AKBAR REZAEI* & JAFAR BAHADORI KHOSROSHAHI*

OPTIMISM, SOCIAL INTELLIGENCE AND POSITIVE AFFECT AS PREDICTORS OF UNIVERSITY STUDENTS' LIFE SATISFACTION

The purpose of the present study was to investigate the relationship between optimism, social intelligence, and positive affect with students' life satisfaction. The sample included 332 students of humanities sciences (213 females and 119 males) from Payame Noor University–Tabriz branch, who were randomly selected using stratified and multiple-stage cluster sampling. Extended Life Orientation questionnaire, Tromso Social Intelligence questionnaire, Positive affect and life satisfaction scales were used as data collection instruments and the data were analysed by Pearson's correlation and hierarchical multiple regression analysis. The results of Pearson's correlation analysis indicated a positive and meaningful correlation between social information processing, social skills, optimism, positive affect, and life satisfaction. Furthermore, the results of hierarchical multiple regression analysis also indicated the direct effect of social information processing and social skills on life satisfaction that later disappeared when optimism and positive affect were introduced in the second step. In the final model, only measures of optimism and positive affect were statistically meaningful. Therefore, social intelligence and positive affect promote (past tense?) life satisfaction in university students.

Keywords: life satisfaction, optimism, positive affect, social intelligence

1. Introduction

Feeling satisfaction with various aspects of life is among the components of positive attitudes toward the world in which we live. DIENER and colleagues (2003) discussed the life satisfaction construct that individuals use to evaluate their life. This evaluation includes emotional response to events, mood, and life satisfaction. Life satisfaction is

* Corresponding author: Akbar Rezaei, Department of Psychology, Payame Noor University (PNU), P.O. BOX 19395-4697, Tehran, Iran; akbar_rezaei@pnu.ac.ir.
Coauthor: Jafar Bahadori Khosroshahi, Ph.D student in Educational Psychology, Department of Education, Faculty of Education & Psychology, Azarbaijan Shahid Madani University, Tabriz, Iran Email: Jafar.b 2010@yahoo.com

a mental concept which is unique to every person and commonly refers to the evaluation an individual makes of his life (HEJAZI et al. 2014). Satisfaction with life is the overall judgment of an individual regarding life and as stated by some scholars, it reflects the balance between an individual's wishes and his current status. The greater the gap between the individual's wishes and his current status, the lower the satisfaction will be (ZAKI 2007). Humans' inner satisfaction originates from personal and social development and adaptive resources (FUNK et al. 2006), which differs across various cultures (PARK & HUEBNER 2005). Moreover, life satisfaction correlates positively with self-esteem (KAPIKIRAN 2013), family relations (HUEBNER et al. 1999), and attributional styles (AHADI et al. 2009) and finally, life satisfaction positively correlates with hopefulness, interpersonal relationships, and self-efficacy (HUEBNER & GILMAN 2006).

University students, as a particular stratum of society, experience certain social conditions which might affect their mental health and life satisfaction. These conditions include critical changes due to leaving highschool and entering university that might result in challenges, adventures, and tensions (BECK et al. 2003). Increased stress and behavioral problems are the consequences of life dissatisfaction, which in turn might lead to a decrease in university students' social integration and confidence (GILMAN et al. 2005).

Optimisim is another factor that is closely related to university students' life satisfaction. Optimism refers to the tendency to take the most optimistic view and denotes a cognitive and affective preparation and believing that good things in life are more important than the bad ones (SCHEIER & CARVER 1992). Moreover, optimisim implies a generalised excpectation based on which an individual expects positive things will happen in important stages of their life (CHEUK-YEE 2008).

