

Investigating the Relationship between Different Dimensions of Social Problem Solving and Problem-Focused Coping Styles

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Abstract

This study investigates the relationship between Different dimensions of social problem solving (Avoidance problem style, rational problem style, impulsive problem style, positive problem orientation, negative problem orientation) and problem-focused coping styles for educational stress in female and male master day students at state universities of Tehran. According to the correlation coefficients of problem-focused coping style at the error level of 5% in both female and male students, it is found that there is a significant relationship between the problem-focused coping style for stress and rational problem solving style in both male and female students and this relationship is stronger in male students. Furthermore, there is a significant relationship between the problem-focused coping style for stress and Positive Problem Solving Orientation in both male and female students and this relationship is stronger in male students. The results of this study indicate that the problem-focused style is the dominant approach among the students in coping with stress, thus the use of effective coping styles, which include the problem-focused coping style, helps the individual to overcome the stressful source and its symptoms.

Keywords: social problem solving, problem-focused coping style, Undergraduate students, State University of Tehran

Introduction

Nowadays, due to the expansion of stressors and the reduction of human's ability to cope with them because of changed lifestyle, the stress has become a large and complex phenomenon because it is affected by numerous factors and the interaction among them. (Frydenberg, 1996) The stress is a condition which encounters the people with events which threaten the physical and mental health. This result is obtained, for instance, when a person feels that those demands are beyond their abilities to deal effectively with them. In summary, the stress is a situation which is created by "stressors" and led to the effective responses to stress to deal with unpleasant situations. (Lewis, 2004)

Given the human social environmental logic, the raised issues for humans significantly have social roots and the human should utilize his own and others' abilities in dealing with simple and complex problems which are facing every day. In fact, when people apply the problem-solving skills to overcome personal and social problems, this skill is called the social problem solving style. The social problem solving steps are the same and are applied only in interpersonal and social relationships (Dalberg et al, 2008). A look at the evolution of human social interactions indicates that the emergence and expansion of human capabilities in social problem solving depend on some personal and social abilities; meanwhile, the way of mental problem representation is significantly

important; in other words, in the process of human development, he forms a variety of understanding and analyzing the existing problem situations in life and thus he can identify those situations. The continuous coping styles for stressful situations lead to the relatively constant approaches in individual cognitive system and these approaches structurally determine the personal and interpersonal problem solving ways and are called the cognitive style approaches. The cognitive style refers to a constant feature and approach in organizing and processing the information. The social problem-solving ability is not a single construct, but a multidimensional construct which consists of different abilities (D’Zurilla and Nezu, 2002).

In the basic model, it is assumed that the social problem-solving ability consists of two independent components, namely, the problem orientation and problem solving skills called later as the problem-solving style. The problem orientation is a set of cognitive psychology- emotional schemas which reflect the individual's beliefs and feeling about the life issues. Problem solving requires the goal-oriented strategies by which a person defines the problem, provides a solution, implements the problem solving strategies and monitors them.

According to the main form of current model for social problem solving (D’Zurilla and Goldfried, 1971; D’Zurilla and Nezu, 1990), it is assumed that the social problem-solving ability consists of two important and relatively independent sections: (1) problem orientation and (2) problem solving skills (later called as the "real problem solving") (D’Zurilla et al, 2002). Based on this theoretical hypothesis, D’Zurilla and Nezu (1990) designed the Social Problem-Solving Inventory (SPSI) consisting of two major scales: (1) problem orientation scale (2) and problem-solving skills scale. Each of these two scales consist of articles (positive questions which are supposed to reflect the "good" problem solving ability, and also the negative questions which are assumed to indicate the "weak" problem solving ability. This hypothesis, under which the problem orientation and problem solving skills are different despite being the correlated sectors of social problem solving, is approved by data which indicates that the items of problem orientation have a high correlation with total score of social problem orientation, but weak correlation with total score of problem solving skills scale, while the opposite is true for the sub scales of problem solving skills (D’Zurilla and Nezu, 1990).

