Ego Integrity, Physical Health Status and Death Anxiety in Older Adults

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The present study was designed to examine the relationship among Ego integrity, physical health status and death anxiety in older adults. A sample of 120 older adults including 60 men and 60 women ($M_{\rm age}$ = 66.52, SD=5.89) was selected through purposive sampling technique. Urdu translated Death Anxiety Scale, Urdu translated Ego Integrity Scale and SF-36 v2 Health Survey were used to measure death anxiety, ego integrity and physical health status respectively. The research findings reveal that ego integrity and physical health are both significant negative predictors of death anxiety among older adults but physical health status appeared as non-significant correlate of ego integrity. The implications of the study are discussed in the light of Gerontological theories and practice.

Keywords. Death anxiety, ego integrity, physical health status, older adults

It is assumed that human encounter with the concept of death mostly triggers the feeling of anxiety (Abdel-Khalek, 2005). Death anxiety is defined Neimeyer, Moser and Wittkowski (2003) as "a cluster of death attitudes characterized by fear, threat, unease, discomfort, and similar negative emotional reactions" (p.47). Erikson (1963) defined the eight stages of life as characterized by unique challenges faced by the individual from childhood to old age. Erikson's psychosocial theory (1963) discusses the role of death anxiety and its implications for human life and its development.

According to Central Intelligence Agency (CIA; 2016) 5.28% and 4.3 % of Pakistan's inhabitants are above 55-64 years and 65 year of age & above respectively. There is a probability of rise up to 11% by the year

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2025 (Jalaal & Younis, 2012), whereas elderly dependency ratio is 7.4 % (CIA, 2016).

Pakistan seems to be facing a number of challenges due to having inadequate resources, while protecting their elderly population (Sabzwari & Azhar, 2010). This situation is in dire need of highlighting the problems of elderly people especially in Pakistan where people live in immense poverty and very limited medical facilities are available which add to the miseries of older population (Usman, 2011). In addition to health related problems, nearness of death increases fear among elderly population (Cicirelli, 2002) and people start realizing their failures in life which automatically instigate the feelings of worthlessness and helplessness ultimately elevating the level of death anxiety (Newman & Newman, 2014). Age, health status, gender, ego integrity and religiosity are the common factors studied as the predictors and correlates of death anxiety (Anvar, Javadpour, & Zadeh, 2012).

Hui and Coleman (2013) explored the relationship between ego integrity and death anxiety among older adults. The results suggested that the higher the ego integrity, the lower is the death anxiety. Similarly, other researches on ego integrity and death anxiety also showed identical results (Kim, 2008; Neimeyer, 2007). Previously another research was conducted on 330 Korean elderly people. Data analysis revealed that depression mediates the relationship of ego integrity with the death anxiety of elderly people (Chang, 2011).

Ghayas and Batool (2016) conducted research on 515 older adults of Pakistan in order to assess the determinants of death anxiety. Findings revealed that ego integrity appeared to be most significant predictor of death anxiety as compare to other religion related variables. Parker (2013) conducted a research on 115 older adults to investigate the impact of ego integrity on death attitudes. Results revealed that greater acceptance of past life as meaningful and valuable with minimum regrets will be a significant predictor of greater neutral acceptance of own death and lesser fear of death.

It is said that low level of ego integrity, high level of psychological problems and physical health related problems increase fear of death among elderly people (John, Binoy, Reddy, Passyavula, & Reddy, 2016). In old age it is said that ego integrity of the people is greatly influenced by physical health status (Pinquart & Sorensen, 2010). Physical health is defined as "being free from pain, physical disability, chronic and infectious diseases, and bodily discomforts that require the attention of a physician, and perhaps also as having increased longevity" (Price, Dake,

& Ward, 2010). Physical health is immensely important and plays a central role in leading a long and wholesome life. During late adulthood, many physical changes take place and the individual becomes more prone to diseases. The overall general health declines in this phase of life (Mahmud, 2005).

