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Development of Perceived School Counselor Support Scale: Based on the ASCA Mindsets and Behaviors

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Abstract: This study presents a culturally and psychometrically sound instrument of perceived school counselor support among Turkish high school students. The study has been framed using American School Counseling Association's Mindsets and Behaviors for Students Success Model to create a valuable instrument that measures students' perceptions of their school counselors' support in a different culture, society, and education system. The results of this study supported the theoretical based *Perceived School Counselor Support Scale* long and short forms providing initial and strong evidence based on internal structure and relations to other variables. Internal consistency estimates on subscales ranged from good to strong.

1. INTRODUCTION

Puberty is a period in which adolescents need to deal with different issues as a result of psychological and physiological changes. Although most students enter puberty during middle school years, adolescents experience significant issues and make important decisions that can affect their academic, social/emotional, and career development during high school years (Balkin & Schmit, 2016; Ohrt, Limberg, Bordonada, Griffith, & Sherrell, 2016). Hence, a non-familial adult who cares about a student's development as a whole can serve as a protective factor (Karaman, Cavazos Vela, & Lu, 2018; Roe, 2013; Yılmaz & Demir, 2016). These non-familial adults can be teachers, coaches, or school counselors.

Adolescents might need an adult's help during puberty because it is also a period of transition from high school to postsecondary education. Researchers (Ferguson & Lamback, 2014; Suldo & Shaunessy-Dedrick, 2013) stated that students experience stress related to academic performance, career planning, and college admissions. Therefore, school counselors play an important role at this stage helping and supporting students' academic, social/emotional, and career development (Karaman et al., 2018).

In today's world, school counseling services and school counselors have more value. Hence, contemporary school counseling standards and models are adapted, such as American School Counselor Association's (ASCA) National Model (2003, 2005, 2014a), the international model for school counseling programs (Fezler & Brown, 2011), and the comprehensive school counseling and guidance program in Turkey (Erkan, 2006; National Ministry of Education [NME], 2006). In addition, it is necessary to have assessment tools to measure the efficacy and practicality of programs. One shortcoming in the counseling field is the lack of scales with validity to measure students' perceptions of school counseling services and school counselors (Lapan, Poynton, Marcotte, Marland, & Milam, 2017). Instruments with validity evidence can help researchers, school counselors, and policy makers better understand the nature of school counseling and delivery of efficient services.

1.1. School Counseling in Turkey and ASCA National Model

The school counseling profession has gone through major changes and development since its emergence. The historical corner stones (e.g., industrial revolution, space race) showed the necessity and importance of the profession. Today, many countries have integrated school counseling services into their curriculums. In this respect, ASCA plays an important role creating new visions and models (Fezler & Brown, 2011; Schimmel, 2008). For example, ASCA released the first national model in 2003 for school counseling programs. After this step was taken, we saw a similar development in Turkey (Do an, 2000; Ye ilyaprak, 2005).

The ASCA National Model is "comprehensive in scope preventive in design and developmental in nature" (ASCA, 2012, p. xi). The model aims to promote students' educational and developmental aspects in the academic, career, and personal/social domains with support of school counselors. The ASCA National Model contains three components which are themes, elements, and flow of the model (ASCA, 2012). The four themes, which are leadership, advocacy, collaboration, and systemic change, were designed to achieve maximum program effectiveness via school counselors, parents, and school staff (ASCA, 2012). The elements are accountability, foundation, management, and delivery.

School counseling and guidance programs in Turkey were initiated in the 1950s under the leadership of US education experts invited by Turkish government officials. This step was taken under the Turkish-American cooperation agreement (Ye ilyaprak, 2005). The Turkish school counseling system was changed in parallel to the changes in the US. After the ASCA National Model (2003) was released, the comprehensive school counseling and guidance program, which was prepared based on the developmental perspective, was implemented in the 2006-2007 academic year by school counselors in Turkey (Ergüner-Tekinalp, Leuwerke, & Terzi, 2009; Terzi, Tekinalp, & Leuwerke, 2011). The final version of ASCA National Model (2014a) consists of four components: (a) foundation, (b) management, (c) delivery, and (d) accountability while the comprehensive school counseling and guidance program (Erkan, 2006; NME, 2006) in Turkey consists of five components: (a) group guidance; (b) individual planning; (c) intervention services; (d) program development, research, consultancy and professional development; and (e) other (events that cannot be placed in other program elements). Although the two national models look different, they have many common points as well. Hence, the current study adapted domains of ASCA Mindsets & Behaviors for Students Success (2014b) to create an instrument that can be useful for Turkish school counselors and researchers and adapted and validated by other researchers into different cultures and languages (e.g., English, Arabic, Spanish).