The coping styles for stress in Coping Inventory for Stressful Situations (CISS) consist of three basic styles, namely, the avoidance, problem-focused and emotion-focused styles, and their questionnaire is designed by Endler and Parker. The problem-focused coping style describes the ways based on which the person pays attention to actions which should be done to reduce or eliminate the stress. The problem-focused types of behavior include searching for more information about the problem, changing the structure of problem in terms of cognition, and giving the priority to measures for dealing with the problem. The emotion-focused coping styles include crying, getting angry and upset, showing the censorious behavior, preoccupation and imagination. The emotion-focused coping style describes the ways based on which a person focuses on himself and takes all his effort on reduced unpleasant feelings. (Halamandaris and Power, 1999)

Given the importance of subject, this study seeks to investigate the relationship between social problem solving and its components with problem-focused coping style in female and male master day students at state universities of Tehran. In this regard, the social problem solving consists of five following factors:

- Avoidance problem solving style (ASS)
- Rational problem solving style (RPSS)
- Impulsive/Carelessness problem solving style (ICSS)
- Positive problem orientation style (PPOS)

- Negative problem orientation style (NPOS)

Shokri (2012) examined the moderating effects of cultural and gender groups in the relationship between perceived social support and educational stress among male and female Iranian and Swedish students. In general, the results of this study on predicting the stressful academic experiences in students have emphasized on dissimilar interactional characteristics of social support concept in two cultures and in contrast, the similar perceived social support interactional characteristics in both genders. Abolghasemi (2012) investigated the effectiveness of coping with stress on the impaired attitudes and social problem-solving skills in patients with breast cancer. The results of analysis of variance through repeated measures indicate that the ways for coping with stress have a positive effect on improving the impaired attitudes and social problem solving skills in patients with breast cancer. Taghilou (2010) examined the relationship between psychological distress and social problem-solving variables through structural equation modeling. The results indicate that the non-adaptive problem solving dimension has a direct and positive effect on the psychological distress, but the adaptive problem solving has no significant effect on psychological distress. Shokri (2007) studied the regulatory role of coping styles on academic stress and educational achievement in students. The results of correlation among the variables indicate that there is a negative relationship between the academic stress and educational achievement, a positive relationship between problem-focused coping style and educational achievement, a negative relationship between the avoidance and emotion-focused coping styles with educational achievement, negative relationship between the problem-focused coping style and academic stress, and a positive relationship between academic stress and emotion-focused and avoidance coping styles. Calaguas (2013) investigated the parents, teachers and their expectations as the sources of academic stress. The results of research indicate that the academic stress is significantly different between men and women. KATSUNORI (2011) examined the relationship between social problem solving and interpersonal competence in Japanese students. The results of implementing the social problem solving skill questionnaire indicate that there is a low correlation among the variables, but high among the subsidiary indexes. Bray et al (2007) investigated the social problem solving in the borderline personality disorder and normal groups. The results indicate that the borderline personality disorder group has lower score in positive problem orientation and rational problem solving than the clinical control group. Kim and Seidlitz (2002) found in a study on the students that the coping mechanisms applied by students include the problem solving, individuals' support, regression and having fun.

Methodology

This study is correlative-descriptive in terms of objective and has the survey type according to the data collection method. The data is collected through the questionnaire and field survey method and then analyzed by SPSS software. The statistical population of this study consists of 56748 male and female master day students at state universities in Tehran during the academic year of 2011-12 (approved statistics by the Ministry of Science in 2011-12). A total of 382 questionnaires is distributed among 56748 members of statistical population by Morgan Table and since 57% of population is female students and the others male, thus from a total of 382 questionnaires, 218 questionnaires distributed among the female students and 164 ones among the male students.

