



Investigating the relationship between big five factor, social support and perfectionism in bilingual undergraduate students: Mediating role of stress coping style

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Abstract

The purpose of the current study was investigating the relationship between big five factor, social support and perfectionism in bilingual undergraduate students: Mediating role of stress coping style. At the first step, bilingual students were selected by employing multi-cluster sampling method and Seadatee Shamir (2011) screening bilingual questionnaire from whole population. Big five factor (McCrae & Costa, 1985), social support (Bruhn & Philips, 1984), perfectionism (Stumpf & Parker, 2000) and stress coping style (Endler, Parker & Summerfeldt, 1998) questionnaires were used to assess Big five factor, social support, perfectionism and stress coping style respectively. These tests were administered to 500 Persian-Turkish Language university students. Descriptive statistics, Structural equation modeling were then performed. Based on the results, there was a significant relationship among Big five factor, social support, perfectionism and stress coping style in students. Finally results show that having high expectation and trying to get the best result in compared with others leads to a dangerous or stressful situation. Bilingual student mostly select the problem solving method for coping. Because they have got high cognitive potentiality. It is because the benefit two cognitive storage of two languages.

1. Introduction

Most of the research (Bieling, Israeli & Antony, 2003; 2004; Dunkley, Sanislow, Grilo, & McGlashan, 2006; Fisher, & Wells, 2005; Laugaa, Rasclé, & Bruchon-Schweitzer, 2008) in the human personality, stress and perfectionism domain has been done discovering aspects associated with psychological and social factors especially social support. In academic context, the main purpose of this study is to investigating the relationship between big five factor, social support and perfectionism in monolingual and bilingual undergraduate students by mediating role of stress coping style.

Personality is one of the main factors influencing human behavior especially the rate of perfectionism and stress (Geranmayepour, & Besharat, 2010). There is different Type of human characteristic influences on his behavior, stress and perfectionism (Hewitt & Flett, 2002). Thus, people personality and perfectionism type affects their motivation to cope with stress and attract social support for their achievement in different areas (Hill, Hall, Appleton, & Kozub, 2008). One's stress is affected by their conditions in the past and present. The intensity and amount of people's stress affected also by and type of personality type (Hashemi & Latifian, 2009).

Eysenck (1987 cited in Letzring, Block, Jack, & Funder, 2005) proposed three factors of personality dimensions: extraversion, neuroticism and psychoticism. Five big factors were presented with a genetic bias and environmental dimensions.

Roussis and Wells (2006) considered all three factors as part of normal personality structure. All three factors are bipolar so that extraversion is placed at one end of factor and introversion occupies the opposite polar. Given the importance of personality indexes, especially introversion and extraversion, Eysenck (1997) believed that many psychology studies because of ignoring the personality factors have reached to wrong results. Research that has been done in the field of education comparing effectiveness of explorative learning and traditional perceptual learning have often found contradictory results or no result. Komarraju, Karau, Schmeck and Avdic (2011) believed that these studies have not considered that extroverted

students prefer more active explorative learning and perform better in this type of learning, while introverted students prefer perceptual passive learning and perform better in this type of learning (Poropat, 2009).

The focus of the current study is on bilingual university student. Bilingualism is global event in most of countries. By this the person speaks by language other than his native language (Spada, Nikcevic, Moneta & Wells, 2008). Native language is first language of people. The people speak with native language, grow with this language and receive cultural and social components through it. By this their identity would be formed, in most of countries as our country, when children grew to specified age, official trainings would be provided to learn second language as official language of would. Word and phonetic components and grammar would be varied.

Although most of studies concentrate on bilingualism as a positive trait but others (Seadatee-Shamir, & Siavoshi, 2014) believes that bilingualism at the same time monolinguals are accompanied with a sort of stress. So bilingual and monolingual have to be able to cope with their stress.

In this regard coping stress skills should be taught to both groups. Stress coping is a set of persons cognitive and behavioral trial that is applied to alter and interoperates and retrieve a stressful situation. It has deliver two strategies for coping which are Emotional Coping strategy and problem solving based strategies. Although both strategies leads to coping but problem solving based strategies are more effective in this job (Bakhityaripour, 2002). A much related variable in the area of bilingualism and stress coping is perfectionism which is a personality trait that play a crucial rule in a stressful event and coping (Mills & Blankstein, 2000). Ofoghi and Besharat (2010) believe that perfectionist people experience more stress and personality disorder than non-perfectionist student. Because perfectionist people tends to exaggerate the vents and tries to concentrate on negative dimension of phenomena and the experience low satisfaction in different tasks which leads to high stress and negative personality trait.

