



Exploring the relationship between perceived emotional intelligence and coping skills of undergraduate students

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Abstract

This study was aimed at exploring the relationship between emotional intelligence and coping skills. The sample consisted of 691 (331 females; 360 males) undergraduate students who study different departments of the Faculties of Education and Technical Education, and department of physical education and sports teaching of School of Physical Education and Sports at Mugla Sıtkı Kocman University. Emotional intelligence levels and coping styles of undergraduate students were measured using the Bar-On Emotional Quotient Inventory (Bar-On, 1997) and The Inventory of Styles of Coping with Stress (Ozbay & Sahin, 1997). Pearson product-moment correlation analysis and structural equation modeling were employed to analyze data. Emotional intelligence was found to be significantly correlated with coping skills.

Keywords: Emotional intelligence, coping skills, undergraduate students, structural equation modeling

Introduction

It is necessary to clarify how people understand their emotional capabilities. In terms of effective expression of emotions, this understanding is important (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). Furthermore, ability to reflect on emotions is regarded as an important factor contributing to the refinement of goals, beliefs, life choices, and decisions (Salovey, Stroud, Woolery, & Epel, 2002). People display variations in the ability to reflect on their emotions and this variation is captured in the term of emotional intelligence (Burns, 2011).

Salovey and Mayer (1990) provides a definition of emotional intelligence which states that emotional intelligence is the ability to be aware of one's own and others' feelings, recognize the differences between feelings and use the information about feelings to determine the direction of

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thoughts and actions. In their definition of the scope of emotional intelligence, there are three categories with ten aspects. They are appraisal and expression of emotion including one's own verbal emotion, and non-verbal emotion, non-verbal perception of emotion in others and empathy), regulation of emotion including one's regulation of his/her own emotions and regulation of emotions in others), and utilization of emotions including flexible planning, creative thinking, redirected attention, and motivation). According to Mayer and Salovey (1997), emotional intelligence is a construct having many dimensions such as perception, expression of emotion, emotional facilitation of thinking, the understanding, analyzing and using emotional information and reflective regulation of emotions. Burns (2011) argues that the components of emotional intelligence are knowledge, planning and various emotional expressions.

There are differences among individuals in terms of perception, understanding and utilization of emotional information; hence, such differences are referred to as emotional intelligence, which is believed to have great influences on one's psychological well-being (Salovey & Mayer, 1990). Though there are differing perceptions of emotional intelligence (Bar On, 1997; Goleman, 1996; Mayer & Salovey, 1997), there is a general agreement about its usefulness in terms of providing skills necessary to make sense of emotions. Hence, it is generally recognized that there is a direct connection between emotional intelligence and emotional regulation and general development (Chan, 2005). Emotional intelligence is needed to control our emotional life (Salovey, Bedell, Detweiler, & Mayer, 2000).

Level of emotional intelligence is one of the factors having influences on the ability to deal with emotional distress (Taylor, 2001). Current transactional models of stress regard coping as a process concerning the assessment of stressors and their short-term and long-term effects (Lazarus, 1999). Therefore, coping means finding ways of dealing with situations assessed to be challenging or stressful (Lazarus & Folkman, 1984). Evaluation of potentially threatening stimuli is of great importance in coping process. Ideal form of coping should result in permanent resolution. In the early research of stress and coping (Lazarus & Folkman, 1984), there were two types of coping processes, which are problem-focused and emotion-focused (Folkman & Lazarus, 1980; Lazarus, 1993). Both of them relate to individual characteristic differences in terms of means of dealing with stress. They are also known as coping styles (Skinner & Zimmer-Gembeck, 2007).

When individuals are striving for changing the problematic situation, they employ problem-focused coping. On the other hand, emotion-focused coping concerns the management of emotions and stress. When the problem situation is viewed as something manageable and changeable, there is a tendency to make use of problem-focused coping. However, when problematic situation is viewed as unmanageable or uncontrollable, emotion-focused coping is more likely to be capitalized on (Carver, Scheier, & Weintraub, 1989).

There are many different conceptualizations of coping. In the early research, coping is dealt with in terms of primary and secondary appraisal (Lazarus, 1966; Lazarus & Folkman, 1984). In primary appraisal, first an individual evaluates whether a stimulus can be a source of stress or pose a threat to the individual. In secondary appraisal, the individual determines the resources at hand to deal with the source of stress. Secondary appraisal process generally provides information for the primary appraisal process. When a person decides that he/she has enough resources to deal with the problem, they view the problem as less stressful. On the other hand, when a person thinks that resources at hand are not sufficient to deal with a specific problem, they may regard the problematic situations as difficult to overcome (Folkman & Moskowitz, 2004).

