The Adolescent Lifestyle Profile Scale: Reliability and Validity of the Turkish Version of the Instrument

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ABSTRACT

Background: The Adolescent Lifestyle Profile (ALP) scale, based on the Health Promotion Model, is designed to asses the health promotion lifestyle profile of adolescents. This study is the first psychometric research of the ALP scale.

Purpose: The aims of this study were to translate the ALP scale into Turkish and to assess its psychometric properties with 890 adolescents between the ages of 14 and 18 years.

Methods: Data on reliability and validity were assessed using the item–total correlations, Cronbach's α coefficient, content validity index, exploratory factor analysis, and confirmatory factor analysis (CFA). Participants were divided randomly into two groups, with the data from one group subjected to exploratory factor analysis and the data from the other group subjected to confirmatory factor analysis.

Results: Content validity was confirmed by a satisfactory level of agreement with a content validity index of .91. Varimax rotation yielded seven factors with eigenvalues greater than 1, which explained 46.87% of the total variance. Four items were removed because of factor loadings of less than .30. The revised 40-item ALP was tested, and the values of the goodness fit index were $\chi^2 = 176.05$, $df = 91$, $p < .001$, $\chi^2/df = 1.93$, goodness-of-fit index = .93, comparative fit index = .94, adjusted goodness-of-fit index = .90, root mean square error of approximation residual = .060, and standardized root mean square residual = .060. The total Cronbach's α coefficient was .87, and subscales ranged from .61 to .81. The item–total corelations ranged between .22 and .64.

Conclusions/Implications for Practice: The results confirm that the Turkish ALP scale has acceptable psychometric properties and that the scale may be used with Turkish adolescents as an effective measure of their health-promoting lifestyle behaviors.

KEY WORDS:
adolescent behaviors, reliability, ALP scale, validity.

Introduction

Adolescence (10–24 years old) is a significant stage in human development. Although it is known as a relatively healthy period of life, 2.6 million adolescents die each year. Many adolescents engage in a wide range of unhealthy habits (such as inadequate nutritional intake, rest, and exercise) and risky behaviors (such as tobacco and drug use) that may lead to adverse health outcomes. Many of these are associated with serious health problems such as cardiac or respiratory diseases, cancer, complicated pregnancies or deliveries, and psychological disorders in later life (Centers for Disease Control and Prevention [CDC], 2012; World Health Organization, 2012). Turkey's population is approximately 73.7 million, with 50% of the population under the age of 28 years. In this youth subgroup, 17.69% or 13,041,569 are adolescents (Turkish Statistical Institute, 2010). Despite this high percentage, inadequate research has been conducted on adolescent health promotion (Hizel, Sanli, Fidan, & Agar, 2006; Kara, Hatun, Aydogan, Babaoglu, & Gokalp, 2003).

The literature shows that obesity, physical inactivity, adolescent pregnancy, risky sexual behaviors, tobacco, violence, and alcohol and drug use are the risky health behaviors of young people that deserve priority attention worldwide (Brener et al., 2007; Chen, James, & Wang, 2007; Ortabag, Ozdemir, Bakir, & Tosun, 2011). Several studies have emphasized that, although adolescence is a period of prevalence for risky health behaviors, it is also an important period in terms of adopting positive health behaviors (Rodham, Brewer, Mistral, & Stallard, 2006; Zahran, Zack, Vernon-Smiley, & Hertz; 2007). Moreover, adolescence is the optimal age in terms of the implementation of health-promoting programs (CDC, 2012).

Adolescents spend a significant amount of time at school. Thus, school-based health promotion programs can exert

a major influence on the acquisition of health-promoting behaviors among both children and adolescents. School health programs that include nutrition, physical activity, health responsibility, stress management, positive life perspective, spiritual health, and interpersonal relations may help adolescents adopt and maintain healthy behaviors (CDC, 2012; Ortabag et al., 2011; Pender, Murdaugh, & Parsons, 2002).

