so level of depression experienced is low; majority of sample was from community setting belonging to middle class. Mean was high for chance and internal LOC reflecting belief in luck as well as personal capabilities in handling life events. This demonstrates the mutually exclusive relation of internal and external LOC where a person can score high on both types of LOC.

Prevalence of Depression

Descriptives were calculated for prevalence of depression along whole sample, gender, and two different residential settings of old-home and community. It was found that majority of elderly (42.8%) lied in the normal category having no depression. While 7.5% elderly suffered from severe depression. The rest of sample lied in between categories ranging from mild (34.9%) to moderate (14%) depression. Findings from other studies done in Pakistan on elderly population have reported different percentages for

prevalence of depression like 16.5% (Mubeen et al., 2012); 66% (Javed & Mustafa, 2013), and 40.6% (Bhamani et al., 2013). These studies have also used Geriartic Depression Scale (GDS) but not elaborated the prevalence of depression along different categories (mild depression, moderate depression and severe depression), which creates confusion as what cutoff score they using exactly to label the population as depressed. Moreover, the difference between depression prevalence in different studies might also be due to different methodological approaches including different sample sizes and sampling strategies (Beekman et al., 1999; Pirkis et al., 2009). Study by Qadir et al.(2014) also shows this fact as study done on similar elderly population yielded different prevalences of depression (31.5% vs 42.6%)when applied different depression scales that is GDS vs Centre of Epidemiological Studies Depression Scale (CES-D).

The present research also compared prevalence of depression between elderly of old-home and community setting. It was found that 13.79% elderly in old-homes and 4.39% in community setting suffered from severe depression, so being high among old-home residents. Similar findings have been reported in literature (Ghimire et al., 2012; Kanwar & Chadha, 1998; Qadir et al., 2014). Prevalence of depression was also compared along gender. It was found that more men (4.45%) than women (3.08%) suffer from severe depression, although the mean of overall depression is more in women (6.75) than men (5.24). so again demonstrating the fact that depression prevalence varies by category of depression (mild, moderate, and severe) used. These findings have been discussed later on under appropriate headings.

Predictors of Depression

One of the objectives of the present research was to study the predictive role of orientation to life (optimism / pessimism), LOC, and QOL in depression. Gender and place of residence were entered as control variables because the variables of study showed differences along these two factors. In the present study optimism emerged as the negative predictor of depression (see Table 10), so providing support for Hypotheses 1 of study, that is optimism negatively predicts depression among elderly. This shows that as optimism level increases, depression decreases. Consistent findings have been reported in the literature (Giltay et al,2006; Reker, 1997). Reker's (1997) study conducted with

institutionalized and community-residing older adults showed that optimism along with some other variables predicted depression in institutionalized elderly. Giltay et al. (2006) conducted longitudinal study of 15 years to assess the protective effect of dispositional optimism on the development of depression in community-dwelling elderly men. Results showed that dispositional optimism predicted for a lower cumulative incidence of depressive symptoms over 15 years. This makes sense because having a positive future orientation has an important protective effect against mental pathology, specifically depression. It gives a person energy and motivation to invest his potentials to improve things in his/her life. Such a person looks at the bright aspects of his life and even if things are not upto the expectations, one believes that one day things will change for better. Person who sees future as dark and blank has no hopes and suffers from depression.

One of the major symptoms of depression according to DSM 5 are lack of motivation and suicide which results from hopelessness, a construct closely related to pessimism. Pessimism not only precedes depression, but also predicts severity and recovery from depression (Alloy, Lipman, & Abramson, 1992). Beck cognitive theory of depression also regards negative view of the future as an important element that ultimately leads to depression (Beck, 1967). According to Beck theory, negative view of future is one of the elements of negative cognitive triad that is the pathway to depression. Optimism is an important variable in positive psychology as it is not only concerned with the relief of negative state, but the building of positive repertoires in a person (see Seligman, 2002). Expecting your future as having loads of good possibilities and bundles of successes, makes a person to be healthy and happy (Lyubomirsky, 2007). Hence, optimism proves itself as an important protective factor for depression according to the findings of current study and past literature with implications for interventions related to depression.

Role of LOC as predictor of depression was also explored in the current study. Study provides partial support for study Hypothesis 2, that is external LOC (powerful others and chance) positively and internal LOC negatively predicts level of depression. Results show that internal LOC and powerful others LOC emerged as predictors of

depression, but chance LOC did not predict depression (see Table 10). Consistent findings have been reported by the literature (Abu-Bader, Tirmazi, & Sherif, 2011; Harris et al., 2003). Abu-Bader et al.'s (2011) study on convenient sample of 70 immigrant Muslim elderly in United States of America showed that a belief in chance health LOC was not correlated with depression score, whereas a belief in internal health LOC emerged as one of the strongest negative predictors of depression. Haris et al.'s (2003) study of patients aged ≥ 65 years, done in London, showed that disability, physical health, social support, socio-economic factors, and health LOC were all independent depression score predictors in the study. There was a weak positive association between a belief in chance health LOC and higher depression scores. Belief in both internal LOC and powerful others health LOC was strongly associated with lower depression scores. However, in this study, powerful others emerged as negative predictor of depression unlike current study, which meant that more a person believed in powerful others in the form of doctors, less the depression he experienced. However in our study, there is a positive association between two variables. This shows that LOC might be more a situation specific construct and a person may exhibit different LOC in different situations which prompt the need to devise situation specific measures.

The finding that chance LOC did not predict depression in present research show the need to revisit the construct of LOC in indigenuous context, especially, with reference to elderly sample. One of the possible reasons for the nonpredictive role of chance LOC in depression might be that the sample of the present research took fate or luck as God's will. As elderly people are in a stage of their life where many of the circumstances are not in their control, so chance LOC might mean to them to give things in the hand of God. So further studies need to be done as whether chance LOC serve as risk or protective factor of depression for elderly especially in indigenuous context. Role of internal and powerful others LOC as predictors of depression is in line with previous studies cited above. Person who believes he has the control over the outcomes of his actions knows that things can be changed for better by putting effort, as he is the one in control of the consequences of his actions. This sole belief empowers him and is enough to keep him psychologically happy in times of adversities. On the other hand, the belief that person's life is controlled by influential people, without whose consent decisions can not be taken

in life is solely enough for a person to fall in depression. Also the importance of autonomy is evident from this finding of predictive role of internal and powerful others LOC in depression. Elderly people should be treated in a way that makes them feel that they, not others are in charge of their lives. They should be given a free hand to take important and everyday decisions of their lives and provided with an autonomous environment where they can exercise their will regarding meager and major issues relevant to them. The importance of autonomy was also explored in present research through a question that was part of likert type scale present in demographic sheet, that asked elderly people about how much freely they can go out with their own choice. Although the result showed nonsignificant relation of going out freely with own choice and depression, but the reason for nonsignificant result might be that autonomy is a very broad concept that cannot just be adequately measured from dimension of going out freely. So it needs to be explored further as to what kind of autonomy is desirable by elderly of indigenuous society.

Hypothesis 3 that QOL among elderly negatively predicts depression showed that the three domains of QOL, psychological health, social relationships and physical health emerged as strong predictors of depression in combined role whereas environment domain did not predict depression thus providing partial support for study hypothesis. Consistent findings have been reported in literature (Kim et al., 2009; Pawaskar et al., 2007; Yeung et al., 2010). Kim et al.'s (2009) study conducted in Korea revealed perceived health status (which is one of the dimensions of QOL) as a powerful predictor of depression. Similarly, study conducted with type 2 diabetic patients sample ($N = 792$) with age range 65 years or above, showed that poor health related QOL was associated with higher risk of depression in patients (Pawaskar et al., 2007). Another study conducted on Chinese elderly people residing in nursing homes showed that strong support networks (perceived social relationships) as well as high self-esteem (psychological health) reduce the presence of depression (Yeung et al., 2010). These studies demonstrate the significance of one's perception related to physical and psychological health and social relationships in protecting them from depression. The view that the more people are satisfied with their self and their relationships, the less

depressed they are, has been supported by Beck's cognitive theory of depression (Beck, 1967). In present study, however environmental QOL could not demonstrate itself as predictor of depression in combined role. Environmental QOL measured elderly's satisfaction with their environmental aspects like access to medical facilities, transport, recreational facilities, home environment, and oppurtunities for getting new information and skills. Environment did not emerge as predictor of depression in combined role, but had it been alone, it must have predicted depression. In combined role, more important variables take more variance and comparatively less important variables can not emerge as predictors. In current research, factors of physical and psychological health and social relationships emerged as predictors of depression because in old age these factors become more important than anything else. Elderly people suffer from declining physical health, which in turn affect their social relationships and psychological health. In current study, certain other aspects of environmental QOL were also explored through questions that were part of demographic sheet. These questions were about if elderly find their residence clean and get food of their choice and relation of these dimensions with depression. According to findings of this study, clean residence did not show any relation with depression. However getting food of choice showed significant relation with depression which shows the importance of this aspect of environmental QOL in mental health of elderly.