Collection tool

The researcher-made questionnaire is applied by considering the standard questionnaire (SPSI-R) and expert professors' guidance in order to measure the social problem solving issue. The Coping Inventory for Stressful Situations (CISS) is introduced by Endler and Parker (1990) to assess

different types of coping styles in stressful situations and it is also utilized in this study to measure coping styles for students' stress.

Results

The data obtained from the questionnaire is processed in this section. The obtained results are summarized and provided along with tables and diagrams, and analysis. The demographic data and subjects' ways of responding to the questionnaires are initially investigated by descriptive statistics, and then the hypothesis test is done in inferential statistical section through the appropriate statistical methods.

Descriptive statistics of samples' demographic data

According to the following table, 57% of samples are female and 43 percent male.

Table 1. Frequency and frequency percentage of samples based on gender

Gender	Frequency	Percentage
Female	218	0.57
Male	164	0.43
Total	382	0.100

According to the following table, 35.1% of samples are educating in engineering and technical group, 30.1% in basic sciences, 13.6% in language, 11% in Art, and 10.2% in medical group.

Table 2. Frequency and frequency percentage of samples based on the educational group

Group	Frequency	Percentage
Engineering and technical	134	35.1
Basic sciences	115	30.1
Art	42	11
Language	52	13.6
Medicine	39	10.2
Total	382	100.0

Descriptive statistics of research variables

According to the following table, the avoidance problem solving has the highest mean among the variables of questionnaire.

Table 3. Frequency and frequency percentage of social problem solving questionnaire variables

Variable	Mean	Standard deviation	Minimum	Maximum	Total
Positive Problem Orientation	3.4271	0.64848	1.5	5.00	1309.17
Negative Problem Orientation	3.5509	0.58980	2.25	5.00	1356.45
Rational Problem Solving	3.2127	0.60499	1.81	5.00	1227.24
Impulsive Style	3.2488	0.54600	1.80	4.5	1241.05
Avoidance Style	3.5673	0.60907	1.40	5.00	1362.70

Table 4. Frequency and frequency percentage of problem-focused stress coping style questionnaire variables

Variable	Mean	Standard deviation	Minimum	Maximum	Total
Problem-focused coping style	2.96	0.231	2	4	1129

Inferential statistics: Investigating the relationship between social problem-solving abilities and problem-focused coping styles in female and male students

Kolmogorov-Smirnov test is utilized to investigate the normality of data. Since the significance level in social problem solving style is less than 0.05 for variables, namely, the positive problem orientation, negative problem orientation, avoidance style, and impulsive style, the normal distribution of target population is rejected at the confidence level of 95%, but the significance level is higher than 0.05 for rational problem solving, thus the population distribution is normal. The significance level is less than 0.05 in problem-focused stress coping style and the normal distribution of target population is rejected at the confidence level of 95%.

In general, since some of the variables are normal in population and the others abnormal, the non-parametric tests are applied to test these variables.

Investigating the relationship between problem-focused coping and avoidance problem solving styles in female and male students:

Table 5. Spearman's correlation coefficient test for investigating the relationship between avoidance problem solving and problem-focused coping styles in female students

Avoidance problem solving style in female students	Spearman's correlation coefficient	Significance level
Problem-focused used coping style	0.049	0.475

Table 6. Spearman's correlation coefficient test for investigating the relationship between avoidance problem solving and problem-focused coping styles in male students

Avoidance problem solving style in male students	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.004	0.956

According to the significant values of test above, the problem-focused stress coping style has no significant relationship with avoidance problem solving style at the error level of 5% in both male and female students.

Investigating the relationship between problem-focused coping and rational problem solving styles in male and female students:

Table 7. Spearman's correlation coefficient test for investigating the relationship between rational problem solving and problem-focused coping styles in female students

Rational problem solving style in female students	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.717	0

Table 8. Spearman's correlation coefficient test for investigating the relationship between rational problem solving and problem-focused coping styles in male students

Rational problem solving style in male students	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.745	0

According to the significant values of test above, the problem-focused stress coping style has a significant relationship with rational problem solving style at the error level of 5% in both male and female students. Furthermore, according to the correlation coefficients, it is found that there is a stronger relationship between the problem-focused stress coping and rational style in male students.

