Comparison of the Components of Emotional Intelligence (EI) in Successful and Unsuccessful Elderly People in Rafsanjan city and the Contribution of these Components in Predicting Successful Aging

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Abstract: Introduction: The purpose of this study was to compare the components of Emotional Intelligence (EI) in successful and unsuccessful elderly people in Rafsanian city. Methods: This study is a correlation research. In order to set an appropriate sample to collect data, Cochran's formula was used. Research sample contain 150 elderly subjects in Rafsanjan city who were selected based on the sample stage. Based on Emotional Intelligence (EI) questionnaire, satisfaction with life scale of Diener et al, Williams and Goldberg's general health questionnaire (GHQ) was used to collect data. Using the results of two questionnaires: Life satisfaction of Diener et al, and Williams and Gold berg's general health questionnaire, subjects were divided into two groups: successful and unsuccessful elderly. In order to analyze the data, in addition to descriptive statistics (classification and characterization data), the T-test and logistic regression analysis was performed using SPSS statistical software. Findings: The results showed that 77.33% of the sample group was in the successful elderly group, emotional intelligence of successful elderly in all subscales of EI is more than unsuccessful elderly and this difference is statistically significant. The five components of emotional intelligence included: self-actualization, emotional self-awareness, social responsibility, empathy and flexibility predicted membership (join) of subjects in the successful elderly category. Conclusion: Results of current study showed that the successful elderly people have higher emotional intelligence. Due to the increasing elderly population statistics in the coming years, the results of this study have many applications in planning for elderly population.

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Introduction

Nowadays, the phenomenon of aging with all aspects of mental, social, cultural, religious and economic effects is a serious and challenging issue for families in particular and society. In general, in developing countries, about two – thirds of all elderly people living in developing countries and by 2025, this figure will reach 75%. Iran is already leaving behind the changes in population structure, according to the (2006) census, with more than 27.7% of elderly age over 60 years , the country has become older and up to 15 years this figure will be 10.7% (momeni & Karimi, 2010).

Success as a positive internal experience and one of the mental health indicators that due to the cognitive and affective evaluations of human lives, in the last three decades has been considered by many psychologists (Hosseini & Rezaee, 2011). Success leads to life satisfaction; on the other hand, life satisfaction is described as an individual evaluation of the various aspects of his or her life. In fact, it can be

said that life satisfaction reflects a balance between one's wishes and his or her current status (Nassiri & Jokar, 2009).

There is no unified definition of successful aging. Rowe & Kahn (1998) have defined successful aging as follows: the absence of disease and disability, cognitive performance and healthy body and active participation in life. Apparently, the concept of successful aging, more than success or unsuccessful, will depend on continued progression (Bowling & Dieppe, 2005). Thus, in definition of successful aging, incorporation of psychological and medical approaches should be involved. Even in chronic physical illness, elderly people may experience successful aging, that this issue is referred to distinguish between chronic disease and their attitudes as a patient (Vaillant & Mukamal, 2001). However, the Berlin Aging study revealed that: the elderly may take an average of three to eight various treatments, but they do not consider themselves as sick; although, in terms of medical science they may

be classified in the patients group of chronic disease. Thus, perceived health is one of the most common definitions of successful aging in the general population (Bowling & Dieppe, 2005); it also is one of the most significant predictors of mortality in the elderly (Wolinsky & Johnson, 1992). One of The greatest effort to the objective study of successful aging that uses this framework was Mac Arthur studies about successful aging that used the cut-off scores for cognitive and somatic to distinguish between groups. Results indicated that more than 32.6% of the Mac Arthur studies that were in the successful aging conditions, had better performance on cognitive and physical tests and were assessed themselves more healthy and reported less chronic illnesses. In contrast, the unsuccessful group had less education and was not white (Strawbridge, Cohen, Schema, Kaplan, 1996). Andrews, Clark and Luszcz, (2002), using the criterion of Mac Arthur cognitive and physical, evaluated 36% of their sample successfully and found that younger age, higher education, more physical activity and better health behaviors, predicted membership in the successful aging group significantly.

Among the variables that can be involved in successful aging is Emotional Intelligence (EI). Mayer & Salovey (1997), are defined that EI is the ability to evaluate, express and regulate their emotions and others and efficient use from it. According to Goleman (2001), EI is a skill, that its owner could control his or her mood through self—awareness, improve it through self—management, understand their impact through empathy and through the management of relationships behave in a manner that enhances their mood and others. Bar-on (1997), considers EI as an important factor in the development of the individual's ability to achieve success in life and linked it with emotional health and mental health generally.