Relationship between Other Study Variables

One of the objectives of the current study was to explore the relationship between orientation to life, LOC, and QOL among elderly. Contrary to past literature, nonsignificant relation of powerful others and chance LOC with QOL was found, although powerful others LOC showed significant relation with QOL in pilot study, but with larger sample, the relation became nonsignificant. On the other hand, internal LOC showed significant relation with QOL consistent with past literature. Research by Mclaughlin, Pachana, and Mcfarland (2010) support the result of present study in which nonsignificant relation of external health LOC was found with health related QOL. However, in current study, powerful others significantly positively correlated with only social relationship domain of QOL.

However, in current study, powerful others significantly positively correlated with only social relationship domain of QOL.

So the present study shows that attributing things to chance LOC has no significant relation with QOL. Earlier, we found that chance LOC could also not demonstrate itself as predictor of depression, so having nonsignificant relations of chance LOC with indicators of mental health like depression and QOL, reflects the need to revisit the construct of LOC, specially chance LOC in indigenuous context. Powerful others dimension of LOC also did not show significant relation with overall score of QOL, but only with social relationship domain of QOL. The significant negative correlation of powerful others LOC with social relationship domain of QOL show that the people who believe their life is controlled by powerful others, become dissatisfied with their social relationships as nobody wants to be driven by others desires, especially at this critical period of life. People in old age economically and physically depend on others, hence, other people take advantage of this dependency and try to steer elderly's life also. This again prompts the need of a supportive and caring social network for the elderly people where they are allowed by others to live the ends of their lives in a dignified and respectable manner without losing their sense of control.

On the other hand, the positive significant relation of internal LOC with QOL is consistent with the past findings (Kostka & Jachimowicz, 2010; Wray et al., 2010).Kostka and Jachimowicz (2010) study conducted study with older participants differing in level of disability and institutionalization which showed that internal health LOC was important and independent correlate of higher QOL in older people. Similarly Wray et al.'s (2010) study done in U.K showed that higher QOL scores were correlated with positive self-concept, an internal LOC and older age. So these findings suggest that the more elderly find they are in control of their lives, or a particular dimension of their life, the more they become satisfied with their lives. Having the control means that the person can mould his life according to his own choice which results in greater satisfaction with in that area of life. Bjorklof et al. (2015) found in their study done on depressed and non-depressed elderly that depressed elderly had external LOC and used less problem

focused coping strategies than non-depressed elderly. So it might be possible that people with internal LOC use problem focused coping strategies which improve their QOL.

The assumption that optimism has positive relationship with QOL was also confirmed. Mishra (2010) found in his research done in India on 426 participants, that optimism, different domains of QOL, and life satisfaction were positively correlated with each other. Results also indicated that, after controlling all demographic variables, optimism significantly predicted life satisfaction and QOL of sample living in urban and rural settings of India. Similarly, Kostka and Jachimowicz (2010) study found significant positive correlation of optimism with QOL. A person who is optimistic has an overall positive outlook on life. He perceives his present and future life in an optimistic manner focusing more on the brighter side of things. Or he/she may adopt problem focused coping strategies to improve things which needs improvement. Optimists view themselves as active agents, feel that their destinies are controlled by themselves (that is internal LOC), and have confidence on their ability to influence their social relationships as well as their environment (Rotter, 1966).As a result they report greater satisfaction with their life and obviously less depression.

Mediating Role of Quality of Life in Predicting Depression

One of the objectives of the present study was to explore the mediating role of QOL for orientation to life and LOC in predicting depression among elderly. In the present study, it was hypothesized that QOL has mediating role for orientation to life in predicting depression (Hypotheses 4). As was hypothesized, QOL emerged as the mediator for orientation to life in predicting depression. Research by Mosher et al. (2006) seem to support this finding. In their research on 133 black college students, they found that social support, a dimension of QOL, mediated the relation between optimism and depressive symptoms. This research was done with adolescents and exploring the mediating role of QOL for orientation to life in predicting depression among elderly, is a unique finding of this research. QOL acting as mediator between optimism and depression highlights the mechanism through which optimism might be playing its role in reducing depression. A person who is optimistic looks at bright side of everything may

that be related to future or his present life. On-ground things may not be upto his/her expectations but he/she develops comfort level with them by accepting ground realities. This flexible behavior may also prompt him to take active steps to change things for better. As a result his QOL might improve or may be its just that he accepts them and become satisfied with whatever he has in life. An optimistic elderly person if not given time by his family, might attribute their behavior to their busy schedule and as a result will hold no grudges for them and will report satisfaction with his relations. This will save him from depression. On the other hand, a pessimistic elderly will attribute the behavior of his family to their non concerned attitude for him. As a result he will report dissatisfaction with his relations and will ultimately suffer from depression. So a person may be optimistic, but if he/she does not perceive good QOL, he will suffer from depression. This highlights the mediating role of QOL between optimism and depression.

QOL proved to be mediating the relation of internal LOC and depression but not for chance LOC and powerful others LOC in mediating depression hence partially confirming Hypothesis 5. Findings show that a person who believes he has control over the outcomes of his actions, becomes more satisfied with his life and its different aspects as he knows that he is not helpless and can change things as per his will by putting effort. For example, an elderly person if suffer from any illness, and if he has internal LOC, will not feel depressed as he knows that he has the cure of disease by consulting the best health care professional, taking medication and precautionary measures. Perceiving QOL positively promotes mental well being and protects one from depression. QOL did not appear to be mediating the relation of both types of external LOC (powerful others and chance) with depression.

Powerful others LOC predict depression according to present study without the mediating role of QOL and chance LOC do not even predict depression according to results of this study. So this shows that an elderly person who believes that life is controlled by influential people, for example his sons, daughter in- law or any other powerful person, may suffer from depression where perceived QOL does not hold any effect, as elderly people find it quite depressing to realize that others are in charge of their lives after enjoying their time period of youthfulness. This challenges their dignity and

autonomy at the same time and this belief is powerful enough to induce depression in them, even without a mediating factor of QOL. This finding is also unique as no study before has explored the mediating role of QOL for internal, powerful others and chance LOC in predicting depression among elderly. The impact of powerful others controlling one's life is also evident from another finding of current study in which depression level between elderly who are economically dependent and independent have been assessed. It is found that economically dependent elderly have high depression level than economically independent elderly. This also shows that how the shift of one's control of life to others, effect mental health and induce depression.

Moderating Role of Place of Residence

The moderating role of place of residence with respect to study variables, that are orientation to life, LOC, and QOL in predicting depression was also explored according to the objectives of study. Assumption related to moderating role for orientation to life in predicting depression (Hypothesis 7) and moderating role for QOL in predicting depression (Hypothesis 9) among elderly got full support as place of residence moderated the relation of orientation to life and QOL with depression. The results of modgraphs for both variables showed that as a person becomes more optimistic and has improved perception of QOL, so does his depression level declines, both in elderly of old homes as well as community settings. However, the decline in depression level of elderly of oldhomes by increasing optimism and QOL, is more sharper as compare to elderly of community settings. After a certain point of intersection, the relationship becomes opposite. Increasing optimism and QOL brings decline in the depression level of elderly participants of community setting at a faster pace than participants of old homes. This actually suggest that interventional strategies of increasing optimism and QOL can be effective in decreasing the depression level of elderly residing in both oldhomes and community settings but for elderly of oldhomes, it is limited to a point. It makes sense also because in an oldhome there are number of other issues as well that continue to effect one's mental health and make one depressed. This include limited autonomy, lonliness, lack of privacy (Choi, Ransom & Wyllie, 2008), etcwhich have a very pronounced effect on their depression level making the effect of cognitive and behavioral

interventional strategies of increasing optimism and QOL limited. This also shows that home setting is best to combat mental health of elderly if focus of interventions in home setting would be to inculcate optimism and promote better QOL, thus reducing depressed mood in elderly.

Place of residence did not act as a moderator of the relation of LOC (Internal, Powerful Others and Chance) in predicting depression as was hypothesized (Hypotheses 8). Also in current study it was found that the participants of old home and community setting differed on powerful others and chance LOC, but no difference was seen on internal LOC.This again points towards the need to revisit the theory of LOC for elderly of indigenuous context. So place of residence acting as moderator of orientation to life and QOL but not of LOC with depression provides partial support for study hypotheses.

Differences on Study Variables along Place of Residence

The present study also made a comparison between elderly residents of old homes and community settings on study variables, that are depression, orientation to life, LOC and QOL. The results achieved provided full support for study Hypotheses 6 that is participants of old homes have more depression, external LOC and lower QOL than participants of community settings. Consistent findings have been reported in literature (Kanwar & Chadha, 1998;Mathew et al., 2009; Srivastava & Swetha, 2002). Elderly in old homes live in an alien environment deprived of their intimate relations and the care and love that can be found in the environment of their own homes. Research by Zafar et al. (2006) also indicates that when living arrangement of elderly is changed, it has an effect on their mental, physical and social well-being. Elderly of old-homes are also deprived of the autonomy that one can find in the four walls of one's home.Study found that institutionalized residents did not get the opportunity to make choices, there was a feeling of loss of control, and helplessness. Some did not value themselves since they were not offered decision making opportunities and they lacked autonomy.(Andresen, Runge, Hoff &, Puggaard, 2009).Choi et al. (2008) also found in their study that institutionalized elderly residents felt isolated and lonely, had few or no visitors. They felt trapped or stuck in institution; they also experienced loss of independence and

freedom due to being under institutional regime and regulation which resulted to lack of autonomy. They may not find intimate relations with whom they can share their deep sorrows and happiness. The family has been consistently reported to be a source of strength and security for the elderly in providing them with social, financial, and emotional support(Kramer, Kwong, Lee, & Chung, 2002) which is associated with their well-being. Therefore it is not surprising that study participants who were residents of old homes reported higher rates of depression perhaps attributable to their feeling of isolation from their families (Cano et al., 2003). All of these factors also contribute to their lower perception of QOL and more external LOC (powerful others and chance LOC) as compared to participants of community settings as found in current study.