It is reported by researchers that the process of ego integrity development is severely interrupted by the decline of physical health. Furthermore it is also reported that physical weaknesses, disabilities and ailments interfere in the social, cognitive and psychological functioning of elderly people (Borchelt, Gilberg, Horgas, & Geiselmann, 1999). Previously it was reported that in old age how a person evaluates his past, present and future is related to quality of social network, self-rated health, locus of control and widowhood but importance of these factors are gender specific (Berg, 2008). Already conducted researches provide proof of this gender specific relationship between health status and ego integrity as it was revealed that health, family relationships, respect from youngsters, and social connectedness is more important for women as compared to men for the evaluation of ego integrity (Hawkes, 2004; James & Zarret, 2005).

According to Fortner and Neimeyer (2010) low level of ego integrity, poor physical and psychological health, are the predictors of death anxiety among older adults, whereas, age, gender and religiosity are not significant predictors of death anxiety. In another empirical research by Missler et al. (2012) revealed that poor physical and mental health increase death anxiety. Similarly, according to Kim (2008) elderly adults with psychological problems are likely to have a higher level of death anxiety than those with sound mental health. Mullin and Lopez (2007) carried out a research on residents of nursing home. The older adults with minimal physical health problems showed less death related anxiety as compared to the older adults with worse physical health. Likewise, Cicirelli (2002) found that older adults with poor PH level in blood experience fear and apprehensions about the process of death and dying. Some researchers also report no significant relationship between death anxiety and physical health among older individuals (Baum & Boxley, 2007).

In the context of Pakistani culture it would be very interesting and informative to study relationship among these variables. Very few researches have been done in Pakistan in the area of death anxiety among older adults (Azeem & Naz, 2015; Ghayas & Batool, 2016; Suhail & Akram, 2002). Basic purpose of this study is to test the validation of

Erikson theory on Pakistani old age population. Pakistani culture is different from other cultures on the basis of different family system, social support, belief system and health care facilities etc. Therefore current study designed to study death anxiety ego integrity and physical health status in indigenous Pakistani setting as these variables are highly influenced by the cultures.

Hypotheses

For the present research, it is hypothesized that:

- Ego integrity and physical health status are negative predictors of death anxiety in older adults.
- Physical health status is positive predictor of ego integrity in older adults.
- There would be gender differences in death anxiety, ego integrity and physical health status in older adults

Method

Sample

The sample consisted of 120 community dwelling older adults (60 men and 60 women) with the age range of 60-94 (M = 66.52, SD = 5.89). Non-probability purposive sampling technique was used in order to gather data. Minimum education of the participants was matriculation and maximum education was post-graduation. Retired men and women, businessman and housewives were given representation in the sample.

Measures

Templer's Death Anxiety Scale. Templer's Death anxiety scale was developed by Donald Templer in 1970. It consists of 15 items to measure respondent's anxiety regarding death. This scale consists of true and false statements and responses receive the coding of 0 and 1. The negative items are reverse scored. The internal consistency of TDAS, with Kuder-Richardson formula coefficient is .76. The TDAS also has shown good test-retest reliability which is .83 (Templer, 1970). Urdu translation of TDAS (Suhail & Akram, 2002) was used in this study. Reliability coefficient of Urdu translated version of TDAS is .72.

Ego Integrity Scale. Ego Integrity Scale, developed by Ryff and Heincke in 1983, assesses the last stage of Erikson's psychosocial theory. The scale consists of 16 items rated on a six point scale (ranging from strongly disagree to strongly agree) and responses receive 1 to 5 scores.

The negative items are reverse scored. Ryff and Heincke (1983) have reported the internal consistency of the EIS as .82 and the test retest coefficient of the scale as .85. In current study Urdu translation of the scale by Ghayas and Batool (2015) was used. Reliability of Urdu translated version was reported to be .80 and its significant positive correlation with life satisfaction and negative correlation with depression provided support for its convergent and divergent validation.

