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# Araștırma

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THE EFFECT OF FUTURE EXPECTATION ON HAPPINESS AND HEALTHY LIFESTYLE BELIEF IN ADOLESCENTS: A STRUCTURAL EQUALITY MODEL ERGENLERDE GELECEK BEKLENTİSİNİN MUTLULUK VE SAĞLIKLI YAŞAM TARZI İNANCINA ETKİSİ: BİR YAPISAL ESİTLİK MODELİ

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#### ABSTRACT

Objective of this study was to determine the effect of future expectations the happiness and healthy lifestyle beliefs of adolescents. Study used a quantitative-crosssectional-descriptive survey design method and was conducted with a sample of adolescents studying in one city in the eastern region of Türkiye. Data were collected using included the "Personal Information Form", "Adolescent Future Expectations Scale", "Adolescent Happiness Scale", and the "Healthy Lifestyle Belief Scale for Adolescents". "Adolescent Future Expectations Scale", "Adolescent Happiness Scale", and the "Healthy Lifestyle Belief Scale for Adolescents". Adolescents' future expectations were found to be effective on happiness and healthy lifestyle beliefs. The established structural equation modeling showed a significant relationship between future expectations, happiness, and healthy lifestyle beliefs. The study suggests that various programs should be implemented to raise adolescents' future expectations, which could shape their beliefs about happiness and healthy lifestyles.

**Keywords:** Adolescent, future expectation, happiness, healthy lifestyle, nursing

#### ÖZ

Bu çalışmanın amacı, ergenlerde gelecek beklentisinin mutluluk ve sağlıklı yaşam tarzı inancına etkisini belirlemektir. Nicel-kesitsel-tanımlayıcı modelinin kullanıldığı çalışmanın örneklemini Türkiye'nin doğusundaki bir ilde öğrenim gören ergenler oluşturmuştur. Verilerin toplanmasında "Kişisel Bilgi Formu", "Ergen Gelecek Beklentileri Ölçeği", "Ergen Mutluluk Ölçeği" ve "Ergenler için Sağlıklı Yaşam Biçimi İnançları Ölçeği" kullanılmıştır. Ergenlerin gelecek beklentilerinin mutluluk ve sağlıklı yaşam tarzı inançları üzerinde etkili olduğu belirlenmiştir. Kurulan yapısal eşitlik modellemesinde gelecek beklentisi, mutluluk ve sağlıklı yaşam tarzı inancı arasında anlamlı bir ilişki olduğu görülmüştür. Bu çalışmadan elde edilen bulgular ergenlerin mutluluk ve sağlıklı yaşam tarzlarına ilişkin inançlarını şekillendirebilecek gelecek beklentilerini yükseltmek için çeşitli programların uygulanması gerektiğini göstermektedir.

Anahtar kelimeler: Ergen, gelecek beklentisi, mutluluk, sağlıklı yaşam tarzı, hemşirelik

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# INTRODUCTION

Adolescence is a complex period that affects the adolescent's thinking and planning about adulthood and future expectations. During this period, important biological changes occur, and the sense of social responsibility increases.<sup>1</sup> Thinking about the future and imagining what they will do in the future affect the adolescent.<sup>2</sup>

Future expectancy is the likelihood of something happening in the future.<sup>3</sup> Having future expectations has positive psychosocial consequences in adolescents. Future expectation is an important protective factor that increases coping capacity in adolescents.<sup>4</sup> Future expectation influences aims and plans, thus directing behavior and development.<sup>5</sup> According to Catalano et al. (2004), those who have positive expectations about the future make long-term plans, have positive thoughts about their jobs, and better social and emotional adaptation abilities.<sup>6</sup> Furthermore, adolescents who expect a negative future are more likely to engage in problematic behaviors such as substance use, delinquency, and sexual risk behaviors.7 This outcome can be explained by the fact that positive expectations for the future should be maintained among adolescents.

Positive expectations for the future are associated with subjective well-being and happiness in adolescents.<sup>8</sup> Adolescents' life decisions are related to expectations about the future, affecting many aspects of future life, including health lifestyle belief.<sup>9</sup> Adolescents who expect better futures are happier than adolescents with low expectations because they value themselves more, increasing the likelihood of engaging in healthy behaviors. Adolescents with low future expectations may engage in unhealthy behaviors. According to Harris et al.<sup>10</sup> those who are not hopeful future have decreased physical activity and exercise rates. In addition, these people are at increased risk of unhealthy eating behavior.