Recently, extensive research have taken place on the disorder of EI and its impact on quality of life, career and academic success, resistance to stress, health and quality of social relationships and marriages. These studies emphasize the impact of EI of the success and happiness in life (Nelis et al. 2009). The results of studies of Petrides, Pita and Kokkinaki (2007) showed that between EI characteristic and variables related to mental health, there is a significant positive relationship. Also the results of studies of Malterer, Glass and Newman (2008) have been approved the negative relationship between EI and psychopathology; however these characteristics are important mediators in response to stress (Mikolajczak & Luminet, 2008). Fabio and Palazzeschi (2009) in their research were investigated concept of fluid intelligence, characteristics of

identity and in academic successful and unsuccessful with regard to the components of EI and individual characteristics; The results of this study showed the effects exerted by fluid intelligence, EI and personal identity and particularly dramatic impact on the ability model of EI on academic success. Shipley, Jackson and Segrest (2010) investigated in their study the relationship between EI and career success due to the increasing age of the population; they find that EI has positive relationship with job experiences. Qualter, Gardner, Pope, Hutchinson and whitely (2012) in their study were investigated long-term effects of EI on performance and academic success of British teenagers. The results showed that after 11 years, the importance of ability EI model in the successful performance has been an average level of their cognitive ability; it also became clear that the trait model of EI after 11 years has had a direct impact on the performance of boys.

Saklofske, Austin, Mastoras, Beatonb and Osborne (2012), in their study examined the collection of influenced character of EI and factors affecting on this model in achieving success of the group of undergraduate (BS) students at the University of Edinburgh; To do this, complete information model for modeling stress, EI and academic achievement measures were collected for 216 students; Results indicated that EI has a significant impact on the success of most students.

According to the issues described above, this study compared the components of EI in the successful and unsuccessful elderly. Also the contribution of the components of EI in predicting successful aging is evaluated. No doubt, in the coming years due to the increasing elderly population statistics, the results of this research will have many applications in planning for the elderly.

Method

The method of this study is a correlation. The population of this study consisted of all the elderly of Rafsanjan city in the second half of 2012. In order to determine the appropriate sample Cochran's formula was used to collect data. Using this method for determining the sample size for this study were selected 150 patients (75 males and 75 females). In order to select the sample group was used the sample stage; in this case, firstly the districts of Rafsanjan municipality were determined and then among the areas of municipality, the two regions (districts) of municipality were randomly selected. Then from each area, 20 streets selected and one number was assigned to each, and then by extraction of random numbers, 10 streets from each area were selected (a total of 20 streets in both regions). Next step is identifying the residence of old people in the

selected streets and going to the door and informed consent, and finally, the questionnaires was completed by interview.

Research Tools

Bar ON Emotional Intelligence Questionnaire

This test consists of 90 questions and responses on a scale of 5 degrees on a Likert scale (Absolutely agree, agree, somewhat, disagree, completely disagree) is set. The test has 15 scales, include: self-awareness, self-presentation, self-esteem, self-actualization, independence, empathy, social responsibility, interpersonal relations, realism, flexibility, problem solving, stress tolerance, impulse control. optimism and happiness. questionnaire is the most comprehensive self-report test of EI that implemented and validated in six countries and has a high degree of reliability and validity. This questionnaire has been validated by samoei et al (2001) and confirmed its validity and reliability in Iran (reliability coefficient of 0.7 or higher, and 93% Cronbach's alpha (Motamedi, 2005).

Life satisfaction scale

Satisfaction with life scale was developing by Diener, Emmons, Larsen and Griffin (1985) to measure life satisfaction. This scale consists of 5 items that they answers is graded in the form of Likert scale from 1 (Completely disagree) to 7 (strongly agree). Studies conducted by Diener et al, (1985) suggest that this scale has good validity properties; the research of Jokar (2007) has done over 577 high school students, the Coronbach's alpha coefficient of 0.80 was obtained. He has calculated validity of the questionnaire through factor analysis method; the results indicate the existence of a general factor in scale that could explain more than 54% of the variance

General Health Questionnaire (Goldberg & Williams, 1988)

General Health Questionnaire (GHQ) is a screening questionnaire based on self-report method that to be used in the series of clinical trials aimed at detecting those with mental disorders (Goldberg & Williams, 1988). In this test, symptoms of a person have been evaluated (self-assessment) from one month prior to the time of test. Based on the factor analysis conducted by Goldberg and Hiller (1979), were obtained four major factors include: the scale of somatic symptoms, anxiety symptoms and insomnia, social dysfunction and the scale of depression.

Psychometrics studies of various test versions showed that the version of 28 questions has the maximum reliability, sensitivity and specificity than the other versions (Goldberg, 1989).