There was, however, no significant difference found in elderly of both settings with respect to their internal LOC. The finding is in contrast to the finding of Grain (2001). He conducted research on homebound and nursing home elderly to find out differences in their sense of control and life satisfaction. Results showed that there was statistically significant difference between the sense of control of elderly of two different settings with homebound elderly showing higher perceived control than nursing home residents. However, no difference on internal LOC, but presence of difference on external LOC between participants of oldhomes and community settings show that internal and external LOC are not two opposite poles of a single continuum, rather these are two independent dimensions. According to Levenson (1974), internal and external LOC should not be treated as mutually exclusive dimensions. A person may be scoring higher or lower on both LOC at the same time. or as in current study, the participants showed differences on external LOC, but not on internal LOC along place of residence. Difference on orientation to life was also explored according to the objective of study. No difference in the orientation to life of elderly of both settings was found. The possible reason can be that as orientation to life is more related to future expectencies and depends more on the perceptions and cognitions, a person who is optimistic is always hopeful regardless of the circumstances he is living in. That is why residential setting showed no role in optimism level of elderly. The mediating role of QOL is also evident from this finding. Despite that there is no difference in the optimism level of elderly of both

settings, but still the participants of old homes have high depression level than community residents. This shows that optimism does not directly effect depression but indirectly through other factors like QOL, a possible mechanism explored in present study. Exploring differences between elderly people of oldhomes and community settings with respect to LOC and orientation to life is a valuable addition to literature by current study due to scarcity of work done on it.

Differences on Study Variables along Socio-demographic and Mental Health Variables

Hypotheses 10 that women score high on depression and low on QOL, internal LOC, and optimism among elderly was partially supported as female elderly scored higher on depression and low on QOL and LOC, but not on optimism. Consistent findings have been reported by literature (Abbasimoghadam et al., 2009; Gibson et al.,2013; Morowatisharifabad et al., 2010; Orfila et al., 2006; Shittu et al., 2014; Wehmeyer, 1993). Studies of Gibson et al. (2013) and Shittu et al. (2014) done on sample of elderly people and on patients in an outpatient clinic, respectively, revealed that women scored higher on depression than men. Depression being more prevalent in women than men can be attributed to the different cultural and societal roles, norms, experiences, and expectations that women have to fulfill and face (Shittu et al., 2014). They are more sensitive than men and specially in a male dominated society like Pakistan, find restricted channels to express themselves. They enjoy limited autonomy which is further limited in the elderly age group that makes them to be more prone to depression as compared to men.

Women also have low QOL as compared to men as supported by our study and past studies conducted by Abbasimoghadam et al. (2009) and Orfila et al. (2006) on elderly sample. Again this can be attributed to the societal and cultural experiences and expectations from women (Arber & Ginn, 1991). Women have additional responsibilities and less health and other facilities than men offered by society. This results in the deterioration of their physical and psychological health at a faster pace than men. Due to their sensitive nature and restricted autonomy, they are also prone to experience less

satisfied relationships and enjoy few environmental facilities than men. That is why they report dissatisfaction with the different aspects of their life. Another finding of the present study was that men had more internal LOC than women. Studies conducted in past(Morowatisharifabad et al., 2010; Wehmeyer, 1993) also report high internal LOC of men than women. In all societies, societal norms seem to be stacked against women. Men are taught to rely on their abilities and are taught as independent and powerful. Women on the other hand are seen as weak and learn to rely on men (Horney, 1967). These differences in sex roles bring changes in their personality traits as well inculcating internal LOC in men, while external LOC in women.

The present study, however, found no support for the presence of high optimism in men than women. This finding is consistent with the finding of Mazanec, Daly, Douglas, and Lipson (2010). The authors found in their study on newly diagnosed cancer patients, that there was no difference between the two genders in terms of optimism. While the finding of current study is in contrast with the findings of Puskar et al. (2010) and Mahasneh et al., (2013) who did research on adolescents, where boys scored higher than girls on optimism. With respect to elderly sample, Singh and Shukla (2014) research on institutionalized elderly men and women revealed that women were more optimistic as compared to men. So it is suggested to conduct further studies on orientation to life and gender relation in elderly sample as optimism may hold different meaning for elderly at this stage of life. They may have more of death and dying anxiety which may be similar for both genders or otherwise thus needs to be explored through in-depth qualitative interviews.

Hyypotheses 11 that participants having low level of education score high on depression, and low on QOL, optimism, and internal LOC got complete support. Past findings (Abbasimoghadam et al., 2009; Kumar & Majumdar, 2014; Morowatisharifabad et al., 2010; Pandit et al., 2013;Schieman, 2001; Shittu et al., 2014) also support findings of current study. Shittu et al. (2014) and Pandit et al. (2013) both found in their studies that depression was more prevalent among the uneducated than educated people. On the other hand, past findings by Abbasimoghadam et al. (2009) and Kumar and Majumdar (2014) both show that uneducated people report lower QOL than educated people. Higher

education is linked to less depressive symptoms and better QOL may be because more education leads to better job opportunities and better financial conditions than uneducated ones. This enables educated people to avail better facilities of health treatment, housing, diet, entertainment, etc. making their life easy and protecting them from severe problems faced by uneducated people that leads to deterioration of their mental health and they report dissatisfaction with their life(Verma, Lin, Chakravarthy, Barua, & Kar, 2014). Education also broadens a person's horizon and he is able to employ better problem solving techniques in times of adversities that protect him from depression and increases his satisfaction level with different life facets (Akhtar, Khan, Vaidhyanathan, Chhabra, & Kannan, 2013).

Present study also found that more educated participants had an internal LOC and were more optimistic than uneducated ones. This finding is consistent with past findings (Mahasneh et al., 2013;Morowatisharifabad et al., 2010; Schieman, 2001). A person who is educated has confidence on his abilities to make difference in his life by putting effort accordingly. In other words, he considers himself to be controlling his destiny and not vice versa. This makes him more optimistic also than uneducated person having the confidence and looking at brighter side of things.

In the present study, it was hypothesized that participants who have single marital status score high on depression, and low on QOL, and optimism as compared to married participants (Hypotheses 12). Partial support for study hypothesis was achieved as participants who were single scored high on depression and low on QOL, but not on optimism. Consistent findings have been reported in literature (Kamran, 2014; Kumar & Majumdar, 2014; Pandit et al., 2013; Yan et al., 2011). Elderly people need practical and emotional support at this age and who can be a better supporter of a person than his spouse who understands all his needs and emotions. So not having a partner at this age either as a result of spousal bereavement or remaining unmarried makes an elderly person very lonely at this age making him vulnerable to depression and lowering his perceived QOL. Regarding optimism, no differences were found between single and married participants. Study of Kamran (2014) done on renal transplant patients also demonstrated no difference on optimism between single and people in a relationship. Previously in this

study it is seen that there is also no difference between men and women on optimism which reflects the need to explore indepth how elderly people view orientation to life at this age as majority of researches done to explore relation of optimism with marital status has been done on samples other than elderly.

Hypotheses 13 that participants having more physical health problems score high on depression and low on QOL as compared to participants who have no or less physical health problems received full support. Some of the past researches support the result of present study (Abbasimoghadam, et al., 2009; Kumar & Majumdar, 2014; Peltzer & Mafuya, 2013; Rodic et al., 2015). Link between physical and psychological health is quite evident as people who are physically unhealthy feel more psychologically distressed as compared to healthy people. They cannot enjoy life to its fullest because of their health condition, may experience impaired relationships and pain associated with the disease depending on its severity level. This relation can work the other way as well as increased depression in a person can contribute to the deterioration of his physical health and he may start suffering from many physical diseases (Trivedi, 2004). So it is very rightly said that a healthy body produces a healthy mind. People who are physically unhealthy as a result report lower QOL as well, as they are dissatisfied with their life in terms of physical health, psychological health, social relationships and environment facilities.

In the present study, it was hypothesized that participants who are financially dependent score high on depression as compared to participants who are financially independent (Hypotheses 14). Consistent findings have been found in literature (Pandit et al., 2013; Udayar et al., 2014). Both of these studies were conducted with elderly sample where a high prevalence of depression was found in economically dependent people. An elderly who is financially dependent may suffer from depression due to loss of dominant and influential status in the family that he enjoyed before as he was earning for the family and was at giving end than receiving. He may also report low QOL as he is not able to fulfill his needs due to lack of money which further contributes to his depression. People around him may make him feel a burden on themselves rejecting the fact that it was he who spent his whole life to provide them with facilities for survival.

Present study also hypothesized that social (environmental) support indicators correlate positively with QOL and negatively with depression (Hypotheses 15). Partial support for study hypotheses was achieved as social (environmental) support indicators of respect from others, interaction with others, and food of choice showed significant negative association with depression, but indicators like clean residence and going out freely did not show significant relation with depression. Similarly, social support indicators of respect from others, interaction with others, clean residence, go out freely, and food of choice showed significant positive association with QOL. Past researches also appear to support this result (Gureje et al., 2008;Koizumi et al., 2005; Yadav, 2010).