Previous studies have shown that future expectations are related to social adaptation, socioeconomic status of the family, parent-adolescent relationship, self-esteem, academic success, etc. and it has consequences that affect until adulthood.<sup>6</sup> According to Iovu et al.<sup>5</sup>, future expectation affects mental health. Adolescents with high future expectations have positive traits such as selfconfidence and hope. Therefore, they are more hopeful and happy in the stressful events.<sup>11</sup> According to Schmid et al.<sup>12</sup> being hopeful about the future has an effect on mental problems such as depression.

In this investigation, the aim was to assess the effect of future expectation on happiness and healthy lifestyle belief in adolescents.

# MATERIALS AND METHODS

#### Design

In this study, a cross-sectional-descriptive questionnaire design was used. The design of the questionnaires was employed a quantitative approach. The study was conducted between June 02, 2023, and Sep 02, 2023.

#### Universe and sampling

The universe of the research consisted of all adolescents living in one city in the eastern region of Türkiye. To select the sample, public high schools in the city center were classified using a cluster sampling method. From these, three high schools were determined by a random selection method, constituting the sample. The study was completed with 1021 participants. The sample size was calculated using the Open Epi Version 3 program with a large effect size of 0.80, alpha error probability of 0.01, and power  $(1-\beta)$  of 0.80. The minimum sample size was determined to be 968, but we collected and analyzed 1021 data that met the inclusion criteria.

#### Inclusion criteria

The World Health Organization (WHO) defines individuals between the ages of 10-19 as adolescents. According to the definition adopted by the Convention on the Rights of the Child, those under the age of 18 are considered children.<sup>13</sup> The study involved all teenagers between the ages of 14 and 18.

#### Exclusion criteria

Individuals who declined to participate in the study or did not provide complete responses to the questionnaire and scale questions were excluded.

#### Data collection tools

The data of the study were collected by the researcher using the "Personal Information Form", the "Adolescent Future Expectations Scale", the "Adolescent Happiness Scale", and the "Healthy Lifestyle Belief Scale for Adolescents".

#### Personal information form

The form prepared by the researcher consists of seven questions such as the gender, age, family type, continuing grade, education status of parents and income level of the family.

#### Adolescent Future Expectations Scale

Adolescent Future Expectations Scale (AFES) is a scale that determines the future expectation of adolescents. It is a 7-point Likert-type scale with 25 items and four sub -dimensions. The items of the scale, which are evaluated on the lowest 1 and the highest 7 points, are in the form of "1" (I strongly do not believe) and "7" (I strongly believe). High scores obtained from the scale indicate that the future expectation of adolescents increases. A minimum score of 25 and a maximum score of 175 can be obtained from the scale. AFES was adapted into Turkish by Tuncer.<sup>14</sup> According to Tuncer's study<sup>14</sup>, the Cronbach alpha internal consistency coefficient of the scale was 0.92. In this study, the Cronbach alpha internal consistency coefficient of the scale.

#### **Adolescent Happiness Scale**

Adolescent Happiness Scale (AHS) was developed by Işık and Atalay.<sup>15</sup> There are 15 items in AHP. There is no reverse scored item. The AHP has a single factor structure consisting of 15 items and does not have an inverse item. It is a five-point Likert type: "1" (strongly disagree), "5" (mostly agree). A minimum of 15 and a maximum of 75 points can be obtained from the scale. A high score indicates that adolescents are high in happiness. The Cronbach alpha coefficient was calculated as 0.92 in the explanatory factor analysis study and as 0.91 in the confirmatory factor analysis study. In this study, the Cronbach's alpha coefficient was found to be 0.88.

