

A study of Emotional Intelligence and Coping Strategies in Baccalaureate Nursing Students

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Abstract

Emotional intelligence (EI) has been highlighted as an important theoretical and practical construct. The attributes of EI are important for overall well-being and influence our ability to succeed in life. The purpose of this study was to investigate the relationship between the emotional intelligences and coping strategies in nursing students. The participants were 219 college students in Daejeon, Korea. All the students were administered two instruments, the EI and Korea version in coping strategy Indicator (K-CSI) scale. Descriptive statistics t-test, ANOVA, and Pearson correlations technique were used to analyze the data with the SPSS Win 15.0 programs. Emotional intelligence was positively related to problem solving coping and social support seeking coping. The findings suggest that increased feelings of control and emotional competence assist nursing students to adopt active and effective coping strategies when dealing with stress.

Keywords: Students, emotional intelligence, coping strategy

1. Introduction

Emotional intelligence, which originates from social intelligence, has begun to be studied relatively recently and has received massive attention in the individual differences field [1]. The concept of emotional intelligence was defined by Salovey and Mayer [2]. They were among the earliest to propose the name “emotional intelligence”. They defined emotional intelligence (EI) as “the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions”. Mayer and Salovey’s [3] definition of EI was a set of interrelated skills concerning “the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth”.

Salovey and Mayer [2] and Mayer and Salovey [3] conceptualized EI as composed of four distinct dimensions:

1. Appraisal and expression of emotion in the self (self emotional appraisal [SEA]). This relates to the individual’s ability to understand their deep emotions and be able to express these emotions naturally. People who have great ability in this area will sense and acknowledge their emotions well before most people.

2. Appraisal and recognition of emotion in others (others’ emotional appraisal [OEA]). This relates to peoples’ ability to perceive and understand the emotions of those people

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around them. People who are high in this ability will be much more sensitive to the feelings and emotions of others as well as reading their minds.

3. Regulation of emotion in the self (regulation of emotion [ROE]). This relates to the ability of people to regulate their emotions, which will enable a more rapid recovery from psychological distress.

4. Use of emotion to facilitate performance (use of emotion [UOE]). This relates to the ability of individuals to make use of their emotions by directing them towards constructive activities and personal performance.

A growing body of empirical evidence suggests that EI correlates robustly with a variety of outcomes that signal social-emotional success. Specifically, researchers assert that employees' EI can predict work related outcomes, such as job satisfaction and behaviors, career commitment and individual health behaviors and stress [4-8]. That leader EI contributes to the followers' satisfaction and behaviors and individuals who had a higher level of emotional intelligence exhibited lower level of career commitment and lower level of perceived stress.

There is increasing interest in the associations of EI with health and well-being. EI has been linked to coping [8, 9], particularly rational/problem focused coping. The link between EI and stress is also not well established in the nursing students. Coping strategies are defined as constantly changing cognitive and behavioral efforts to manage specific external or internal demands that are far beyond the existing resources of the person [8]. Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce or minimize stressful events [9]. These processes are thought to be important psychological resources for adaptive intrapersonal and interpersonal emotional functioning [2]. The primary approaches toward the process of coping are differentiated into three major styles: the problem-focused coping whose direct function is to reduce pressures or increase stress management skills; emotional-focused coping which deals with cognitive strategies that delay solving or removing stress factor by giving a new name and meaning; and avoidant-focused coping style whose main characteristic is to confront stress factor [9]. Despite lack of strong convergence, the comprehensive list of coping categories does indicate some consensus. Three strategies appeared in factor-analytic taxonomies more often than all others. Problem Solving, a set of "fight" responses aimed at eliminating the source of stress; Avoidance, "flight" responses that manage stress by means of withdrawal from its source; and Seeking Social Support, which attempts to maximize human contact in order to minimize stress [10].

Moradi *et al.* [8] explored the relationship between coping strategies and emotional intelligence of nursing students. The finding of their study showed that emotional intelligence had a positive relationship with problem-solving coping strategies, social support, cognitive appraisal, and emotional inhibition of positive relationship and has negative significant relationship with physical control coping strategies.

