

Prediction of Life Satisfaction Based on Perfectionism, Sense of Solitude and Attachment Style in Type II Diabetes patients in Guilan Center for Vascular Surgery

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ABSTRACT

The main goal of this research is to predict life satisfaction out of perfectionism, sense of solitude and attachment style in type II diabetes patients in Guilan Center for vascular surgery. It is a correlation study. Statistical population of the research included all type II Diabetes patients. 200 individuals were selected by means of simple random sampling. Research instruments included: 1. Hill et al (2004) perfectionism questionnaire, 2. Short form of socio-emotional solitude scale for adults (SELSA-S), 3. Diner et al's life satisfaction questionnaire (1998), 4. Adults' attachment scale (RAAS). Correlation and multiple regression coefficients were used for analyzing data. Results of regression analysis showed that attachment style can predict life satisfaction. Results of correlation coefficient analysis showed that there is a relationship between life satisfaction and perfectionism, there is a significant relationship between attachment style and life satisfaction. However, there was no significant relationship between life satisfaction and sense of solitude. Considering the results, it can be concluded that consultancy aimed at discovering sense of solitude in type II diabetes patients in Guilan Center for vascular surgery can adjust perfectionism and improve life satisfaction and attachment style.

KEYWORDS: life satisfaction, sense of solitude, attachment style, perfectionism.

INTRODUCTION

Diabetes is a metabolic disease and multi-factor disorder which is characterized by chronic increase or hyperglycemia and is resulted from secretion disorder or Insulin performance disorder or both of them. Diabetes is considered as a silent epidemic and is regarded as a public hygiene problem and is responsible for 9% of total global mortality. Perfectionism is a set of very high performance criteria which is accompanied by negative self-evaluation and criticisms (Froust, 1990). Perfectionism is a negative neurotic style in behavior (Homachek, 1987). Normal-neurotic classification has characterized two types of perfectionisms. Positive or adaptive perfectionism is characterized by high accessible personal standards, tendency to discipline and organization of affairs, sense of satisfaction with one's performance, search for excellence and motivation for achieving positive rewards (Abolghasemi, 2007). Negative or non-adaptive perfectionism is also defined by unrealistically high standards, extreme worry about personal defects and mistakes, perception of high pressure of environment for being perfect, perception of large distance between personal performance and standards and doubt about affairs and avoiding consequences of personal performances (Terry Shourt, Onz, Slad, Dewi, 1995). Perfectionist individuals seek perfection when experiencing defeat and do not use self-controlling activities and keep criticizing them (Elden, Blingo valance, 1994). Boronz defined perfectionism as an individual's tendency to impose perfect and unachievable criteria and attempt for fulfillment of the criteria and is accompanied by critical self-evaluations of one's performance. Dimensions of perfectionism indicate intra-personal, inter-personal and social multidisciplinary nature (Frost, Marit, Lahart and Rosenblit, 1990). On the other hand, sense of solitude is an unwelcome experience which is expressed in response to quantitative and qualitative failures in social relations (Peplou and Perlman, 1981). This feeling has a short background in psychology. However, many philosophical, literal and religious works have dealt with this feeling (Hankok, 1986, as quoted from Crous-Parlo, 2008). Therefore, it seems that sense of solitude and attempt for its description is not restricted to a particular time. In other words, while some individuals have restricted social relations, they do not experience sense of solitude. However, some others suffer from solitude feelings in spite of having wide social relations. Therefore, sense of solitude requires an individual's perception or evaluation of one's social relations and comparison of present status with his or her favorable and utopic state. Some experts believe that this comparison and way of perception of social relations is the cause for occurrence of sense of solitude (Hinrich

