

Relationship of Primary Incompatible Schema and Perception of Aging among Elders in Iran

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The aim of this study was to investigate the relationship between early incompatible schema and perception of aging among elders in Iran. For this study, 150 retired employees of the oil and gas company named South Oil were selected by a cluster sampling method. Participants responded to Aging Perceptions Questionnaire (APQ) and the short form of Primary Incompatible Schema (YSQ-SF). The data were analyzed by the Pearson correlation and Stepwise Regression Analysis using SPSS 18 software. The result showed that there is significant relationship between "perception of aging" and schema of "Abandonment/instability", "Social isolation", "Shame/defectiveness" & "Dependence/incompetence". Regression analysis demonstrated that the variables of "Emotional inhibition", "Self-sacrifice", "Failure" & "Emotional deprivation" had the most important role in predicting "perception of aging", and the largest predictive role related to "Self-sacrifice". It was concluded that schemas have an important role in personality and mental health, especially of the aged, and attention to them is essential for the well being of elderly population.

Keywords: Early incompatible schema, Perception of aging, Elderly population

Old age should be understood as a biological phenomenon with psychological consequences (Freitas, Queiroz, & Sousa, 2010). Typically, age is employed as an index of length of life, and implies several expectations to the biological state, fitness and functioning of the person in question. Multidimensional nature of age refers to age-related changes and life course transitions that are not only biological and maturational but, also psychological and social in nature. This multidimensionality implies that we do not consider age only physically (biological age), but in relation to our social world (social age) and to our personal goals and intentions (personal age) as well as in relation to what we feel we are on the 'inside' (subjective age) (Uotinen, 2005, p.9). The concept of subjective age, known as age identity, cognitive age or perceived age, provides a multidimensional view of the aging process and encompasses more social, psychological and personal meaning than chronological age (Bergland, Nicolaisen, & Thorsen, 2014). In most cases, the terms subjective age and personal age are used as synonyms referring to an

individual's personal perception of his or her age (Uotinen, 2005). "Self-perception of aging" refers to perceptions of their own age and aging (Levy, 2003; Sneed & Whitbourne, 2005). The process, by which individuals develop perceptions about themselves as old people draw upon two stages of expectations. First, there are expectations that are internalized during the lifetime that preceded old age. These aging expectations include trajectories of attributes that will increase or decrease at different points over the life span. The second stage of expectations occurs through encounters that elderly individuals have in everyday life (Levy, Slade, & Kasl, 2002).

Although, old age is linked to both positive (e.g., wise) and negative (e.g., senile) stereotypes, negative attributes clearly outweigh positive ones (Hummert, 1990; Kite & Johnson, 1988). Both the activation of age stereotypes and age-related cues influence performance and behavior and are related to health and longevity (Hess, 2006; Horton, Baker, & Deakin, 2007; Hsu, Chung, & Langer, 2010).

Also, age schema causes a person to perceive himself as an elderly person and to characterize themselves using old age negative stereotypes. Age schemas act like other schemas (such as primary incompatible schema, which arise as a result of unfulfilled, basic childhood emotional needs) and guide the processing of information about the self (Kuryshva, 2014).

Schemas guide the processing of information about concepts, people, events and the self and reflect cultural, individual and situational differences in their understanding (Mandler, 1984). Theoretical and empirical research on schema is one of the most active areas in contemporary psychology (Kuryshva, 2014).

According to Yang's definition (2003), primary incompatible schemas are patterns of deep or pervasive essences that are formed in childhood or adolescence and are continuous in life. Yang defines several schemas, which have been called primary incompatible schemas. He defines five scopes with subsets: 1. Being exhausted by life including Abandonment/instability, Mistrust/abuse, Emotional deprivation, Defectiveness/shame and Social isolation/alienation, 2. Autonomy and dysfunction including Dependence/ incompetence, Vulnerability to damage and disease, no self evolution and a foul and failure. 3. Disrupt limitations including Eligibility/ hauteur, Self-control/ inadequate self-discipline. 4. Other directions including Obedience, Self sacrifice and Attracting attention. 5. Excessive Preparation and Inhibition including Negativity / pessimism, Emotional inhibition, Hard Criteria / extreme blame and Punishment (Mehrnoush, & Esmaeili, 2015; Nazemi et al, 2015).

Yang's schema-focused Cognitive therapy includes assessment schemas with a therapy protocol. Yang believes that schemas are constant patterns that are created in childhood and continue into adulthood and old age (Ahi & Besharat, 2007). For treating patients with cognitive therapy, assessment of primary incompatible schemas is important, especially for the well-being in old age and the prevention of undesirable outcomes.

Review of literature indicates that no study has been performed on the relationship of early incompatible schema and perception of aging in elders. Therefore, the objective of this study is to examine the relationship of early incompatible schema and perception of aging in elders.

