



## Determination of Factors Affecting Adolescents' Healthy Lifestyle Behaviors and Self-Efficacy Levels According to the Health Promotion Model

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### Abstract

**Aim:** This study aimed to determine the relationship between adolescents' healthy lifestyle behaviors and self-efficacy levels, as well as the factors affecting this relationship.

**Methods:** The study was completed between September 15 and October 15, 2020, with 816 adolescents aged 14-17, attending high school in a provincial center, who voluntarily participated. Data were collected using a "Descriptive Questionnaire" including socio-demographic information, the "Adolescent Lifestyle Scale," and the "Self-Efficacy/Competence Scale."

**Results:** The mean score of the participants on the Adolescent Lifestyle Scale was found to be  $\bar{X}=104.07\pm 19.23$ , and the mean score on the Self-Efficacy Scale was  $\bar{X}=84.78\pm 14.32$ . A significant relationship was found between adolescents' lifestyle behaviors and their self-efficacy levels.

**Conclusion:** Based on the study results, school health policies should promote personalized interventions that enhance adolescents' self-efficacy and address sociodemographic disparities to support equitable development of healthy lifestyle behaviors.

**Keywords:** Adolescent, School, Health, Lifestyle, Self-efficacy, Nurse

## Introduction

The adolescent period is a critical growth phase during which psychological and social transformations occur in parallel with hormonal and biological changes. In this period, individuals prepare themselves for adulthood and develop essential skills (Montgomery et al., 2020; Orben et al., 2020). During this transitional period to adulthood, adolescents learn many social and cognitive skills as well as negative health-related behaviors and/or attitudes. It is noted that many health problems that emerge in adulthood may stem from the negative health behaviors acquired during this period (Avan, 2024; Metin Karaaslan & Çelebioğlu, 2018; Mewton et al., 2019). The fact that diseases rooted in negative health behaviors during adolescence tend to appear later in life causes the preventive measures that should be taken during this period to be neglected (Dorn et al., 2019).

This process turns the adolescent period into a time of vulnerability and adaptation (de Maat et al., 2023; Roberts & Lopez-Duran, 2019). According to the 2022 data from the Turkish Statistical Institute, more than 6,000 adolescent deaths occur annually in the 15-24 age group, and approximately 44% of these deaths are due to external injuries and poisonings. This rate rose to over 70% in 2023 following the February 6 earthquake (Türkiye İstatistik Kurumu, 2024). In adolescents, causes such as infectious diseases, vaccine-preventable diseases, malnutrition disorders, AIDS, reproductive health problems, unintentional injuries, violence, physical disorders, mental disorders, and substance use increase mortality rates (Strong et al., 2021; Sümen & Öncel, 2017; Triyanto et al., 2019). Health indicators typically focus on the burden of diseases or mortality; however, in adolescents, health and well-being indicators should focus on illness and risky behaviors (Kassebaum et al., 2017; Sümen & Öncel, 2017).

To protect and promote adolescent health and identify risky behaviors, the Health Promotion Model (HPM), which provides a theoretical perspective to examine the relationships among factors contributing to health-promoting behaviors and health responsibility, can be utilized (Çalık & Kapucu, 2017). In the Health Promotion Model (HPM), cognitive characteristics such as perceived benefits, perceived barriers, and perceived self-efficacy are reported to play an important guiding role in the formation of behavior (Pender et al., 2014). Self-efficacy reflects the adolescent's self-perception and belief in their ability to perform a specific activity (Koca & Ekşi, 2021; Zhang et al., 2024). Self-efficacy is reported to be one of the factors that may have a significant impact on adolescent health (Nelson et al., 2019). In the study by Gürcan and Kaya (2024), self-efficacy was found to be a strong predictor of healthy lifestyle behaviors, while in the study by Binay et al. (2016), the average healthy lifestyle score in adolescents was found to be correlated with the average self-efficacy score (Binay & Yiğit, 2016; Gürcan & Kaya, 2025). Adolescents with high perceived self-efficacy are reported to show greater motivation and persistence in their tasks when faced with difficulties compared to those with low perceived self-efficacy, and those with low self-efficacy levels have higher health risks (Heikkinen et al., 2024; Nelson et al., 2019). These results demonstrate the importance of self-efficacy in the development of health behaviors. This study aimed to determine the relationship between adolescents' healthy lifestyle behaviors and their self-efficacy levels, as well as the factors affecting this relationship.