Optimism not only provides an incentive to act, but also rewards behaviors that function adaptively. From the viewpoint of learning theorists, optimism can be considered as an acquired thinking style. SELIGMAN and colleagues (2006) stated that to an optimist, setbacks, failures, and adverse events are temporary, specific to a particular situation and due to external factors. SCHWARTZ and STRACK (1991) carried out a study on evaluating a judgemental model of happiness. Their findings indicated that optimists reply more positively and adaptively to events and circumstances; experience less stress; enjoy a stronger immune system and are more creative than unhappy individuals. Along the same lines, WEBER and colleagues (2010) did a similar study and concluded that optimisim is a teachable thought pattern which assists individuals in confronting vicissitudes. Moreover, optimists possess higher psychological adjustment, adaptive behaviors and self-esteem, all of which implies expecting positive consequences. Optimists also attempt to positively consider and understand negative events which in turn increase their life satisfaction. In their research, BESIER & GOLDBECK (2012) showed that there was a significant negative relationship between life satisfaction, anxiety, and depression syndrome.

Another factor which might influence life satisfaction is social intelligence. The concept of social intelligence was proposed in the early decades of the twentieth century by Thorndike. Social intelligence refers to the ability to understand others,

behave intelligently while interacting with others, and use this intelligence to maintain adaptive social interactions (ASGARI & ROSHANI 2012). NIJHOLT and colleagues (2009) defined social intelligence as an essential skill for individuals to communicate, understand, and interact effectively with others. In the words of SELLS (2007), social intelligence can be widely discussed as an intelligence requisite for behaviors and interactions. Moreover, CROWNE (2009) defines social intelligence as a potential that makes an individual capable of displaying an appropriate behavior in obtaining a specific goal. In fact, social intelligence implies being intelligent *in* interactions rather than *about* interactions. Therefore, social intelligence is multi-faceted, including a set of skills and social qualifications that influence an individual's ability in identifying, understanding, and managing emotions, facing challenges, problem solving, health improvement and adjustment (SAFAVI et al. 2009). ZIRKEL (2000) believes that social intelligence is closely related to personality and behavior. Studies have also indicated that social intelligence and effective communication are requisites for successful performance in life, work, and education (GARMAROODI & VAHDANINIA 2006). TAMANNAEIFAR and BEHZADMOGHADDAM (2016) reported a significant relationship between perceived social support and life satisfaction; finally, ANIMASAHUN (2010) found a significant relationship among social intelligence, the individual's adjustment, and life satisfaction of university students. Therefore, it might be expected that social intelligence positively correlates with life satisfaction and positive affect.

Affect is an aspect of human behavior which plays a crucial role in human life. Some scientists such as Darwin emphasised that emotions are beneficial for human survival. Emotions are beneficial since they orient human actions towards a goal; therefore, humans are goal-oriented in their actions and avoid aimless ones (SOLTANIZADEH et al. 2012). As stated by some scholars, emotions are socially useful; they are used to convey messages to others, interact socially, create and maintain constructive relations with others. Positive affect is a form of active energy, strong focus, and involvement in an enjoyable activity and includes a wide range of positive moods such as happiness, sense of empowerment, passion, desire, interest and confidence (MIRI et al. 2015). The results of some studies indicate that a high positive affect and low negative affect play an important role in the positive perception of self and an increase in life satisfaction. For instance, SPINDLER and colleagues (2009) indicated that positive affect is related to extensive social relations, helping behavior, attention, concentration, and a high decision-making ability while negative affect is related to mental complaints, low coping abilities, pressure, stress and anxiety, and finally, HU and GRUBER (2008) reported that a high positive affect and low negative affect are commonly accompanied by low levels of distress, fewer depressive symptoms, more daily activities and higher levels of perceived physical and mental health which is further related to the quality of life and life satisfaction. BORG and colleagues (2008), in a research bearing the title *Relationship between health, self-esteem and sources of financial and social support with living satisfaction in elderly people in the six European countries*, found that in all six countries, overall health and self-esteem had a positive relationship with life satisfaction.

The evidence of the increased referral of university students to Student Coun-seling Centers in recent years highlights the fact that students are experiencing more stress and more psychological, social, and educational problems – and since students are responsible for maintaining and improving the future health of the society, and as they should fuction as the educated and skilled workforce of the society – their men-tal health should be brought to the foreground. Among the mental health variables that might affect the life of students is their life satisfaction. Given that psychology's main objective is to improve the quality of human life, and life satisfaction is one of the major factors affecting the psychological well-being; therefore, investigating the relationship among these variables and life satisfaction as well as their contribution to life satisfaction is of utmost importance.