Some more recent models and definitions of coping draw on emotion research so that the constructs of emotional intelligence and coping are closely connected (Folkman & Moskowitz, 2004; Skinner & Zimmer-Gembeck, 2007). People having higher emotional intelligence are believed to have more sophisticated devices to deal with stressful situations. Better coping skills result from accurate perception, understanding and management of one's own and other people's emotions (Salovey, Bedell, Detweiller, & Mayer, 2000). Zeidner et al. (2006) offered some ways of making use of emotional intelligence to cope with stress including avoidance of stressful situations, more constructive perceptions and situational appraisals, adaptive management and repairing of emotions, richer coping resources and use of effective and flexible coping strategies. Thus, the purpose of the current study was to determine whether coping skills was related to emotional intelligence. The results of the study are thought to give important information about the formation of emotional intelligence in undergraduate students.

Methodology

Model

This study is a quantitative and relational study aimed at examining the relationship between emotional intelligence and coping skills. The data were collected by Emotional Intelligence Questionnaire Bar-On (1997) and The Inventory of Styles of Coping with Stress (Ozbay & Sahin, 1997).

Participants

In the study, the data were collected by randomly selecting from the Faculties of Education and Technical Education, and department of physical education and sports teaching of School of Physical Education and Sports at Mugla Sıtkı Kocman University. The participants were 691 undergraduate students (331 females; 360 males). The mean age of the participants was 24.71 years, with a standard deviation of 2.27 years.

Instruments

Emotional Intelligence Questionnaire (EIQ) The EIQ developed by Bar-On (1997) adapted to Turkish by Acar (2001) was used for emotional intelligence measurement. This scale is a 133-item questionnaire originally known as the Bar-On EIQ measures the 5 dimensions of emotional intelligence. In the present study an 88-item shortened and adapted form (Acar, 2001) was used. The 5 dimensions of the questionnaire are: intrapersonal abilities, interpersonal abilities, adaptability, stress management, and general mood. The intrapersonal abilities dimension consists of items regarding awareness of one's emotions, self-confidence, self-esteem, self-actualization, and autonomy. The interpersonal abilities dimension is composed of items regarding understanding others, and forming and maintaining satisfactory relationships. The adaptability dimension consists of items concerning problem solving, realism, and flexibility. The stress management dimension is composed of items regarding coping with stress without losing hope and feeling in control. The general mood dimension measuring one's outlook on life, satisfaction with life, and feelings toward life and living in general. High scores indicate high-level ability on the mentioned dimensions. The reliability coefficient is reported to be $\alpha = .92$ for the total questionnaire, ranging between $\alpha = .65$ and $.84$ for the subscales (Acar, 2001). In the present study, Cronbach's alphas for the subscale of the EIQ were $.88$ for overall score, and $.83$ for intrapersonal intelligence, $.79$ for interpersonal intelligence, $.70$ for adaptability, $.76$ for stress management, and $.77$ for general mood.

The Inventory of Styles of Coping with Stress (ISCS) The ISCS that was originally developed by Ozbay (1993) aiming at foreign students studying at a university in the USA. The inventory was adapted to Turkish by Ozbay and Sahin (1997). The purpose of the inventory was to assess the styles of coping with stress of individuals at various stress conditions. At the end of factor analysis in the study of Turkish adaption, 43 expressions out of 56 items of original inventory of coping with stress were grouped under 6 factors. The inventory was arranged depending on a 5 scored Likert type and the participants were asked to read each item and mark one of the choices of “never”, “rarely”, “sometimes”, “frequently” or “always”. Students were also asked to choose and mark the item best fitting them while answering the inventory. 6 factors determined through the technique was named as Turning to religion (6 items), Seeking External Helping (9 items), Active Planning (10 items), Emotional-Behavioral Disengagement (7 items), Biochemical Disengagement (4 items), Acceptance-Cognitive Restructuring (7 items). Besides, structural factor analysis, criterion validity was obtained with the help of a similar scale and findings were obtained concerning the validity of the test. The scale of the styles of coping with stress developed by Sahin and Durak (1995) was used as a criterion, $r=.54$ ($p<.001$). The reliability of the test was realized through the method of Cronbach alfa internal consistency. General reliability coefficient of the test was found as 0.81. The results of the reliability study showed that the test-retest correlation coefficients ranged between .56 and .89. Ozbay and Sahin (1997), reported internal consistency reliabilities for the subscales as Turning to religion .89; Seeking External Helping .81; Active Planning .75; Emotional-Behavioral Disengagement .62; Biochemical Disengagement .56; Acceptance-Cognitive Restructuring .56. In this study, Cronbach’s alpha for the subscales were calculated .86, .79, .76, .69, .64, and .65.