## Materials and Methods

The study was conducted in six high schools with similar educational levels, school types, and socio-economic and socio-cultural characteristics, under the Provincial Directorate of National Education in a city center in the Mediterranean Region, using a cross-sectional and descriptive design. A power analysis was performed with a 5% margin of error, 95% power, and an effect size of 0.115, resulting in a sample size of 815 adolescents. The study was completed with 816 adolescents aged 14-17 who voluntarily participated and completed the survey forms fully.

Data were collected online via Google Forms using a "Descriptive Questionnaire" including socio-demographic information, the "Adolescent Lifestyle Scale (ALS)," and the "Self-Efficacy/Competence Scale (SECS)."

The Descriptive Questionnaire was developed by the researchers based on the literature (Ardic & Esin, 2015; Gözüm & Aksayan, 1999; Sümen & Öncel, 2017). This form includes 17 questions covering adolescents' sociodemographic characteristics such as age, gender, social security status, as well as parental education, economic status, marital status, family type, employment status and perceived role in health-related changes.

Perceived role in health-related changes: This variable is used to assess the extent to which individuals perceive themselves as effective and responsible in health-related lifestyle changes. In other words, it reflects

how individuals perceive their own contribution and role in behavior changes such as healthy eating, physical activity, and sleep patterns.

**Adolescent Lifestyle Scale (ALS);** The “Health Promotion Lifestyle Profile II” scale, developed by Hendricks, Murdaugh, and Pender based on the Health Promotion Model, was validated for Turkish reliability by Ardiç (2008). This scale enables the assessment of healthy lifestyle behaviors at every stage of adolescence. The scale consists of 40 items and is answered using a four-point Likert-type response format (Ardiç Çobaner, 2013). The maximum score that can be obtained from the scale is 160, and the minimum is 40. Although there is no specific cut-off point, it is reported that higher scores indicate a higher level of positive health behaviors. All items on the scale are positively worded, and the scale includes seven subdimensions that can be used independently or as a total score. The Cronbach's alpha coefficients for these subdimensions range from 0.58 to 0.87 (Ardic & Esin, 2015). In this study, the Cronbach's alpha coefficients for the total scale and its subdimensions were calculated to range between 0.65 and 0.94.

**Self-Efficacy/Competence Scale (SECS);** SECS, developed by Sherer and Maddux in 1982, was examined for Turkish validity and reliability by Gözüm and Aksayan (1999). This scale does not pertain to any specific domain and measures general perceived self-efficacy. The SECS consists of 23 items and is structured as a 5-point Likert-type scale, with scores ranging from a minimum of 23 to a maximum of 115. A higher score indicates a higher level of general self-efficacy (SE) perception. The scale includes four subdimensions: “Initiating Behavior (IB),” “Maintaining Behavior (MB),” “Completing Behavior (CB),” and “Struggling with Barriers (SB).” While the Cronbach's alpha internal consistency reliability coefficient for the entire scale was determined to be 0.81, the reliability coefficients for the subdimensions were found to be 0.82, 0.77, 0.79, and 0.64, respectively (Gözüm, Aksayan, 1999). In this study, the Cronbach's alpha coefficient for the total scale was calculated as 0.86, while the coefficients for the subdimensions were 0.84, 0.78, 0.83, and 0.60, respectively.

### Data Analysis

The study data were analyzed using the IBM SPSS Statistics Standard Concurrent User V26 statistical software package. Frequency distributions and arithmetic means of the socio-demographic characteristics of adolescents and their parents were calculated. For normality distribution, kurtosis and skewness tests ( $\pm 2$ ) were applied. The Mann-Whitney U test was used for comparing scale scores between two groups in nonparametric data, and the Kruskal-Wallis test was used when there were more than two groups. For data evaluated with the Kruskal-Wallis test, pairwise comparison analyses (Tamhane's T2) were conducted to determine the source of group differences. In examining the relationships between variables, Spearman correlation analysis was first performed, followed by multiple regression analysis to evaluate the effect of the independent variable, self-efficacy, on the dependent variable, healthy lifestyle. Cronbach's alpha test was applied for variance analysis. A p-value of  $\leq 0.05$  was considered statistically significant in interpreting the results.

### Results

A total of 816 adolescents participated in the study, which was conducted to examine the relationship between adolescents' healthy lifestyle behaviors and self-efficacy levels, as well as the factors influencing them. The mean age of the participating adolescents was found to be  $15.20 \pm 1.22$ .