According to previous studies, life satisfaction as a variable affects the way one copes with life's stresses and thus affects mental health of the individual as well as personality factors that contribute to the satisfaction of people's life, optimism, social intelligence, and positive affect. Also, as to the points mentioned above, the present study aims to predict life satisfaction in terms of variables such as optimism, social intelligence, and positive affect in university students.

2. Method

The study is descriptive and correlational; the population consisted of all male and female students of Payam Noor University of Tabriz in the academic year 2016–2017, out of which 332 students (213 girls and 119 boys) were selected through cluster sampling from among students of psychology, pre-school and school educa-tion, social sciences, educational management and planning, consulting and law. The mean age range of the sample was 23 years and 9 months, with the standard devia-tion of 4.62.

3. Instruments

Satisfaction with Life Scale: this scale has been developed by DIENER and colleagues (1985) which included five items to measure global cognitive judgments of one's life satisfaction. Participants indicate how much they agree or disagree with each of the five items using a 5-point Likert scale that ranges from strongly agree to strongly dis-agree. BAYANI and colleagues (2007) estimated the reliability of this scale in a sample of 109 university students. The reliability estimates of Chronbach's alpha and test-retest were 0.83 and 0.69 respectively (Goodarzi, 2007). In this study, Chronbach's alpha was 0.85 for the total scale and for the three subscales of social information processing, social skills and social awareness was 0.76, 0.80, 0.73.

Life Orientation Questionnaire: this questionnaire has been developed by CHANG and colleagues (1997) to measure the expectations an individual has of life consequences. This questionnaire includes eight items, four of which are stated with positive statements (items 1, 3, 4 and 7) and four items with negative statements

(2, 5, 6, and 8) which are reversely scored. Participants indicate how much they agree or disagree with each of the eight items using a 5-point Likert scale that ranges from strongly disagree to strongly agree. CHANG and colleagues (1997) reported the Chronbach's alpha reliability of 0.77 and 0.89 for optimism and pessimism scales, respectively. Furthermore, Omega coefficient for optimism and pessimism scales were 0.81 and 0.92 respectively, and the test-retest reliability of the two scales were 0.73 and 0.84 respectively. The Chronbach's alpha reliability estimate for the present study was 0.71.

Social Intelligence Scale: this scale has been developed by SILVERA and colleagues (2001), which is a self-report 21-item scale to measure three scales of social intelligence, namely (1) social information processing (this scale emphasises the ability to understand and predict the behavior of and feelings of others and the ability to understand verbal and nonverbal messages, hidden messages and clear messages in human relationships); (2) social skills (this scale measures behavioral aspects such as the ability to engage in new social situations, social harmony and basic communication skills such as active listening, acting boldly as well as establishing, maintaining and breaking the relationships) and (3) social awareness (this scale measures lack of awareness or surprise about the events in social situations and the ability to actively behave in accordance with time and place). Participants indicate how much they agree or disagree with each of the items using a 5-point Likert scale that ranges from strongly disagree to strongly agree. SILVERA and colleagues (2001) reported the reliability of the three scales of social information processing, social skills, and social awareness as 0.81, 0.86 and 0.79 respectively. REZAEI (2010) reported the Chronbach's alpha reliability of the total scale as 0.75 and for the three subscales of social information processing, social skills and social awareness, the reliability was 0.73, 0.66 and 0.64 respectively. Moreover, the test-retest reliability of the total scale was 0.81 and for the three subscales of social information processing, social skills, and social awareness, the reliability was 0.76, 0.86 and 0.66 respectively (REZAEI 2010). In this study, Chronbach's alpha was 0.85 for the total scale and for the three subscales of social information processing, social skills, and social awareness was 0.76, 0.80, 0.73.