# Turkish Version of the Healthy Lifestyle Belief Scale for Adolescents

Healthy Lifestyle Belief Scale for Adolescents (HLBS) by Melnyk et al.<sup>16</sup> developed. Akdeniz Kudubes and Bektas<sup>17</sup> conducted the Turkish validity and reliability study. The scale describes various aspects of maintaining a healthy lifestyle. It has a total of 16 items and three sub-dimensions. The sub-dimensions of the scale are

"health belief", "physical activity" and "nutrition". "Health Belief" sub-dimension 4, 5, 6, 11, 12, 13 and 16, "physical activity" sub-dimension 2, 7, 9, 14 and 15, "nutrition" sub-dimension 1, 3, it creates items 8 and 10. The five-point Likert scale is answered as "1" (strongly disagree), "5" (strongly agree). A minimum of 16 and a maximum of 80 points can be obtained from the scale. An increase in the score obtained from the scale indicates that adolescents' belief in healthy life increases. The Cronbach's alpha coefficient of the scale is 0.90. The factor loadings of the items vary between 0.49-0.86. In this study, the Cronbach alpha coefficient of the scale was found to be 0.90.

#### Data collection process

A survey form created using the "Google Forms" application was used to collect the study data. The aim is to reach more people. The Google Forms includes information about the purpose of the study, the details required for participation and the necessity of parental consent. In this way, the participants were informed. It was stated that both parental and adolescent consent was required to start the study and that they could participate in the study after receiving confirmation that they were approved. At the time of data collection, participants did not ask for personal data. Data were obtained from people who participated in the online survey in accordance with data privacy principles. To ensure data integrity and prevent multiple responses, the questionnaire was designed to allow each participant to fill it out only once. Survey responses were stored anonymously, and the data was securely stored in Google Forms.

#### Statistical analyses

Data were analyzed with the Statistical Package for the Social Sciences-SPSS (Version 23, Chicago IL, USA) program. It was determined whether the data were suitable for normal distribution (p>0.05).<sup>18</sup> Descriptive statistics were used for sociodemographic and categorical variables. Kruskal Wallis-H test, independent-sample t-test, and Mann-Whitney-U test were used to evaluate the difference in scale scores depending on sociodemographic characteristics. The Games-Howell test was conducted to examine pair wise comparisons between the three and more than three variables. The Games-Howell test proved to be a valuable tool in this study, accommodating the unequal sample sizes and variances across groups. Its ability to provide accurate post hoc comparisons in situations where assumptions of equal variances and sample sizes are violated enhances the robustness of the study's conclusions. Correlation analysis was relationship to determine the sociodemographic characteristics with scale scores. In addition, analyses included path analysis and structural equation modeling (SEM) conducted using the AMOS 23 (IBM Corp., Armonk, NY, USA) package program.

# Ethical approval

Research and Publication Ethics Committee of a University (Date: 15.11.2022, No: E.85072). Official permission was also obtained from the Directorate of National Education (Date: 02.06.2023, No: 110102). In this research, ethical rules were followed throughout the process. Data were collected on a voluntary basis. Confidentiality of the participants was given importance. The research was completed in line with the ethical principles of the Declaration of Helsinki.

#### RESULTS

In this study, 50.5% of the participants were female and 72.2% were in the nuclear family structure, 42.8% of their mothers were primary school graduates and 35.7% of their fathers were secondary school graduates, and 74.4% of them had moderate income. The mean age of the adolescents was found to be  $15.8\pm2.1$  (Table 1).

The difference between AHS and HLBS total scores by gender was statistically significant (p<0.05; Table 1). Although there was no difference between male and female adolescents in terms of AFES total scores, the difference in AFES "work and educational attainment", "the community via sports and faith community", and "leadership expectations" sub-dimensions was found statistically significant (p<0.05; Table 1). Comparing adolescents, by family type, found no significant difference in any of the scales based on the total score of the scale. However, the difference in AFES "leadership expectations", HLBS "physical activity" and HLBS "nutrition" sub-dimensions was found to be statistically significant (p<0.05; Table 1).When the mean scores of the scales were compared according to the education status of the mother and father, in the mothers' AHS total scores, HLBS "physical activity" and HLBS "nutrition" sub-dimensions and HLBS total scores; the difference in AFES "health belief", HLBS "physical activity" sub-dimensions, AHS total scores and HLBS total scores in fathers was found to be statistically significant (p<0.05; Table 1). It was found that the increase in the income level of the adolescent in the family had a significant effect on the scores obtained from the AFES "work and education attainment", "the community via sports and faith community", "leadership expectations" sub-dimensions, the AHS total score, and the means obtained from the HLBS total and all sub-dimensions (p<0.05; Table 1). As a result of the conducted correlation analysis, it was determined that there was a positive correlation between of AFES total score and AHS total score, and HLBS total score (p<0.05; Table 2). In the data analysis, firstly, the measurement models of the dimensions were evaluated. It was determined that the fit values in the measurement models were within the desired limits. The fit index values of the measurement model were CMIN/DF=2.503; RMSEA=0.091;