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and Galon, 2006; Jones, 1981; Hackley, Berentson Kasiopo, 2003). Attachment is a deep emotional bond an individual establishes with other individuals. The function of attachment system is keeping close to other people in stressful situations (as quoted from Khoda Bakhsh, 2012). In fact, Balbie developed attachment style and referred to deep emotional bond which is transferred to another person (Brent, Dewis, Green, Wertington and Bradnild, 2009; Erz, Miklalink, Wanizendem and Krunberg, 2008). The main signal of attachment behavior is that the child seeks for his or her caretaker or the person he or she has a close relationship with and becomes worried when the caretaker is absent. Blbie used attachment behavior not only to respond to separation of child from caretaker but also considers it as a natural response to any kind of worry (Reber, 1985). When the question is propounded: "whether you are satisfied with your life or not?" they usually answer few sentences. Individuals are usually less satisfied with their lives than they express. Individuals tend to have good feelings but many people are not too satisfied because there are always some things which bring dissatisfaction. Being satisfied means having a feeling of reaching one's expectations. Satisfaction is a mental state, and is a cognitive existence. This cooperation can be proposed in two states: both in the form we change the world and we expect, and in contrast because they are unreal. Measurement of life quality is done by life satisfaction and is considered as a good life and is something beyond satisfaction (Nordon Flat, 1991). In SHirvani's research (2011), relationship between life satisfaction and primary incompatible schemas were investigated in students of Babol City universities. The results of the research showed that there are differences between female and male students in the following subscales: absence of trust/bad behavior, failure, vulnerability to loss or disease and strict criteria/extreme fault-seeking. Mousavi (2011) conducted a research titled: "relationship between attachment classes and personality traits with happiness feeling among students of Tabriz University with a statistical population of 2800 people and 250 sample members. He showed that there is a positive relationship between secure attachment style and extrovert personality dimensions and conscionsciousness and happiness. Further, there was a negative relationship between secure attachment style and neuroticism. Parker, Ortega and Van Lu Ningham (2014) conducted a research on 3098 people and found that satisfaction with life is the best predictor of psychological health and attachment style and factors like income, education, gender and occupational status are in the subsequent stages. Oum and Rice (2014) investigated relationship between attachment style, perfectionism, concentration on target and academic progress. They studied 134 students and analyzed data by means of regression method. They found that when perfectionism increases, concentration on target and academic progress also increase. Of course, the correlation between attachment and points of positive perfectionism was more. Arsalan, Hamarta, Oreh and Ozishil (2010) investigated sense of solitude and perfectionism in students. They studied 535 students (328 female and 207 male). They concluded that perfectionism in students is higher than normal and there is a significant correlation between perfectionism and sense of solitude. Chapan (2010) investigated relationship between perfectionism, academic laziness with life satisfaction in university students. In this research, 230 respondents were involved. Data were collected by means of perfectionism multidimensional scale for measuring perfectionism personality trait, students' laziness scale for measuring laziness and life satisfaction scale for measuring life satisfaction. Results were analyzed by means of regression technique. Results showed that perfectionism significantly predicts academic laziness and life satisfaction. Handert and Lantiri (2012) investigated relationship between unsafe attachment style and emotional inability in young men who suffered from temperament disorders. Results showed that those who had emotional disabilities expressed unsecure attachment style and had more serious signals of separation anxiety over childhood. Therefore, Diabetes is a metabolic disorder which has the following features: disorder in carbohydrates, fats and proteins metabolism and increase in coronary diseases risk. A research was conducted on 114 patients who suffered from diabetes and showed that stressful events in life can disturb diabetes control. Considering what was said before, the present research tries to answer the question: "is there any relationship between prediction of life satisfaction and sense of solitude, attachment style and perfectionism in type II diabetes patients?"

Research methodology, statistical population and sample size

The present research is a descriptive correlation. Statistical population of the research included all patients who suffered from type II diabetes and they were 2400 people in number. They had referred to عروق surgery centers in Rasht City in the first quarter of 2014 for treatment. Random sampling method was used for sampling. Morgan table dictated to select 220 people as sample size out of 2400 people (total population). The questionnaires were distributed among respondents and 200 questionnaires were analyzed.

Measurement instrument

1. Perfectionism questionnaire: Hill et al (2004) designed an instrument which is an objective and self-reporting questionnaire and is based upon cognitive-behavioral approach. The Persian version of perfectionism index has 58 questions and 6 subscales. It was validated and normalized by Houman and Samaee (2010). It has 6 subscales: inter-personal sensitivity, attempt for excellence, discipline and organization, pressure perception by parents, purposefulness and high standards for others. In a research conducted by Rasouli (2010), Chronbach's alpha was equal to 0.76. Furthermore, Hoseini (2011) calculated validity and reliability coefficients

to be equal to 0.67 and 0.77 respectively. In the present research, Chronbach's alpha (for 200 sample members) was equal to 0.78.

