

# The Structural Relationships between Social Support, Emotional Intelligence, Self-esteem, and Hope in Rural Elementary School Students

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## Abstract

**Background/ Objectives:** This research aimed to verify the structural relationships among social support, emotional intelligence, self-esteem, and hope in 240 elementary school students located in rural areas in Korea. **Methods/ Statistical Analysis:** In order to accomplish this, frequency analysis, reliability analysis, correlation analysis, structural equation modeling, and Sobel's test analysis were conducted. **Findings:** First, social support, emotional intelligence, self-esteem, and hope were positively correlated with each other. Second, social support of rural elementary school students had an impact on emotional intelligence, self-esteem, and hope. Moreover, emotional intelligence and self-esteem also had impacts on hope. Third, there was a mediating effect of emotional intelligence and self-esteem between social support and hope. **Applications/Improvement:** These findings will be used to increase hope level of elementary students through social support, emotional intelligence, and self-esteem.

**Keywords:** Elementary School Student, Emotional Intelligence, Hope, Self-esteem, Social Support

## 1. Introduction

All human beings desire happiness and want to be successful in the process. According to<sup>1</sup>, the factors that determine happiness are emotional intelligence (80%) and IQ (20%), which means that emotional intelligence is more influential to success in life. Emotional intelligence is the ability to perceive one's internal emotion in a given situation and to express themselves in response to internal or external demands by controlling emotion in an appropriate way<sup>2</sup>; this ability is a foundation that influences the performance of all perceptual tasks<sup>3</sup>. In particular, children with high emotion regulation or emotion control have relationships with peers, maintain more positive interpersonal relationships, and more actively participate in their lives<sup>4</sup>. Emotional intelligence is crucial to active involvement in one's life, and attention is being drawn to the importance of improving emotional intelligence in elementary school students through development and learning.

Self-esteem, which is used as an indicator of a healthy mind<sup>5</sup>, is a subjective sense of satisfaction with and approval of one's own self, including self-respect<sup>6</sup>. A person with high self-esteem is not influenced by negative or positive external judgments, whereas a person with low self-esteem is sensitive to negative external judgments<sup>7,8</sup>, and findings are similar among adolescents. Teenagers with high self-esteem are highly active; they have successful social lives and display active self-expression<sup>9</sup>. In addition, people recognize psychological pain and difficulty caused by negative events from different perspectives. For example, one study found that people with low self-esteem felt more psychological pain and difficulty from negative events than did people with high self-esteem. This suggests that self-esteem is deeply related with hope, which is a positively motivated state<sup>10</sup>.

Hope is a positively synchronized emotion based on one's capacity to achieve goals<sup>11,12</sup>; it refers to exploiting life troubles in order to attempt to improve one's circum-

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stances<sup>13</sup>. Hope is also an assumption based on one's belief in success, and it occurs through the interaction between goal-oriented agency and the pathways to achieving goals<sup>10</sup>. Persons with high levels of hope tend to establish a determined goal and a specific course for achieving it but will also seek alternate paths when faced with difficulties<sup>13</sup>.

Social support is a variable that is bound with both self-esteem and hope. It is a positive resource that is attained by people who are socially related<sup>14-16</sup>, and it is composed of family, teacher, and peer support. In other words, social support is derived from relationships with parents, teachers, and peers<sup>17</sup>. One study found that students with high peer support adequately regulated their own emotions and displayed strong self-control<sup>18</sup>, and another found that students who perceive positive social support have high levels hope<sup>19</sup>. It can thus be inferred that social support influences emotional intelligence, self-esteem, and hope, but the relationships require study.

Therefore, this study was conducted to determine the relationships between social support, emotional intelligence, self-esteem, and hope among elementary school students in rural areas. To achieve this goal, the study asked: "What are the correlations between social support, emotional intelligence, self-esteem, and hope?"; "What are the structural relationships between social support, emotional intelligence, self-esteem, and hope in elementary school students in rural areas"; and "Are emotional intelligence and self-esteem mediated in any relationships between social support and hope?".