Investigating the relationship between problem-focused coping and impulsive problem solving styles in male and female students:

Table 9. Spearman's correlation coefficient test for investigating the relationship between impulsive problem solving and problem-focused coping styles in female students

Impulsive problem solving style	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.017	0.852

Table 10. Spearman's correlation coefficient test for investigating the relationship between impulsive problem solving and problem-focused coping styles in male students

Impulsive problem solving style	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.158	0.044

According to the significant values of test above, the problem-focused stress coping style has no significant relationship with impulsive problem solving style at the error level of 5% in both male and female students.

Investigating the relationship between problem-focused coping and positive problem-solving orientation styles in male and female students:

Table 11. Spearman's correlation coefficient test for investigating the relationship between positive problem-solving orientation and problem-focused coping styles in female students

Positive problem-solving orientation in female student	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.767	0

Table 12. Spearman's correlation coefficient test for investigating the relationship between positive problem-solving orientation and problem-focused coping styles in male students

Positive problem-solving orientation in male student	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.768	0

According to the significant values of test above, the problem-focused stress coping style has a significant relationship with positive problem-solving orientation at the error level of 5% in both male and female students. Furthermore, according to the correlation coefficients, it is found that

there is a stronger correlation between the problem-focused stress coping and positive problem-solving orientation styles in male students.

Investigating the relationship between problem-focused coping and negative problem-solving orientation styles in male and female students:

Table 13. Spearman's correlation coefficient test for investigating the relationship between negative problem-solving orientation and problem-focused coping styles in female students

Negative problem-solving orientation in female student	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.051	0.453

Table 14. Spearman's correlation coefficient test for investigating the relationship between negative problem-solving orientation and problem-focused coping styles in male students

Negative problem-solving orientation in male student	Spearman's correlation coefficient	Significance level
Problem-focused coping style	0.020	0.796

According to the significant values of test above, the problem-focused stress coping style has no significant relationship with negative problem-solving orientation at the error level of 5% in both male and female students. Furthermore, according to the correlation coefficients, it is found that there is a stronger correlation between the problem-focused stress coping and negative problem-solving orientation styles in female students.

Conclusion

Stress is a general experience in all human lives. Therefore, more attention is paid on the sources of stress and its coping styles in recent years and it is shown that the application of effective coping styles plays the important role in reducing the stress. The coping styles are the continuous effort to adapt the individuals to unbalanced conditions. In the case of using the effective coping styles, the emotions are moderated and the stress relieved. The effective coping styles reduce the negative effects of stress and enhance the ability of environmental and internal stressor management through applying these types of behavior.

The research findings indicate that 57% of students are female and 43% male. Furthermore, 35.1 percent of students are educating in technical group, 30.1% in basic sciences, 11% in the art, 13.6% in English, and 10.2% in medical group. Among the variables of social problem solving, the avoidance problem solving variable has the highest rate and among the variables of stress coping style, the emotion-focused coping style has the highest score. Spearman's correlation coefficient test is applied to examine the relationship between social problem-solving ability with problem-focused coping styles in female and male students. Given the correlation coefficients of problem-focused coping style and rational problem solving style at the error level of 5% in both male and female students, it is found that there is a significant relationship between the problem-focused stress coping and rational problem solving styles in both male and female students and this relationship is stronger in male students. Furthermore, there is a significant relationship between the problem-focused coping style and positive orientation problem solving style in both male and female students and this relationship is stronger in male students. Since the research is conducted on male and female master day students at state universities of Tehran, it is suggested expanding the research domain. Given that the teachers play the important roles in education, it is recommended

investigating the variables and factors such as individual differences, environmental and organizational factors and various personality variables with subjective well-being rate.

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