Also, Noorbakhsh *et al.* [9] explored the relationship between emotional intelligence and coping styles with stress of university students. Their findings revealed that EI was positively associated with problem-focused and positive emotional focused coping styles, and negatively associated with negative emotional focused coping style.

Song and Chae [7] explored the differences in stress levels and stress coping strategies according to the degree of emotional intelligence in nursing students. Nursing students who had a higher level of emotional intelligence exhibited lower levels of perceived stress and clinical practice stress and used more problem-focused coping strategies than those who had a lower level of emotional intelligence.

Por *et al.* [11] suggested that emotional intelligence was positively related to well-being, problem-focused coping and perceived nursing competency, and negatively related to perceived stress. Their findings suggest that increased feelings of control and emotional

competence assist nursing students to adopt active and effective coping strategies when dealing with stress, which in turn enhances their subjective well being.

Park *et al.* [12] suggested the need for nurses to manage their emotions and found that stress coping is better in nurses with higher emotional intelligence, 4~7 year clinical experience, working on wards as well as having a fixed shift.

Benson *et al.* [13] asserted that by recognizing the importance of EI as a prerequisite for effective nursing leadership, competent nursing practice and quality clinical nursing outcomes, and by developing these skills in the future nursing workforce, we may ultimately improve the nursing profession's capacity to respond to both anticipated and unforeseen challenges in the future of health care. But, the lack of evidence emphasizes the need to explore EI in nursing students.

Therefore, this study was executed to identify the relationship between EI and the coping strategies for nursing students. Is the individual's coping style different from stress conditions based on his emotional intelligence?

2. Methods

2.1. Study Design

This study was descriptive and exploratory in design. This study assesses the relationship between the emotional intelligence and coping strategies in nursing students.

2.2. Sampling and Data Collection

Convenience sampling was used and questionnaires were administered to one hundred nine nursing students at a university in D city took part in this study. All of the students had attended the university. Data were collected using face-to-face interview with a structured questionnaire. The participants in this study, who consented to participate, understood the purpose of this study, and had the complete capacity to verbally communicate in Korean. It took 20-25 minutes to complete the questionnaire.

2.3. Instrument

2.3.1. Emotional intelligence (EI): In order to determine the emotional intelligence, a tool of the 16 questions was used, which was developed by Wong and Low (Wong and Low Emotional Intelligence Scale, WLEIS) [4], and modified by Jeon [14]. WLEIS consists of 16 items and taps individuals' knowledge about their own emotional abilities rather than their actual capacities. The scale consists of four dimensions with four items in each dimension. The SEA dimension (Self-Emotion Appraisal) relates to individuals' ability to understand and express their emotions (e.g., "I have a good sense of why I have certain feelings"). The OEA dimension (Others' Emotion Appraisal) relates to individuals' ability to perceive and understand the emotions of others (e.g., "I always know my friends' emotions from their behavior"). The ROE dimension (Regulation of Emotion) relates to individuals' ability to regulate their own emotions (e.g., "I am able to control my temper and handle difficulties rationally"). The UOE dimension (Use of Emotion) relates to individuals' ability to make use of their own emotions by channeling them toward constructive activities to facilitate performance (e.g., "I would always encourage myself to try my best"). All items were presented on a seven-point scale: 1 = totally disagree to 7 = totally agree. Higher scores meant positive perception of emotional intelligence. In this sample, the Cronbach's alpha was .78 for the global EI scale and alpha varied from .72 to .86 for the four subscales.

2.3.2. Coping Strategies: The Korea version coping strategy indicator (K-CSI) is a well-established dispositional coping measure [15] encompassing three different coping styles: (1) problem solving -oriented; (2) social support seeking-oriented; (3) avoidance-oriented coping. It consists of 33 questions. Using a three-point Likert scale (1=not at all to 3=very much), participants indicated how much they engage in the suggested coping activities when they encounter stressful situations. In this sample, the Cronbach's alpha values for problem solving, social support seeking, and avoidance coping strategies were .86, .85, and .66, respectively.