Particularly these factors have been chosen in present research because literature shows the importance of these factors in mental health of elderly. Getting respect from others is one of these factors. A survey of long-term care facilities found that what elderly residents needed most was in fact respect. Respect was a key factor that determined their QOL (Mansfield, Ejas, & Werner, 2000). Palmore and Maeda (1985) identified different forms of respect that are important for elderly. These forms were later on explored and confirmed by other researchers also (Dayton & Saengtienchai, 1999). Some aspects of these forms were explored in present research. Clean residence, and others spending time with elderly (interaction with others) are two aspects of "care respect", a particular form of respect, while elderly getting food of choice is part of "victual respect" which is another form of respect. The importance of good diet for physical and mental health is a well researched area. Prolonged periods of nutritional and certain vitamin deficiencies bring about fatigue, tiredness, and chronic depression. Food plays a part in the QOL of a person by reducing his depressive mood and improving his emotional status (Bulut, 2009). An elderly person who has a supportive network around him that provides him with practical support as well as emotional support contributes to the positive mental health of elderly. As we can see from the results of this study that practical support in the form of getting food of their choice in diet and emotional support in the form of people around an elderly person giving him respect, taking time out to talk to him, lessens his depression. Such an elderly person is even if facing any physical health problems that are inevitable in this age, can still be happier and satisfied with his life as he knows that there

are people in the world who care for him and would continue to help him in times of need.

Autonomy is another important factor that has been shown by literature to be important for elderly mental health. Lack of control in life has a negative impact on the physical and mental health of a person and elderly people, even if physically weak at their old age, enjoy autonomy, it will contribute positively to their wellbeing (Johannesen, Petersen, & Avlund, 2004). However autonomy to go out of home with own choice did not prove to be significant enough to impact the depression level of elderly according to present study results. May be, autonomy in other areas of life is more important to impact the mental health of elderly, so further studies need to be done to evaluate the importance of autonomy for elderly of indigenuous culture. All of these environmental (social) support indicators also significantly positively correlated with QOL of elderly in this study apart from depression highlighting the importance of these factors for the increased satisfaction from life for elderly.

Hypothesis 16 that loneliness feeling correlate positively with depression and negatively with QOL received complete support. Consistent findings have been reported in literature (Singh & Misra, 2009; Singh & Srivastava, 2014; Smith et al., 2004). The circumstances that old people face in old age like spousal death, problems in mobility due to physical health, lack of communication between older and younger generation, and reduction in community's cohesiveness in a modernized world of today, may isolate an elderly person sociall leading to the increased feeling of lonliness among elderly people. Lonliness deprives an elderly from the practical and emotional support that an elderly requires. This may cause psychological distress in him, making him vulnerable to depression and making him dissatisfied with his life in terms of his physical and psychological health, social relationships, and environment in general.

The last objective of the study was to explore attitude of resistence to care among elderly in relation to depression and QOL. Study found nonsignificant relation of resistence to care with depression and QOL. No study has been done to the best knowledge of researcher in the past in which relation of resistence to care with depression

has been explored. However, the finding of current study is in contrast with the past finding of Potts et al. (1996) in which resistence to care behavior was found to have strong negative influence on elderly's QOL. Resistance to care behavior of elderly can be attributed to their fear of dependency and studies show that the fear of dependency could be greater than the fear of pain (Clark & Seymour, 1999). Resistence to care behavior can also be explained in the light of equity theory (Adams, 1963). Equity theory proposes that people in a relationship express their dissatisfaction with that relationship and feel distressed, if they find that they are either under-rewarded or over-rewarded in a relationship. So in order to reduce this distress, they attempt to bring balance into the relationship. So the resistant behavior of elderly can be attributed to their over dependency on others and arising as a reaction of it. The present study however found no support for the relation of resistence to care with depression and QOL. One of the possible reasons might be that the question in the current study " Do you like that others help you?' to assess resistence to care might be too broad and it needs to be narrowed down by asking elderly about seeking help regarding different areas and particular chores. Secondly, the element of social desirability might be there as most of the elderly reported that they do not like others help and like to take care of themselves.

Conclusion

The prevalence rate of severe depression was found to be 7.5% in total elderly population residing in old homes and community settings. Personal cognitions and perceptions have an important role in depression which is a common mental health problem among elderly in the light of Beck's cognitive theory of depression and social learning theory of Rotter. Orientation to life, LOC (internal and powerful others), and QOL emerged in the present research as significant predictors of depression, although chance LOC could not demonstrate itself as significant depression predictor in combined role. QOL was found to be a mediator through which orientation to life and internal LOC predict depression. However, powerful others LOC predicted depression directly without mediating role of QOL. Moderating role of place of residence (old home or community) in orientation to life, LOC, and QOL in predicting depression was also investigated with place of residence emerging as the moderator of the relation of orientation to life and

QOL in predicting depression, but not as the moderator in the relation of LOC (internal, powerful others and chance) in predicting depression. Internal and external LOC emerged as two independent dimensions of LOC instead of being opposite poles of single continuum so rejecting the mutually exclusive relation of these two constructs. Elderly residents of old homes showed more depression, lower perceived QOL and more external LOC than residents of community settings. Elderly women had more depression and lower perceived QOL and internal LOC than elderly men.Elderly having lowerlevel of education showed more depression and lower perceived QOL, optimism and internal LOC than elderly having comparatively higher education. Single elderly showedmore depression and lower perceived QOL than elderly having partner.More the physical health problems elderly had, higher the depression and lower the perceived QOL they showed. Elderly who were economically dependent had more depression as compared to elderly who were economically independent. More the elderly felt that people around them respect them,interact with them and give them their food of choice, better the perceived QOL and less the depression they experienced. Also better QOL was perceived by elderly if they found their residential area clean and had autonomy to go out with their own choice without any restriction. Elderly also had more depression and lowerQOL if they experienced loneliness in their lives.

So the significant findings of the study can be illustrated in the form of final model as follows.

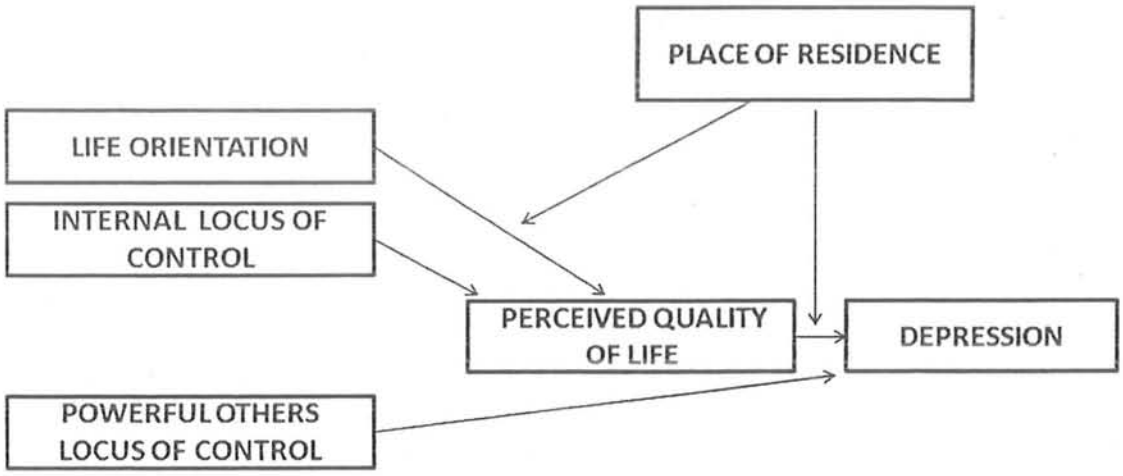

Figure 5: Model of Relationship between Orientation to life, LOC, QOL and Depression with Place of residence as moderator

Implications

The present study highlights the role of personal cognitions and perceptions related to orientation to life, LOC, and QOL as protective factors against depression in old people. As these are thoughts that ultimately effect feelings (depression), and behavior, so these cognitions can be modified through interventions to improve the mental health of old people by employing cognitive approach or strategies of positive psychology. Cognitive behavioral therapies are considered very effective for the older people because of the fact that they are focused on "here and now", so individuals current stressors are identified and targeted. Also individuals are taught different skills of how to cope with their stressors. Expanding psycho-education courses to include strategies for enhancing and maintaining a sense of personal control and optimistic orientation to life can be very beneficial for elderly population of indigenuous context. This study also demonstrates that improvement in environmental and social conditions of elderly can prove to be very fruitful as it determine their attitude and orientations about present and future life and preserve their sense of control.The different dimensions of social support influencing depression and QOL emerging in the present research highlight the role of supportive social and family network for mental health of elderly. Elderly getting emotional support in the form of respect from people around them, others spending

quality time with elderly and giving them practical support in the form of clean residential places and getting food of their choice in meal are some of the significant factors that protects them from depression and/or improves their perception of their QOL. So the social network around elderly is required to play their part. However engaging family members in interventions would be a difficult task, so the emphasis of interventionsbe more on the modification of elderly's cognitions that could facilitate them in developing sound mental health. Also at the national level, elderly needs to be provided with the best health care system by the government which is affordable and efficient at the same time, as physical health of elderly also contributes to their deteriorating mental health. On the other hand, psychologically healthy elderly would reduce the burden of elderly suffering from physical illnesses from the health care system and ultimately reducing health care costs of country's economy and proving to be beneficial members of society. Also elderly of our society needs to be cared for within the walls of their home settings. This is the responsibility of younger generation to take care of them and not to relocate them to institutional settings where they are deprived of the intimacy, love, and care of their own family members with whom they spent their life time.