## 2. Method

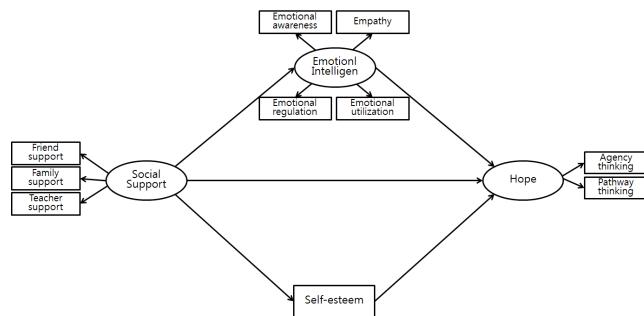
### 2.1 Research Model

Based on results from previous studies that showed that students with high peer support have strong emotional regulation and self-control<sup>18</sup> and that these students also perceive more positive social support, these students display more hope<sup>19</sup>. Thus, students who show greater emotional self-control have closer and more positive peer relationships and also participate more actively in their lives<sup>4</sup>; see the research model shown in Figure 1.

### 2.2 Participants and Data Collection

In this research, purposive convenience sampling was conducted among 240 students who attended small

schools located in rural areas outside of a city and in two counties in C Province in Korea. The individual characteristics of the research subjects are as follows. In terms of gender, girls and boys accounted for 45.8% and 54.2%, respectively. By school grade, the most, 19.2%, were first-graders, followed by third, sixth, and fifth-graders, who, respectively, accounted for 18.3%, 17.5%, and 16.7% of participants; second and fourth-graders accounted for 14.2% of the group.



**Figure 1.** Research model.

### 2.3 Instruments

#### 2.3.1 Social Support

The definition of social support that was used in this study was that which was appropriately modified<sup>20</sup> for research subjects based on the Social Support Appraisal Scale that was developed by<sup>21</sup>.

The modified scale consists of 3 sub-domains that measure children's perceptions and evaluations of family, peer, and teacher support. Each item is scored on a 4-point Likert scale from 1 = strongly disagree to 4 = strongly agree, and the Cronbach's  $\alpha$  reliability values for peer, family, and teacher support were 0.789, 0.883, and 0.729, respectively.

#### 2.3.2 Emotional Intelligence

To measure emotional intelligence, emotional awareness, empathy, emotional regulation, and emotional utilization (excluding emotional expression), this study used confirmatory factor analysis with the subdomains of emotional intelligence test Moon<sup>22</sup> identified based on the emotional intelligence model<sup>3</sup>. Each item is scored on a 3-point Likert scale from 1 = disagree to 3 = agree using closed ended questions, and emotional intelligence is higher when scores are higher. The Cronbach's  $\alpha$  reliability values for emotional awareness, empathy, emotional

**Table 1.** Correlation and descriptive statistics of main variables

	1. Peer support	2. Family support	3. Teacher support	4. Emotional awareness	5. Empathy	6. Emotional regulation	7. Emotional utilization	8. Self-esteem	9. Agency thinking	10. Pathway thinking
1	1									
2	0.589**	1								
3	0.450**	0.623**	1							
4	0.389**	0.332**	0.371**	1						
5	0.220**	0.179**	0.194**	0.302**	1					
6	0.303**	0.251**	0.286**	0.369**	0.625**	1				
7	0.132*	0.153*	0.128*	0.082	0.177**	0.263**	1			
8	0.551**	0.547**	0.477**	0.445**	0.291**	0.424**	0.283**	1		
9	0.394**	0.449**	0.328**	0.314**	0.305**	0.370**	0.204**	0.540**	1	
10	0.366**	0.417**	0.351**	0.365**	0.329**	0.404**	0.172**	0.485**	0.737**	1
M	2.7300	3.1305	2.8660	2.4514	2.1775	2.2141	2.6912	3.0418	2.1844	2.1649
SD	0.56407	0.65704	0.57236	0.38241	0.45622	0.40348	0.25110	0.53182	0.50996	0.51282
Skewness	-0.356	-0.656	-0.105	-0.692	-0.308	-0.263	-1.671	-0.101	-0.213	-0.069
Kutosis	0.536	0.336	-0.239	0.034	-0.407	-0.122	7.525	-0.584	-0.313	-0.286

\* $p<0.05$ , \*\* $p<0.01$

regulation, and emotional utilization were 0.740, 0.751, 0.855, and 0.870, respectively.