Basic data about healthy adolescent behaviors are needed to plan health promotion programs. These data are also necessary for the development of reliable measures. The few instruments currently available to evaluate health-promoting lifestyles include The Adolescent Lifestyle Questionnaire, the Adolescent Health-Promoting scale, the Health-Promoting Lifestyle (HPLP), and the Adolescent Lifestyle Profile (ALP; Chen, Wang, Yang, & Liou, 2003; Gillis, 1997; Hendricks, Murdaugh, & Pender, 2006). Many studies have used the HPLP to assess the healthy lifestyle behaviors of adolescents (Can et al., 2008; Mohamadian, Ghannaee, Kortdzanganeh, & Meihan, 2013; Wei et al., 2012). The HPLP scale was developed by Pender et al. (2002) based on the Health Promotion Model. The ALP scale is a revision of the HPLP developed by Hendricks et al. (2006) to specifically evaluate the health-promoting lifestyles of adolescents. The HPLP scale has 52 items in the six subscales of nutrition, physical activity, health responsibility, interpersonal relation, stress management, and spiritual growth. The ALP has 44 items in the seven subscales of nutrition, physical activity, health responsibility, stress management, positive life perspective, interpersonal relation, and spiritual health. Although the subscales of the HPLP and the ALP are similar, items of the ALP were revised to specifically address factors relevant to adolescents. Thus, Pender et al. recommended that the ALP scale be used to assess the health-promoting lifestyles behaviors of adolescents in future studies (Hendricks et al., 2006).

The aims of this study were to translate the ALP into the Turkish language and then to assess its psychometric characteristics in terms of internal consistency, item–total correlation, test–retest reliability, and construct validity on a population of Turkish adolescents. This study is the first psychometric assessment of the ALP scale in a language other than English.

Methods

Participants and Settings

The sample group was composed of 890 adolescents between the ages of 14 and 18 years currently enrolled at three public high schools in metropolitan Istanbul, Turkey. Initial recruitment targeted the entire student population of these three schools (1,018 students). However, only 890 were enrolled as participants because 56 students submitted incomplete questionnaires, 32 declined to participate, and 40 were absent on day that data were collected. The final sample included 385 boys and 505 girls. The average age of participants was 16.04 ± 0.94 years.

Instrument

Adolescent lifestyle profile
The original version of the ALP developed by Hendricks et al. (2006) consisted of 44 items in seven subscales: health responsibility (seven items), physical activity (six items), nutrition (seven items), positive life perspective (six items), interpersonal relations (six items), stress management (six items), and spiritual health (six items). The ALP is a revision of the Health Promotion Model that is designed specifically to evaluate the healthy lifestyle behaviors of adolescents (Hendricks et al., 2006; Pender et al., 2002).

The instrument uses a 4-point scale response format to obtain data regarding the frequency of reported behaviors (*never*, *sometimes*, *often*, and *always*), with scores ranging from 1 to 4; higher scores indicate a higher frequency of health-promoting lifestyle behaviors (Hendricks et al., 2006). The Cronbach's α coefficients for the original ALP subscales are, respectively, .82 (health responsibility), .77 (physical activity), .65 (nutrition), .81 (positive life perspective), .77 (interpersonal relations), .66 (stress management), .82 (spiritual health), and .93 (total ALP). A principal-axis factor analysis yielded a seven-factor structure (Hendricks et al., 2006).

Translation procedures
The ALP was first translated from English into Turkish by two independent translators (a bilingual language expert and a nursing professional) and then back-translated into English by two translators (a medical expert and a bilingual language expert). The Turkish, English, and back-translated versions were compared and discussed by an expert panel on adolescent health, which resulted in the preliminary Turkish version of the ALP. In a pilot study, adolescent respondents (*N* = 30) found this version to be relevant, meaningful, and easy to complete; their comments led to only minor changes in wording (items 3, 13, 15, and 36; Ardic, 2008).

Content validity procedure
Content validity was conducted to assess the relevance, clarity, and comprehensiveness of the developed Turkish version of the ALP. The content validity index (CVI) developed by Waltz and Bausell (1983) was used. The content validity was assessed by an expert panel of 12 academics, with three from the field of community health, two from community health nursing, three from pediatric nursing, three from the fundamentals of nursing, and one from psychiatric nursing. The panelists rated the feasibility and relevance of each item on a scale from 1 (*least relevant*) to 4 (*most relevant*). The CVI of the scale was calculated by dividing the number of items rated either 3 (*relevant but needing minor revision*) or 4 (*very relevant*) by the total number of items. Scores of 80% or higher were required to confirm expert validity.