Data Analysis

In this study, the analysis of relationship between emotional intelligence and coping skills was performed by Pearson product-moment correlation analysis and structural equation modeling. Structural equation modeling (SEM) is a statistical technique for testing and estimating causal relations using a combination of statistical data and qualitative causal assumptions. The model is tested against the obtained measurement data to determine how well the model fits the data. The causal assumptions embedded in the model often have falsifiable implications which can be tested against the data. Among the strengths of SEM is the ability to construct latent variables: variables which are not measured directly, but are estimated in the model from several measured variables each of which is predicted to “tap into” the latent variables. This allows the modeler to explicitly capture the unreliability of measurement in the model, which in theory allows the

structural relations between latent variables to be accurately estimated. Factor analysis, path analysis and regression all represent special cases of SEM (Kline, 2005). In this study, the model was created by testing the relationships among the emotional intelligence and coping skills variables using SEM.

Results

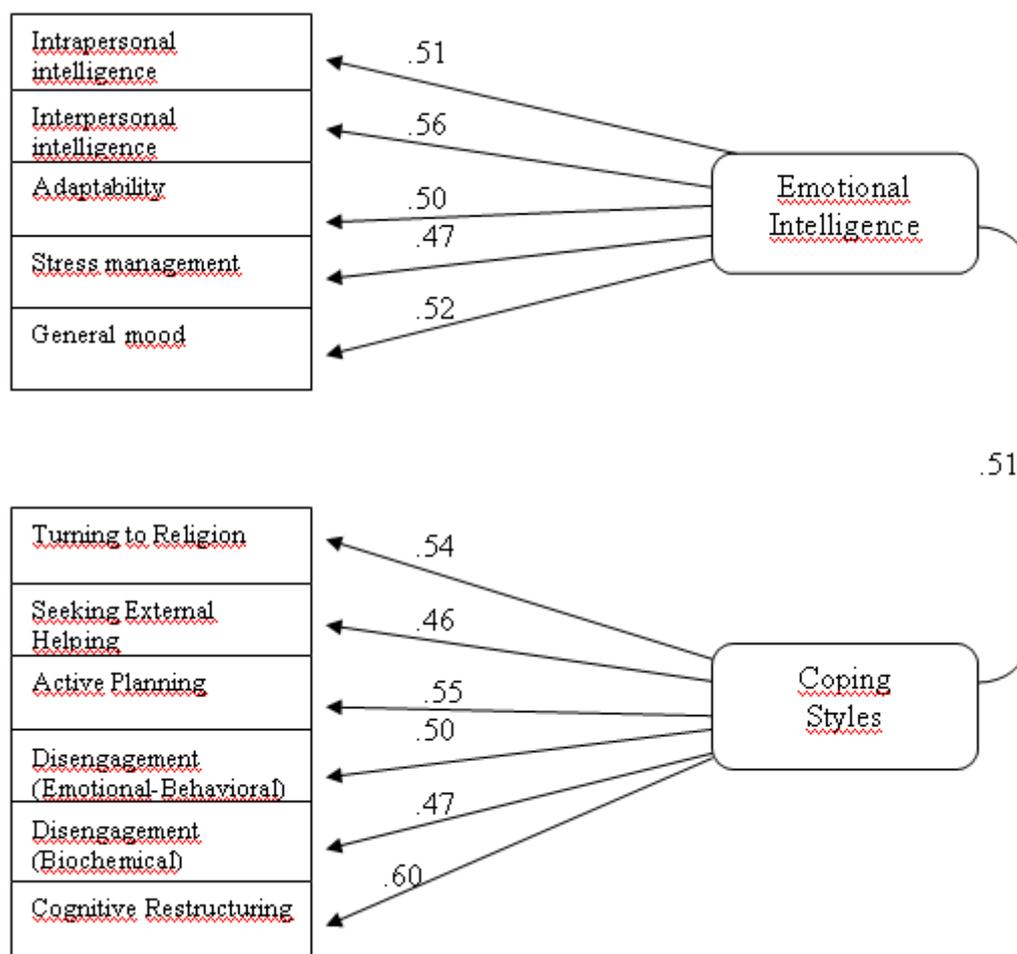
An analysis of the relationship between emotional intelligence and coping skills of undergraduate students was performed using Pearson product-moment correlation analysis and structural equation modeling. Results are presented below.