Limitations and Suggestions

1. Scale of LOC should be further validated in cultural context through confirmatory factor analysis (CFA). Concept of LOC needs to be revisited for elderly population especially in indigenuous culture as the concept may hold different meaning for elderly. New scales for LOC should be devised based on indigenuous elderly population concept of the construct. Instead of generalized measures of LOC, more specific measures measuring LOC in specific areas will yield more accurate reflection of the construct.
2. Present study utilized self-report measure for depression symptoms rather than a proper depression diagnoses for identifying potentially depressed respondents. Although GDS has been found in many cultures to reliably predicts depression, but it does not confirm the presence of a depressive disorder. As GDS does not confirm the presence of a depressive disorder, therefore proper protocol for

screening must be utilized. Psychiatric individuals require more elaborate tools to generate accurate and meaningful diagnostic data.

3. Present research employed structured interview format for data collection which resulted in inadequate address to the different shades of likert response format of the questionnaires.Participants fill questionnaires by themselves is a better way to address this issue.
4. Data was collected from mainly middle class of society which made it impossible to assess and compare the study variables across wide segments of society. So in future more diverse samples should be employed.
5. The sample size of elderly from old homes is small as compared to elderly of community settings, so the generalizability of the results of comparison between the participants from two settings on study variables is reduced. Future research should try to employ equal samples from old homes and community settings so that findings can be generalized safely.
6. According to researchers, LOC should be viewed as a continuous variable, which implies that an individual's LOC may change between different situations. So longitudinal studies can be conducted to assess the difference in LOC across time and situations.
7. More research needs to be done on the mediating role of QOL and particularly which facets of QOL mediate the relation of these cognitive factors and depression.
8. Constructs of orientation to life and LOC of elderly should be explored in depth through qualitative studies to get a better knowledge of how these constructs are viewed by elderly of indigenuous context.
9. Resistence to care and its relation to depression and QOL is an under researched area which needs to be probed.
10. The concept and importance of autonomy should be explored in indigenuous context with respect to elderly sample through indepth interviews.

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APPENDICES

APPENDIX A

اجازت نامہ

میں شاہستہ قومی ادارہ نفسیات، قائداعظم یونیورسٹی اسلام آباد میں ایم فل کی طالبہ ہوں یہ ایک تعلیمی اور تحقیقی ادارہ ہے جو مختلف نفسیاتی اور سماجی موضوعات پر تحقیق کا کام کرتا ہے۔ میری موجودہ تحقیق کا مقصد بڑھاپے میں لوگوں کی زندگی اور ان کی جسمانی اور نفسیاتی صحت کے بارے میں جاننا ہے۔ یہ تحقیق میری ایم فل کی ڈگری کا حصہ ہے گی۔

اس سلسلے میں آپ کو چند سوالوں پر مبنی ایک کتابچہ دیا جا رہا ہے۔ سوالنامے کے ہر حصے میں دیئے گئے بیانات کو غور سے پڑھیں اور جواب آپ کی سوچ اور ذاتی تجربے سے مطابقت رکھتا ہو اس پر صحیح کا نشان لگائیں۔ اس سوالنامے میں صحیح اور غلط جواب کا کوئی تصور نہیں ہے۔ یہ صرف آپ کی زندگی اور جسمانی و نفسیاتی صحت سے متعلق آپ کی رائے کا اظہار ہے۔ آپ سے درخواست ہے کہ تمام جوابات ایمانداری سے دیں اور یقینی بنائیں کہ آپ نے ہر سوال کا جواب دیا ہے۔

آپ کو اس بات کی یقین دہانی کرائی جاتی ہے کہ آپ کی رائے کو صرف تحقیقی مقصد کے لیے استعمال کیا جائے گا۔ اور مکمل طور پر خفیہ راز میں رکھا جائے گا۔ اگر آپ اس تحقیق میں حصہ لینا چاہتے ہیں تو نیچے دی گئی جگہ پر دستخط کریں۔ اگر کسی بھی موقع پر آپ اس تحقیق کا حصہ بننے سے انکار کرنا چاہیں تو یہ حق آپ کو مکمل طور پر حاصل رہے گا۔

میں بطور محقق آپ کی مدد کی بے حد شکر گزار رہوں گی۔

دستخط

منجانب:

محقق: شاہستہ

قومی ادارہ نفسیات قائداعظم یونیورسٹی اسلام آباد

APPENDIX B

ذاتی کوائف

نام: ---------- عمر: ----------

جنس: (مرد / عورت) ---------- تعلیمی قابلیت ----------

مذہب: ---------- کیا آپ پیشہ وارانہ امور سے ریٹائرڈ زندگی گزار رہے ہیں؟ --------

آپ کا پیشہ کیا تھا/ کیا ہے؟ ---------- خاندانی نظام: (انفرادی ------- مشترکہ -------)

اگر مشترکہ ہے تو کس کے ساتھ رہتی ہیں/ رہتے ہیں ----- آپ معاشی طور پر: (پیسے کے لحاظ سے) خود کفیل ہیں؟ --------

اگر معاشی طور خود کفیل نہیں ہیں تو کس پر انحصار کرتے ہیں؟ --------

آپ کے خیال میں آپ پاکستان کے کس طبقے سے تعلق رکھتے ہیں؟

نچلا طبقہ ------- درمیانہ طبقہ ------- اونچا طبقہ ------- خاندان کی ماہانہ آمدنی؟ --------

ازدواجی حیثیت:

شادی شدہ ------- غیر شادی شدہ ------- طلاق یافتہ ------- بیوہ / رنڈوا -------

بچوں کی تعداد ------- (جن میں سے):

شادی شدہ ------- غیر شادی شدہ ------- پوتے / پوتیاں ------- نواسے / نواسیاں -------

کوئی جسمانی بیماری / بیماریاں جو آپ کو لاحق ہوں؟ -------

اگر کوئی جسمانی بیماری ہے تو کتنے عرصے سے؟ -------

کوئی نفسیاتی یا ذہنی بیماری / بیماریاں جو آپ کو لاحق ہوں یا ڈاکٹر سے تشخیص کی ہوں؟ _____

اگر کوئی نفسیاتی یا ذہنی بیماری ہے تو کتنے عرصے سے؟ _____

آپ کے شوہر / بچوں کو لاحق کوئی دائمی مرض / بیماری؟ _____

جسمانی اور فزیکل کوئی دائمی بیماری یا نفسیاتی مرض؟ _____

کیا گزشتہ 6 ماہ کے دوران آپ کے کسی قریبی عزیز / رشتہ دار کی فوتگی ہوئی ہے؟ _____

کیا آپ کوئی نشہ آور چیز مثلاً سگریٹ / حقہ وغیرہ استعمال کرتے ہیں؟ ہاں _____ نہیں _____

فارغ اوقات میں آپ کیا کرتے ہیں؟ _____

کیا آپ کے ارد گرد موجود لوگ آپ سے عزت و احترام سے پیش آتے ہیں؟	بالکل نہیں	معمولی	درمیانہ سا	ہاں بہت زیادہ	بہت ہی زیادہ
کیا آپ کی رہائش کی جگہ آپ کی مرضی کے مطابق صاف ستھری ہوتی ہے؟					
آپ کے ارد گرد کے لوگ آپ سے بات چیت اور گپ شپ کے لیے وقت نکالتے ہیں؟					
کیا آپ اکیلا پن محسوس کرتے ہیں؟					
کیا آپ اپنی مرضی سے باہر آجا سکتے ہیں؟					
کیا آپ کو کھانا پینا آپ کی مرضی کے مطابق ملتا ہے؟					
آپ کس حد تک دوسروں کی مدد لینا پسند کرتے ہیں۔					

کچھ اور خاص بات جو آپ کہنا چاہتے ہوں؟ _____

GERIARTIC DEPRESSION SCALE

APPENDIX C

اُس جواب کے سامنے نشان لگائیں جو آپ کے گزرے ہوئے ہفتے کو بہتر طور پر بیان کرے۔

نمبر شمار	سوالات	ہاں	نہیں
1	کیا آپ اپنی زندگی سے بنیادی طور پر خوش ہیں؟		
2	کیا آپ نے اپنے کئی کام اور مشاغل ترک کر دیئے ہیں؟		
3	کیا آپ سمجھتے ہیں کہ آپ کی زندگی خالی ہے؟		
4	کیا آپ اکثر اکتا جاتے ہیں؟		
5	کیا آپ زیادہ تر وقت پُر امید رہتے ہیں؟		
6	کیا آپ کو اپنے ساتھ کچھ برا ہونے کا خدشہ ہوتا ہے؟		
7	کیا آپ زیادہ تر وقت خوش رہتے ہیں؟		
8	کیا آپ اکثر لاچار محسوس کرتے ہیں؟		
9	کیا آپ باہر جا کر نئے کام کرنے کی بجائے گھر پر رہنا پسند کرتے ہیں؟		
10	کیا آپ سمجھتے ہیں کہ آپ کو یادداشت کے ساتھ مسئلہ باقی لوگوں سے زیادہ ہے؟		
11	کیا آپ سمجھتے ہیں کہ آپ کی زندگی بہترین ہے؟		
12	کیا آپ اپنی موجودہ حالت میں اپنے آپ کو بے قدر سمجھتے ہیں؟		
13	کیا آپ خود کو توانائی سے بھرپور محسوس کرتے ہیں؟		
14	کیا آپ سمجھتے ہیں کہ آپ کو موجودہ حالات میں امید نہیں؟		
15	کیا آپ سمجھتے ہیں کہ زیادہ تر لوگوں کی زندگی آپ سے بہتر ہے؟		