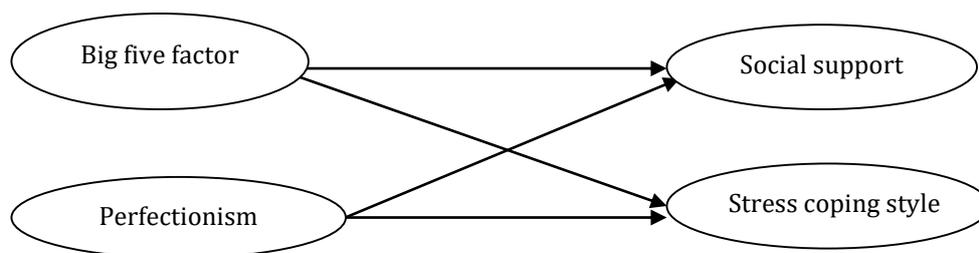


Figure1. Path analysis model of latent variables in bilingual person

2. Method

2.1 Participants

The statistical population of the study included all faculty members of Taleghan Payam Noor University of Taleghan. The research sample included 500 people (249 females, 251 males), selected with employing multi cluster sampling.

2.2. Measurement

2.2.1. NEO Personality Inventory

McCrae and Costa (1985), for the first time developed a questionnaire named NEO with 85 items. Then, modified versions of the questionnaire including 240 and 60 items were also proposed to measure people's personality characteristics. In the present study to examine the personality characteristics of employees, the short form of Neo questionnaire with 60 questions, which for the first time translated into Persian by Kiamehr (2002), is used. The questionnaire measures Five Big personality attributes of people, including neuroticism (N), extraversion (E), Openness (O), Agreeableness (A) and conscientiousness (C).

Each of these features in the test is measured by 12 items. Scoring the questionnaire is done in a Likert-type scale with 5 points, in the range between completely disagree (1) to strongly agree (5), which some item are scored reversely. McCrae and Costa (2004) in a study conducted on 208 students, reliability coefficients of five personality characteristic of short form Neo-test, with 60 items, using Cronbach's alpha reported to be in the ranged between 0.75 to 0.83. According to Khojastemehr (2005) the reliability of the questionnaire in men and women who were asking for divorce in Ahwaz city was determined between 0.66 and 0.90 based on Cronbach's alpha and between 0.51 and 0.82 based on bisection method. As well as they determined the

reliability of the questionnaire in ordinary men and women between 0.60 to 0.84 based on Cronbach's alpha and between 0.64 and 0.80 based on bisection method. Kiamehr (2002) determined the correlation coefficient of the test based on long NEO test (240 items) for the five personality characteristics in the range between $r = 0.71$ to $r = 0.91$. Khojastemehr (2005) reported the validity of the questionnaire based on simultaneous credit and internal correlations of five indexes of the questionnaire as suitable. Naderi and Farajollah Chabi (2011) also calculated the reliability of the NEO Personality questionnaire for its short form (NEO-FFI) based Cronbach's alpha and bisection methods ranging between 0.60 and 0.86.

2.2.2. Social Support Instrument

To assess social support, Social Support Instrument (Bruhn & Philips, 1984) was employed. The questionnaire uses the Likert-scale ranging from "very seldom or never" to "very often or always". Cronbach's alpha coefficient was reported to be 0.95 by Russell, Altmaier and Van Velzen (1987) and 0.94 by Smith and Houston (1987). Accordingly criterion validity was used to determine its validity. Therefore, it seems that the questionnaire can be a valid measure to predict social support to investigate the reliability the Cronbach's alpha (0.88) was employed.