SF-36v2 Health Survey. SF-36v2 health survey is considered to be a very concise but broad measure, which was developed to assess eight domains of health status. SF-36v2 health survey is comprised of 36 items. Eight domains fall under two component summary measures; Physical Component Summary (PCS) measure is comprised of total 21 items and Mental Component Summary (MCS) Measure is consisted total 14 items, reported health transition (HT) is consisted of 1 items which not used to score any of the eight domain and health components. Physical Functioning (PF) (10 items), Role-Physical (RP) (4 items), Bodily Pain (BP) (2 items) and General Health (GH) (5 items) are included in Physical Component, whereas Vitality (VT) (4 items), Social Functioning (SF) (2 items), Role- Emotional (RE) (3 items) and Mental Health (MH) (5 items) come under Mental Component. SF-36 measures aggregate percentage of score for each of the eight domains. Eight domain ordered from left to right from best physical health to best mental health. In this research scoring was done by the Quality Metric Health OutcomesTM Scoring Software 4.0. Both internal consistency and test-retest method have been used to measure reliability of these eight scales and two summary measures (Ware et al., 2008). In more than 25 studies the reliability statistics have exceeded 0.70 (Tsai, Bayliss, & Ware, 1997) while in others, it exceeded 0.80 (McHorney et al., 1994). In the current study only physical health component was used and reliability of current administration appeared satisfactory (α =.80).

Procedure

Participants were engaged from the community from various venues. Keeping in view the ethical considerations, firstly, informed consent sheet was signed by each participant, whereby they assured their willingness to participate in the research. Secondly confidentiality of the information was ensured to the participants. Simultaneously, the purpose of the study and its significance was also explained to them. After receiving instructions and guidelines, the participants filled a series of questionnaires including the demographic sheet, and all the scales.

Appropriate assistance was provided to the participants as and when required. Scores obtained on the scales were statistically analyzed through SPSS.

Results

Table 1 Reliability Analysis and Correlation Between Study Variables (N = 120)

| | Scale | α | M | SD | 2 | 3 |
|---|------------------------|-----|-------|------|------|------|
| 1 | Death Anxiety | .80 | 50.75 | 9.28 | 49** | 31** |
| 2 | Ego Integrity | .70 | 8.53 | 3.02 | | .06 |
| 3 | Physical Health Status | .80 | 53.17 | 7.27 | | |

^{**}*p*< .01.

All measures have good reliability indices. The Pearson Product correlation analysis revealed that there is a significant negative correlation between death anxiety and ego integrity in older adults. Furthermore, a statistically significant negative correlation was also found between Death anxiety and Physical health status. However there is a non-significant relationship between physical health and ego Integrity in older adults.

Table 2
Hierarchical Regression Analysis predicting Death Anxiety from Ego
Integrity and Physical Health Status (N=120)

| Variables | Death | Death Anxiety | | | |
|------------------------|--------------|---------------|--|--|--|
| | ΔR^2 | β | | | |
| Step 1 | .12 | | | | |
| (Control variables) | | .31** | | | |
| Gender | | 13 | | | |
| Education | | | | | |
| Step 2 | .34 | | | | |
| Ego Integrity | | 45*** | | | |
| Physical Health status | | 19* | | | |
| Total R^2 | .46 | | | | |
| F(2,117) | 16.46 | | | | |

^{*}p<.05. **p<.01. ***p<.001.

Hierarchical regression analysis was run in order to assess the predictors of death anxiety among older adults. The overall model explained 46% with F (2, 117) = 16.46, p< .001. Results revealed that control variable gender ($\beta = .31$, p< .01) appeared as significant while

education appeared as non-significant predictor of death anxiety in older adults. Results also revealed that both ego integrity ($\beta = -.45$, p < .001) and physical health status ($\beta = -.19$, p < .05) both are significant negative predictors of death anxiety in older adults.