Method

Sample

The statistical population of this study consists of all male, retired employees in the oil and gas company named South Oil. The sample of this study consisted of 150 people with an average age of 64 years (range being 60-71 years), living in Khuzestn in Aghajari and Ahwaz cities. None of the participants had diseases leading to memory impairment and dementia.

Research Tools

Primary incompatible schemas questionnaire: This questionnaire has been developed by Yang in 2005. It measures the Self-reporting of primary incompatible schemas such as Emotional deprivation, Abandonment/instability, Mistrust/abuse, Social isolation/alienation, Shame/defectiveness, Failure in progress, Dependence/practical incompetence, Vulnerability to diseases and damages, involvement, Obedience, Self Sacrifice (devotion), emotional inhibition, Strict criteria, Merit/outclass, Restraint/inadequate self-discipline, Praise/attract attention, Concern/paranoia, and self-punishment. Smith, Jones & Yungoothlech (1995) stated the reliability of the primary incompatible schemas questionnaire by using test-retest 0.5 and 0.82, respectively (Zolfaghari, Fatehi zade & Abedi, 2008).. Also, a short form of 75 items has been used in Iran by Ahi and Besharat (2007). The reliability using Cronbach Alpha method and Split-half method concluded to be 0.91 and 0.86 respectively. In this study, the reliability was 0.75 using the Cronbach Alpha method.

Aging perceptions questionnaire (APQ): This questionnaire was prepared in 2007 by Barker and colleagues. It is a self-report instrument that measures the individual assessment of perceived process of aging. It has 8 subscales and it is based on a 5-point Likert scale (Barker, Hanlon, McGee, Hickey, & Conroy, 2007). The

components include the following views about aging: 1. Timeline chronic, 2. Timeline cyclical, 3. Consequences positive, 4. Consequences negative, 5. Emotional representations, 6. Control positive, & 7. Control negative, and experience of health-related changes. The total scores of views about aging plus experience of health-related changes gives the perception of aging score. This questionnaire was standardized in Iran by Faride Haghi Asgarabadi (2012). Cronbach's alpha coefficients of subscales were between 0.63 and 0.81. Cronbach's alpha coefficient for the first section, that is, views about aging was 0.81 and for the second section, that is, experience of health-related changes was 0.88. In this study, Cronbach's alpha coefficient was found to be 0.85 for all questions.

Results

Descriptive statistics and findings of this study were presented in this section. Table 1 included descriptive information, mean and standard deviation (SD) of the variables.

Table 1: Means and Standard Deviations of Elders' Score on Research Variables

Variables	Mean	SD	Minimum	Maximum	N
Emotional deprivation	9.43	4.38	5	23	150
Abandonment / instability	8.91	3.79	5	21	150
Mistrust/abuse	8.89	3.56	5	20	150
Social isolation	7.59	2.62	5	16	150
Shame/defectiveness	6.69	2.28	5	15	150
Failure	7.21	2.58	5	16	150
Dependence/incompetence	7.63	2.73	5	17	150
Vulnerability to harm or illness	6.77	2.49	5	16	150
Enmeshment	2.88	1.12	2	8	150
Subjugation	8.01	2.79	5	16	150
Self-sacrifice	17.13	5.86	5	35	150
Emotional inhibition	11.76	3.87	5	18	150
Unrelenting standards/hyper criticalness	14.86	4.07	6	23	150
Entitlement	11.38	4.44	5	21	150
Insufficient self-control/self-discipline	11.35	6.07	5	53	150
Perception of aging	97.94	14.11	62	128	150

According to Table 1, the largest mean (SD) score among the early incompatible schema belonged to Self-sacrifice (M=17.13, SD=5.86), and the smallest mean (SD) score amongst them belonged to Enmeshment (M=2.88, SD=1.12). Also the Mean and SD of Perception of aging were 97.94 and 14.11.

To investigate the relationship between early incompatible schema and perception of aging, a matrix of Pearson correlation coefficient was prepared. The summary of findings is given in Table 2.

As seen in Table 2, there is a significant relationship (by $p \leq 0.05$) between perception of aging and the schema of Abandonment/instability, Social isolation, Shame/defectiveness, & Dependence/incompetence. Also, there is a significant relationship (by $p \leq 0.01$) between Perception of aging and Schema of Emotional deprivation, Failure, Subjugation, Self-sacrifice, Emotional inhibition, and Insufficient self-control/self-discipline.