Positive Affect Scale: this scale has been developed by WATSON and colleagues (1988) which included two 10-item scales to measure positive and negative affects. Participants indicated their affects using a 5-point Likert scale that ranged from never to very much. For the purpose of the present study, the participants were requested to read all the 20 items (10 positive, 10 negative) and state how much they have experienced each in the last few weeks. It should be mentioned that only the positive affect scores were used for the data analysis in the present study. BAKHSHIPOOR ROODSARI and DEJKAM (2005) investigated reliability and construct validity of this scale for university students using confirmatory factor analysis and structural equation modeling. The reported reliability of the scales was 0.87 and the reliability estimated for the present study using Chronbach's alpha was 0.82.

To find the life satisfaction of university students, the data were analysed through SPSS-20 using correlation analysis and hierarchical regression analysis.

4. Findings

The Pearson correlation test was used to investigate the correlation between measures of social intelligence, optimism and positive affect, and life satisfaction of students. The pairwise correlation coefficients of these variables are provided in *Table 1*.

Table 1
Correlation Coefficients of Social Intelligence,
Optimism and Positive Affect Scales with Students' Life Satisfaction

Scales	1	2	3	4	5	6
Social information processing	1.00					
Social awareness	0.12*	1.00				
Social skills	0.34**	0.38**	1.00			
Optimism	0.24**	0.15**	0.39**	1.00		
Positive affect	0.25**	0.14**	0.42**	0.50**	1.00	
Life satisfaction	0.18**	0.11	0.26**	0.40**	0.38**	1.00
Mean	21.31	21.14	19.86	19.23	30.01	15.95
Standard Deviation	3.42	4.18	4.05	3.35	6.46	4.45

**: $p < 0.01$; *: $p < 0.05$ (two-tailed test)

As it can be seen in *Table 1*, the correlation coefficients between the components of social intelligence, optimism, positive affect and life satisfaction are significant and positive; however, the relationship between life satisfaction and social awareness was not statistically significant ($r = 0.11$). the highest correlation was between life satisfaction and optimism ($r = 0.40$), and among other variables, the strongest relationship was between optimism and positive affect ($r = 0.50$).

Hierarchical multiple regression was used to assess the scores of optimism and positive affect scores to predict life satisfaction levels, after controlling for the effect of social intelligence scales (social information processing, social skills, and social awareness). Preliminary analysis was run to ensure that the assumptions of normality, linearity, multicollinearity and homoscedasticity are not violated. The values reported for Tolerance and VIF (*Table 4*), and also the scatter plot and Normal (P–P) Plot and the scatter plot of standardised residuals, indicated that the assumptions are not violated.

The scores of social information processing, social skills, and social awareness scales were analysed in a first step, explaining 7% of the variance in life satisfaction. After entering optimism and positive affect in the second step, the total variance explained by the general model was 20.1 ($p < 0.001$; $F (5, 297) = 14.94$; $R2 = 0.448$). The two scales of optimism and positive affect explained about 13% of variance in life satisfaction after controlling for social intelligence scales ($p < 0.001$; $F (2, 297) = 23.489$). In the final model, only the values of the two variables of optimism and affect were statistically significant; the optimism scale had a higher beta value than positive affect.

Table 2
Hierarchical Regression Analysis to Predict Life Satisfaction of University Students

Model	R	R^2	R^2 adjusted	Standard error of estimate	Statistics for change				
					R^2 change	F change	df_1	df_2	Sig. F change
1	273[a]	0.075	0.065	4.2917	0.075	8.035	3	299	0.0001
2	448[b]	0.201	0.188	4.0013	0.126	23.489	2	297	0.0001

a. predictors: (fixed), social information processing, social awareness, social skills
b. predictors: (fixed), social information processing, social awareness, social skills, optimism, positive affect

Table 3
Sum of Squares of Hierarchical Regression Analysis to Predict Life Satisfaction
of University Students