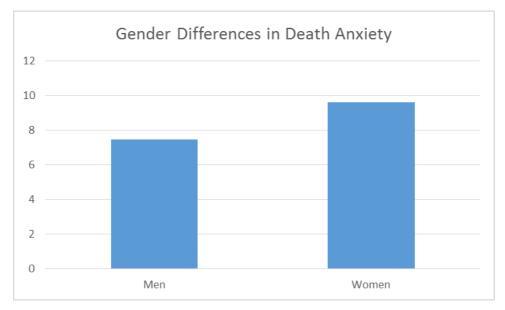
Table 3 Gender Difference in Death Anxiety, Ego Integrity and Physical Health Status in Older Adults (N = 120)

| | Men | Women | | 95% CI | | Cohen's |
|------------------|-------------|-------------|---------|--------|-------|---------|
| Variables | M (SD) | M(SD) | t(118) | LL | UL | d |
| 1. Death anxiety | 7.45 (2.73) | 9.61(2.92) | 4.18*** | -3.19 | -1.14 | .77 |
| 2. Ego integrity | 52.01(8.74) | 49.48(9.70) | 1.50 | 80 | -1.14 | .20 |
| 3. PHS | 43.45(7.06) | 35.75(8.98) | 5.21*** | 4.77 | 10.6 | .96 |

Note. PHS= Physical Health Status ***p<.001.

Results of *t*-test in Table 3 revealed significant gender differences in death anxiety and physical health status in older adults, while non-significant gender differences were found in ego integrity. Mean and standard deviation showed that older women exhibit more death anxiety than older men, Moreover older women have lower physical health status as compare to men. Further Figure 1 and 2 indicated the gender differences in death anxiety and physical health status in older adults.

Figure 1. Gender Differences in Death Anxiety



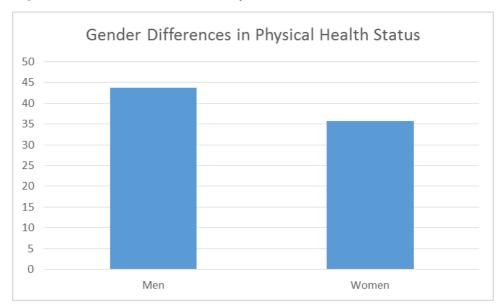


Figure 2. Gender Differences in Physical Health Status

Discussion

The results supported the hypothesis that ego integrity was shown to be a significant negative predictor of death anxiety. These results are consistent with the claims of Erikson's theory (1963) which posits that higher level of ego integrity will lessen death related concerns or death anxiety. He suggested that the way individual perceives his/her present and past life influence the way individual deals with the process of dying and death. The results of various previous researches also suggest that the acceptance of past life is a significant predictor of anxiety related to death among older adults (Hui & Coleman, 2013; Parker, 2013).

Results of this study are justified on the basis of fact that the individual with good psychological adjustment capacity (i.e., higher level of ego integrity) are able to overcome the fear of death. Viorst (1986) postulated that older adults were going through the phase of life where they lose their friends and loved ones due to death, and death was also knocking at their door. Therefore, at this time their perspective about their own life would help them to manage and minimize death anxiety.

It was hypothesized that physical health status would be a significant negative predictor of death anxiety among older adults. As age progresses, the individual's health also starts to decline. Deteriorating physical health and death anxiety have a strong connection as shown by

the findings of the present research. Previously it was revealed in researches that poor health heightens the individual's concerns and worries related to death. Unhealthy individuals tend to exhibit more death anxiety than healthy individuals (Sinha & Nigan, 1993; Viney, 1984). Various researches have studied the predictive relationship between death anxiety and physical health among older adults. Most of the research findings show physical health to be a good predictor of death anxiety (Tate, 1982; Sinha & Nigan, 1993).