2.2.3. Perfectionism

To measure perfectionism, Stumpf and Parker (2000) were used. It has two factors and has 20 questions 20 for each sub variable altogether, based on Likert-scale ranging from "I strongly disagree" to "I totally agree". To determine the validity of the questionnaire, content and construct validity were used (Stoeber & Stoeber, 2009). Calculated the

internal consistency of sub-tests to determine the reliability of the measure using Cronbach's alpha coefficient. Before the final administration of the questionnaire, a pilot administration was carried out among 30 university students. The resulting Cronbach's alpha was calculated to be almost approximately almost 0.89. The final administration, with a sample of 400, gave an index of 0.71. In this study for investigate the reliability of the instrument the Cronbach's alpha was employed.

2.2.4. Stress coping style inventory

To measure stress coping style, stress coping style inventory Endler, Parker and Summerfeldt (1998) was used. It has three factors and has 48 questions altogether, based on Likert-scale ranging from “I

strongly disagree” to “I totally agree”. To determine the validity of the questionnaire, content and construct validity were used. Endler, Parker and Summerfeldt (1998) calculated the internal consistency of sub-tests to determine the reliability of the measure using Cronbach's alpha coefficient. Before the final administration of the questionnaire, a pilot administration was carried out among 50 university students. The resulting Cronbach's alpha was calculated to be almost approximately almost 0.66. The final administration, with a sample of 400, gave an index of 0.77.

3. Results

Descriptive statistics indices have been shown that there is a good distribution in scores.

Table1. Descriptive statistics indices of research variable

| Variables | Standard Deviation | Mean | Maximum | Minimum |
|-----------------------|--------------------|-------|---------|---------|
| Big five factor | 3.28 | 19.09 | 21 | 3 |
| psychopathic | 3.09 | 4.91 | 12 | 1 |
| extroversion | 4.09 | 6.02 | 13 | 2 |
| openness | 5.02 | 7.08 | 13 | 2 |
| agreeableness | 3.63 | 7.36 | 18 | 1 |
| responsibility taking | 11.75 | 92.91 | 122 | 28 |
| Social support | 6.04 | 8.21 | 18 | 4 |
| friends | 5.55 | 61.32 | 19 | 3 |
| family | 4.53 | 14.32 | 20 | 5 |
| others | 6.02 | 14.10 | 19 | 4 |
| Perfectionism | 7.52. | 17.12 | 19 | 5 |
| positive | 4.13 | 14.76 | 18 | 6 |
| negative | 10.15 | 84.85 | 112 | 19 |
| Coping stress | 5.04 | 14.02 | 18 | 5 |
| problem based | 6.04 | 17.12 | 19 | 4 |
| emotion based | 4. 53 | 13.32 | 20 | 5 |
| neglected based | 4.21 | 11.19 | 19 | 6 |

Table2. Correlation matrix of research variables in both groups

| Variables | Big five factor | Social support | Perfectionism | Coping stress |
|-----------------|-----------------|----------------|---------------|---------------|
| Big five factor | - | | | |
| Social support | 0.51** | - | | |
| Perfectionism | 0.33** | 0.46 ** | - | |
| Coping stress | 0.28** | 0.54** | 0.50** | - |

** p≤0.01 * p≤0.05

The correlation matrix in Table2 shows that there is a significant relationship between Big five factors, Social support, Perfectionism and Coping stress. Since the aim of the study has been to investigate the

predictive role of Big five factor, Social support and Coping stress in determining perfectionism and determine the degree of the direct and indirect effect of these variables on social support, path analysis has

been employed. Based on correlations, of the variables of Big five factor, Social support, Perfectionism and Coping stress. The model shows that Big five factor predict 0.22 percent of,

Perfectionism, and 0.23 percent of coping stress. Also the model shows that Social support predicts 0.26, and 0.19 percent of Perfectionism, and coping stress.