Model	Sources of changes	Sum of squares	Df	Mean squares	F	Sig.
1	Regression	443.97	3	147.99	8.01	0.0001[a]
	Residue	5507.30	299	18.42		
	Total	5951.27	302			
2	Regression	1196.12	5	239.22	14.94	0.0001[b]
	Residue	4755.16	297	16.01		
	Total	5951.27	302			

a. predictors: (fixed), social information processing, social awareness, social skills
b. predictors: (fixed), social information processing, social awareness, social skills, optimism, positive affect

Table 4
Standard and Non-standard Hierarchical Regression Coefficients to Predict Life Satisfaction
of University Students

Model	Non-standard coefficients		Standard coefficients	t	Sig	Multicollinearity statistics	
	B	Standard error	Beta			Tolerance	VIF
Constant	7.945	1.196		4.126	0.0001		
Social information processing	0.145	0.077	0.112	1.889	0.06	0.880	1.137
Social awareness	0.022	0.064	0.021	0.344	0.731	0.846	1.182
Social skills	0.224	0.07	0.205	3.194	0.002	0.754	1.326
Constant	2.369	0.981		1.196	0.233		
Social information processing	0.062	0.073	0.048	0.854	0.394	0.855	1.169
Social awareness	0.017	0.060	0.016	0.283	0.777	0.845	1.184
Social skills	0.043	0.071	0.040	0.614	0.540	0.646	1.549
Optimism	0.344	0.083	0.257	4.160	0.0001	0.707	1.414
Positive affect	0.147	0.043	0.213	3.412	0.001	0.687	1.455

5. Discussion and Conclusion

This study aimed to examine the relationship among optimism, positive affect, and social intelligence as well as the effects of these variables on students' satisfaction with life. The results indicated a significant positive relationship between the components of social information processing, social skills, optimism, and positive affect with life satisfaction. Life satisfaction had the highest correlation with optimism. The hierarchical regression analysis also revealed that the components of social information processing and social skills, when entered into the analysis in the first step, were significant predictors for life satisfaction; however, the direct effect of these variables disappeared when optimism and positive affect were entered into the analysis. These relationships imply that optimism and positive affect can function as mediating variables in the relationship between social intelligence and life satisfaction of university students. The findings of the present study are consistent with the findings of the previous studies mentioned in the introductory section. For instance, CHANG and colleagues (2003) and KARADEMAS (2006) reported a relationship between optimism and life satisfaction (r = 0.42).

Another explanation might be that high social intelligence helps to create a positive and effective interpersonal relationship with others. One of these cases is the ability to create and maintain friendly relations, which plays a significant role in mental and social health, and strengthening family ties as an important source of social support and breaking unhealthy social ties. This skill will be needed to establish relations and facilitate the creation of relationships among groups and interpersonal intimacy.

It seems that social intelligence leads to the reduction of verbal aggression. For this reason, aggressive individuals cannot actualise their capabilities in society. Therefore, they might experience behavioral and emotional disorders due to their immature and aberrant behavior whereas the acquisition of skills that make it possible to express thoughts and feelings enriches interpersonal relationships in family, school, and community contexts. Therefore, having high social intelligence increases life satisfaction among university students (ENIOLA, 2007). The probable reason for the students' adaptation rate being heightened is the acquisition and deployment of social intelligence, which forms the foundation of interpersonal relations. Students with high social intelligence often employ their own quaifications; they will definitely be successful in having their own peer groups and friends; they positively interact with their friends and display appropriate behaviors. Students who demonstrate higher social intelligence and maintain strong relations with family and community are probably highly adaptive. Along the same lines, university students with higher social intelligence display more socially acceptable behaviors and have a more positive self-concept; therefore, they will understand, evaluate, and accept their strengths and weaknesses more appropriately (DAVIS 2001).

In study conducted by WILLIAMS (1992) on 223 university students, it was found that optimism positively correlates with extraversion and negatively correlates with neuroticism. MOUSAVI NASAB and TAGHAVI (2006) reported that optimism alone explains about 10% of the variance effective in life satisfaction. They further stated

that optimists employ more problem-focused coping strategies compared with pessimists and enjoy higher mental health and life satisfaction. Optimism influences current assumptions and the evaluation and expectations of the future (LAI & YUE 2000). SCHEIER and colleagues (2001) believe that when faced with problems, optimists continue to pursue their valuable goals and regulate their own feelings using effective coping strategies to achieve their goals. TAYLOR and colleagues (1992) stated that if common human perceptions are accompanied by a positive sense of self and an optimistic view about the future, they will be able not only to manage ups and downs in life but they can also cope with highly stressful and life-threatening events.