### 2.3.3 Self-esteem

To measure self-esteem, this study used the self-esteem scale developed <sup>6</sup>. The scale consists of 10 positive or negative question items; each item is scored on a 4-point Likert scale, and self-esteem is higher as scores are higher. The Cronbach's  $\alpha$  values for the positive and negative items were 0.789 and 0.684, respectively.

### 2.3.4 Hope

To measure hope, this study used the K-DHS, the Korean version of Snyder's Dispositional Hope Scale, which was validated by<sup>23</sup> based on the hope scale <sup>10</sup>. Although the original uses a 5-point Likert scale, the K-DHS was modified to be a 3-point scale that still indicated that higher scores reflected higher levels of hope. The Cronbach's  $\alpha$  values for agency and pathway thinking were 0.710 and 0.756, respectively.

## 2.4 Data Analysis

The data were analyzed using SPSS PC+ Win. 21.0, and Amos 21.0. For the statistical analysis, descriptive sta-

tistics, reliability analysis, correlation analysis, mean comparison analysis, and structural equation modeling were applied.

## 3. Results

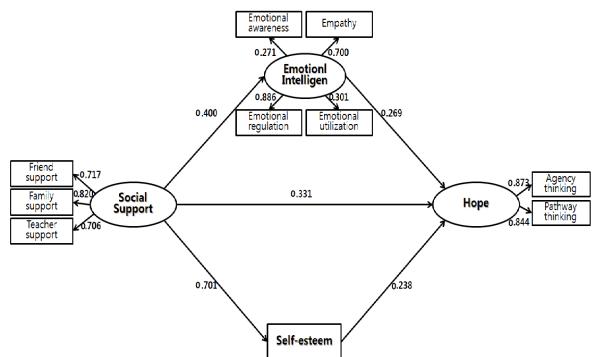
### 3.1 Correlation Analysis and Descriptive Statistics

The results from Pearson's correlation analyses between the variables are shown in Table 1. There were positive correlations among the subdomains of social support, emotional intelligence, self-esteem, and hope, but there was no significant correlation between emotional awareness and emotional utilization among the subdomain of emotional intelligence. The means of the variables exceeded the mid-point; specifically, the means for family support were mostly the highest among the social support subdomains, mean emotional utilization was highest in an emotional intelligence subdomain, and the mean for agency thinking was greater than that for pathway thinking. Based on the criteria suggested by West<sup>23,24</sup>, if absolute skewness and kurtosis are lower than 3 and 8, respectively, the variables are considered to satisfy the required conditions for normal distribution.

### 3.2 Validating the Modified Model

To identify the structural relationships in the research model, this study conducted confirmatory factor analyses, convergent validity evaluations and research model analyses. To confirm the criteria for model goodness of fit as shown in Table 2,  $\chi^2$  was assigned a value that had no statistically significant difference. In addition, TLI and CFI were assigned a value of more than 0.9, whereas RMSEA was assigned a value of less than .1<sup>25</sup>. In addition, to confirm the convergent validity of the measurement model, the standardized factor load was assigned a value of more than 0.5, whereas z was assigned a value that was statistically significant. Moreover, average variance extracted and concept reliability were assigned values of more than 0.5 and more than 0.7, respectively<sup>26</sup>.

The result of the research model analyses showed that the model's goodness-of-fit values were:  $\chi^2 = 82.443(df=31)$ ; NFI = 0.912; TLI = 0.916; CFI = 0.942; and RMSEA = 0.083. These measurements did not satisfy goodness of fit, and thus the model was partially modified by modification indices, specifically by connecting the covariance pathways of error items that were theoretically explainable among error variances that exceeded the modification index by more than 10.



**Figure 2.** Modified model.

**Table 2.** Goodness-of-fit comparison between the research and the modified models

Classification	$\chi^2$	df	NFI	TLI	CFI	RMSEA
Research model	82.443***	31	0.912	0.916	0.942	0.083
Modified model	40.279	29	0.957	0.980	0.987	0.040

\*\*\* $p<0.001$

When the model was modified, the  $\chi^2$  was not statistically significant from the original goodness-of-fit index.