Analysis of data revealed that there is insignificant relationship between physical health status and ego integrity. These results are contrary to existing researches, depicting positive relationship between physical health status and ego integrity (Pinquart & Sorensen, 2001). These results are in line with previous research conducted by James and Zarret (2005) whose finding depicted that among elderly participants physical health status was not related with their level of ego integrity. Previously it was also reported that in old age person evaluates his past present and future on the basis of quality of social network, self-rated health, depressive symptoms, locus of control and widowhood but importance of these factors are gender specific (Berg, 2008).

Many studies on gender differences with respect to death anxiety have shown that women tend to show more anxiety and concern related to death than men, which is consistent with our findings (Depaola, et al., 2010; Suhail & Akram, 2002). The difference between the level of death anxiety among men and women could be explained in the context of the structure of the Pakistani society. Pakistan is a patriarchal society, where men are decision makers and heads of the family. This could be the reason why women exhibit more death anxiety than men (Schumaker, Barraclough, & Vagg, 1988).

Secondly, in our society men are not encouraged to cry or to show the sensitive side of their personality because that is considered against their masculine personality (Abdel-Khalek, 2005; Dattel & Neimeyer, 1990). Men mostly tend to hide their emotions and compassionate reactions (Hirschberger, Florian, & Mikulincer, 2005). Women, on the other hand, are more expressive and without any fear of judgment openly display their emotions and freely admit their concerns related to death (Abdel-Khalek, 2005).

Results of present study revealed that there are insignificant gender differences in ego integrity and these results are in line with already existing researches (Darling-Fisher & Leidy, 1988; Hannah et al., 1996; Ryff & Heincke, 1983). Results also revealed that men scored higher on

pyhical health status as compare to the women. Other researches also endorse these findings that women have poorer health status then men (Macintyre, Hunt, & Sweeting, 1996; Carmel & Bernstein, 2003).

Limitations and Suggestions. Demographic variables like, socioeconomic status, educational level, occupation and religiosity were not controlled during the data collection. It is suggested that in future researches this point should be taken into account. Data was collected from specified limited region of Punjab it is recommended that future research should be conducted on sample taken from diverse regions of Pakistan to make the findings more externally generalizable. Furthermore this was a purely quantitative research. Future researches studying death anxiety, physical health and ego integrity among the older population should also make use of qualitative research and mixed method designs to yield more meaningful and richer results and it is highly recommended that more research on this area needed to be carried out in Pakistan.

Implications. This research opens the door for future researchers to do more work to highlight the problems of older adults as not much attention has been given to them in our society. The study has shown that physical health status is linked to death anxiety. It points toward the need of considering health as not just a unitary concept consisting of physical health but a multidimensional construct in which the mind is affecting the body and body is influencing the mind. This implies that all the aspects of the well-being of older people need to be given attention to.

References

- Abdel-Khalek, A. M. (2005). Death anxiety in clinical and non-clinical groups. *Death Studies*, 29, 251-259. Doi:10.1080/07481180590916371
- Anvar, M., Javadpour, A., & Zadeh, S. M. (2012). Assessing death anxiety and its correlates among severe medically ill in-patients. *Shiraz-E-Medical Journal*, *13*(3). Retrieved from http://semj.sums.ac.ir/vol13/jul2012/r91004.htm
- Azaiza, F., Ron, P., Shoham, M., & Gigini, I. (2010). Death and dying anxiety among elderly Arab Muslims in Israel [Abstract]. *Death Studies*, *34*(4), 351-364. Doi:10.1080/07481181003613941
- Azeem, F., & Naz, M. A. (2015). Resilience, Death Anxiety, and Depression Among Institutionalized and Noninstitutionalized Elderly. *Pakistan Journal of Psychological Research*, 30(1), 18-21.

