

## FACTORS AFFECTING HOPELESSNESS LEVELS OF TURKISH PRETEENAGERS ATTENDING PRIMARY SCHOOL: A STRUCTURAL EQUATION MODEL

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This study was designed to determine the factors affecting hopelessness about the future of 10-12-year-old Turkish primary school students. Firstly, descriptive factor analysis was applied in order to determine the factors affecting hopelessness levels, then a structural equation model (SEM) was utilized to describe the relationship between the specified factors and hopelessness; these relationships were tested by LISREL 8.54. The results indicated that the preteenagers' level of hopelessness was adversely affected by support received from parents and friends. The hopelessness level was also significantly affected by the preteenagers' positive self-definition and parents' educational level.

*Keywords:* hopelessness, Turkish preteenagers, primary school, structural equation modeling.

Adolescence is a transitional period between childhood and adulthood. In childhood no other microsystem has greater influence on development than the family. The family meets most of the young child's biological, emotional, and intellectual needs, and interaction with family members contributes to the child's early experience to the greatest extent (Garbarino et al., 1985, p. 241). But during adolescence teenagers mature both physically and psychologically, need acceptance by their peer groups, and want to secure their independence.

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Therefore, this period plays an important role in the development of individuals. Puberty, referring to the beginning of adolescence, is accepted as the special period in which each child slowly leaves behind childish behaviors, learns to play with peer groups, share others' pain and pleasure, adapt to community laws, internalize values of the society and develop positive attitudes towards social relationships. In this developmental period, factors such as socioeconomic status of the family, attitudes of the parents, cultural characteristics of society, parenting styles, and relations between mother and father affect future prospects for children and adolescents (Kashani, Dahlmeier, Bordwin, Soltys, & Reid, 1995; Kashani, Dandoy, & Reid, 1992; Kashani, Soltys, Dandoy, Vaidya, & Reid, 1991). A *hopelessness expectancy* has been defined as *the perception that one had no control over what was going to happen and by absolute certainty that an important bad outcome was going to occur or that a highly desired good outcome was not going to occur* (Carson, Butcher, & Mineka, 2000, p. 239). And these expectations may create tendencies for depression, suicide and other self-defeating behaviors. In childhood and adolescence psychology, the concept of hopelessness has been given great importance. Pfeffer (1981) suggests that threat and attempt of suicide are increased by factors such as negative experiences in the family, feelings of hopelessness and worthlessness in children aged between 6-12 years who exhibit self-murder behavior. Many factors such as parental attitudes, social support taken from the family, socioeconomic status of the family and exposure to traumatic experiences have significant effects on the psychological well-being of children.

The Hopelessness Scale for Children (Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983; Kazdin, Rodgers, & Colbus, 1986) has been a notable tool for researchers to measure the hopelessness of children and adolescents. Previous research results have found negative relations between hopelessness and social support for children (Kashani, Suarez, Allen, & Reid, 1997). Sullivan (2003) reported that hopelessness, sadness, despair, low energy, loss of appetite, sleep disorders and frequent thoughts of self-murder in 6-12-year-old children are basic characteristics in childhood depression. Gibb and Alloy (2006) found support for a mediating role of attributional styles for both 4th and 5th grade children. Supporting recent refinements in the hopelessness theory, the best fitting mediational model was the one in which depressive symptoms exhibited reciprocal relations with some variables. Specifically, attributional styles partially mediated the link between verbal victimization and residual change in depressive symptoms. In light of these findings, we investigated whether or not factors such as the environment of family, school and friends affect future expectations of children attending primary school.

## METHOD

Firstly, we determined the factors that may affect the hopelessness level of preteenagers by factor analysis. Then, a structural equation model (SEM) was utilized to describe the relations between determined factors and hopelessness, and the model was tested by LISREL 8.54.

The items related to teenage hopelessness were developed by means of inspiration from various scales and checklists. Pilot research for the validity and reliability of the scale was carried out with 450 ten- to twelve-year-old students chosen from five different primary schools. The final scale consisted of 17 items and the alpha coefficient was calculated as 0.75. These items are given in Table 1. The final scale was applied at three schools by interviewing 200 students. Because of missing information on 50 forms, analysis was carried out on the responses of 150 preteenagers. The seventeen items were scored on a 3-point Likert scale. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was found as 0.71 in the analysis. The research also used Bartlett's Test of Sphericity (BTS) which tests the hypothesis "correlation matrix = unit matrix". The rejection of the hypothesis shows that correlation between the variables is different from 1.0 and the factor analysis is appropriate for the variables. The approximate Chi-square value for BTS was found as 476.40 ( $df = 78, p = 0.000$ ).