Table 1. Sociodemographic characteristics of adolescents (n=816)

Sociodemographic Characteristics	n	%
<b>Gender</b>		
Female	634	77.7
Male	182	22.3
<b>Age</b>		
14	230	28.1
15	301	36.9
16	158	19.4
17	127	15.6
<b>Family Type</b>		
Nuclear Family	719	88.1
Extended Family	59	7.2
Broken (Divorced/Separated) Family	38	4.7

<b>Family Income Status</b>		
My income is less than my expenses	343	42.0
My income is equal to my expenses	407	49.9
My income is more than my expenses	66	8.1
<b>Perception of Health Status</b>		
Very Good	120	14.7
Good	460	56.4
Moderate	218	26.7
Poor	18	2.2
<b>Perception of Having a Healthy Lifestyle</b>		
Yes	470	57.6
No	346	42.4
<b>Perceived Role in Health-Related Changes</b>		
I always think I have a role	195	23.9
I often think I have a role	267	32.7
I sometimes think I have a role	354	43.4

It was determined that 77.7% of the participants were female, 36.9% were 15 years old, 88.1% had a nuclear family structure, and 49.9% reported that their income was equal to their expenses. Among the adolescents, 56.4% described their health as good, 57.6% believed they had a healthy lifestyle, and 43.4% stated that they sometimes had an influence on the changes related to their health (Table 1).

Table 2. Mean scores of the Adolescent Lifestyle Scale (ALS) and Self-Efficacy Scale (SES) (n=816)

Scales and Subscales	Mean ± SD	Min-Max
<b>Adolescent Lifestyle Scale (ALS)</b>		
Health Responsibility	10.75 ± 2.54	5.00-20.00
Physical Activity	13.46 ± 3.98	6.00-24.00
Nutrition	15.20 ± 3.31	7.00-24.00
Positive Life Perspective	22.79 ± 4.95	8.00- 32.00
Interpersonal Relations	15.27 ± 3.08	5.00-20.00
Stress Management	13.74 ± 2.70	7.00-20.00
Spiritual Health	12.83 ± 3.06	5.00-20.00
<b>Total ALS</b>	<b>104.07 ± 19.23</b>	<b>50.00-160.00</b>
<b>Self-Efficacy Scale (SES)</b>		
Initiating Behavior	30.74±6.28	8.00-40.00
Maintaining Behavior	26.78±5.57	7.00-35.00
Completing Behavior	18.38±4.91	5.00-25.00
Coping with Obstacles	8.86±2.51	3.00-15.00
<b>Total SES</b>	<b>84.78±14.32</b>	<b>27.00-115.00</b>

SD = Standard Deviation

The mean score of the participants on the Adolescent Lifestyle Scale (ALS) was found to be  $\bar{X}=104.07\pm19.23$  while the mean score on the Self-Efficacy Scale (SES) was  $\bar{X}=84.78\pm14.32$  (Table 2). The mean scores for the subdimensions of both scales are presented in Table 2.

The study found a significant difference between family income levels and the scores on both the Adolescent Lifestyle Scale (ALS) and the Self-Efficacy Scale (SES) ( $p < 0.01$ ). Post hoc Tukey analysis revealed that this difference was between families whose income was less than their expenses and those whose income was greater than their expenses.

A significant difference was also found between the adolescents' grade level and their ALS and SES scores ( $p < 0.05$ ). The difference in ALS scores was due to 4th-year students compared to 1st- and 2nd-year students, while the difference in SES scores was between 4th-year students and 2nd- and 3rd-year students.

Based on adolescents' self-reported health status, classified as very good, good, moderate, and poor, it was observed that ALS and SES scores decreased progressively from positive to negative perceptions of health, with a statistically significant difference ( $p < 0.01$ ). This difference was attributed to the gap between the groups describing their health as "very good" and "good" for ALS, and between the "very good" group and those describing their health as "moderate" and "poor" for SES.

Table 3. Factors affecting individuals' Adolescent Lifestyle Scale (ALS) and Self-Efficacy (SES) scores (n=816)