ASCA Mindsets & Behaviors for Students Success (2014b) are organized by domains that "*enhance the learning process and create a culture of college and career readiness for all students*" (p. 1). These domains are (a) academic development, (b) career development, and (c) social/emotional development. Academic development refers to standards counselors use to

support and maximize students' academic success. The second domain, career development, guides counselors to help students understand the connection between school and work and to support a successful transition from school to higher education or world of work. The last domain, social/emotional development, guides counseling services to help students with social and emotional issues. Specifically, the last domain guides counselors how to help students manage and learn emotions and interpersonal skills. In summary, the current study used a framework based on the aforementioned domains and generated items using the comprehensive counseling and guidance program (Erkan, 2006; NME, 2006).

1.2. Counselor Support

One prominent goal of the school counseling profession is to help all students be successful in schools (ASCA, 2005; Clark & Breman, 2009). In this respect, school counselors and students are the main components of school counseling services. The support students perceive from their counselors can influence their development in academic, career, and social/emotional domains. For example, Poynton and Lapan (2017) stated that students who sought school counselors for assistance when applying to college were more likely to have educational motivation for higher education. In another study, Parker and Ray (2017) found that counseling activities for college and career readiness among Latinx high school students were very important. However, in the same study, it was reported that students indicated personal/social or academic support from their school counselors were less important.

Similar to the current study, Lapan et al. (2017) developed and validated the "College and Career Readiness Counseling Support Scale." Their instrument had five factors but confirmatory factor analysis (CFA) did not confirm the factor structure. In the validation process, these authors found that the frequency and helpfulness of meeting with counselors were correlated with achievement in high school.

Although most of the aforementioned studies focused on counselors' support for college and career readiness, there were noteworthy studies focusing on school counselor support in other areas, such as LGBT youth concerns (Roe, 2013), positive adult role models (Blum, McNeely, & Nonnemaker, 2002), and life skills and individual attention (Ohrt et al., 2016). Roe (2013) used a phenomenological inquiry approach to examine the support gay and bisexual adolescents received from their school counselors. Taking many factors into account (e.g., political beliefs, school counselors' accessibility), students reported that school counselors were helpful when they discussed and listened to students' concerns on LGBT issues. Adolescents stated that it was relaxing when someone listened to their concerns without judging or breaking confidentiality.

The studies mentioned above showed a reality among many important facts: school counselor support has a significant place in students' academic, social/emotional, and career development. This finding is aligned with the ASCA Mindsets & Behaviors for Students Success and the current study aims to create a culturally valuable and psychometrically sound instrument in the counseling field.

1.3. Present Study

The present study has been framed using ASCA Mindsets & Behaviors for Students Success (2014b) to create a valuable instrument which measures students' perceptions of their school counselors' support in a different culture, society, and education system. Previous efforts to create international content standards for school counseling programs (Fezler & Brown, 2011) showed the worthiness of the profession and advocated for school counseling in other countries. After reviewing the literature in English and Turkish, to the best of the authors' knowledge, there is not a theoretically driven instrument developed and validated for K-12 students in both languages. Hence, the purpose of current study was to develop and validate an ASCA National

Model and developmental perspective-based instrument that measures high school students' perceptions of school counseling services and school counselors' support. We aimed to identify long and short forms of the measure that could be useful for Turkish high school students and future adaptation studies (e.g., English version). We utilized the questions listed below to guide the study:

1. Will EFA and CFA identify scales based on the ASCA Mindsets & Behaviors for Students Success that measures high school students' perceptions of school counselors' support in Turkish culture?