2. Short form of socio-emotional solitude scale for adults (SELSA-S): this scale was designed and prepared based on Veis classification in 2004 by Tomaso, Branon and Best. This scale contained 15 items and three subscales of romantic solitude (5 items), family solitude (5 items) and social solitude (5 items). Emotional solitude feeling was obtained by adding romantic and family subscales scores. The questions were based upon 5-point Likert scale from completely disagree (point 1) to completely agree (point 5). All items except for 14 and 15th items were reverse-scored and a higher score indicated higher sense of solitude. Designers of this scale calculated Chronbach's alpha coefficient to be between 0.87 and 0.90, which showed an appropriate internal consistency. The designers reported that there is a significant correlation between (SELSA-S) subscales and total score of sense of solitude scale (UCLA-3) and subscales of attachment perception index (IPPA). This significant correlation indicates that this questionnaire has appropriate simultaneous, differentiation and convergent validity. Di Tomaso, Branon McNalti, Ross and Berges conducted a research and calculated Chronbach's alpha to be equal to 0.81 for sense of romantic solitude and 0.91 for sense of family solitude. Validity and reliability of this questionnaire has been verified in many studies. Chronbach's alpha for 200 sample members was calculated to be equal to 0.69.

3. Diner et al's life satisfaction questionnaire: this scale contained 48 questions which evaluate life state and sense of well-being. Its factor analysis showed that it is made up of three dimensions. The number of questions decreased to 5 questions and it was used as a separate scale. Its validity and reliability were verified. The five items have 7 choices each and were scored from 1 (completely disagree) to seven (completely agree). Hojjat (2009) calculated its reliability to be equal to 0.89. in the present research, Chronbach's alpha was equal to 0.76 for 200 people.

4. Collins And Reid Adult Attachment Scale (RAAS)-revised version: Adults' attachment scale was first designed by Kolinz and Reid (1990) and was revised in 1996. Attachment theory is the base of this questionnaire. This scale evaluates communication scales and friendly relationship style. It contained 18 items. The respondents answered the questions based on a 5-point Likert scale. This questionnaire has 3 subscales which evaluate emotional bond of individuals with others. "Anxiety" subscale evaluates an individual's worry about being rejected by others. Dependence subscale is avoidant attachment. Anxiety subscale has ambivalent concordance with anxious attachment and proximity subscale is a bi-polar dimension which places secure and avoidant descriptions in front of each other. Therefore, proximity matches secure dependence and dependence subscale can be set as avoidant attachment (Fani and Fovaler, 1996; as quoted from Pakdaman, 2011).

Scoring method and results interpretation:

Proximity subscale (6 items): 1-8-9-10-14-17

Dependence subscale (6 items): 3-4-7-15-16-18.

Anxiety subscale (6 items): 2-5-6-11-12-13

In order to calculate the score of each subscale, we add the score of corresponding items and divide by the number of items (6). The respondents were assigned to one of the three groups: secure attachment style, anxious attachment style, avoidant attachment style.

Secure attachment style: individuals with above average scores in proximity and dependence scales and lower-than-average scores in anxiety subscale.

Anxious attachment style: individuals with above average score in anxiety subscale and average scores in proximity and dependence subscales.

Avoidant attachment style: individuals with low scores in all three subscales. Sa'dnia (2011) calculated total reliability coefficient to be equal to 0.87. for subscales, the coefficients were equal to 0.67 for anxious style, 0.71 for anxious style and 0.69 for avoidant style. In the present research, Chronbach's alpha was equal to 0.75 for total questions, 0.65 for secure style, 0.64 for anxious style and 0.62 for avoidant style. Frequency distribution table, mean and standard deviation were used for descriptive analysis. Multiple regression coefficient (stepwise) and Pearson correlation was used for inferential analysis. All statistical measurements were conducted by means of SPSS18 software package.

Findings

Table 1. Mean and standard deviation descriptive indices for research variables

SD	mean	Statistical indices	
10.43	66.94	Life satisfaction	<u>Dependent variable</u>
17.98	61.43	perfectionism	<u>Independent variable</u>
19.59	23.16	Sense of solitude	
10.49	66.60	attachment	

As it can be seen in table 1, mean value of life satisfaction variable is equal to 66.94 with a standard deviation equal to 10.43, mean value of perfectionism is equal to 61.43 with a standard deviation equal to 17.98, mean value of sense of solitude is equal to 23.16 with a standard deviation equal to 15.59 and mean value of attachment is equal to 66.60 with a standard deviation equal to 10.49.

Inferential findings

First hypothesis: there is a relationship between life satisfaction, perfectionism, sense of solitude and attachment style in type II Diabetes patients.