GFI=0.964 was found. All path coefficients were found to be statistically significant. The non-standardized analysis results of all path coefficients obtained are shown in Table 3. The constructed structural model was found to be compatible, and the model fit index value was within the desired range. The pathways coefficients among all scales were considered statistically significant (β=11.313, p<0.001; β=25.979, p<0.001; β=59.92, p<0.001) (Figure 1; Table 3).

# DISCUSSION

The individual's future expectation depends on his relationships with other people (family members or friends, etc.). Supportive and trusting interaction increases hope for the future. There are many factors that affect the future expectation in adolescents. These are gender, economic, demographic parameters, academic parameters, and social factors.<sup>19</sup>

Gender is a demographic factor in determining future



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	Test value	High <sup>3</sup>	Moderate <sup>2</sup>	Low <sup>1</sup>	Income	Test value		University <sup>4</sup>	Secondary school <sup>3</sup>	Primary school <sup>2</sup>	No education <sup>1</sup>	Fathers' education status	Test value	Test voltes	University <sup>4</sup>	Secondary school <sup>3</sup>	Primary school <sup>2</sup>	No education <sup>1</sup>	Mothers' education status	Test value	Bad <sup>3</sup>	Moderate <sup>2</sup>	Good <sup>1</sup>	Academic success	Test value	Extended family (grandparents. etc.)	Nuclear family	Family Type	Test value	Female	Male	Gender		Some demographic characteristics of the participants	Table 1. Comparison of the Mean Sco
		37	759	225				249	365	359	48				132	240	437	212			345	419	278			284	737			516	505		n		res of
		3.6	74.4	22.0				24.4	35.7	35.2	4.7				12.9	23.5	42.8	20.8			33.1	40.2	26.7			27.8	72.2			50.5	49.5		%		Stude
p-0.001 3>2>1	X***=14.411 n= <b>0.001</b>	45.7±14.4	44.7±13.1	$41.4 \pm 12.5$		p=0.330	X***=4.604	40.9±12.3	42.6±12.7	42.8±12.8	42.2±13.9		p=0.907	X***=1.021	$41.4 \pm 12.5$	$42.4 \pm 12.4$	$42.9 \pm 12.9$	$42.1 \pm 13.3$		Λ =8.020 p= <b>0.018</b> 2>1=3	41.0±12.4	43.3±15.5	43.0±13.3		z <sup></sup> =-2.15 p=0.031	43.9±13.7	41.8±12.4		p= <b>0.000</b>	44.0±13.1	40.6±12.2		Mean±SD	AFES-1 Work and educational attainment	nts From AF
p=0.473	X***=1.498	$31.6 \pm 9.6$	30.8±8.3	30.2±8.3		p=0.953	X***=0.686	30.4±9.2	30.6±7.9	$30.1 \pm 8.1$	$29.9 \pm 8.4$		p=0.107	X***=7.618	30.4±9.4	30.9±8.3	30.7±8.3	29.0±7.5		X***=1.836 p=0.399	30.0±8.3	30.7±8.3	30.3±8.3		Z**=-0.77 p=0.441	$29.9\pm8.1$	30.6±8.5		p=0.786	30.3±8.6	30.4±8.0		Mean±SD	AFES-2 Expectations for marrying and having children	ES, AHS and HLB
p- <b>0.000</b> 3>2>1	X***=23.116 n=0.000	$13.0 \pm 4.9$	$12.9 \pm 3.7$	11.7±3.6		p=0.263	X***=5.241	$12.1 \pm 4.0$	11.7±3.6	$12.0 \pm 3.6$	12.8±3.7		p=0.210	X***=5.859	12.4±3.9	11.9±3.7	12.1±3.7	11.6±3.7		A =9.433 p= <b>0.009</b> 1=2>3	11.5±3.7	12.3±3.9	12.2±3.5		Z**=-0.580 p=0.056	$11.9\pm5.0$	12.1±3.8		t = 1.426 p= <b>0.000</b>	12.5±3.8	$11.5 \pm 3.6$		Mean±SD	AFES-3 Participation in the community via spo and faith communi	S According to Sor