In Iran, Taghavi (2001) performed validation features of 28 questions forms with 92 students sample in Shiraz University. Retest reliability coefficient, bisection, and Cronbach's alpha, was obtained respectively 0.70, 0.93 and 0.90.

Findings

Table 1 presents the mean and standard deviation of EI and its components in successful and unsuccessful elderly. T-test results showed that the mean scores on EI and all its components in successful elderly are higher than unsuccessful elderly (P<0.001).

Logistic regression analysis also indicated (Table 2) that only five of the fifteen components of EI with significant coefficients have been entered into the model. These variables include: self-actualization, emotional self-awareness social responsibility, empathy and flexibility. Self-actualization, flexibility. emotional self-awareness, and empathy that have positive significant contribution: this means that elderly with higher self-actualization, with higher flexibility, and higher levels of emotional self-awareness and higher empathy have greater chances of success. Only for social responsibility variable the coefficient is negative that indicate that elderly people with higher responsibility have less chance of success. Column EXP (B) represents the rate of change in the predicted probability of successful aging, per unit change in the predictor variable. Values less than 1 indicate that the predictor variable increase associated with reduced chance of event (like what happened in the presence of the predictor variable of responsibility). Also, none of the three variables of gender, education and employment status have any predictive capability of class membership (join) of successful and unsuccessful aging. The value of Chi-square statistics also showed that the relationship between independent variable and the dependent variable is positive and significant at the 0.05 alpha levels.

The study results (Table 3) slowed that the overall percentage of correct classification model is 84%, so that, 20 unsuccessful aging of 33 unsuccessful aging (66.6%) and 90 successful aging of 101 successful aging (92.1%) were correctly classified.

Table 1: Results of T-test to compare the mean scores of EI and its components in successful and unsuccessful elderly

Variable	Elderly(Aging)	Mean scores	Standard deviation	T-Value	
EI Scores	Unsuccessful	253.94	44.98	**7.79	
El Scores	Successful	322.5	43.8		
Problem solving	Unsuccessful	18.1765	4.32379	***-6.329	
	Successful	22.6696	3.41237		
Happiness	Unsuccessful	15.7647	4.72299	***-7.440	
	Successful	22.1754	4.31348		
Independence	Unsuccessful	16.3333	3.62859	***-5.022	
	Successful	19.8947	3.57565		
Stress tolerance	Unsuccessful	13.8824	4.2742	***-6.196	
	Successful	19.2456	4.54001		
Self-actualization	Unsuccessful	16.4706	3.99420	***-8.320	
Sen-actualization	Successful	22.3158	3.47001		
Emotional	Unsuccessful	17.2353	3.89295	***-7.513	
self-awareness	Successful	22.1404	3.16193		
Realism	Unsuccessful	16.8529	3.50871	***-7.240	
	Successful	21.1754	2.90939		
Interpersonal relations	Unsuccessful	18.7059	5.39657	***-6.312	
	Successful	23.6609	3.52407		
Optimism	Unsuccessful	17.3235	4.28331	***-7.828	
	Successful	22.8261	3.37759		
Self-esteem	Unsuccessful	17.3529	3.76493	***-6.923	
	Successful	22.4035	3.72440		
Impulse control	Unsuccessful	16.4118	4.71694	***-5.158	
	Successful	20.9107	4.37345		
Flexibility	Unsuccessful	13.7353	3.27811	***-6.021	
	Successful	18.1842	3.91631		
Social responsibility	Unsuccessful	20.4806	5.22949	***-3.064	
	Successful	22.8087	3.43331		
Empathy	Unsuccessful	19.5882	6.10572	***-4.697	
	Successful	23.4609	3.49508		
Self-presentation	Unsuccessful	16.2647	4.7735	***-3.359	
	Successful	18.9292	4.04818		

^{**}P<0.001;

Table 2: Results of stepwise logistic regression estimate for both groups of successful and unsuccessful elderly

Independent variable	Beta (β)	Prediction coefficient Exp (B)	Standard deviation	Wald *	Significant level
Self-actualization	0.248	1.281	0.097	6.48	0.011
Emotional self-awareness	0.227	1.255	0.111	4.15	0.042
Flexibility	0.175	1.191	0.106	2.74	0.048
Social responsibility	-0.465	0.628	0.152	9.37	0.002
Empathy	0.275	1.316	0.143	3.69	0.05
Chi 2 statistics (significant			(0.001) 64.1		
level)			(0.001) 04.1		
Explanation Multiply			0.565		

^{*} It is explained that the Wald index was obtained divided by the square of non- standard β (beta) divided by standard error and compared with the non-standard β , is more accurate index (indicator) of the intensity of the relationship between predictor variables and the criterion.