Data Collection

Researchers used the developed Turkish ALP to collect data between March and June 2007 from participants. Before data collection, permission to conduct the psychometric test in Turkey was obtained from the first author of the ALP (Hendricks et al., 2006), and ethical approval was obtained from the ethical committee of the Directorate of National Education in Istanbul. Approval to conduct the study was obtained from the administrations of the three schools. Both the students and their parents were informed about the purpose of the study and were asked to provide written informed consent to participate. The scale was administered to the participants in an observed classroom setting. In each class, the participants were informed about the aim of the study, that their participation was voluntary, and that their answers would be treated confidentially. The participants were asked to not write their names on the forms. The participants were given 25 minutes to complete the scale, a time assessed as adequate by the pilot study.

Data Analysis

SPSS version 11.5 for Windows (SPSS, Inc., Chicago, IL, USA) and LISREL version 8.5 (Scientific Software International, Inc., 2007) were used for all statistical analysis works. Descriptive statistics were calculated using frequency, percentage, mean, and standard deviation. The construct validity of the ALP was evaluated using the principal components matrix with varimax rotation exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The reliability of the Turkish version of the ALP was examined using internal consistency, item–total correlation, and test–retest stability (Nunnally & Bernstein, 1994).

The first stage evaluated the construct validity of the ALP using EFA and CFA. Previous studies have shown that, in analyses of studies on psychometric analysis, using two discrete samples to analyze EFA and CFA is more effective than using one sample to analyze both (Jöreskog & Sörbom, 1993; Woods & Edwards, 2008). Therefore, the sample was randomly divided into two equal halves (n = 445). The EFA was run on the first half, and then, the scale model that appeared because of the EFA was validated with CFA on the second half of the sample.

The EFA was used to determine the underlying structure of the items. The eigenvalue and the explained variance were used to determine the aggregate number of factors for the items used in the factor analysis. The Kaiser–Meyer–Olkin (KMO) index, a criterion used to determine whether items are appropriate for principal component analysis, was investigated for the EFA sample (Burns & Grove; 1997; Nunnally & Bernstein, 1994).

The CFA was used to compare both emergent and conventional factor structures. The CFA model fit was assessed using several indicators: the comparative fit index (CFI), goodness-of-fit index (GFI), adjusted GFI (AGFI), standardized root mean square residual (SRMR), and the root mean square error of approximation residual (RMSEA). The fit of the model to the data was based on the ratio of the χ^2 value and the degrees of freedom (χ^2/df). The factor loadings are the regression coefficients used to predict indicators from the latent factor. Values of $\chi^2/df < 5$, GFI > .90, AGFI > .80, CFI > .90, SRMR < .10, and RMSEA < .08 were deemed to indicate acceptable fit. Higher factor loadings are considered better, and minimum factor loadings should exceed .30 and be positive (Kelloway, 1998; Simsek, 2007; Streiner & Norman, 2003).

In the second stage, internal consistent reliability, measured using the Pearson correlation and Cronbach's α, was used to assess the item–total correlation. The test–retest reliability (stability) was assessed using the Pearson correlation, with a significance set to $p < .05$ and confidence interval estimated at the 95% level (Nunnally & Bernstein, 1994).

Results

Validity

Content validity

Relevance at the item level had a mean result of 3.52 of 4 and at the CVI was 91.2%, which indicated that the ALP had good content validity. The expert panel suggested minor revisions for Item 3 ("*See my school nurse or school doctor if I am not feeling well*"), Item 13 ("*Eat cold or hot cereals for breakfast*"), Item 15 ("*Feel there is a higher power guiding my life*"), and Item 36 ("*Spend time praying or meditating*"). These items were not appropriate for the culture and lifestyle of Turkey and were thus changed based on the expert panel's recommendations.

Construct validity

a. Exploratory factor analysis: The obtained KMO value was .85, and the significance of Bartlett's sphericity was <.001 (χ^2 = 6023.77, df = 946). These results indicate that the samples met the criteria for factor analysis. Principal component analysis was performed using varimax rotation with Kaiser normalization. Factor analysis yielded a 12-factor solution with an explained variance of 60.59%, with eigenvalues > 1. However, the scree plot analysis indicated a model with a seven-factor structure.