APPENDIX D

WORLD HEALTH ORGANIZATION QUALITY OF LIFE (WHOQOL-BREF) SCALE

ہدایات:

اس سوالنامہ میں آپ کی زندگی کے معیار، صحت اور زندگی کے دیگر پہلوؤں کے بارے میں پوچھا جائے گا۔ براہ مہربانی آپ تمام سوالات کے جواب دیں۔ اگر آپ کسی سوال کے جواب کے بارے میں یقینی طور پر کچھ نہیں کہہ سکتے تو سب سے مناسب جواب کا چناؤ کریں۔ عموماً یہ وہ جواب ہوسکتا ہے جو کہ آپ کے ذہن میں سب سے پہلے آئے۔ آپ سے گزارش ہے کہ اپنے ذاتی معیار، اُمیدیں، خوشیاں اور خدشات ذہن میں رکھیں۔ سوالات دیتے وقت پچھلے دو ہفتوں کی زندگی کو ذہن میں رکھیں۔

مثلاً

کیا آپ کو دوسروں کی ایسی مدد حاصل ہے جو آپ چاہتے ہوں؟

بالکل نہیں	تھوڑی بہت	درمیانی حد تک	بہت زیادہ	بہت ہی زیادہ
1	2	3	4	5

اگر پچھلے دو ہفتوں سے آپ کو دوسروں کی بہت زیادہ مدد حاصل رہی ہو تو آپ نمبر 4 پر دائرہ لگا سکتے ہیں۔
لیکن اگر پچھلے دو ہفتوں سے آپ کو دوسروں کی مدد بالکل بھی نہیں ملی تو آپ نمبر 1 پر دائرہ لگا سکتے ہیں۔

آپ سے گزارش ہے کہ ہر سوال کو غور سے پڑھیں اور اپنے احساسات کا جائزہ لیں اور پھر اُس نمبر پر دائرہ لگائیں جو آپ کے احساسات کو بہتر طور پر ظاہر کرتا ہو۔

1	آپ اپنے معیارِ زندگی کو کس درجہ کا محسوس کرتے ہیں	بہت برا 1	برا 2	نہ اچھا نہ برا 3	اچھا 4	بہت اچھا 5
2	آپ اپنی صحت سے کس حد تک مطمئن ہیں۔	بہت غیر مطمئن 1	غیر مطمئن 2	نہ مطمئن نہ غیر مطمئن 3	مطمئن 4	بہت مطمئن 5

مندرجہ ذیل سوالات میں آپ سے کچھ مخصوص چیزوں کے بارے میں پوچھا جائے گا کہ ان سے آپ کا پچھلے دو ہفتوں میں کس حد تک تجربہ ہوا ہے۔

نمبر شمار	بیانات	بالکل نہیں	تھوڑا بہت	درمیانی حد تک	بہت زیادہ	بہت ہی زیادہ
3	آپ کس حد تک محسوس کرتے ہیں کہ جسمانی درد آپ کے لیے وہ کام کرنے میں رکاوٹ بنتا ہے جس کا کرنا آپ کے لیے ضروری ہوتا ہے۔	1	2	3	4	5

نمبر شمار	بیانات	بالکل نہیں	تھوڑا بہت	درمیانی حد تک	بہت زیادہ	بہت زیادہ
4	روزمرہ کاموں کی ادائیگی کے لیے آپ کو کس حد تک طبی علاج کی ضرورت پڑتی ہے۔	1	2	3	4	5
5	آپ کس حد تک اپنی زندگی سے لطف اندوز ہوتے ہیں۔	1	2	3	4	5
6	آپ کس حد تک اپنی زندگی کو بامعنی محسوس کرتے ہیں۔	1	2	3	4	5
7	آپ کس حد تک اپنے آپ کو توجہ مرکوز کرنے کے قابل سمجھتے ہیں۔	1	2	3	4	5
8	آپ روزمرہ زندگی میں اپنے آپ کو کس حد تک محفوظ تصور کرتے ہیں۔	1	2	3	4	5
9	آپ کے اردگرد کا طبعی ماحول کس حد تک صحت مندانہ ہے۔	1	2	3	4	5
10	کیا آپ روزمرہ زندگی کے لیے مناسب توانائی محسوس کرتے ہیں۔	1	2	3	4	5
11	کیا آپ کے لیے اپنی ظاہری جسمانی شکل وصورت قابل قبول ہے۔	1	2	3	4	5
12	کیا آپ کے پاس اپنی ضروریات پوری کرنے کے لیے مناسب پیسہ موجود ہے۔	1	2	3	4	5
13	آپ کو روزمرہ زندگی گزارنے سے متعلق کتنی ضروری معلومات دستیاب ہیں۔	1	2	3	4	5
14	آپ کو بیہ بتفریح کے مواقع کس حد تک میسر ہیں۔	1	2	3	4	5
15	آپ اپنے اردگرد جسمانی طور پر کس حد تک چلنے پھرنے کے قابل ہیں۔	1	2	3	4	5

مندرجہ ذیل سوالات میں آپ سے پوچھا گیا ہے کہ پچھلے دو ہفتوں سے آپ نے اپنے زندگی کے مختلف پہلوؤں کے حوالے سے کس قدر اچھا یا مطمئن محسوس کیا۔

نمبر شمار	بیانات	انتہائی غیر مطمئن	غیر مطمئن	نہ مطمئن نہ غیر مطمئن	مطمئن	انتہائی مطمئن
16	آپ اپنی نیند سے کس حد تک مطمئن ہیں	1	2	3	4	5
17	آپ اپنی روزمرہ کام سرانجام دینے کی صلاحیت سے کس حد تک مطمئن ہیں۔	1	2	3	4	5
18	آپ اپنی کام کرنے کی صلاحیت سے کس حد تک مطمئن ہیں۔	1	2	3	4	5
19	آپ اپنی ذات سے کس حد تک مطمئن ہیں۔	1	2	3	4	5

نمبر شمار	بیانات	انتہائی غیر مطمئن	غیر مطمئن	نہ مطمئن نہ غیر مطمئن	مطمئن	انتہائی مطمئن
20	آپ اپنے تعلقات سے کس حد تک مطمئن ہیں۔	1	2	3	4	5
21	آپ اپنی جنسی زندگی سے کس حد تک مطمئن ہیں۔	1	2	3	4	5
22	آپ اپنے دوستوں سے ملنے والی مدد سے کس حد تک مطمئن ہیں۔	1	2	3	4	5
23	آپ اپنی رہائش کی جگہ کے حالات سے کس حد تک مطمئن ہیں۔	1	2	3	4	5
24	آپ طبعی سہولتوں تک اپنی رسائی سے کس حد تک مطمئن ہیں۔	1	2	3	4	5
25	آپ اپنے ذرائع آمدورفت سے کس حد تک مطمئن ہیں۔	1	2	3	4	5
26	آپ کس حد تک منفی احساسات کا شکار رہتے ہیں مثلاً اداسی، مایوسی، پریشانی اور افسردگی وغیرہ۔	کبھی نہیں	بعض اوقات	اکثر اوقات	بہت زیادہ	ہمیشہ

APPENDIX E

LIFE ORIENTATION TEST

مندرجہ ذیل بیانات کے بارے میں اپنی رائے دیے گے پیمانے کی مدد سے دیں اور کوشش کریں کہ کہ ایک سوال کا جواب دوسرے سوالوں پر اندازنہ ہو۔

نمبر شمار	بیانات	ا۔ بالکل متفق نہیں	ب۔ متفق نہیں	ج۔ معلوم نہیں	د۔ متفق	ہ۔ بالکل متفق
1	غیر یقینی حالات میں عموماً مجھے بہترین کی توقع ہوتی ہے۔					
2	پرسکون رہنا میرے لیے آسان ہے۔					
3	اگر میرے ساتھ کچھ غلط ہو سکتا ہے تو ہو کر رہے گا۔					
4	میں ہمیشہ چیزوں کا روشن رخ دیکھتا ہوں۔					
5	میں اپنے مستقبل کے بارے میں ہمیشہ پُر امید رہتا ہوں۔					
6	میں اپنے دوستوں میں بہت خوش رہتا ہوں۔					
7	میرے لئے یہ بات اہم ہے کہ میں خود کو مصروف رکھوں۔					
8	مجھے بہت کم یہ توقع ہوتی ہے کہ حالات میری مرضی کے مطابق ہوں گے۔					
9	میں جس طرح چاہتا ہوں اس طرح کبھی نہیں ہوتا۔					
10	میں آسانی سے پریشان نہیں ہوتا۔					
11	میں اس بات پر یقین رکھتا ہوں کہ ہر اندھیرے کے بعد اجالا ہوتا ہے۔					
12	میں اپنے ساتھ واقع ہونے والی اچھی چیزوں پر بہت کم بھروسہ کرتا ہوں۔					