2.4. Data Analysis

The data were analyzed using the SPSS Win 15.0 program. Descriptive statistics was determined for all demographic variables. Cronbach's alpha reliability coefficients were used to estimate internal consistency and reliability of the tools. Emotional intelligence and coping strategies were analyzed using descriptive statistics. Pearson's correlations were performed in order to identify the degree of relations of variables. A linear analysis was conducted to assess for linearity of the relationship between emotional intelligence and coping strategies. General statistical techniques were used to analyze the data based on an alpha level of .05.

2.5. Ethical Consideration

Standard ethical and legal points were followed regarding the use of reporting subjects in research; salient, relative points were explained to all subjects. These guidelines included: participants' right to withdraw from the project, anonymity, limitations on the use of resulting data, use for research and or academic purposes only, and the possible destruction of sensitive materials.

3. Results

3.1. General Characteristics of Subjects

Respondents included 219 college students who were aged 17-23 years. The mean age was 18.8 years (SD=.74). The sample was predominantly female (91.3%).

3.2. Emotional Intelligences and Coping Strategies Levels

The descriptive statistics for the nursing students' emotional intelligences and coping strategies were done. The mean score for the emotional intelligence was 5.00 on a scale of 1-7. The score of problem-solving coping strategy was 2.13, social support seeking coping strategy was 2.25, and avoidance coping strategy was 1.76 on a scale of 1-3 (Table 1).

Table 1. Mean and Standard Deviation of Standardized Score on Emotional Intelligence and Coping Strategy (N=219)

Variable	Mean	SD
WLEIS	5.00	.57
WLEIS 1(SEA)	5.33	.82
WLEIS 2(OEA)	5.43	.77
WLEIS 3(ROE)	4.64	.97
WLEIS 4(UOE)	4.59	1.13

Problem solving oriented coping	2.13	.36
Social support seeking oriented coping	2.25	.41
Avoidance oriented coping	1.76	.33

SEA=self-emotional appraisal; OEA=others' emotional appraisal; ROE=regulation of emotion; UOE=use of emotion.

3.3. Correlation between Emotional Intelligences and Coping Strategies

The overall mean emotional intelligence score was correlated with the mean problem solving coping strategy scores ($r=.396$ at $p<.001$) and social support seeking coping strategy scores ($r=.178$ at $p=.008$). Each of the emotional intelligence factors was significantly correlated with coping strategies, with one exception; the factor of avoidance coping strategy (Table 2).

Table 2. Correlation between Emotional Intelligences and Coping Strategies

	Coping strategies		
	Problem solving	Social support seeking	Avoidance
	r (p)	r (p)	r (p)
WLEIS	.396(<.001)	.178(.008)	-.031(.648)
WLEIS 1(SEA)	.222(.001)	.132(.051)	.011(.870)
WLEIS 2(OEA)	.119(.080)	.164(.016)	.031(.645)
WLEIS 3(ROE)	.401(<.001)	.130(.056)	-.102(.135)
WLEIS 4(UOE)	.217(.001)	.042(.539)	-.006(.935)

SEA=self-emotional appraisal; OEA=others' emotional appraisal; ROE=regulation of emotion; UOE=use of emotion.

3.4. Correlation Amongst Variables

To determine the influence of each variables of EI on the variance of coping style, emotional intelligence subscales were analyzed as foreseeing variables and problem solving oriented and social support seeking orientated coping as standard variable in regression equation. The results of variance and regression analysis showed $F=13.39$ between the scores of problem solving oriented coping with emotional intelligence subscales which is meaningful in $P<.001$ and ($R=.448$) was obtained. Therefore 18.6% of the variance related to problem solving oriented coping is determined by emotional intelligence subscales. Regression coefficients show that the subscales of self-emotional appraisal ($\beta=0.17$, $t=2.38$), regulation of emotion ($\beta=0.34$, $t=5.35$) and utilization of emotion ($\beta=.13$, $t=2.08$) could determine the style of problem solving oriented meaningfully. But the results of variance and regression analysis between the scores of social support seeking oriented coping and avoidance oriented coping with emotional intelligence subscales - which were not meaningful - was obtained (Table 3).