These seven factors explained 46.87% of the variance. Because of factor loadings of less than .30, four items (Items 30, 31, 34, and 44) were removed from the ALP scale. Factor 1 included six items from the positive life perspective subscale (18, 23, 26, 28, 38, and 39), one item from the spiritual health subscale (15), and one item from the stress management subscale (35). It was the strongest factor, explaining the greatest percentage of variance and having the highest average loadings on the ALP. Factor 2 included six items from the physical activity subscale (2, 4, 16, 27, 32, and 40), Factor 3 included six items from the nutrition

subscale (7, 10, 13, 22, 24, and 42), Factor 4 included five items from the health responsibility subscale (3, 8, 14, 22, and 33), and Factor 5 included five items from the spiritual health subscale (9, 20, 29, 36, and 41). Factor 6 was composed of four items relating to the interpersonal relation subscale (6, 12, 19, and 37) and one item relating to the stress management subscale (43). Factor 7 included four items from the stress management subscale (5, 11, 17, and 25) and one item from the interpersonal relation subscale (1). As seen in the factor distribution, the subscales of four items were changed from the original Turkish draft version. Items 15 and 35 were placed in the positive life perspective subscale, Item 1 was placed in the stress management subscale, and Item 43 was placed in the interpersonal relation subscale. Finally, because of the EFA, the ALP scale was reduced to 40 items, and the subscales of four items were changed (see Table 1).

b. Confirmatory factor analysis: After evaluating the factor structure of the scale with the EFA, the CFA evaluated the second set of participants using the revised 40-item ALP. The CFA resulted in a GFI (χ^2 = 176.05, df = 91, p < .001, χ^2/df = 1.93, GFI = .93, CFI = .94, AGFI = .90, RMSEA = .060, SRMR = .060).

Reliability

Test–retest reliability
The test–retest method was used to assess the time durability of the scale. To evaluate stability, the 40-item ALP was administered twice to 150 adolescents at an interval of 2 weeks. The correlation coefficient for the total scale was .80 and for the subscales were, respectively, .61 (stress management), .67 (spiritual health), .68 (positive life perspective), .76 (health responsibility), .77 (nutrition), .78 (interpersonal relation), and .84 (physical activity; see Table 2).

Internal consistency
Cronbach's α and item–total correlations were recalculated for the latest (40 items/seven subscales) version of the Turkish ALP to examine internal consistency. The total Cronbach's α was .87, whereas the Cronbach's α for each of the subscales was as follows: positive life perspective = .81, physical activity = .80, health responsibility = .72, spiritual health = .70, nutrition = .65, interpersonal relation = .65, and stress management = .61. The item–total correlations ranged between .22 and .64. The intercorrelations among the factor correlations were between .28 and .79. The lowest correlation was between the physical activity and stress management subscales, whereas the highest correlation was between the positive life perspective subscale and the total ALP (see Table 2).

Discussion
Results of this study show the findings for the validity and reliability of the Turkish version of the ALP in assessing healthy behavior in adolescents. Because this research was the first psychometric study of the ALP scale in the world to measure the health-promoting lifestyle behaviors of adolescents, our findings were compared with those of psychometric studies on adolescents that used the HPLP or the Adolescent Health-Promoting scale.

Validity

Content validity
Issues regarding the comprehensibility of certain items (Items 3, 13, 15, and 36) were detected during the adaptation of the scale into Turkish and during the concept validity process. The expert panel made recommendations for adapting these items to the cultural structure of Turkish adolescents.

Item 3 (health responsibility item variable: "*See my school nurse or school doctor if I am not feeling well*") assesses the frequency with which participants sought out the school nurse or the school doctor when they felt unwell. There are school nurses and school doctors in the United States, and students are encouraged to seek their assistance with health problems. However, school nurses or school doctors are available only in private schools in Turkey. Therefore, adolescents are expected to go to their family health centers when feeling unwell. Thus, this item has been changed to "*See my family nurse or my family doctor if I am not feeling well.*"

Item 13 (nutrition item variable: "*Eat cold or hot cereals for breakfast*") was changed to "*Eat various food groups for breakfast every day (olives, cheese, eggs, honey, bread…*" because Turkish breakfast habits do not usually include hot or cold cereals. Traditional Turkish breakfasts include foods such as bread, olives, cheese, eggs, and honey.

Item 15 (spiritual health item variable: "*Feel there is a higher power guiding my life*") was very difficult for the adolescents to understand and therefore was changed to "*I feel that I have a high power guiding my life.*"

Item 36 (spiritual health item variable: "*Spend time praying or meditating*") was changed to "*Spend time praying or relaxing.*" Turkey's population is largely Muslim (99%), and meditation is not a frequent method of relaxation in Turkey.