Several reasons can be provided for the relationship between optimism and life satisfaction. First, considering the optimists' account of negative events, it might be possible that pessimists or less optimistic individuals attribute life problems, stress, and diseases to general and stable factors; therefore, they become embarrassed more easily and give up attempting to solve problems. Second, as stated by PETERSON and colleagues (1988), optimism does not imply being superficially positive: rather, it implies actively solving problems, following plans and working hard. In other words, we might say that optimists outperform in problem solving or coping with stressful life events and life-threatening problems and illnesses; therefore, they are healthier.

The studies conducted by CHANG and colleagues (1997) and MARSHALL and colleagues (1992) indicated that positive affect not only correlates with optimism and social intelligence but also with predicting satisfaction with life. DIENER and colleagues (1991) reported a significant relationship between the frequency of daily positive events and positive affect. Individuals with a high positive affect actively, competently, passionately and confidently face life's challenges; they prefer being in the company of others and enjoy the trust and satisfaction brought about by such social interactions (BAKHSHIPOOR ROODSARI & DEJKAM 2005).

When individuals evaluate their own degree of life satisfaction, while they are dominated by either negative or positive affect, this dominancy, in tune with the current mood, either positively or negatively influences their overall judgment regarding life. To put it differently, an individual's congnition is prejudiced by affect. On the other hand, taking the direct effect of affect on memory into account, positive affect recalls positive and pleasant memories of life and negative and unpleasant memories of life will be evoked by negative affect. In general, affect is the the outcome of our interpretations of life events. Positive or negative interpretations influence not only the positive/negative affect but also individuals' judgment of life satisfaction (SOLTANIZADEH et al., 2012).

The results of studies on social intelligence confirmed the positive correlation of this variable with life satisfaction and other positive personality traits. For instance, YAHYAZADEH-JELOUDAR and LOTFI-GOODARZI (2012) found a positive correlation between teachers' social intelligence and five factors of personal satisfaction. MALTESE and colleagues (2012) indicated negative significant correlations between negative self-esteem, proactive excuses, and all the three social intelligence domains. The findings of the present study revealed a positive relationship between components of

social intelligence and life satisfaction; however, they are indirectly affected by the variables of optimism and positive affect. The mediating role of optimism and positive affect expresses the relationship between cognitive representations and human performance. In other words, optimism reflects an overall positive evaluation of the future and what will happen. A positive attitude about the future requires either a positive evaluation of the current individual–environment interaction or a strong belief in a promising future. It seems that optimism and positive attitude play a pivotal role in the overall well-being of an individual and the degree of adaptation to social context. Individuals with high levels of social intelligence, positive affect, and optimism are able to analyse others' social behavior; understand their motives and cognition, and display appropriate behaviors consistent with their social context. As a consequence, they make less use of defensive strategies and they deal with daily life problems more efficiently (MALTESE et al. 2012).

No study is devoid of limitations, and the current study is no exception. First, a self-report questionnaire was used to measure the variables of the study. Therefore, we recommend the future studies to be carried out using interview, stimulated recall, discussion, conversation and daily logs to achieve more accurate results. Moreover, the findings of this study might not be generalisable to other educational contexts and age ranges; therefore, longitudinal studies may better clarify the relationship among life satisfaction, optimism, positive affect, and social intelligence in different age groups. Furthermore, this study was limited to Payame-Noor university students of Tabriz. Therefore, care must be exercised in generalising the findings to the students attending other universities. Finally, we recommend investigating the relationship among life satisfaction and other variables such as self-esteem, hopelessness, emotional intelligence, perfectionism, social support, self-efficacy, locus of control, hardness, introversion, and extraversion in future studies.

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