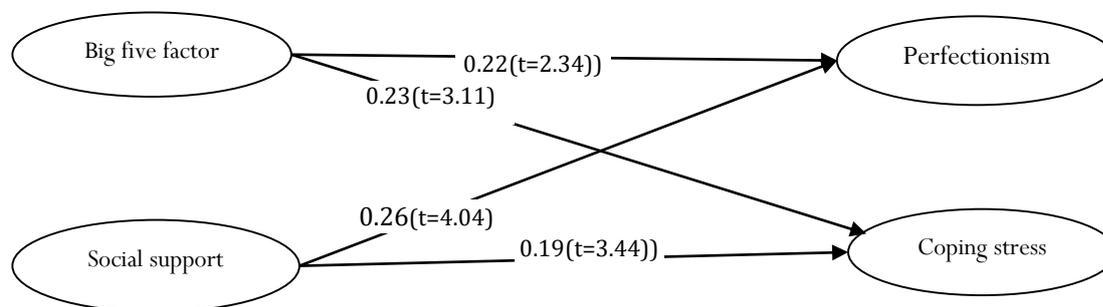


Figure2. Path analysis model for big five factors, Social support, Perfectionism and Coping stress

Note: All of effects are significant at 0.05

Table3. Goodness of fit

| χ^2 | df | χ^2/df | Sig. | RMSEA | SRMR | GFI | AGFI | CFI | NFI | NNFI |
|----------|-----|-------------|------|-------|------|------|------|------|------|------|
| 334.61 | 154 | 2.15 | 0.03 | 0.42 | 0.44 | 0.96 | 0.95 | 0.92 | 0.92 | 0.91 |

After calculating the parameters, fitness of the model was measured. Of all statistics fitness of four indices was more important: GFI, AGFI, RMSEA, and chi-square. The most important statistic is chi-square. This statistic measures the difference between observed and measures with $df= 156$, which is significant at $p= 0.01$. However, since the size of the sample is big, the matrix. The insignificance of this statistic shows the fitness of the model. Chi-Square is 335.63 significance cannot be used to reject the null hypotheses is and be generalized to the population. To decrease its dependency on sample size, we discuss other indices and their interpretation. $AGFI= 0.95$ and $GFI= 0.96$, with values close to 1, show the fitness of the model. Considering the residues and errors, the low value of $RMSEA= 0.042$ show the fitness of the model

4. Discussion

As the results of the current study reveals there was a significant relationship between among Big five factor, social support, perfectionism and stress coping style in students.in this regard (Hart, Gilner, Handal, & Gfeller, 1998) in line with the finding believe that when student have high expectation and

they try to get the best result in compared with others they fell a dangerous or stressful situation. So they have to find a way out. That’s why they different people may have different reaction to the same event (Hewitt, Flett, Besser, Sherry, & McGee, 2003). The result of this study reveals that bilingual student mostly select the problem solving method for coping. Because according to Seadatee Shamir and Siavoshi (2014) bilingual person has got a high cognitive potentiality. It is because the benefit two cognitive storage of two languages (Seadatee Shamir, Soleimanian, Zahmatkesh & Mahdian, 2011).

There was evidence of a strong association between high levels of perfectionism, stressful situation with personality factors, having higher perfectionism trait, higher levels of stress and low social support were all found to be strongly predictive of high levels of invalid coping stress styles (Hill, Huelsman, Furr, Kibler, Vicente, Kennedy, 2004).

High levels of personality traits, self-esteem, self-concept and other Personal factors shows to have strong effect on problem solving coping style and therefore attracting social support and social health (Kawamura, Frost, & Harmatz, 2002). Also those bilingual undergraduate students reporting lower

levels of psychological and personality invalid traits and high perfectionism bilingual students had higher levels of psychological distress and stressful problems (Larijani, & Besharat, 2010).

In keeping with previous findings from the international literature (Siegle, & Schuler, 2000), indicators of social and emotional well-being such as loneliness, low levels of social support, lack of community involvement, and lower income levels were all associated with negative personality trait (Shafran, cooper & Fairburn, 2002). While it is not possible to determine the direction of causality in a cross-sectional survey, there is increasing recognition that mental health is both a cause and a consequence of social and emotional inequities, (Schonfeld, 2001; Shafran & Mansell, 2001).

Some other studies also believe that low Psychological health like Physical health, Anxiety, Social disorder, Depression) are distinguished by a low self-esteem, self-concept and high level of emotional helplessness.

One of the study's short coming is that it is based on one type of bilingualism which is called common bilingualism. It is probable that the result may affect this limit. Seadatee Shamir et al., (2011) believe that Bilingualism would be categorized to 4 categories based on lingual skills: Passive bilingualism, Dominant bilingualism, Common bilingualism, Homogenous bilingualism. It is therefore recommended to researcher to study other three type of bilingualism to find the difference.

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