Table 2: Correlation Matrix for Research Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Emotional deprivation	1															
Abandonment / instability	0.543**	1														
Mistrust/abuse	0.424**	0.484**	1													
Social isolation	0.495**	0.560**	0.583**	1												
Shame/defectiveness	0.442**	0.639**	0.405**	0.727	1											
Failure	0.277*	0.41**	0.163	0.563**	0.641**	1										
Dependence/ incompetence	0.412**	0.275*	0.170	0.456**	0.407**	0.515**	1									
Vulnerability to harm or illness	0.456**	0.463**	0.480**	0.374**	0.309**	0.65	0.188	1								
Enmeshment	0.247*	0.174	0.216	0.271*	0.209	0.127	0.110	0.39**	1							
Subjugation	0.223	0.097	0.157	0.245*	0.311**	0.49**	0.624**	0.603	0.075	1						
Self-sacrifice	-0.118	0.005	0.111	0.023	-0.109	-0.184	-0.088	0.151	0.173	0.152	1					
Emotional inhibition	0.278*	0.230*	0.108	0.283*	0.261*	0.261*	0.347**	0.344**	0.055	0.047	0.584**	1				
Unrelenting standards/ hyper criticalness	0.054	0.246*	0.266*	0.176	-0.052	0.147	0.013	0.279*	0.218	-0.17	0.263*	0.003	1			
Entitlement	0.177	0.413**	0.368**	0.326**	0.221	0.024	0.112	0.337**	0.254*	-0.19	-0.113	-0.11	0.671**	1		
Insufficient self-control/ self-discipline	0.175	0.110	0.283*	0.266*	0.269*	0.339**	0.088	0.120	0.263*	0.237*	0.151	0.198	0.051	0.025	1	
Perception of aging	0.322**	0.289*	0.167	0.248*	0.276*	0.347**	0.273*	0.185	0.220	0.402**	0.395**	0.474**	0.143	-0.07	0.367**	1

**P≤0.01, *P≤0.05v

Table 3: The Result of Stepwise Regression in Predicting Perception of Aging

Model	Variables	R	R ²	F	B	t
1	Emotional inhibition	0.474	0.225	20.875	0.474	4.56**
2	Emotional inhibition	0.557	0.311	15.992	0.404	3.98**
	Self-sacrifice				0.301	2.97**
3	Emotional inhibition	0.629	0.396	15.314	0.269	2.57*
	Self-sacrifice				0.393	3.93**
	Failure				0.326	3.15**
4	Emotional inhibition	0.666	0.444	13.754	0.209	2.01*
	Self-sacrifice				0.427	4.38**
	Failure				0.289	2.85**
	Emotional deprivation				0.234	2.42**

**p<0.05 ** p<.0. 01

To assess a more accurate predictive role for early incompatible schemas, a multivariate regression analysis (stepwise) was used. The result of the analysis is shown in Table 3.

Regression analysis illustrated that all variables were used in analysis and Emotional inhibition, Self-sacrifice, Failure and Emotional deprivation had the most important role in predicting Perception of aging. As seen in Model 4, the multiple correlation coefficient (R) was 0.666. This means that Early incompatible schemas significantly predict the Perception of aging. Also, the coefficient of determination (R²) is equal to 0.444, which means that 44.4% of the variance in the dependent variable is predicted by independent variables. In addition, in this regression model, the largest predictive role is related to Self-sacrifice ($\beta=0.427$).

Discussion

The 8th stage of Erikson's personality theory is "Integrity and Despair". In this stage, the person's ability to look back on life with contentment and few regrets is the main task. Integrity involves having a good perspective in life in one's final years. People who had struggled through life without feeling a part of its positive perspective may end up facing death in despair (Schultz & Schultz, 2012). According to this theory, an old person is on a continuum throughout the entire life and despair characterizes this stage for some. It can be said that a person with schema of failure throughout life have this trait at the last stage of one's life.

Contrarily, it can be said that an elderly person who emphasizes the rational aspect of life and has emotional control does not experience negative emotions even at the later stages of life. Such practices affect his feelings and perception about one's health and aging. Also, the schema of self-sacrifice promotes self-denial so that the aged prioritizes the needs of others even at the expense of one's own.

Labeling theory suggests that when confronted with age stereotypes, older adults integrate the stereotypical information into their self-assessment, and therefore, show assimilation effects (Rothermund, 2005; Rothermund & Brandtstädter, 2003). Findings

convey that the priming of negative age stereotypes in older adults results in poorer age-typical performance such as slower gait or impaired memory performance (Hess, Hinson, & Statham, 2004; Levy, 1996), and it supports the idea of the assimilation effect. It can be said that one of the traits of old age is sensitivity, and sometimes elders may have excessive expectations from others. Therefore, they may have emotional deprivation schema. A person having this schema presents the trait of excessive sensitivity to behavior of others.

Conclusion

The purpose of this study is to investigate the relationship of early incompatible schema and perception of aging of elders. The findings of this study show that early schema is indeed associated with the perception of old age by the participants. The major problem encountered by the researcher was the difficulty in explaining the issues to elderly people. The research is limited by its relatively restricted sample taken from one company only. However, future research may be conducted to generalize the findings in other settings.

The major applied value of this study lies in incorporating the variable of early schema in health management of the elderly. The schemas are cognitive dimensions that have an important role in the perception of self, others and the society by the elderly. This construct may be utilized to examine the mental health of the elders and to improve their quality of life.

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