2. Will CFA identify the short form of the Perceived School Counselor Support Scale (PSCS)?

3. Will these scales be significantly correlated with mattering and grit?

2. METHOD -Study 1: Development of the Perceived School Counselor Support Scale

2.1. Item Generation and Scale Refinement

The authors followed standards for educational and psychological testing (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 2014) at the procedure of development and validation of the instrument. First, a literature review of the ASCA National Model (2014a) ASCA Mindsets & Behaviors for Students Success (2014b) and developmental school counseling approach in Turkey (NME, 2006) were conducted to determine factors that influence a student's perception of counselor support. The authors desired to develop an instrument which is efficient and have strong psychometric properties. Hence, we limited the instrument with three factors that reflected three domains of ASCA Mindsets and Behaviors and developmental approach. These three factors (domains) were called a) academic support, b) career support, and c) social /emotional support. Second, 64 items were written based on the domains by the authors and sent to nine expert raters including school counselors who have experience for at least seven years, counselor educators, and measurement evaluation specialists in order to satisfy validity evidence based on test content. Based on their feedback, some items were revised, and seven items were removed from the item pool. The final pool included 57 items. As a final step, a Turkish language and literacy faculty member checked 57 items for grammar and age appropriateness. The language expert grammatically changed a few items and certified that the scale had a 5th grade reading level based on the Flesch Reading Ease Formula (Flesch, 1948). A 5-point Likert-type response format, with values 1 *Never*, 2 *Rarely*, 3 *Sometimes*, 4 *Usually,* and 5 *Always,* was used to identify students' perceived support level from counselors.

2.2. Data Collection Procedure

The relevant institutional ethics and research board approved this study. Invitations to school counselors were sent through the e-mail list of the city's national education board. After receiving approval responses from school counselors, we visited schools to meet with principals face-to-face. We initiated the study in schools in which principals admitted us to attend. A family meeting was conducted in each school during the final two weeks of February 2017 and families were informed about the study. A permission form was distributed, and participants whose families gave signed permission forms were included in the study.

When we prepared the measurement package, we inserted bogus items (Moran & Cutler, 1997) to control for response biases (e.g., 1k. Please mark "3" for this question). Data were collected during March 2017. Students attended five high schools across one province of East Anatolia Region. Participants attended a diverse range of high schools (e.g., vocational high schools, general high schools, Anatolian high schools) located in urban and suburban communities. The

data were collected by one of the authors with the help of school counselors during the first 20 minutes of guidance classes. Participation was voluntary, and we distributed measures to only those participants. Incentives were not offered or given to the participants.

2.3. Sample

A total of 744 students through 9th and 12th grade from a vocational, a general and an Anatolian high school participated in Study 1. Eighty-two participants had missing data on five or more items. After removing students with missing data and who did not follow directions on bogus items, the final analysis included 662 participants. The mean age of participants was 16.08 years (*SD* = 1.18; range, 14-19 years). More girls (*n*=353, 53.3%) than boys (*n*=309, 46.7%) participated. Also, participants reported their grade levels as follows: 9th grade (*n* = 147, 22.2%), 10th grade (*n*= 144, 21.8%), 11th grade (*n*=189, 28.5%), and 12th grade (*n* = 182, 27.5%).

2.4. Measures

***Demographic form*:** A demographic form was designed to collect data related to participants' age, gender, and grade levels. The information in the form was included based on feedback from principals and school counselors. We did not include questions related to ethnicity, SES levels, and family background since those could worry or bother some students.

Perceived School Counselor Support Scale: The PSCS was developed by the lead author and was based on the ASCA Mindsets & Behaviors for Students Success (2014b) and developmental school counseling approach (Erkan, 2006; NME, 2006; Ye ilyaprak, 2005). Since the core of study is the analysis of this instrument, the following domains describe item development. According to ASCA model and developmental school counseling approach, the first domain is academic development. Hence, when we created possible factors, we named our first factor as academic support inspired by the model and approach. The second domain was career development, and the factor was labeled as career support. Following these, the third domain was social/emotional development, and the third factor was named social/emotional support. A 5-point Likert-type response format with values ranging from one (*never*) to five (*always*) was used. Reliability estimates in the normative sample were evaluated using Cronbach's alpha ( ) to assess internal consistency.