Table 1. The relationship between emotional intelligence and coping skills

	Turning to Religion	Seeking External Helping	Active Planning	Emotional-Behavioral Disengagement	Biochemical Disengagement	Cognitive Restructuring
Intrapersonal Intelligence	.31**	.23*	.34*	-.31*	-.38**	.33*
Interpersonal Intelligence	.24*	.33**	.32*	-.34*	-.33**	.32*
Adaptability	.33**	.32*	.35**	-.34**	-.38**	.31**
Stress Management	.28*	.24*	.37**	-.38**	-.39**	.35**
General Mood	.32**	.22*	.34*	-.36**	-.39**	.36*

** $p < .01$; * $p < .05$

Although there are a negative relationship between some dimensions of coping (emotional-behavioral disengagement, and biochemical disengagement) and emotional intelligence, subdimensions of coping (turning to religion, seeking external helping, active planning, and cognitive restructuring) is positively related to subdimensions of emotional intelligence (intrapersonal intelligence, interpersonal intelligence, adaptability, stress management, and general mood).

Figure 1. Path diagram of significant predictors of emotional intelligence

$\chi^2=399.44$, $df=121$, $\chi^2/df= 3.30$, $p=.00$, $RMSEA=.08$, $GFI=.95$, $AGFI=.89$, $NFI=.94$, $NNFI=.92$, $CFI=.96$, $IFI=.96$, $RMR=.08$; $SRMR=.08$.

According to the data obtained the total points of emotional intelligence predict the subdimensions of emotional intelligence between .47 and .56. The total points of coping predict the subdimensions of coping between .46 and .60. Moreover there is a relationship of .51 between the total points of emotional intelligence and coping styles. Figure 1 shows whether the variables are consistent or not is analyzed. As can be seen in Figure 1, the data obtained fit well model. Path coefficients ranged from .46 to .60. Path coefficients with absolute values less than .10 could indicate a “small effect”, values around .30 could suggest a “typical” or “medium effect”, and a “large effect” could be indicated by coefficients with absolute values $\geq .50$ (Kline, 2005). In this study, all of these values were higher than .30

Discussion

At the end of this study, it was found that there was a significant relationship between emotional intelligence and coping skills. According to the results of this study, there were a negative relationship between some dimensions of coping (emotional-behavioral disengagement, and biochemical disengagement) and emotional intelligence, subdimensions of coping (turning to religion, seeking external helping, active planning, and cognitive restructuring) is positively related to subdimensions of emotional intelligence (intrapersonal intelligence, interpersonal intelligence, adaptability, stress management, and general mood).

Emotional information provides people with better understanding of their reactions to various sources of stress and guidance in coping process (Alumran & Punamäki, 2008; Baker & Berenbaum, 2007; Greenberg, 2002). Emotion regulation is closely associated with effective coping with a problem (Aldea & Rice, 2006). Within the context of emotional intelligence, emotions are regarded as useful resources of information guiding an individual in the correct direction in a social environment (Salovey & Grewal, 2005). The existing research base provides a lot of evidence connecting emotional intelligence with the management of stress, solving of problem, general well-being and mental health (Ciarrochi, Dean, & Anderson, 2002; Gerits, Derksen, Verbruggen, & Katzko, 2005; Pau & Croucher, 2003). For instance, participants of the study conducted by Pau and Croucher (2003) were found to experience less stress and have better health, if they have high level of emotional intelligence. In the same manner, Gohm, Corser, and Dalsky (2005) reported positive correlation between emotional intelligence and protection from stress.