Factor analysis and SEM were utilized in analysis. The model was also examined through the LISREL program. Items with factor loading below 0.50 were ignored. At the end of the factor analysis, four different dimensions explaining 60% of total variance were obtained. These factors are; A: Relationship with Family, B: Relationship with Friends, C: Opinions about School, and D: Self-definition. Alpha values for internal consistency of each dimension are 0.74, 0.75, 0.70 and 0.69, respectively. Items and their loadings within the factors are given in Table 1. Hypotheses developed to test the relationships among factors were as follows:

**$H_A$ :** Support of the family is negatively associated with the hopelessness of preteenagers.

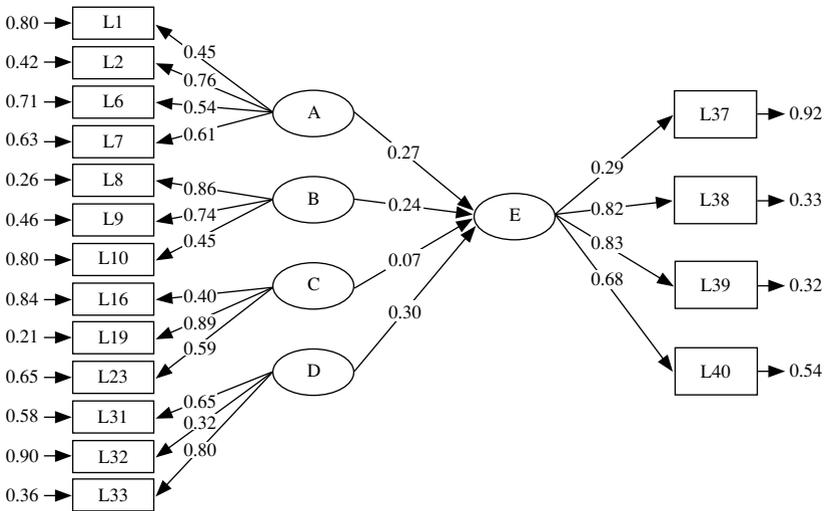
**$H_B$ :** Support of friends is negatively associated with the hopelessness of preteenagers.

**$H_C$ :** Positive opinions about school have a negative effect on the hopelessness of preteenagers.

**$H_D$ :** Positive self-definitions have a negative effect on the hopelessness of preteenagers.

The items for hopelessness were inspired by the Hopelessness Scale for Children (Kazdin et al., 1983; Kazdin et al., 1986). As the dependent variable, hopelessness was measured by four items. These are L37: "I want to grow up because things will be better", L38: "I think that fair prospects are waiting for me

in the future”, L39: “I will be an important person when I grow up”, and L40: “I think that I will get the things I want”. For the Hopelessness Scale, higher scores reflect lower levels of hopelessness tendencies. Fit indices of the model are calculated as: NFI: 0.85 (Normed Fit Index), CFI: 0.87 (Comparative Fit Index), GFI: 0.91 (Goodness-of-fit), RMSEA: 0.08. An RMSEA value equal to 0.05 or less reflects a perfect fit, and values under 0.10 indicate an acceptable fit, while those above 0.10 indicate a bad fit. Other fitness criteria are between 0 and 1 with closeness to 1 showing a better fit of the model (Yılmaz, 2004; Yılmaz & Celik, 2004). When all fitness criteria are considered, it is evident that our proposed model is valid. When Figure 1 is reviewed, statistically significant relationships can be seen between A and E ( $\gamma_{11} = 0.27$ ), B and E ( $\gamma_{21} = 0.24$ ), D and E ( $\gamma_{41} = 0.30$ ), but the relationship between C and E ( $\gamma_{31} = 0.07$ ) is not significant.



**Figure 1.** Path diagram for model. Goodness of Fit: NFI: 0.85, NNFI: 0.90, CFI: 0.87, GFI: 0.91, AGFI: 0.87, RMSEA: 0.08, Chi-square = 242.68, *df* = 109, *p* value = 0.000

### FINDINGS AND DISCUSSION

Structural equation modeling was applied in order to reveal closed-down structures affecting future expectations of teenagers. According to SEM results,  $H_A$ ,  $H_B$  and  $H_D$  hypotheses were verified. Results revealed that more support from family and friends and positive self-definition decreased the hopelessness levels of preteenagers. Additionally, we found that the events preteenagers experienced within their familial, social, and academic environments had significant effects

on their positive attitudes about the future. It was also revealed that enjoying being with family, having support of the family during problem solving, being pleased with being at school and the things learned at school, liking teachers, liking neighbors, and having positive thoughts about themselves all have positive effects on attitudes of students about the future.