APPENDIX F

INTERNALITY, POWERFUL OTHERS, CHANCE (IPC) SCALE

APPENDIX

یہ سوالنامہ کئی ایسے بیانات پر مشتمل ہے جو یہ ظاہر کرتے ہیں کہ آپ ایک خاص صورتِ حال میں کسطرح کا کردار اپناتے ہیں۔ آپ ہر بیان کو غور سے پڑھیں اور یہ بیان کیجئے کہ آپ اس بیان سے متفق ہیں یا غیر متفق۔

وضاحت کے طور پر اس مثال کو دیکھئے۔

اگر میں کچھ چاہتی رچاہتا ہوں تو میں اسکو حاصل کرنے کے لیے سخت محنت کرتی رکرتا ہوں۔ اگر آپ اس بیان سے بہت زیادہ زیادہ متفق ہیں تو بہت زیادہ متفق والے کالم کے آگے (✓) نشان لگائیں۔

ے		بہت زیادہ غیر متفق	زیادہ غیر متفق	غیر متفق	متفق	زیادہ متفق	بہت زیادہ متفق
.1	میں جو چاہتا رچاہتی ہوں وہ اس لیے حاصل کرلیتا رلیتی ہوں کیونکہ میں نے اس کے لیے محنت کی ہوتی ہے۔ ۸						
.2	میری زندگی کا انحصار میرے عمل پر ہے۔						
.3	میں عام طور پر اپنے ذاتی مفادات کا تحفظ کرنے کے قابل ہوتا رہوتی ہوں۔						
.4	جب میں کوئی منصوبہ بندی کروں تو مجھے ان کے قابل عمل ہونے کا یقین ہوتا ہے۔						
.5	میں کافی حد تک یہ اندازہ لگا سکتا رسکتی ہوں کہ میری زندگی میں کیا ہوگا۔						
.6	کافی حد تک میری زندگی حادثاتی واقعات سے کنٹرول ہوتی ہے۔						
.7	میں جو چاہتی رچاہتا ہوں جب وہ مجھے ملتا ہے تو عموماً وہ قسمت کی وجہ سے ملتا ہے۔						
.8	میری نظر میں مستقبل کے فیصلے ابھی سے کرلینا کچھ اتنی عقلمندی کی بات نہیں کیونکہ چیزیں اچھی یا بری قسمت کی وجہ سے بدل جایا کرتی ہیں۔						
.9	میرے دوستوں کا کم یا زیادہ ہونا بنیادی طور پر میری قسمت پر منحصر ہے۔						
.10	میں قائد بنتا رہتی ہوں یا نہیں زیادہ تر میری صلاحیت پر منحصر ہے۔						
.11	میں جو چاہتا رچاہتی ہوں اس کو حاصل کرنے کے لیے مجھے ان لوگوں کو خوش کرنا پڑتا ہے جو مجھ سے اعلیٰ رتبہ پر ہیں۔						
.12	میری تمام صلاحیتوں کے باوجود مجھے صاحبِ اقتدار کی خوشنودی کے بغیر قائدانہ ذمہ داری نہیں دے جائے گی۔						

.13	میرے رہنما بننے کا انحصار اس پر ہے کہ میں اتنی خوش قسمت ہوں کہ صحیح وقت پر صحیح جگہ پہنچ جاؤں۔						
.14	مجھے لگتا ہے کہ میری زندگی کا زیادہ تر حصہ بااثر طاقتور لوگوں کے ہاتھ میں ہے۔						
.15	میری زندگی زیادہ تر ان لوگوں کے کنٹرول میں ہے جو زیادہ بااثر ہیں۔						
.16	اپنے منصوبہ کو پایہ تکمیل تک پہنچانے کے لیے میں اس بات کو یقینی بناتی ہوں کہ وہ ان لوگوں کی پسند سے مطابقت رکھے۔						
.17	میرے جیسے لوگوں کا بااثر گروہ سے اپنے ذاتی مفادات کو بچانا بہت مشکل ہوتا ہے۔						
.18	اگر خاص لوگ مجھے ناپسند کرنے کا فیصلہ کریں تو میرے شاید بہت کم دوست ہوں گے۔						
.19	میرے کتنے دوست ہیں اس کا انحصار اس بات پر ہے کہ میں کتنی رکتنا اچھا انسان ہوں۔						
.20	میری کار کا حادثہ ہونے یا نہ ہونے کا انحصار زیادہ تر دوسرے ڈرائیوروں پر ہوتا ہے۔						
.21	میری گاڑی کا حادثہ ہونے یا نہ ہونے کا انحصار اس پر ہے کہ میں کتنا اچھا/اچھی ڈرائیور ہوں۔						
.22	میرا حادثے کا شکار ہونا زیادہ تر قسمت پر منحصر ہے۔						
.23	میں اکثر ذاتی مفادات کو بری قسمت سے نہیں بچا سکتا/سکتی۔						
.24	اکثر میرے مشاہدے میں آیا ہے کہ جو ہونا ہوتا ہے وہ ہو کر رہتا ہے۔						

یہ سوالنامہ کئی ایسے بیانات پر مشتمل ہے جو یہ ظاہر کرتے ہیں کہ آپ ایک خاص صورتِ حال میں کس طرح کا کردار اپناتے ہیں؟ آپ ہر بیان کو غور سے پڑھیں اور یہ بیان کیجئے کہ آپ اس بیان سے متفق ہیں یا غیر متفق۔

وضاحت کے طور پر اس مثال کو دیکھئے۔

اگر میں کچھ چاہتی رچاہتا ہوں، تو میں اس کو حاصل کرنے کے لئے سخت محنت کرتی رکرتا ہوں۔ اگر آپ اس بیان سے بہت زیادہ متفق ہیں، تو پھر بہت زیادہ متفق والے کالم کے آگے (✓) نشان لگائیں۔

6- کافی حد تک یہ اندازہ لگا سکتی رسکتا ہوں کہ میری زندگی میں کیا ہوگا۔

10- میں قائد بنتی رہتا ہوں یا نہیں، زیادہ تر میری صلاحیت پر منحصر ہے۔

12- میری تمام صلاحیتوں کے باوجود مجھے صاحبِ اقتدار کی خوشنودی کے بغیر قائدانہ ذمہ داری نہیں دی جائیں گی۔

13- میرے راہنما بننے کا انحصار اس پر ہے کہ میں اتنی خوش قسمت ہوں کہ صحیح وقت پر صحیح جگہ پہنچ جاؤں۔

16- اپنے منصوبہ کو پایہ تکمیل تک پہنچانے کے لئے میں اس بات کو یقینی بناتی رہتا ہوں کہ وہ ان لوگوں کی پسند سے مطابقت رکھے۔

17- میرے جیسے لوگوں کا بااثر گروہ سے اپنے ذاتی مفادات کو بچانا بہت مشکل ہوتا ہے۔

18- اگر خاص لوگ مجھے ناپسند کرنے کا فیصلہ کریں، تو میرے شاید بہت کم دوست ہوں گے۔

20- میری کار کا حادثہ ہونے یا نہ ہونے کا انحصار اس پر ہے کہ میں کتنی اچھی راچھا ڈرائیور ہوں۔

Back Translation of Modified items of Levenson Internality, Powerful Others, Chance Scale

6. To large extent my life is controlled by the incidents that happens accidently.

10. My control over other people is mostly dependent on my ability.

12. Despite of all my capabilities, I do not get charge of anything until authority people do not have their will.

13. The chance that I become a leader depends on the good fortune that I get right opportunity at right time.

16. In order to complete my plans, I make sure they are made according to the will of influential people.

17. For people like me, it is very difficult to protect personal benefits from strong and influential people.

18. If important/ influential people decide to dislike me, then may be I will have very few friends.

20. Whether I meet an accident by a vehicle, depends mostly on the other drivers.

Levenson Multidimensional Locus of Control Scale

For each of the following statements, indicate the extent to which you agree or disagree by writing in the appropriate number.

-3 = strongly disagree
-2 = disagree somewhat
-1 = slightly disagree
+1 = slightly agree
+2 = agree somewhat
+3 = strongly agree

1. When I get what I want, it's usually because I worked hard for it.
2. My life is determined by my own actions.
3. I am usually able to protect my personal interests.
4. When I make plans, I am almost certain to make them work.
5. I can pretty much determine what will happen in my life.
6. To a great extent my life is controlled by accidental happenings.
7. When I get what I want, it's usually because I'm lucky.
8. It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.
9. It's chiefly a matter of fate whether or not I have a few friends or many friends.
10. Whether or not I get to be a leader depends mostly on my ability.
11. Getting what I want requires pleasing those people above me.
12. Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.
13. Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.
14. My life is chiefly controlled by powerful others.
15. I feel like what happens in my life is mostly determined by powerful people.
16. In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.

17. People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.
18. If important people were to decide they didn't like me, I probably wouldn't make many friends.
19. How many friends I have depends on how nice a person I am.
20. Whether or not I get into a car accident depends mostly on the other driver.
21. Whether or not I get into a car accident depends mostly on how good a driver I am.
22. Whether or not I get into a car accident is mostly a matter of luck.
23. Often there is no chance of protecting my personal interests from bad luck.
24. I have often found that what is going to happen will happen.