Factors	ALS			SES		
	n	Mean ± SD	f-p	n	Mean ± SD	f-p
<b>Family Income Status</b>						
My income is less than my expenses	343	100.37±20.05 <sup>a</sup>	<b>f=12.005</b>	343	80.79±14.56 <sup>a</sup>	<b>f=7.666</b>
My income is equal to my expenses	407	106.31±17.99 <sup>ab</sup>	<b>p=0.000</b>	407	84.07±14.16 <sup>ab</sup>	<b>p=0.001</b>
My income is more than my expenses	66	109.46±19.20 <sup>b</sup>		66	86.84±12.95 <sup>b</sup>	
<b>Grade Level</b>						
1st Grade	250	104.40±18.30 <sup>a</sup>	<b>f=5.565</b>	250	81.78±14.24 <sup>abc</sup>	<b>f=3.280</b>
2nd Grade	289	106.57±18.51 <sup>b</sup>	<b>p=0.001</b>	289	84.12±13.28 <sup>a</sup>	<b>p=0.020</b>
3rd Grade	159	103.43±20.64 <sup>abc</sup>		159	84.50±15.50 <sup>b</sup>	
4th Grade	118	98.12±19.83 <sup>c</sup>		118	80.21±15.08 <sup>c</sup>	
<b>Perception of Health Status</b>						
Very Good	120	114.17±19.33 <sup>a</sup>	<b>f=21.033</b>	120	86.13±14.30 <sup>a</sup>	<b>f=5.776</b>
Good	460	104.53±17.79 <sup>b</sup>	<b>p=0.000</b>	460	83.41±13.82 <sup>abc</sup>	<b>p=0.001</b>
Moderate	218	98.57±19.63 <sup>ab</sup>		218	80.47±14.31 <sup>b</sup>	
Poor	18	91.55±19.23 <sup>ab</sup>		18	75.00±21.65 <sup>c</sup>	
<b>Perceived Role in Health-Related Changes</b>						
I always think I have a role	195	107.76±19.31 <sup>a</sup>	<b>f=10.253</b>	149	85.11±16.25 <sup>a</sup>	<b>f=5.988</b>
I often think I have a role	267	105.97±19.36 <sup>ab</sup>	<b>p=0.000</b>	267	84.07±13.26 <sup>ab</sup>	<b>p=0.003</b>
I sometimes think I have a role	354	100.70±17.22 <sup>b</sup>		354	80.97±13.22 <sup>b</sup>	
<b>Health Insurance Status</b>						
Yes	633	105.11±19.22	<b>t=2.892</b>	633	83.67±14.29	<b>t=2.80</b>
No	183	100.46±18.88	<b>p=0.004</b>	183	80.31±14.29	<b>p=0.005</b>
<b>Perception of Having a Healthy Lifestyle</b>						
Yes	470	107.62±18.98	<b>t=6.279</b>	470	85.17±13.04	<b>t=5.179</b>
No	346	99.26±18.54	<b>p=0.000</b>	346	79.85±14.47	<b>p=0.000</b>

SD = Standard Deviation. f: ANOVA test. t: independent samples t-test. Groups sharing the same superscript letters are not significantly different (p>0.05); different letters indicate statistically significant differences. Post-hoc comparisons were conducted using the Tukey HSD test.

When examining adolescents' perceptions of their role in changes to their health status, it was found that as the perception of having a role in these changes decreased, the scores on both the Adolescent Lifestyle Scale (ALS) and the Self-Efficacy Scale (SES) also decreased, with a significant difference between groups (p <0.05). This difference was due to the gap between those who believed they "sometimes" had a role in health changes and those who believed they "always" had a role.

Adolescents whose families had health insurance had significantly higher mean scores on the ALS and SES compared to those without health insurance (p <0.01). Additionally, adolescents who considered themselves to have a healthy lifestyle had significantly higher ALS and SES mean scores than those who did not consider their lifestyle healthy (p <0.01) (Table 3).

Table 4. Regression analysis results for examining the effects among research variables

Dependent Variable	Independent Variable	B	S.H.	β	t	p	R	R <sup>2</sup>	F	p
Healthy Lifestyle	(Constant)	50.128	2.510		19.973	0.000	0.422	0.178	176.502	0.000
	Self-Efficacy	0.315	0.024	0.422	13.285	0.00				

In the simple linear regression model examining healthy lifestyle behaviors and self-efficacy, self-efficacy explains 17.8% of the total variance. According to the standardized regression coefficients (β), a one-unit increase in self-efficacy leads to a 0.42-unit increase in healthy lifestyle behaviors (Table 4).

In conclusion, a significant relationship was found between adolescents' self-efficacy levels and their healthy lifestyle behaviors.