- Baum, S. K., & Boxley, R. L. (2007). Age denial: Death denial in the elderly. *Death Education*, 8, 419-423. Doi:10.1080/07481188408252479
- Berg, A. N. (2008). Life Satisfaction in late life: Markers and predictors of level and change among 80+ year olds (Doctoral Dissertation, Gothenburg University). Retrieved from http://consumer.myjoice.com/files/Avhandling_Anne_Ingeborg_B erg.pdf
- Borchelt, M., Gilberg, R., Horgas, A. L., & Geiselmann, B. (1999). On the significance of morbidity and disability in old age. In P. B. Baltes & K. U. Mayer (Eds.), *The Berlin aging study: Aging from 70 to 100* (pp. 403–429). Cambridge, UK: Cambridge University Press.
- Campbell, A., Converse, P., & Rogers, W. (1976). *The quality of American life*. New York: Russell Sage Foundation.
- Carmel, S., & Bernstein, J. H. (2003). Gender differences in physical health and psychosocial wellbeing among four age-groups of elderly people in Israel [Abstract]. *International Journal of aging & Human Development*, 56 (2), 113-131. Doi: 10.2190/87yh-45qn-48ty-9hn8
- Central Intelligence Agency (CIA). (2016). *The World Factbook*. Retrieved from https://www.cia.gov/library/publications/theworld-factbook/geos/pk.html
- Cicirelli, V. G. (2002). Fear of death in older adults predictions from terror management theory. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 57(4), 358-366.
- Chang, K. E. (2011). The effects of ego integrity on the anxiety of the elderly: Focusing on the mediating effects of depression. *Korean Journal of Human Ecology*. 20 (5), 917-926.
- Darling-Fisher, C., & Leidy, K. N. (1988). Measuring Eriksonian development in the adult: The modified Erikson psychosocial stage inventory. *Psychological Reports*, 62, 747-754. Doi: 10.2466/pr0.1988.62.3.747
- Dattel, A. R., & Neimeyer, R. A. (1990). Sex differences in death anxiety: Testing the emotional expressiveness hypothesis. *Death Studies*, 14(1), 1-11. Doi: 10.1080/07481189008252341
- Depaola, S. J., Griffin, M., Young, J. R., & Neimeyer, R. A. (2010). Death anxiety and attitudes toward the elderly among older adults: The role of gender and ethnicity. *Death Studies*, *27*(7), 3350-3354. Doi: 10.1080/07481180302904

- Erikson, E. H. (1963). *Childhood and society*. New York: Norton & Company.
- Fortner, B. V., & Neimeyer, R. A. (2010). Death anxiety among older adults: A qualitative review. *Death Studies*, 23(5), 387-411. Doi: 10.1080/074811899200920
- Ghayas, S., & Batool, S. (2016). *Determinants of death anxiety and old age experience among Pakistani people* (Unpublished PhD Dissertation). Govt College University, Lahore-Pakistan.
- Hannah, M. T., Domino, G., Figueredo, A. J., & Hendrickson, R. (1996). The Prediction of ego integrity in older persons. *Educational and Psychological Measurement*, 56 (6), 930-950. doi: 10.1177/0013164496056006002
- Haroon, W., & Khawaja, A. O. (2014). Ego Integrity and Physical Health Status as the Predictors of Death Anxiety among Older Adults (Unpublished Master Dissertation). Lahore College for Women University, Lahore.
- Hawkes, L. M. (2004). *Reflections of Ego Integrity in Older Women through Autophotography*. (Honor Dissertation, Southern Illinois University). Retrieved from http://opensiuc.lib.siu.edu/cgi/viewcontent.cgi?article=1250&context=uhp_theses
- Helm, G, (2000). Gender Differences of the Older Adult in Relationship to Ego Integrity and the Need for Control. (Electronic Theses Dissertations, East Tennessee State University). Retrieved from dc.etsu.edu/cgi/viewcontent.cgi?article=1035&context=etd
- Hirschberger, G., Florian, V., & Mikulincer, M. (2005). Fear and compassion: A terror management analysis of emotional reactions to physical disability [Abstract]. *Rehabilitation Psychology*, *50*, 246–257. Doi: 10.1037/0090-5550.50.3.246
- Hui, K. Y., & Coleman. P. G. (2013). Afterlife Beliefs and Ego Integrity as two mediators of the relationship between intrinsic religiosity and personal death anxiety among older adult British Christians. *Research on Aging March*, 35(2), 144-162. Doi: 10.1177/0164027512436429
- Jalaal, S., & Younis, Z. M. (2012). Aging and elderly in Pakistan. *Ageing International*, *39*(2), 4-12. Doi:10.1007/s12126-012-9153-4
- James, J. B., & Zarret, N. (2005). Ego integrity in the lives of older women: A follow-up of mothers from the sears, Maccoby, and Levin (1951) patterns of child rearing study. *Journal of Adult Development*, 12(4), 23-29. Doi:10.1007/s10804-005-7084-y