p- <b>0.000</b> 3>1=2	X***=9.705 n= <b>0.008</b>	$16.7 \pm 4.9$	$15.5 \pm 4.8$	$15.0\pm6.8$		p=0.741	X***=18.283	15.7±4.8	$15.0 \pm 4.9$	$16.4 \pm 4.5$	$15.9 \pm 4.9$		p=0.358	X***=4.368	$14.9\pm 5.1$	$15.8\pm5.2$	$15.9 \pm 4.8$	$16.6 \pm 4.8$		X***=1.089 p=0.580	15.5±4.8	$15.7\pm5.1$	$16.0 \pm 4.8$		Z**=-2.183 p= <b>0.029</b>	$16.3 \pm 4.8$	$15.6 \pm 5.0$		p= <b>0.000</b>	$16.3\pm5.0$	$15.2 \pm 4.8$		Mean±SD	e AFES-4 orts Leadership ity expectations	me Demographi
p=0.975	X***=0.050	$101.4\pm26.6$	$100.6\pm23.0$	$100.1\pm23.2$		p=0.236	X***=5.538	$100.2\pm23.0$	$102.0\pm23.4$	99.1±22.8	$104.2\pm 28.0$		p=0.906	X***=1.022	$100.4 \pm 21.3$	$100.6 \pm 24.4$	$100.5 \pm 23.3$	$101.0\pm23.7$		X***=0.788 p=0.674	$100.3\pm23.5$	$100.0\pm21.2$	$101.4\pm25.0$		Z**=-1.061 p=0.289	$101.4\pm24.0$	100.3±22.9		p=0.554	$101.0\pm 23.8$	$100.1 \pm 22.6$		Mean±SD	AFES Total	c Characteris
p= <b>0.000</b> 3>1=2	X***=28.851 n= <b>0.000</b>	$50.7 \pm 18.1$	$39.3 \pm 13.2$	$36.3 \pm 12.6$		p= <b>u.u∠1</b> 4>1=3>2	X***=11.499	39.1±12.7	$38.1 \pm 13.2$	$35.5 \pm 13.0$	$38.5 \pm 15.9$		p= <b>0.003</b> 3=4>1=2	X***=14.821	39.6±13.2	$39.5 \pm 13.1$	$36.1 \pm 12.7$	$36.3 \pm 13.8$		X***=0.462 p=0.794	37.2±12.7	$37.6 \pm 14.4$	37.8±12.5		Z**=-1.152 p=0.249	37.7±12.8	$37.1 \pm 14.5$		p= <b>0.002</b>	$38.8 \pm 14.4$	$36.2 \pm 11.8$		Mean±SD	AHS Total	tics.
p- <b>0.007</b> 3>2>1	X***=9.883 n= <b>0.007</b>	17.4±5.9	15.2±5.8	$14.3\pm5.0$		p=0.172	X***=6.394	$15.0\pm 5.2$	14.7±4.9	14.1±5.5	$15.1\pm6.3$		p= <b>0.043</b> 3=4>1=2	X***=9.740	$15.2\pm5.1$	$15.2\pm5.1$	$14.2\pm5.2$	$14.3\pm5.4$		X***=1.338 p=0.512	14.3±4.9	14.8±5.5	$14.8 \pm 5.5$		Z**=-0.580 p=0.562	14.5±5.7	14.7±5.2		т = 33.7 тв p=0.235	14.8±5.9	$14.4 \pm 4.6$		Mean±SD	HLBS-1 Health belief	
9- <b>0.001</b> 3>1=2	X***=14.377 n= <b>0.001</b>	$15.5 \pm 4.4$	12.9±4.7	$12.6 \pm 4.3$		p= <b>0.006</b> 4>1=3>2	X***=14.579	$13.5 \pm 4.3$	$12.7 \pm 4.1$	$12.2 \pm 4.6$	$12.6\pm5.4$		p= <b>0.003</b> 3=4>1=2	X***=16.254	$13.4 \pm 4.3$	$13.4 \pm 4.3$	$12.5 \pm 4.5$	$12.2 \pm 4.3$		X***=0.675 p=0.714	12.6±4.4	12.8±4.7	$12.8 \pm 4.1$		Z**=-2.241 p= <b>0.025</b>	12.2±4.5	$13.0 \pm 4.4$		p=0.899	12.7±4.8	$12.8 \pm 4.0$		Mean±SD	HLBS-2 Physical activ- ity	
p-0.032 3>2>1	X***=6.889 n= <b>0.032</b>	$10.5 \pm 4.0$	$9.4 \pm 4.1$	8.9±3.6		p=0.410	X***=3.969	9.3±3.9	9.2±3.7	8.8±3.8	9.3±4.2		p=0.189	X***=6.142	9.3±3.9	9.6±3.9	8.9±3.8	8.9±3.7		X***=1.281 p=0.527	8.9±3.4	9.3±4.1	9.3±3.9		Z**=-2.268 p= <b>0.023</b>	8.8±3.8	9.3±3.8		t <sup>=31./31</sup> p= <b>0.018</b>	9.4±4.2	8.8±3.3		Mean±SD	HLBS-3 Nutrition	
р- <b>о:оот</b> 3>2>1	X***=13.753 n= <b>0.001</b>	$46.7 \pm 13.6$	$40.6 \pm 13.8$	$38.7 \pm 12.3$		p= <b>0.025</b> 4>1=3>2	X***=11.158	$40.8 \pm 12.4$	$39.6 \pm 11.7$	$37.9 \pm 13.6$	$39.5 \pm 15.9$		p= <b>0.003</b> 3=4>1=2	X***=16.064	$41.2 \pm 12.5$	$41.0 \pm 12.1$	$38.5 \pm 13.0$	$38.2 \pm 13.0$		X***=0.877 p=0.645	$36.6 \pm 13.4$	39.8±13.8	$38.9 \pm 11.6$		Z**=-1.153 p=0.125	$39.9 \pm 12.5$	$38.3 \pm 13.5$		p=0.209	39.9±14.5	$38.9 \pm 0.8$		Mean±SD	HLBS Total	