Table 2. Correlation matrix for investigation of life satisfaction, perfectionism, sense of solitude and attachment styles

	1	2	3	4	5	6
perfectionism	1					
sense of solitude	**0.433	1				
attachment	**0.409	0.114	1			
secure	-0.057	0.019	*-0.185	1		
avoidant	0.105	-0.027	-0.021	0.062	1	
anxiety	0.029	-0.180**	-0.039	0.032	0.089	1
life satisfaction	**0.408	0.084	**0.945	*0.182	-0.037	-0.052

Considering the results of the above table, there is a significant relationship between perfectionism and life satisfaction ($p < 0.01$, $r = 0.408$). There is no relationship between sense of solitude and life satisfaction ($p > 0.01$, $r = 0.084$). There is a significant relationship between attachment style and life satisfaction ($p < 0.01$, $r = 0.945$). There is a significant relationship between attachment style and life satisfaction ($r = 0.182$, $p < 0.05$). There is no significant relationship between avoidant and anxious attachment styles and life satisfaction.

Table 3. multiple correlation between independent and dependent variables

	r(R2(R2(Δ	Std.error
attachment	0.945	0.893	0.893	3.45

Determination coefficient shows that attachment variable predicts 89% of variance of life satisfaction variable ($r^2 = 0.893$).

Table 4. multiple regression variance analysis test

	SS	DF	MS	F	Sig
Regression (attachment)	17181.15	1	17181.15	144.78	0.000
remainder	2049.65	172	11.91		

Since $p < 0.01$, the model is significant. Therefore, it can be concluded that the multiple regression equation is a linear equation; in other words, attachment style can predict variations in life satisfaction variable (Sig=0.000, F=144.78). Table 4 presents coefficients obtained for regression by stepwise method.

Table 5. Standard and non-standard coefficients of independent and dependent variable

	B	Standard error	Beta	T	Sig
constant	4.05	1.67		2.42	0.016
Attachment	0.943	0.025	0.945	27.97	0.000

Beta coefficient presents a measure for evaluation of the share of each variable in the model. the calculated beta coefficients in the table show that as standard deviation of attachment style increases one unit, standard deviation of life satisfaction also increases by 0.945 (beta).

Regression line equation $y = bx + a$

Life satisfaction = (0.943) + (0.945) attachment

Second hypothesis: there is a relationship between life satisfaction and perfectionism in type II diabetes patients.

Table 6. Pearson correlation test for investigation of life satisfaction and perfectionism

	perfectionism	Life satisfaction
0.408	correlation	
0.000	sig	
200	number	

As it can be seen in the above table, there is a relationship between life satisfaction and perfectionism ($r=0.408$) which is statistically significant ($p<0.01$). Therefore, it can be concluded with 99% of certainty that there is a significant relationship between life satisfaction and perfectionism.

Third hypothesis: there is a relationship between life satisfaction and sense of solitude in type II diabetes patients.

Table 7. Pearson correlation test for investigation of life satisfaction and sense of solitude

	Sense of solitude	
0.084	correlation	Life satisfaction
0.236	sig	
200	number	

As it can be seen in the table above, there is a relationship between life satisfaction and sense of solitude ($r=0.084$) which is not statistically significant ($p>0.01$). Therefore, it can be said with 99% of certainty that there is not any relationship between life satisfaction and sense of solitude.

Fourth hypothesis: there is a relationship between life satisfaction and attachment style in type II diabetes patients.

Table 8. Pearson correlation test for investigation of life satisfaction and attachment style

	1	2	3	4
attachment	1			
secure	*-0.158	1		
avoidance	-0.021	0.062	1	
anxiety	-0.039	0.032	0.089	1
life satisfaction	**0.945	*0.182	-0.037	-0.052

As it can be seen in the table above, there is a relationship between life satisfaction and attachment style ($r=0.954$) which is statistically significant ($p<0.01$). Further, there is a relationship between secure attachment style and life satisfaction ($r=0.182$) which is statistically significant ($p<0.05$). Therefore, it can be said with 99% of certainty that there is a significant relationship between life satisfaction and attachment style and secure attachment style. Relationships between other variables were not significant.