Construct validity
Exploratory factor analysis: The KMO index indicated that the correlation matrix was more than adequate for factoring (Nunnally & Bernstein, 1994). A principal axis factor analysis supported the presence of the seven factors used as subscales for the original ALP (Hendricks et al., 2006). The EFA found that the factor loadings for Items 30, 31, 34, and 44 were all below .30. Therefore, these items were removed from the scale.

TABLE 1.

Exploratory Factor Analysis of ALP (N = 445)

	Factor Loading	Eigen Value	Variance Explained, %
Factor 1		5.045	12.012
PLP28: Look forward to each new day	.687		
PLP23: Am happy with who I am	.664		
PLP38: Set goals that I can achieve	.553		
PLP39: Feel good about myself when I do something well	.550		
PLP26: Work toward important goals in my life	.543		
SH15: I feel that I have a high power guiding my life	.436		
PLP18: Am excited about the future	.408		
SM35: Try to think pleasant thoughts as I fall asleep	.406		
Factor 2		3.785	9.329
PA4: Engage in vigorous physical activity for 20 minutes or 3 days a week	.755		
PA40: Exercise until my heart beats fast and I perspire	.751		
PA32: Play active games with my friends	.727		
PA16: Participate in recreational activities or sports	.682		
PA27: Walk or do something active during my free time	.629		
PA2: Spend time with my family being active	.512		
Factor 3		3.051	7.662
NU21: Eat 2–4 servings of fruit each day	.563		
NU24: Eat 3–5 servings of vegetables each day	.474		
NU10: Choose low-fat milk or low-fat dairy products	.428		
NU42: Drink six (6) or more glasses of water each day	.394		
NU13: Eat various food groups for breakfast every day (olives, cheese, …)	.381		
NU7: Avoid ''sweets'' or other foods high in sugar	.360		
Factor 4		1.681	4.822
HR14: Ask questions of the doctor or nurse to understand their	.529		
HR22: Attend programs about preventing health problems and improving my health	.465		
HR3: See my family nurse or my family doctor if I am not feeling well	.433		
HR33: Seek guidance from school counselor when needed	.417		
HR8: Read articles about health topics	.410		
Factor 5		1.544	4.509
SH41: Use my spiritual beliefs as a guide for what I do	.712		
SH29: Engage in activities to help me grow spiritually	.653		
SH20: Attend a group that shares my spiritual beliefs	.562		
SH36: Spend time praying or relaxing	.490		
SH9: Talk with others about my spiritual beliefs	.486		
Factor 6		1.460	4.319
IR19: Spent time with close friends	.650		
IR12: Try to be sensitive to the feelings of others	.643		
IR6: Congratulate others when they do something well	.624		
IR37: Make a special effort to be helpful to others	.541		
SM43: Discuss my problems with someone close to me to	.520		
Factor 7		1.414	4.214
SM5: Get 6–8 hours of sleep at night	.521		
SM11: Take time to relax each day	.440		
SM25: Take time for myself to do something I like	.488		
SM17: Try to adjust to those things in my life that I cannot change	.338		
IR1: Spend time talking to members of my family	.334		
Total		17.98	46.87

Note. ALP = Adolescent Lifestyle Profile; PLP = positive life perspective; SH = spiritual health; SM = stress management; PA = physical activity; NU = nutrition; HR = health responsibility; IR = interpersonal relations.

TABLE 2.
Correlations of Subscales of the 40-Item ALP (N = 890)

	HR	PA	NU	PLP	IR	SM	SH
HR							
PA	.34						
NU	.42	.46					
PLP	.44	.45	.46				
IR	.43	.44	.47	.59			
SM	.39	.28	.32	.51	.41		
SH	.41	.36	.36	.73	.42	.54	
ALP	.58	.64	.63	.79	.67	.59	.67

Note. NU = nutrition; PA = physical activity; HR = health responsibility; SM = stress management; IR = interpersonal relations; PLP = positive life perspective; SH = spiritual health; ALP = Adolescent Lifestyle Profile.

Item 30 (nutrition item variable: "*Eat a variety of meats*") evaluates whether students consume a sufficient amount of meat. Because the socioeconomic level of the sample group included low- and middle-income families, it may be difficult for them to consume sufficient amounts of meat. Therefore, the item weight of Item 30 was permitted to be below .30.

Item 31 (interpersonal relation item variable: "*Settle conflicts through discussion rather than fighting*") defines the preferences of adolescents for discussing rather than fighting out problems with which they are confronted. It is fairly difficult to talk about or discuss issues regarding violence in Turkey. Individuals who use violence against their families or friends have difficulty in accepting this (Kaya, Bilgin, & Singer, 2012). Therefore, the accuracy of the responses given by adolescents to this question is likely not reliable.