2.5. Data Analysis

First, for the purposes of the exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), we split the sample with 662 participants into two data sets. We selected a random sample of 50% of 662 students for use in the EFA and the remaining 331 for the CFA. Three analyses were conducted to determine factor structure of the PSCS. The first analysis was parallel analysis (PA), which is a Monte Carlo simulation technique to determine the number of factors to retain in EFA (Ledesma & Valero-Mora, 2007). Parallel Analysis, which was introduced by Horn (1965), compares the observed eigenvalues to account for more variance than the components obtained from random data (Karaman, Balkin, & Juhnke, 2018; O'Connor, 2000). Before we ran a PA, the Kaiser-Meyer-Olkin (KMO) was examined to determine if the data were appropriate for factor analysis. The KMO value of .97 indicated that the data were appropriate for analysis (Leech, Barrett, & Morgan, 2005). ViSta 7.2 program (Young, Valero-Mora, & Friendly, 2006) was used to run PA.

The second analysis conducted was EFA. Based on PA analysis, we used the fixed number of factors in EFA to extract dimensions of the instrument. An EFA using principal axis factoring with a direct oblique rotation was conducted. An oblique rotation was selected since we hypothesized that factors were correlated. The identification of factors was based on factor loadings of .40 or greater. Tabachnick and Fidell (2013) stated that .32 is a good rule of thumb

for the minimum loading of an item. Items that had loadings less than .40 or cross-loaded with no distinct measure of a latent variable were omitted.

The final analysis used was CFA to confirm EFA results and develop PSCS short form. A four-factor model was created based on the PA and EFA results. An essential step was to analyze multivariate normality in this part. The Mardia's statistic indicated that the data had a high value of multivariate kurtosis (9.87; Bentler & Wu, 1993). A Mahalanobis Distance operation was conducted to detect multivariate outliers. Based on the analysis, 8 cases were removed from the data-set, thereby reducing the initial sample of 331 students to 323. The second analysis of Mardia's statistic showed that the multivariate kurtosis decreased dramatically (3.68). We interpreted the chi square statistic (x^2) and *p*-values, as well as comparative fit index (CFI), Tucker-Lewis index (TLI), standardized root mean square residual (SRMR), and the root mean square error of approximation (RMSEA) metrics of model fit. When inspecting these values, we used Dimitrov's (2012) standards in which an acceptable model fit is represented in values for the x^2 ($p > .05$), CFI > .90, TLI > .90, SRMR< .06, and RMSEA < .08. When creating the short form, the item selection procedure was based on the statistical methodology conducted by Marteu and Bekker (1992) and Fioravanti-Bastos, Cheniaux, and Fernandez (2011). In this procedure, equal number of items is ranked based on their corrected item-total correlation under subscales. After creating several short forms, multiple CFAs are run. Based on CFA results and internal consistency scores, the best fitted model is chosen as the short form. Hence, we created 12- and 16- item forms to select the best-fitted model based on analyses. Models were compared using Satorra-Bentler chi-square difference test.

2.6. Results
2.6.1. *Factor structure*

Exploratory factor analysis: Based on PA, four factors were retained. Subsequently, an EFA using principal axis factoring with a direct oblimin rotation was conducted to identify 4 factors. Of the 57 generated items included on the PSCS, 18 were eliminated since they were under the .40 item loading criteria. The fixed number of four factors in EFA explained 70% of the variance across all 39 items. Factor 1 was named as *Career Support* reflecting how school counselor(s) support students in terms of career development. A sample item representing this factor was "My school counselor helps me to learn about careers related to my interests and abilities." The eigenvalue for this factor was 20.71 and explained 53% of the variance across all 39 items. Nine items were retained in the factor, with factor loadings ranging from .51 to .88. Table 1 includes factor loadings of the retained items. Subsequently, Table 2 contains descriptive statistics, intercorrelations of the scores from the respective subscales, and internal consistency ( ) of subscale scores.

Factor 2 was named *Emotional Support.* This factor contained nine items with factor loadings ranging from .61 to .83. The eigenvalue for this scale was 3.22 and explained 8% of the variance. This scale included students' perception of emotional support from school counselor(s). A sample item representing this factor was "My school counselor understands what I am going through."

Factor 3 was named *Social Support* to reflect students' perceived social support from school counselor(s) when interacting with them. This factor contained ten items with factor loadings ranging from .49 to .86. The eigenvalue for this scale was 1.95 and explained 5% of the variance. A sample item representing this factor was "My school counselor encourages me about speaking in the public."