^{***}P<0.0001

Table 3: Percentage of classification accuracy of regression model

	Unsuccessful aging	Successful aging	Percentage of prediction accuracy
Unsuccessful aging	20	13	60.6
Successful aging	8	93	92.1
Total percentage			84.3

Discussion and conclusions

The aim of current study is comparison of the components of EI in successful and unsuccessful elderly and the contribution of these components in predicting successful aging. The results showed that in both successful and unsuccessful elderly group there was significant difference in the components of EI. This means that the successful elderly compared with unsuccessful elderly, have higher EI; this finding with the result of studies that have been approved positive outcomes of EI on quality of life, career and academic success, stress resistance, heath and quality of social relationships and marriage, are consistent; for example, the positive effects of EI on the success and happiness in life (Nelis, Quoidbach, Mikolaiczak and Hansenne, 2009); positive relationship between EI attributes and variables related to mental health (Petrides, Pita and Kokkinaki, 2007) and negative relationship between EI and psychopathology (Malterer Glass and Newman, 2008) Has been approved; In explaining these findings, it can be said that elderly with higher EI are happy and have higher motivation and better social relationships (Aghayar & sharifi daramdi. 2009), and Also, they have higher adaptability in dealing with environmental emergencies and pressures (Ciarrochi, Forgas and Mayer, 2001).

Also, the contribution of the components of EI in predicting successful aging, the results showed that the components: self-actualization, self-awareness, social responsibility, empathy and flexibility, can predict successful aging; this means that the elderly with higher self-actualization, with greater flexibility, with higher levels of emotional self-awareness and higher empathy have a greater chance of success in aging period. but, the social responsibility component, predicted membership of subjects in successful elderly class (category) negatively; this means that older people with higher responsibility have less chance of success. It may be inferred that higher responsibility and helping others in sample studied, is reduced their chance of success. This result can be explained with Post (2005) reasoning; he believed that high correlation between happiness, prosperity, health and longevity with emotional and behavioral kindness, depended on receiving no harm during these humanitarian activities. Furthermore, significant contribution of self-actualization component in predicting successful

aging, are consistent with the result study of Abolghasemi, Abbasi, Narimani and Ghamari(2009). They showed that an increase in self-actualization, predicts manager's success in entrepreneurship. So, according to Maslow defined self-actualization as "the most successful and realize the talents, capabilities and abilities and realize the self in the highest level" (Schultz, 2011), it can be inferred that a higher self-actualization is directly related to the feeling of greater success in life. Also, the study results of the flexibility component with the study results of Jeste, Depp and Vahia (2010), are consistent; in their investigation, they reached to the conclusion that optimism, flexibility, cognitive ability and physical and mental health are important variables to predict successful aging. The results of this research on significant contribution of empathy in predicting successful aging are also consistent with the study results of Sze, Gyurak, Goodkind and Levenson (2012). Sze et al indicated that emotional empathy important plays an role community-friendly behavior (helping others) in elderly group. In this regard, the study results with the study findings of Kahana, Bhatta, Lovegreen, Kahana and Midlarsky(2013) are also consistent; humanitarian Thev showed that attitudes. volunteering and informal helping behaviors have a unique contribution in life satisfaction (success). So it can be concluded that the empathy as a common component in community- friendly behavior and EI as an important predictor variables in life satisfaction, is effective in aging period.

If we consider the career and academic success as two component of success in general meaning and as a foundation for success and life satisfaction in aging period, the results of this study with study results of Fabio and Palazzeschi (2009) that indicated the effects exerted by EI and fluid intelligence and personal identity, and in particular the dramatic impact of model- based ability EI on academic success and The study of Saklofske, Austin, Mastoras, Beatonb and Osborn (2012)that showed EI has a significant impact on the success of the majority of students are consistent. In this regard, the results of this study with the findings of Qualter, Gardner, Pope, Hutchinson and Whiteley(2012) concerning the positive effects of EI on success are consistent: They showed that EI is effective in student achievement. The results obtained in this study with the study of

Shipley, Jackson and Segrest(2010) who showed a positive relationship between EI and occupational success, are consistent; In general, emotional capabilities in proper detect of emotional responses, in the face of daily events, expanding the scope of the vision and create a positive attitude about the events and emotions, play a major role. As a result, individuals who have the ability to detect, control and use of these emotional capabilities, will benefit from social support, sense of satisfaction, greater physical and mental health, and ultimately higher success (Schutte and Malouff, 2007). These results will have a lot of implicit applications in addressing the health problems of elderly. Officials and those involved in the elderly affairs, with careful planning in line with the training of EI components to this group can take positive steps. Effective teaching of EI skills can also prepare individuals for entry into this important period and can convert the aging into effective and useful period for individuals and society.

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