The number of studies looking at the correlation between coping and emotional intelligence is high (Deniz & Yilmaz, 2006; Gohm & Clore, 2002; Gohm, Corser, & Dalsky, 2005; Matthews & Zeidner, 2000; Mikolajczak & Lumminet, 2008; Mikolajczak et al., 2006; Mikolajczak, Nelis, Hansenne & Quoidbach, 2008; Petrides, Perez-Gonzalez, & Furnham 2007; Ramos, Fernandez-Berrocal, & Extrema, 2007; Saklofske, Austin, Galloway & Davidson 2007; Salovey, Bedell, Detweiler, & Mayer, 1999; Salovey, Stroud, Woolery, & Epel, 2002), and they reported various results depending on the definitions and classification principles of coping; yet, there is a shared tendency that high emotional intelligence leads to use of active, positive, problem-oriented and effective coping strategies rather than passive, emotion-focused and negative coping. The present study also confirms this tendency. According to Block and Block (1980), people having high

emotional intelligence find their lives more meaningful and express their emotions more properly. Bar-On & Parker (2000) report that people with high emotional intelligence have greater capacity to recognize and express their emotions so that they can lead happy lives. They can be more sensitive to the feelings of others; hence, they can have more fulfilling interpersonal relationships not requiring dependency on other people. Such people generally obtain better outcomes while solving problems and dealing with stress.

Matthew and Zeidner (2000) state that on the basis of emotional intelligence lays successful problem solving and stress coping. Furnham, Petrides, and Spencer-Bowdage (2002) revealed direct connection between emotional intelligence and coping styles. There are many personal, emotional and social elements involved in emotional intelligence affecting the level of success experienced while dealing with environmental demands and pressures (Bar-On, 1997). According to Mathews and Zeidner (2000), as emotionally intelligent people are prone to seek social support; hence, they feel less depressive when confronted with problems. Salovey, Bedell, Detweiler, and Mayer (1999) argue that individuals having high emotional intelligence can be better in the regulation of thoughts and emotions providing protection against mental disengagement. Salovey, Mayer, Goldman, Turvey, and Palfai (1995) suggest that the better individuals are in perceiving and experiencing their emotions the better they monitor their emotions and moods. Therefore, students with high emotional intelligence are more likely to maintain positive moods longer and generate positive moods even in negative situations.

People with higher emotional intelligence have more sophisticated coping skills, which results in better psychological health (Salovey, Bedell, Detweiler, & Mayer, 2000). For example, people having high emotional intelligence have a tendency to consider stressors less threatening, to employ more active and fewer passive coping strategies (Campbell & Ntobedzi, 2007; Matthew & Zeidner, 2000; Salovey, Stroud, Woolery, & Epel, 2002; Shah, & Nutankumar, 2008; Velasco, Fernández, Páez, & Campos, 2006).

Emotionally intelligent people are generally optimistic, flexible, realistic, and successful at solving social problems and coping with stress, without losing control (Bar-On, 1997). They are better able to identify and describe emotions in themselves and in others, can manage states of emotional arousal in themselves and others, and can utilize their feelings and emotions in an adaptive style (Taylor, Parker, & Bagby, 1999). Students with high emotional intelligence are able

to critically analyze stressful situations and these results in a positive analysis of the situations. On the other hand, students with low emotional intelligence tend to view stressful situations as sources of disasters and make negative inferences from them (Nelson, Dell'Oliver, Koch, & Buckler, 2001).

Individuals having ambiguous opinions about their emotions display a tendency to participate in high levels of problem-focused coping and they may more likely experience negative distress outcomes (Baker & Berenbaum, 2007). If individuals have improved emotional intelligence, they will have more resources to draw on; hence, they can overcome problem more easily (Bar-On, 1997; Saklofske, Austin, Galloway, & Davidson, 2007; Salovey, Stroud, Woolery, & Epel, 2002).

According to these findings the coping skills of undergraduate students increase as their emotional intelligence level increase. It can be argued that the emotional intelligence of undergraduate students make contributions to using coping mechanisms to the some stressful situations they encounter by perceiving them. Finally, the coping skills of undergraduate students can be increased by improving his/her emotional intelligence. As a result, in psychological counseling and guidance studies, it would be appropriate to include applications about effective/healthy coping skills to increase the level of emotional intelligence. Further research is needed to enhance current understanding of the interrelationships of emotional intelligence, coping strategies, and effectiveness of undergraduate students.

This study should be evaluated with some important limitations. For example, the sample size is relatively small and therefore the study findings may not be generalizable to other populations. Data were collected from convenience samples that might limit generalizability of present results. It should be noted that the relationships found in this study are correlational and not causal. Larger and representative samples are needed from different populations to assess the effects of cultural differences on the model on emotional intelligence and coping strategies. This study considered only prospective teachers and further research is needed to include qualified teachers. Field experiments are particularly useful in evaluating the effects of enhancing emotional intelligence of undergraduate students on individual and social outcomes. In depth exploration using qualitative interview methods would be useful to ascertain how students with different levels of emotional intelligence, deal with stress in general.

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