## Discussion

The importance of developing preventive interventions and strategies to help protect and improve adolescents' health and reduce their susceptibility to diseases in adulthood is emphasized. In nursing practice, it is crucial to evaluate adolescents' physical and mental health with a holistic approach and to identify indicators related to cognitive, emotional, psychosocial, and lifestyle factors (Mastorci et al., 2020; Mewton et al., 2019). The average ALS scores of the participants in the study were found to be at a moderate level. This indicates that nurses should provide education and support to help adolescents develop healthy lifestyle behaviors. Additionally, the presence of studies in the literature with findings similar to those of this study (Eroyamak et al., 2018; Gömleksiz et al., 2020; Köseoğlu Örnek & Kürklü, 2017; Külcü et al., 2019) supports the importance of nursing practices and the validity of the necessary strategies. In this way, nurses can implement effective interventions to improve adolescents' health behaviors.

Perceived self-efficacy, one of the main components of Pender's Health Promotion Model, is a significant factor influencing adolescents' behaviors. Adolescents with high perceived self-efficacy tend to make efforts to overcome the problems and challenges they face, whereas those with low perceived self-efficacy are more likely to avoid these difficulties (Koca & Ekşi, 2021). In our study, individuals' self-efficacy levels were found to be at a moderate level. Similarly, other studies conducted with adolescents have also reported that self-efficacy levels are at a moderate level (Koca & Ekşi, 2021; Mert et al., 2019). These findings highlight the importance of strategies aimed at enhancing adolescents' perceived self-efficacy in nursing practice. Nurses can engage with adolescents by providing educational programs and individualized counseling services that support their self-efficacy. In particular, through health education and behavior change programs, adolescents can be helped to feel a greater sense of control over their own health. In this way, adolescents will be encouraged to improve their health behaviors and cope more effectively with the challenges they face.

Socioeconomic status has been reported to have an impact on individuals' housing, nutrition, education, self-efficacy, and healthy lifestyle behaviors (Gömleksiz et al., 2020; Köseoğlu Örnek & Kürklü, 2017). In our study, it was observed that individuals with low family income levels had significantly lower self-efficacy and ALS scores compared to other groups ( $p < 0.01$ ). These findings emphasize the importance of socioeconomic factors in nursing practice. When evaluating individuals' health status, nurses should consider not only physical health indicators but also socioeconomic conditions. Individuals with low-income levels may face challenges in accessing healthcare, maintaining a healthy diet, and obtaining education, all of which can negatively affect their perception of self-efficacy. Nurses can develop strategies to enhance self-efficacy, particularly among adolescents from low socioeconomic backgrounds. These strategies may include health education, support groups, and individualized counseling. In this way, individuals can be supported in adopting healthy lifestyle behaviors, thereby improving overall health outcomes.

It was found that adolescents' grade levels had a significant effect on their ALS and SES scores ( $p < 0.05$ ). The literature indicates a negative relationship between grade level and healthy lifestyle behaviors, with unhealthy eating habits and low levels of physical activity increasing as adolescents get older (Metin Karaaslan & Çelebioğlu, 2018). In this context, nurses should develop educational programs and support services to enhance adolescents' healthy lifestyle behaviors. Especially during adolescents' educational processes, implementing strategies aimed at increasing their health knowledge and self-efficacy will contribute to the prevention of future health problems.

The study found that adolescents' health perceptions significantly influenced their ALS and SES levels ( $p < 0.01$ ). There are also studies in the literature that align with our findings regarding healthy lifestyle behaviors and self-efficacy levels (Karaca & Aslan, 2019; Köseoğlu Örnek & Kürklü, 2017). These findings emphasize the importance of health education and raising awareness in nursing practice. The adoption of healthy lifestyle behaviors and the increase in self-efficacy levels can be achieved through educational programs and support services provided by nurses to adolescents. This can strengthen adolescents' health perceptions and contribute to the prevention of future health problems.

The study found that adolescents' perceived role in health changes significantly affected their ALS and SES levels ( $p < 0.05$ ). This finding highlights the importance of adolescents' active participation in health processes within nursing practice. Educational programs conducted with adolescents who have Type 1 diabetes have been shown to positively impact health outcomes and contribute to the adoption of healthy lifestyle behaviors (Bakır, 2020). Nurses can increase adolescents' self-efficacy and support the maintenance of healthy behaviors by organizing educational programs to develop their knowledge and skills in health management. This enables

adolescents to make more informed decisions about their own health, ultimately improving their health status in the long term.