Item 34 (health responsibility item variable: "*Ask questions of the doctor or nurse about improving my health*") evaluates whether adolescents ask questions regarding their health and, thus, to what extent they manage their responsibilities on health issues. However, because the schools included in the sample are public schools and because doctors and nurses are not present in Turkish high schools, it is difficult for adolescents to reach a doctor or a nurse. That is probably a reason why the factor loading of this item was deemed to be low.

Item 44 (health responsibility item variable: "*Avoid behaviors that damage my health [smoking, drinking, taking drugs]*") defines as unhealthy adolescent behaviors. Most (87.5%) of the participants gave answers of either "always" or "frequently." This is likely abnormally high and explained by participant concerns that their families and teachers will find out about the response they give to this question. In addition, asking about alcohol and drug use in a single item reduced the response rate.

Result of the EFA, Items 35 (stress management item variable: "*Try to think pleasant thoughts as I fall asleep*") and 15 (spiritual health item variable: "*I feel that I have a high power guiding my life*") were grouped under the positive life perspective subscale in the Turkish ALP. Among Turkish adolescents, thinking about good things while going to bed at night and feeling the presence of a powerful creature that guides our lives are considered as encouraging a positive approach to life rather than a way to promote stress management. Optimistic people think about good things while going to bed at night and try to remember the times when they were happy. Moreover, feeling the presence of a powerful creature that guides our lives may lead to more positive expectations about the future in young people.

Item 1 (interpersonal relation item variable: "*Spend time talking to members of my family*") was grouped under the stress management subscale, and Item 43 (stress management item variable: "*Discuss my problems with someone close to me to try and solve them*") was grouped under the interpersonal relation subscale in the Turkish ALP. When young people have problems, spending time with their families may help them cope with stress. In addition, sharing personal problems with someone with whom they feel close reflects the strength of interpersonal relationships. In general, concepts in subscales including stress management, positive approach to life, and interpersonal relationships are expressed in similar words in Turkish. Therefore, we consider that the EFA supported these recommendations because these concepts are similar subscales in terms of content and meaning.

Confirmatory factor analysis

After using the EFA to evaluate the factor structure of this scale, the Turkish ALP was evaluated with the CFA on the second participant group. The CFA showed that the Turkish ALP had a good fit index (Jöreskog & Sörbom, 1993). Similarly, Mohamadian et al.'s (2013) study used the CFA and found that the HPLP yielded a good estimate of fit (χ^2 = 6.34, *df* = 2, CFI = .99, NFI = .99, RMSEA = .066).

Reliability (Internal Consistency)

After performing the construct validity analysis, the Turkish ALP scale yielded strong internal reliability (Burns & Grove, 1997; Nunnally & Bernstein, 1994; see Table 2). The original ALP another study on ALP (Hendricks & Hendricks, 2005), and the Turkish ALP all achieved highly similar levels of internal consistency. The internal consistency of Mohamadian et al.'s (2013) study used the HPLP as follows: total = .86, nutrition = .70, physical activity = .75, health responsibility = .77, and stress management = .71 (Mohamadian et al., 2013). The other research to use the HPLP in Turkey reported Cronbach's α values of between .59 and .82 for the subscales and .91 for the total scale (Can et al., 2008).

Conclusions and Recommendations

In summary, the findings with respect to (a) internal consistency by means of Cronbach's α and item–total correlations, (b) the observed pattern of cross-scale correlations, and (c) the EFA and CFA results across three separate models were all highly supportive of the factor structure of the Turkish-version ALP. Another relevant issue regarding the findings of the ALP validation was the construct similarity between the Iranian sample, the U.S. sample, and the Turkish sample. The current study confirms that the Turkish ALP may be used as a practical guide for school health nurses and community health centers to assess adolescent health-promoting lifestyle behaviors and unhealthy behaviors. In addition, because this scale effectively measures adolescent behaviors such as nutrition, physical activity, health responsibility, stress management, positive life perspective, and interpersonal relations, it may facilitate the preparation of health promotion programs designed for the needs of this population. The sample does not represent all the adolescents in Turkey. Therefore, findings should not be generalized beyond the population considered. Further testing of the Turkish ALP with samples of high-income adolescents is recommended.

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