DISCUSSION AND CONCLUSION

First hypothesis: there is a relationship between life satisfaction, perfectionism, sense of solitude and attachment styles in type II diabetes patients. This result is consistent with the results of studies conducted by Arsalan, Hamarta, Oreh and Ozishil (2010), Chapan (2010), Bekandam (2012), Handert and Lantiri (2012), Parker, Ortega and One Lu Ningham (2014), Oum and Rice (2014). Results showed that there is relationship between perfectionism and sense of solitude and attachment style with life satisfaction. Furthermore, having an appropriate attachment style is effective in removal of anxieties which are occurred in mutual social relations and enables individuals to control environment and their worries, respond to happiness expressions more appropriately and therefore reduce anxieties of absence of secure attachment. Some people believe that life satisfaction refers to hope to future but hope to future is the result of life satisfaction or dissatisfaction. When an individual is satisfied with his or her life, he or she will be more hopeful to his or her future and will feel less lonesome. Diabetes patients believe that life satisfaction means having ideal spatial and time conditions and having all facilities for a healthy life, while the real meaning of life satisfaction is having a positive viewpoint towards one's life in spite of all difficulties and frustrations, victories and successes, joys and raising talents. Therefore, it can be said that individuals with high secure attachment have high self-efficacy skills and are more successful in solving their problems. Moreover, investigations showed that happy individuals look at positive aspects of issues and interpret events in a way that leads to their happiness. Such individuals have happy temperaments and are socially active. Therefore, they have high levels of self-esteem, good social support system, high levels of optimism, self-efficacy and powerful external control centers and this helps diabetes patients with feeling less lonesome. In general, it must be said that diabetes patients should be more conscious about their roles. When an individual has domination over his or her roles and increases his or her self-esteem, his or her sense of solitude will decrease and life satisfaction will increase.

Second hypothesis: there is a relationship between life satisfaction and perfectionism in type II diabetes patients.

Results of this hypothesis analysis are consistent with studies conducted with Arsalan, Hamarta, Oreh and Ozishil (2010), Chapan (2010), Handert and Lantiri (2012), Parker, Ortega and One luNingham (2014), Oum and Rice (2014). Absence of necessary communicational skills for dealing with life problems is a harmful

factor. Problems like depression, anxiety, solitude, isolation, timidity and conflicts in social relations are issues which cause many family and social problems. When diabetes patients fail to find an effective solution via conversation and effective communication and ignore issues, this can increase their solitude. Of course, this is observed more in perfectionist individuals. Such individuals have less satisfaction due to high-level targets and pride. In general, it can be said that general life satisfaction is a combination of individual and social conditions and is a sign of positive attitudes towards the world and environment in which they live. Life satisfaction has a high correlation with sense of prosperity, mutual trust and sense of commitment to society and is a sign of an individual's attitude towards surroundings.

Third hypothesis: there is a relationship between life satisfaction and sense of solitude in type II diabetes patients. The result conforms to the results of studies conducted by Arsalan, Hamarta, Oreh and Ozishil (2010), Chapan (2010), Parker, Ortega and One Lu Nnghan (2014), Oum and Rice (2014). It can be said that the significant relationship life satisfaction and sense of solitude depends highly on emotional and sentimental security individuals receive from each other. This depends on personality traits. Sense of solitude is common in diabetes patients. Communications skills and absence of solitude enables individuals to understand their tendencies and needs and express their feelings and opinions in a way that brings the minimum conflicts and defensive responses and maximum cooperation and support. Establishment of friendly communications and absence of solitude and isolation reduce conflicts in inter-personal relations especially in diabetes patients. In other words, these individuals' abilities to establish relationship with each other is an important strategy which enables them to stop negative emotions and thereby reduce psychological tension and increase life satisfaction.

Fourth hypothesis: there is a relationship between life satisfaction and attachment style in type II diabetes patients. This result is consistent with the results of studies conducted with Arsalan, Hamarta, Oreh and Ozishil (2010), Chapan (2010), Bekandam (2012), Handert and Lantiri (2012), Parker, Ortega and One Lou Ningham (2014), Oum and Rice (2014). This can be explained that trust in oneself and others is a basic trait in individuals with secure attachment style and helps individuals with establishment of a healthy and happy relationship and attracting others' help. Such individuals establish healthy and normal communications with others and reach satisfaction. It seems that these features is less common in individuals who have dependence (avoidant) attachment style. Individuals with avoidant attachment style experience less happiness in their lives and when they want to be happy for several hours, they become stressed and worried and cannot become dominant over their environment. Individuals who suffer from diabetes may be interested in establishment of emotional and friendly relationships but are not satisfied with these relations and do not tend to establish long-term communications and lack social skills and expression of emotions. Such individuals suffer from anxiety and depression in subsequent stages of life. Result of this research refers to the importance of secure attachment as a primary need and inter-generation transfer. Experience has it that having secure attachment is necessary for elimination of anxieties of social relationships and enables individuals to control environment and repel anxieties. Such individuals reject illogical demands. In general, it must be said that life satisfaction is one of the symbols of health measurement. Life satisfaction is a state of complete physical, psychological and social welfare and individual's perceptions of his or her life conditions considering the value system and culture he or she lives in. individuals who have high life satisfaction have high life quality and do not doubt about their abilities and are sensitive to emotional states. Individuals with low life satisfaction express states like embarrassment, anxiety, absence of courage, low risk-taking and introversion ... in inter-personal relationships. They have low life qualities.

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