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Table 2. The Relationship Between Total Mean Scores From AFES, AHS, and HLBS.

Scale	r	р
AFES Total<-> AHS Total	0.586+	0.017
HLBS Total<-> AHS Total	0.640†	0.000
AFES Total<-> HLBS Total	0.4178	0.026

<sup>4</sup>Moderate positive association and correlation is significant at the 0.01 level, <sup>†</sup>Strong positive association and correlation are significant at the 0.01 level, <sup>Y</sup>Weak positive association and correlation are significant at the 0.01 level, r: Pearson correlation, AFES: Adolescent Future Expectations Scale, AHS: Adolescent Happiness Scale, HLBS: Healthy Lifestyle Belief Scale for Adolescents.

Table 3. Fit indices of the Structural Equation Model.

Scale			β1	β2	SE	Test values	р
HLBS	<>	AFES	12.215	11.313	1.301	8.694	< 0.001
AHS	<>	HLBS	26.412	25.979	1.885	13.783	< 0.001
AHS	<>	AFES	61.125	59.92	5.14	11.657	< 0.001

β1: Standard coefficient, β2: Non-standardized coefficient, SE: Standard error, AFES: Adolescent Future Expectations Scale, AHS: Adolescent Happiness Scale, HLBS: Healthy Lifestyle Belief Scale for Adolescents.