**TABLE 1**  
RESULTS OF EFA AND SEM, CRONBACH'S ALPHA ( $\alpha$ ) VALUES, PARAMETER ESTIMATES, AND  $R^2$

Factors/items	EFA Factor Loading	SEM Estimation of standardized parameter	$R^2$	$\alpha$
<b>Factor A:</b> Relationship with family	Eigenvalue: 2.17			0.74
L1. I like spending time at home with my family.	0.70	0.45*** ( $t = 4.93$ )	0.20	
L2. My family and I enjoy being together.	0.73	0.76*** ( $t = 8.56$ )	0.58	
L6. My family helps me with solving my problems.	0.67	0.54*** ( $t = 6.02$ )	0.29	
L7. My family likes hearing my thoughts.	0.70	0.61*** ( $t = 6.86$ )	0.37	
<b>Factor B:</b> Relationship with friends	Eigenvalue: 2.05			0.75
L8. My friends are kind to me.	0.82	0.86*** ( $t = 9.93$ )	0.74	
L9. I enjoy being with my friends.	0.84	0.74*** ( $t = 8.61$ )	0.54	
L10. My friends are excellent people.	0.63	0.75*** ( $t = 5.15$ )	0.20	
<b>Factor C:</b> Opinions about school	Eigenvalue: 1.84			0.70
L16. I like to be in school.	0.56	0.40*** ( $t = 4.25$ )	0.16	
L19. I learn many things at school.	0.85	0.89*** ( $t = 7.29$ )	0.79	
L23. I like my teachers.	0.76	0.59*** ( $t = 5.79$ )	0.35	
<b>Factor D:</b> Self-definition	Eigenvalue: 1.78			0.69
L31. The people around me like me.	0.80	0.65*** ( $t = 7.23$ )	0.42	
L32. I take care of how I dress.	0.72	0.32** ( $t = 3.50$ )	0.10	
L33. I like myself.	0.63	0.80*** ( $t = 8.67$ )	0.64	
$\gamma_{11}$ ( $A \rightarrow E$ )		0.27* ( $t = 2.08$ )		
$\gamma_{21}$ ( $B \rightarrow E$ )		0.24* ( $t = 1.96$ )		
$\gamma_{31}$ ( $C \rightarrow E$ )		0.07 <sup>ns</sup> ( $t = 0.70$ )		
$\gamma_{41}$ ( $D \rightarrow E$ )		0.30* ( $t = 2.00$ )		
Variation (%)	Cumulative (%)			
Factor A	16.71	16.71		
Factor B	15.73	32.44		
Factor C	14.16	46.60		
Factor D	13.71	60.31		

Note: ns = not significant, \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

All items were answered on 3-point Likert scales ranging from 3 = *strongly agree* to 1 = *strongly disagree*.

ANOVA analysis revealed that the education level of parents has a significant effect on the hopelessness level of preteenagers. The means of hopelessness scores in preteenagers were 9.45, 10.33 and 11.22 in relation to the mothers' education – primary school, high school, and university, respectively. The means of hopelessness scores in preteenagers were 9.79, 9.60 and 10.70 in relation to the fathers' education - primary school, high school, and university, respectively. The findings show that the students whose parents have had higher education had lower hopelessness scores; mothers' level of education had the most significant negative effect. The means of hopelessness scores of the students were 10.16 and 9.86 for males and females, respectively. According to gender, only one item (L39) was found to be significant. Additionally, agreement on expressions such as "I like myself", has been found for females and males at 69% and 75%, respectively. Furthermore, it has been observed that when the family income level increases, the level of hopelessness decreases.

There are two limitations of the present study. The variable of hopelessness was limited to four items. Since all the factors affecting hopelessness could not be taken into consideration, four possible factors were selected in this study. Without ignoring these limitations, the results of this study are consistent with theoretical explanations related to the importance of adolescents' relations with their family and peers for supporting and protecting their psychological well-being. Universalizing the social skills programs that enhance high-risk preteenagers' communication with their family, teachers and peers seems to be functional. Also, for parents, guidance services should be developed that include family-oriented programs about developmental periods, teenagers' developmental needs, possible further problems such as depression, use of alcohol, potentially dangerous drugs, suicide, and violent behaviors. Parents should be informed about sources of professional support. Since eliminating the problems after they have begun is both more difficult and more expensive than circumventing them, the importance of preventive services is obvious.

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