The study found that the presence of family health insurance significantly affected the ALS and SES levels ( $p < 0.01$ ). These findings emphasize the importance of health insurance in nursing practice. Adolescents with health insurance have been shown to have greater access to health services and to use healthcare services more regularly (Suchman et al., 2020). The improvement of prenatal care services within the scope of health insurance for pregnant adolescents positively affects both health outcomes and healthy lifestyle behaviors (Balsa & Triunfo, 2021). Nurses should inform families to increase adolescents' health insurance coverage and develop programs that facilitate their access to the healthcare system. In this way, adolescents' levels of self-efficacy can increase, and their health behaviors may become more positive.

Adolescents who perceive themselves as having a healthy lifestyle were found to have significantly higher ALS and SES levels ( $p < 0.01$ ). This highlights the importance of promoting the perception of a healthy lifestyle in nursing practice. It has been shown that self-esteem increases an individual's level of self-efficacy and supports healthy lifestyle behaviors (Galán-Arroyo, Herrerueta-Jara, et al., 2024; İmamoğlu & Bilge, 2021; Kaynak et al., 2022). Nurses can enhance adolescents' self-esteem and reduce depressive symptoms by encouraging them to adopt healthy lifestyle behaviors such as physical activity. In this context, educational and support programs should be developed to strengthen individuals' perceptions of a healthy lifestyle, thereby creating a positive impact on their overall health status.

A significant positive relationship was found between the self-efficacy scale and the adolescent lifestyle (ALS) scale ( $p < 0.001$ ). When adolescents have a high belief in their ability to engage in physical activity behaviors, their likelihood of exhibiting these positive health behaviors also increases (Galán-Arroyo, Flores-Ferro, et al., 2024; Galán-Arroyo, Herrerueta-Jara, et al., 2024; Liu et al., 2020). Self-efficacy has been identified as the strongest predictor of healthy lifestyle behaviors among all related factors, and a relationship has also been found between the average healthy lifestyle scores and self-efficacy scores in adolescents (Binay & Yiğit, 2016; Gürcan & Kaya, 2025; Kapali et al., 2024). In this context, it can be said that adolescents with high self-confidence and belief are likely to exhibit a greater number of positive health behaviors. From a nursing practice perspective, it is important to develop intervention programs aimed at increasing adolescents' perceived self-efficacy. Such programs can reinforce individuals' confidence in themselves, thereby strengthening their willingness to engage in physical activity and other healthy behaviors.

Nurses providing guidance to increase adolescents' self-efficacy levels will make significant contributions to the adoption and maintenance of healthy lifestyle behaviors. In this context, it is recommended that nursing practices develop educational and intervention programs aimed at enhancing adolescents' healthy lifestyle behaviors and strengthening their perceived self-efficacy. Nurses' development of strategies that support these positive behaviors will contribute to improving adolescents' overall health status.

### ***Implications for School Health Policy, Practice and Equity***

Based on the results of this study, school health professionals should contribute to the development of policies and practices that support personalized health education and support programs tailored to adolescents' sociodemographic characteristics in order to promote healthy lifestyle behaviors. In practice, school health nurses can organize individual counseling sessions aimed at enhancing adolescents' health perceptions, self-concept, and self-efficacy. To promote equity, these interventions should be designed with consideration for differences in income level, access to resources, and health beliefs. Additionally, interventional studies within the scope of nursing practice are needed to better understand the relationship between adolescents' health behaviors and self-efficacy, which will support the development of evidence-based strategies and encourage the adoption of healthy lifestyle behaviors among diverse student populations.

### ***Limitations***

The use of a cross-sectional design in the study may pose difficulties in determining cause-and-effect relationships. The limited sample size and the data being obtained only from adolescents in a specific region may affect the generalizability of the results to the entire population. Additionally, the study's reliance on subjective data and the inability to fully control the effects of socioeconomic variables may increase the risk of bias and errors.

**Conclusion**

In this study, it was concluded that factors such as family income status, grade level, adolescents' perception of their own health status, their perceived role/influence in health changes, the presence of family health insurance, and the belief in having a healthy lifestyle significantly affect adolescents' healthy lifestyle behaviors and self-efficacy levels. Additionally, self-efficacy levels have a significant impact on healthy lifestyle behaviors.

***Human Subjects Approval Statement***

Written approval for the study was obtained from the Ethics Committee of Kahramanmaraş Sutcuimam University, (no: 2020/16-03, dated 26.08.2020) and the Provincial Directorate of National Education (no: E.17862377, dated 09.12.2020). Permission to use the scales was obtained via email, and informed consent was obtained from both the parents and the participants. The study was conducted in accordance with the principles of the Declaration of Helsinki

**Conflict of Interest Disclosure Statement**

There are no actual or potential conflicts of interest for any of the named authors.

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