Figure 1: Standardized Path Coefficients

CMIN: Chi-square fit statistics, DF: Degree of freedom, RMSEA: Root mean square error of approximation, CFI: Comparative fit index, AFES: Adolescent Future Expectations Scale, AHS: Adolescent Happiness Scale, HLBS: Healthy Lifestyle Belief Scale for Adolescents.

expectations and quality of life. There are various findings about this in the literature. According to Silverman et al.<sup>20</sup> that girls worry more than boys. Brown et al.<sup>21</sup> reported that girls have more positive future expectations than boys. Adolescents' thoughts such as hope and happiness affect their future expectations positively.<sup>22</sup> In this study, female adolescents' future expectations were found to be lower. According to Kim and Kim<sup>23</sup> that adolescents with low future expectations have an unhealthy lifestyle. It was found to male adolescents with lower scores on AFES, including sub-dimension means, had lower mean HLBS scores. Further research should be done to investigate the reveal whether future expectation is associated with traditional gender roles.<sup>21</sup> The development of an individual's future expectations is dynamically linked to his or her relationships with significant others (e.g. family members or friends). Adolescents' perception of warm, supportive, and reliable interactions between themselves and their parents provides models of positive behaviors that youth later incorporate into their own self-concepts, which in turn informs their hopes for the future.24 Dubow, Arnett, Smith, and Ippolito<sup>25</sup> concluded that parental support predicted increases in positive future expectations in a sample of disadvantaged inner-youth. Ryan, and Pryor<sup>26</sup> found that a higher level of family connectedness was associated with adolescent well-being, including future orientation. In this study, AFES in adolescents living in extended family type "leadership expectations" subdimension mean scores were found to be higher. These results suggest that strong family relationships increase adolescents' positive perceptions of the future.

Previous research has shown that academic success is associated with future expectation. As the success of the course increases, the future expectation also increases. Cuhadar et al.<sup>27</sup> have been reported that the academic success of high school students is significantly different from their future expectations. Chykina<sup>28</sup> reported that perceived academic success is associated with future expectation. In addition, it has been suggested that future expectation increases academic success. It has conclusively been shown that adolescents with low academic performance scored low on all scales. A difference was found between AFES "work and education attainment", "the community via sports and faith community" sub-dimension means. These differences were statistically significant. The findings from this study compatible to the current literature.

The educational status of parents is directly linked to living standards.<sup>19</sup> According to Tuncer<sup>29</sup> that there was no significant difference between the education status of parents and the future expectations of the adolescents. Baumann et al.<sup>30</sup> have been reported that the level of education status is effective in the quality of life of adolescents. It has been reported that the future expectation of adolescents whose parental education status is below the university is affected. It was found to the level of parental education status did not affect the adolescent's future expectation. However, it was found to that adolescent whose parents were university degree had high means in all AFES sub-dimensions. There was a difference between the mean scores in terms of AHS and HLBS total scores. The evidence from this study suggests that the increase in the education status of the parents positively affects the happiness and healthy lifestyle beliefs in adolescents.

It has been reported that future expectations with male adolescents in neighborhoods with poor families were found to be negative. In addition, it was reported that adolescents thought of themselves as disadvantaged people. As a result, negative thinks about the future occur.<sup>31</sup> It has been reported that African-American and Latino low income youth adolescents hopelessness about the future.<sup>32</sup> Not to be of future expectation makes negative behaviors common among adolescents. Stress and hopelessness reason to alcohol, substance use, and addiction.<sup>33</sup> In this study, adolescents were found living in low-income families had lower scores on AFES "work and education attainment", "the community via sports and faith community", "leadership expectations" sub-

dimensions, AHS total score, HLBS total and all subdimensions. Low income is thought to cause unhappiness. This is critical because it directly affects the accuracy of future expectation and belief in a healthy lifestyle. The findings from this study compatible to the current literature.

# CONCLUSIONS

We have shown that adolescents' future expectations are associated with hope and healthy lifestyle beliefs. These results are consistent with those of other studies and suggest that adolescents' future expectation, healthy life belief and health status are interrelated. More research is needed to better understand when examine the factors that shape the future expectations of adolescents. Policies should be designed to help build positive future expectations in adolescence period.

In future, studies can be designed to include multiple centers, include a pre-/post-test for knowledge and future expectations of adolescents can be examined with in-depth interview techniques.

There are some limitations to this study. These results of the study can only be generalized to the study population. The sample was taken from one city, not all adolescents can be represented. Our cross-sectional design does not allow us to test for causal relationships. In addition, the research was conducted in one center.

**Ethics Committee Approval:** Ethics committee approval was received for this study from the Research and Publication Ethics Committee of Bingol University (Date: 15.11.2022, No: E.85072).

**Informed Consent:** Informed consent was obtained from all adolescents and their parents who participated in this study.

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