- John, M. Binoy, S. Reddy, J. Passyavula, S. K. & Reddy, V.P (2016). A study to assess the level of death anxiety among elderly people at selected area at Bhopal. *International Journal of Medical and Health Research*, 2(5), 23-24.
- Kim, H. H. (2008). *Impact of spirituality and religion on attitudes toward death and dying among Korean seniors living in Chicago* (Doctoral Dissertation, Loyola University). Retrieved from http://search.proquest.com/docview/304569621
- Macintyre, S., Hunt, K., & Sweeting, H. (1996). Gender differences in health: Are things really as simple as they seem? *Social Science & Medicine*, 42(4), 617-624. Retrieved from http://www.sciencedirect.com/science/article/pii/02779536950033 55
- Mahmud, J. (2005). Developmental Psychology. UK: APH publishers
- McHorney, C. A., Ware, J. E., Lu, J. F. R., & Sherbourne, C. D. (1994). The MOS 36-item short-form health survey (SF-36): III Tests of data quality, scaling assumptions and reliability across diverse patient groups. *Med Care*, 32(4), 40-66. Retrieved from http://www.jstor.org/discover/10.2307/3766189?uid=2&uid=4&sid=21104674317533
- Mimrot, B. H. (2011). A comparative study of death anxiety of old persons. *Indian Streams Research Journal*, 1 (5), 30-37.
- Missler, M., Stroebe, M., Geurtsen, L., Mastenbroke, M., Chmoun, S., & Houwen, K. V. D. (2012). Exploring death anxiety among elderly people: A literature review and empirical investigation. *Journal of Death and Dying*, 64 (4), 357-379. Doi: 10.2190/OM.64.4.e
- Mullins, L. C., & Lopez, M. A. (2007). Death anxiety among nursing home residents: A comparison of the young-old and the old-old. *Death Education*, 6(1), 75-86. Doi:10.1080/07481188208252117
- Neimeyer, R. A. (2007). Actualization, integration, and fear of death: A test of the additive model. *Death Studies*, 9(34), 235-244. Doi:10.1080/07481188508252520
- Neimeyer, R. A., Moser, R., & Wittkowski, J. (2003). Assessing attitudes toward dying and death: Psychometric considerations. *Omega*, 47, 45-76. Doi: 10.2190/EP4R-TULM-W52G-L3EX
- Newman, B., & Newman, P. (2014). *Development through Life: A Psychosocial Approach*. New York: Cengage Learning.
- Parker, D. W. (2013). The relationship between ego integrity and death attitudes in older adults. *American Journal of Applied Psychology*, 2(1), 7-15. Doi: 10.11648/j.ajap.20130201.12