APPENDIX F5

یہ سوالنامہ کئی ایسے بیانات پر مشتمل ہے جو یہ ظاہر کرتے ہیں کہ آپ ایک خاص صورت حال جس کا کہ مندرجہ ذیل سوالات میں ذکر کیا گیا ہے میں کس طرح کا کردار اپناتے ہیں۔ اس صورتِ حال کا آپ اپنے گھر، دفتر ادارے یا زندگی میں سامنا کر سکتے ہیں۔ مثلاً آپ کی زندگی اور اہم فیصلوں بہت سے بااثر لوگوں کا عمل دخل ہوسکتا ہے۔ آپ کے گھر میں یہ بااثر شخصیت آپ کی بہو، بیٹا، شوہر یا کوئی اور رشتہ دار ہوسکتا ہے۔ دفتر یا ادارے میں بااثر شخصیت آپ کا مالک (Boss)، انتظامی سربراہ یا ساتھ رہنے یا کام کرنے والا ساتھی ہوسکتا ہے۔

آپ ہر بیان کو غور سے پڑھیں اور یہ بتائیں کہ آپ اس سے متفق ہیں یا غیر متفق۔

وضاحت کے طور پر اس مثال کو دیکھیے۔

اگر میں کچھ چاہتی/چاہتا ہوں تو میں اس کو حاصل کرنے کے لیے سخت محنت کرتی/کرتا ہوں۔ اگر آپ اس بیان سے بہت زیادہ/زیادہ متفق ہیں تو پھر بہت زیادہ متفق والے کالم کے آگے (✓) کا نشان لگائیں۔

نمبر شمار	بیانات	بہت زیادہ غیر متفق	زیادہ غیر متفق	غیر متفق	متفق	زیادہ متفق	بہت زیادہ متفق
1	میں جو چاہتا/چاہتی ہوں وہ اس لیے حاصل کر لیتا/لیتی ہوں کیونکہ میں نے اس کے لیے محنت کی ہوتی ہے۔						
2	میری زندگی کا انحصار میرے عمل پر ہے۔						
3	میں عام طور پر اپنے ذاتی مفادات کا تحفظ کرنے کے قابل ہوتا/ہوتی ہوں۔						
4	جب میں کوئی منصوبہ بندی کروں تو مجھے ان کے قابل عمل ہونے کا یقین ہوتا ہے۔						
5	میں کافی حد تک یہ اندازہ لگا سکتا/سکتی ہوں کہ میری زندگی میں کیا ہو گا۔						
6	کافی حد تک میری زندگی حادثاتی (اچانک رونما ہونے والے) واقعات سے کنٹرول ہوتی ہے۔						
7	میں جو چاہتی/چاہتا ہوں جب وہ مجھے ملتا ہے تو عموماً وہ قسمت کی وجہ سے ملتا ہے۔						
8	میری نظر میں مستقبل کے فیصلے ابھی سے کر لینا کچھ اتنی عقلمندی کی بات نہیں کیونکہ چیزیں اچھی یا بری قسمت کی وجہ سے بدل جایا کرتی ہیں۔						
9	میرے دوستوں کا کم یا زیادہ ہونا بنیادی طور پر میری قسمت پر منحصر ہے۔						

نمبر شمار	بیانات	بہت زیادہ غیر متفق	زیادہ غیر متفق	غیر متفق	متفق	زیادہ متفق	بہت ز متفق
10	میرا دوسرے لوگوں پر کتنا کنٹرول ہے، یہ زیادہ تر میری صلاحیت پر منحصر ہے۔						
11	میں جو چاہتا/چاہتی ہوں اس کو حاصل کرنے کے لیے مجھے ان لوگوں کو خوش کرنا پڑتا ہے جو مجھ سے اعلیٰ رتبہ پر ہیں۔						
12	میری تمام صلاحیتوں کے باوجود مجھے کسی چیز کا انچارج (رہنما) نہیں بنایا جائے گا جب تک کہ اس میں بااثر لوگوں کی مرضی شامل نہ ہو۔						
13	میرے رہنما (انچارج) بننے کا انحصار اس پر ہے کہ مجھے اچھے مواقع خوش قسمتی سے صحیح وقت اور صحیح جگہ پر مل جائیں۔						
14	مجھے لگتا ہے کہ میری زندگی کا زیادہ تر حصہ بااثر/طاقتور لوگوں کے ہاتھ میں ہے۔						
15	میری زندگی زیادہ تر ان لوگوں کے کنٹرول میں ہے جو زیادہ بااثر ہیں						
16	اپنے منصوبوں کو مکمل کرنے کے لئے میں اس بات کو یقینی بناتی/بناتا ہوں کہ وہ ان لوگوں کی پسند کے مطابق ہوں جو بااثر ہیں۔						
17	میرے جیسے لوگوں کا طاقت ور بااثر گروہ سے اپنے ذاتی مفادات کو بچانا بہت مشکل ہوتا ہے۔						
18	اگر اہم/بااثر لوگ مجھے ناپسند کرنے کا فیصلہ کریں تو میرے شاید بہت کم دوست ہوں گے۔						
19	میرے کتنے دوست ہیں اس کا انحصار اس بات پر ہے کہ میں کتنی/کتنا اچھا انسان ہوں۔						
20	میری ساتھ گاڑی کا حادثہ ہوگا کہ نہیں یہ زیادہ تر دوسرے ڈرائیوروں پر منحصر ہے۔						
21	میری گاڑی کا حادثہ ہوگا کہ نہیں یہ میرے اچھا ڈرائیور ہونے پر منحصر ہے۔						
22	میرا حادثے کا شکا ہونا زیادہ تر قسمت پر منحصر ہے۔						
23	میں اکثر ذاتی مفادات کو بری قسمت سے نہیں بچا سکتا/سکتی۔						

نمبر شمار	بیانات	بہت زیادہ غیر متفق	زیادہ متفق	غیر متفق	متفق	زیادہ متفق	بہت متفق
24	اکثر میرے مشاہدے میں آیا ہے کہ جو ہونا ہوتا ہے وہ ہو کر رہتا ہے۔						

FILLED FORM (11) Important

VOLKAN, Sibel <volkans@who.int> 10/17/14 at 5:05 PM
To sana
CC CHATTERJI, Somnath

Dear Sana,

Please go ahead and use the version prepared by Rukhsana Kausar.

Thank you.

Best regards,

Sibel

-----Original Message-----
From: sana [mailto:taurus85_2006@yahoo.com]
Sent: 30 September 2014 22:04
To: whoqol
Subject: Re: FW: FILLED FORM

Respected Sir!

This is in response to your mail about WHOQOL BREF Urdu version. Sir i have compared the two Urdu translations sent by you. They are very much identical except TWO differences. First difference which i feel is that although the two translations talking about same thing, but the one done by Rukhsana Kausar is more appropriately worded and more comprehendable than the original Urdu version. Secondly, a relatively serious problem, is with item number 15 i.e"how well are u able to get around?". As translated in original Urdu version, it gives the meaning as "Can u convince yourself physically to do some work?" whereas the other Urdu translation gives the meaning as " how well you are able to walk around physicaly? or in simple words "can you easily walk around without any physical problem?". Only you can tell Sir what this item actually means as i am confused. Rest i find no major difference between the two Urdu translations and original English questionnaire. So plz can you clarify this question number 15 actual meaning? also if the other Urdu translation i find better instead of original Urdu translation, wording wise,can i use it for my research?

WAITING FOR YOUR RESPONSE
SANA

On Tue, 9/30/14, whoqol <whoqol@who.int> wrote:

Subject: FW: FILLED FORM
To: "taurus85_2006@yahoo.com" <taurus85_2006@yahoo.com>
Date: Tuesday, September 30, 2014, 4:45 PM

Dear Sana,

The version I sent to you, is the original Urdu version of the WHOQOL produced in Lahore. I am attaching another version which someone else has also produced. Could you please compare the two and let me know if they are

TEST APPLICATION FORM

Name of Applicant SANA MUMTAZ

Name of Supervisor/Professor Dr. HUMAIRA JAMI

Institution / Department Psychology Department, GAU.

Test Required: (*title, year, author, edition, and publisher*):

Hannah levenson locus of control (Younis, 2003)

Purpose: Research / Teaching / Clinical Assessment / Any other _____

Topic of research / teaching Quality of life, depression, locus of control & orientation to life

M.Sc./M.Phil./Ph.D./M.S./Diploma/Any other _____

Undertaking

This is hereby specified that the above mentioned information is correct. I applied for the above mentioned scale after appropriate research and consultation with my supervisor. I am convinced that this Test/Videos/Resource Material is especially relevant to my work. I also understand that I have to follow the copy rights requirements of the test developers and will not violate the ethics of research at any moment. This work is the intellectual property of the author / publisher. No part of this test may be reproduced or photocopied or disseminate or to republish without written permission from the author / publisher. I am also under obligation to share my data and research findings with the TRC of NIP.

Supervisor/Professor | Student | Practitioner

Permission granted for the above mentioned research only

11/9/14

Coordinator (Signature & Stamp)

Test Resource Centre

National Institute of Psychology, Quaid-i-Azam University