Additionally, given that NFI = 0.957, TLI = 0.980, CFI = 0.987, and RMSEA = 0.040, the modified model showed greatly improved goodness of fit compared with the previous model. As a result, this study selected the modified model as the final model. The test results using the modified model and each path coefficient are described in Figure 2 and Table 3. Based on the test results by path, all paths were statistically significant, with the details as follows: The paths between both social support and emotional intelligence and between social support and self-esteem were positively significant,  $\beta=0.701$ ,  $p<0.001$ , and  $\beta=0.701$ ,  $p<0.001$ , respectively; the path between social support and hope was also positively significant ( $\beta=0.331$ ,  $p<0.001$ ). In addition, the paths between both emotional intelligence and hope ( $\beta=0.269$ ,  $p<0.01$ ) and emotional intelligence and self-esteem ( $\beta=0.238$ ,  $p<0.01$ ) showed positive significance. It was determined that social support, emotional intelligence, and self-esteem were the factors that explained hope.

### 3.3 Mediating Effect Test

Sobel's test was conducted to examine whether there were any statistically significant indirect effects when emotional intelligence and self-esteem mediated the relationships between social support and hope, and these results are shown in Table 4.

Firstly, emotional intelligence had a significant mediation effect ( $p<0.05$ ; Z=2.0689) on the path between social support and hope, and self-esteem had a significant mediation effect ( $p<0.05$ ; Z=2.5246) on the path between social support and hope. In other words, the greater the social support, the higher the emotional intelligence and self-esteem, and these positively influence hope. These results indicate that social support not only directly and positively influences hope but also indirectly influences it through emotional intelligence and self-esteem.

## 4. Discussion

This study was conducted to identify structural relationships between social support, emotional intelligence, self-esteem, and hope among 240 students from small elementary schools located in rural areas outside of a city and in two counties in C Province in Korea. The study results are discussed.

Firstly, there were significant positive correlations between social support, emotional intelligence, self-

**Table 3.** Path of the modified model

Path between variables			B	$\beta$	S.E	t
Social support	→	Emotional intelligence	0.103	0.400	0.033	3.137**
Social support	→	Self-esteem	0.923	0.701	0.097	9.505***
Emotional intelligence	→	Hope	1.155	0.269	0.418	2.764**
Social support	→	Hope	0.365	0.331	0.109	3.358***
Self-esteem	→	Hope	0.199	0.238	0.076	2.612**

\*\* $p<0.01$ , \*\*\* $p<0.001$

**Table 4.** Mediating effects of emotional intelligence and self-esteem

Path					Z	p
Social support	→	Emotional intelligence	→	Hope	2.0689	0.0386
Social support	→	Self-esteem	→	Hope	2.5246	0.0116

esteem, and hope. The study results showed that children with strong self-regulation and emotional control have closer peer relationships and maintain more positive social relationships<sup>4</sup>; students with high peer support have high emotional regulation and self-control<sup>18</sup>, and students who perceive more positive social support have more hope, all of which support the findings from previous studies<sup>19</sup>.

Secondly, elementary school students in rural areas appear to receive positive social support, which is significantly correlated with emotional intelligence, hope, and self-esteem, and emotional intelligence and self-esteem are also positively correlated with hope. Both this and previous results suggests that social support has a positive influence on hope<sup>27</sup>.

Thirdly, regarding the relationship between social support and hope in elementary school students in rural areas, it was demonstrated that emotional intelligence and self-esteem are mediating variables. This is because positive perceptions of pro-social behavior or attitudes from family, teachers, and peers directly influence hope but can also be interpreted as having indirect effects through emotional intelligence and self-esteem. Below we suggest future studies based on our results.

In this study, elementary school students' emotional intelligence and self-esteem were major influences on hope, demonstrating their importance. Therefore, programs should be developed that cultivate emotional intelligence and self-esteem in rural elementary school students, and through such programs, deficits in emotional ability, character, and human nature could also be prevented, which would contribute to developing in

children active attitudes toward life and effective conflict resolution tactics as well.

## 5. Acknowledgement

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