- Pinquart, M., & Sorensen, S. (2010). Influences on loneliness in older adults: A meta-analysis. *Basic and Applied Social Psychology*, 23(1), 245–266. Doi: 10.1207/S15324834BASP2304_2
- Price, J. H., Dake, J. A., & Ward, B. (2010). Assessing the needs of program participants. *Health promotion programs: From theory to practice*, 91-119.
- Rieker, P. P., & Bird, C. E. (2005). Rethinking gender differences in health: Why we need to integrate social and biological perspectives. *Journals of Gerontology*, 60 (2), 40–47.
- Ryff, C. D., & Heincke, S. G. (1983). Subjective organization of personality in adulthood and aging. *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Sabzwari, R. S., & Azhar, G. (2010). Ageing in Pakistan: A new challenge. *Ageing International*, *36*(4), 423-427. Doi: 10.1007/s12126-010-9082-z
- Schumaker, J. F., Barraclough, R. A., & Vagg, L. M. (1988). Death anxiety in Malaysian and Australian university students. *The Journal of Social Psychology*, 128, 41-47. Doi:10.1080/00224545.1988.9711682
- Sinha, S. P., & Nigan, M. (1993). Stress and death anxiety. *Indian Journal of Clinical Psychology*, 20(2), 78-81.
- Suhail, K., & Akram, S. (2002). Correlates of death anxiety in Pakistan. *Death Studies*, 26(1), 39-50. Doi: 10.1080/07481180210146
- Tahir, W., & Ilyas, R. (2009). Death anxiety among clinical and non clinical populations of Pakistan. MSc Dissertation, Department of Psychology, University of Sargodha, Sargodha-Pakistan.
- Tate, L. A. (1982). Life satisfaction and death anxiety in aged women [Abstract]. *The International Journal of Aging and Human Development*, 15(4), 299-306. Doi: 10.2190/G50V-7K1Q-G3XH-XABV
- Templer, D. I. (1970). The construction and validation of death anxiety scale. *Journal of General Psychology*, 82, 165-177. Doi:10.1080/00221309.1970.9920634
- Tsai, C., Bayliss, M. S., & Ware, J. E. (1997). *SF-36 Health survey annotated bibliography*. Boston, MA: Health assessment lab, New England Medical Center.
- Usman, M. (2011). *The suffering of elderly people in Pakistan*. Retrieved from http://www.pkhope.com/the-suffering-of-elderly-people-in-pakistan/

- Viney, L. L. (1984). Concerns about death among severely ill people. In F. R. Epting & R. A. Neimeyer (Eds.), *Personal meanings of death: Applications of personal construct theory to clinical practice* (pp.143-158). Retrieved from http://books.google.com. pk/books?id=VMQq25Jd0m8C&dq=Neimeyer+(Eds.),+Personal+ meanings+of+death&source=gbs_navlinks_s
- Viorst, J. (1986). *Necessary Losses: The Loves Illusions Dependencies and Impossible Ex.* Retrieved fromhttp://books.google.com.pk/books?id=-GsBMtiRuK4C&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Ware, J. E., Gandek, B., & the IQOLA Project Group. (1994). The SF-36 Health survey: Development and use in mental health research and the IQOLA Project. *International Journal of Mental Health*, 23(2), 49-73. Retrieved from http://www.jstor.org/discover/ 10.2307/41344687?uid=3738832&uid=2&uid=4&sid=211041532 78211
- Ware, J. E., Kosinski, M., Bjorner, J. B., Turner-Bowker, D. M., Gandek, B., & Maruish, M. E. (2008). *SF-36v2 Health survey: Administration guide for clinical trial investigators*. Lincoln, RI: Quality Metric Incorporated.
- Wass, H., Berardo, F. M., & Neimeyer, R. A. (1988). *Dying: Facing the facts* (2nd ed.). Washington: Hemisphere Publishing Corporation.
- Zunzunegui, M., Alvarado, B. E., Béland. F., & Vissandjee. B. (2008). Explaining health differences between men and women in later life: a cross-city comparison in Latin America and the Caribbean. *Social Science Medicine*, 68(2), 235-242. Doi: 10.1016/j.socscimed.2008.10.031

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