Table 3. Regression Analysis for Variables Predicting Coping Strategies

	Coping strategies		
	Problem solving	Social support seeking	Avoidance
	$\beta(t)$	$\beta(t)$	$\beta(t)$
WLEIS 1(SEA)	.170(2.38)*	.055(0.69)	.007(0.08)
WLEIS 2(OEA)	-.029(-0.40)	.119(1.52)	.049(0.61)
WLEIS 3(ROE)	.345(5.35)***	.094(1.33)	-.117(-1.63)
WLEIS 4(UOE)	.131(2.08)*	.018(0.26)	.021(0.30)
	Adjusted R ² =.186 (F=13.39, p<.001)	Adjusted R ² =.022 (F=2.19, p=.070)	Adjusted R ² =-.005 (F=.721, p=.578)

***p<.001, **p<.01, *p<.05, SEA=self-emotional appraisal; OEA=others emotional appraisal; ROE=regulation of emotion; UOE=use of emotion.

4. Discussion

In general, findings of the present study showed that emotional intelligence had a positive relationship with problem-solving coping and social support seeking coping strategies. The positive relationship of emotional intelligence elements, such as problem-solving and social support seeking, are consistent with the findings of some studies. These results confirm the findings of the present research and conforms to the results and necessities of findings of previous research in relation with EI [8, 9, 11, 16]. Through adjusting and managing emotional productivity or facilitating the perception of emotional evaluation, those with increased emotional intelligence used more of the problem-focused coping styles and positive emotional-focused coping, and less of the negative emotional-focused coping styles.

As the findings of this study showed, there is no significant relationship between emotional intelligence and avoidance coping strategies. However, this finding is not consistent with findings of most of the studies conducted in the field about the relationship between emotional intelligence and task coping, emotion coping and avoidance coping styles but the study conducted by Kim and Agrusa [1], showed that students with higher emotional intelligence use both task coping and avoidance coping while they use lower emotional coping. Park *et al.* [12] found that there was a significant positive correlation between emotional intelligence and stress coping. The positive relationship with problem-centered coping and self-emotion appraisal, others' emotion appraisal, regulation of emotion and use of emotion was founded. They asserted in their study that further development and application of programs, which can improve nurses' emotional intelligence are needed.

According to the regression analyses, there has been evidence of the effect of emotional intelligence in problem solving oriented coping strategies. Similarly, Kim and Agrusa's [1] studies showed a relationship between three psychological traits and task- and emotion-oriented coping. As for task coping, EI is the most significant explanatory variable of all. People who are clear and attentive about their emotions display higher levels of positive affect if they are engaged in problem-focused, active coping. They asserted that those who are clear about their emotions have the requisite information about the status of their goals and therefore have the ability to make sound decisions to solve their problem. Also, they suggested that individuals who perceive not only their emotions, but also others' emotions clearly, are equipped with even more affluent information,

which helps them move their resources swiftly to minimize the adverse impact of the problem.

Nursing is a stressful occupation and clinical placements expose students at an early stage in their studies to the realities of working as a healthcare professional [11]. Student nurses with higher levels of self-esteem had lower levels of stress, as did students with higher levels of emotional support. Coping strategies identified were positive thinking and social support. Emotional support in the form of social support has been reported as a helpful coping strategy in stressful situations [17]. Student nurses need to develop the ability to control their emotions and channel their moods constructively, since an inability to self-regulate emotions can lead to an increase in stress and anxiety [11]. As a consequence, it would appear that individuals with high EI are better able to regulate and express their own emotions and read the deeper emotional meanings of others with whom they interact. They are less likely to be overwhelmed by stress and are at a lower risk of developing mental health problems.

5. Conclusion

This study examined the relationship between emotional intelligence and coping strategies amongst university nursing students. This finding indicates that students' emotional intelligence was positively related to problem solving coping and social support seeking coping. The findings suggest that increased feelings of control and emotional competence assist nursing students to adopt active and effective coping strategies when dealing with stress. We should consider the mutual relationships of so many factors while judging the application of coping strategies. However, in the present study, just one effective variable, namely, the impact of emotional intelligence on the application of different coping strategies was investigated. There may be intervening and moderator variables that influence the emotional intelligence impact on accepting different coping strategies. So, other effective factors besides emotional intelligence in accepting different coping strategies should be investigated or controlled in the future studies. The population of this study is limited to Daejeon. The results of this study, therefore, must be interpreted with caution.

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