The last scale, factor 4, was named *Academic Support.* This factor contained 11 items with factor loadings ranging from .53 to .81. The eigenvalue for this scale was 1.61 and explained 4% of the variance. This scale reflected students' perceived support from their school

counselor(s). A sample item representing this factor was "My school counselor informs me how to study more efficiently."

Table 1. *Instrument Items, Factor Loadings, Corrected Item-Total Correlation Scores, and CFA standardized Parameter Estimates*

PSCS Items	CS	ES	SS	AS	CITC	PE
Item 1	**.88**				.76	.77
Item 2	**.76**				.71	.62
Item 3	**.71**				.78	.72
Item 4	**.69**				.85	.82
Item 5	**.66**				.78	.75
Item 6	**.65**				.82	.79
Item 7	**.59**				.78	.81
Item 8	**.54**				.77	.83
Item 9	**.50**				.73	.77
Item 10		**.83**			.85	.84
Item 11		**.80**			.84	.79
Item 12		**.79**			.87	.91
Item 13		**.78**			.75	.61
Item 14		**.78**			.78	.82
Item 15		**.77**			.86	.89
Item 16		**.77**			.76	.77
Item 17		**.66**			.68	.72
Item 18		**.61**			.78	.81
Item 19			**-.86**		.87	.88
Item 20			**-.83**		.85	.83
Item 21			**-.83**		.86	.87
Item 22			**-.74**		.84	.84
Item 23			**-.73**		.79	.82
Item 24			**-.58**		.83	.77
Item 25			**-.54**		.81	.81
Item 26			**-.52**		.75	.80
Item 27			**-.52**		.78	.82
Item 28			**-.49**		.70	.62
Item 29				**.81**	.80	.79
Item 30				**.75**	.70	.74
Item 31				**.70**	.72	.77
Item 32				**.66**	.82	.78
Item 33				**.66**	.80	.81
Item 34				**.63**	.78	.83
Item 35				**.60**	.78	.75
Item 36				**.60**	.81	.81
Item 37				**.58**	.81	.76
Item 38				**.54**	.74	.77
Item 39				**.53**	.57	.65

Note. Factor loadings >.40 are in boldface. PE= Standardized Parameter Estimates. CITC= Corrected Item-Total Correlation Scores. PSCS= Perceived School Counselor Support Scale; CS= Career Support, ES= Emotional Support, SS= Social Support, AS= Academic Support

Confirmatory factor analysis: Based on the results of PA and EFA, we hypothesized the 4-factor model would have an appropriate fit. The AMOS version 22 package program was used to compute CFA. We used the second part of the data, which were not included in the EFA, to run CFA. Table 1 presents standardized parameter estimates from the CFA testing the four-factor solution suggested by the EFA. The results, x^2 (696) = 1616.9, CFI= .91, TLI= .91, RMSEA [90% CI] = .064 [.060, .068], and SRMR= .048, indicated that four-factor model had an acceptable fit (Dimitrov, 2012).

Creating PSCS short form (PSCS-S): Managing and scoring long scales can take a significant amount of time. Moreover, completing a long instrument can be exhausting and lead to measurement errors that can be attributed to incorrect or missed items (Fioravanti-Bastos et al., 2011; Schmidt, Le, & Ilies, 2003). Hence, to select the best items of the PSCS-S scale, items were ranked according to their corrected item-total correlation coefficients (Table 1). The CFA testing for the models was conducted with the same CFA data we used for the extended form.

After examining the corrected item-total correlation coefficients, we created two models. Researchers suggested having at least three items in each factor (MacCallum, Widaman, Preacher, & Hong, 2001; Raubenheimer, 2004). Following this rule, the first model included four factors and 12 items. The second model included four factors and 16 items. Models were compared using Satorra-Bentler chi-square difference test. The testing results for the first model was, x^2 (48) = 105.01, CFI= .98, TLI= .97, RMSEA [90% CI] = .061 [.045, .077], and SRMR= .028 indicating a strong fit. A second analysis was run for the second model and results showed that the model had a strong fit, x^2 (98) = 206.03, CFI= .97, TLI= .96, RMSEA [90% CI] = .059 [.047, .070], and SRMR= .035. After CFA testing, we used Satorra-Bentler chi-square difference test to choose the best model. Werner and Schermelleh-Engel (2010) stated "if the x_d^2 -value is significant, the "larger" model with more freely estimated parameters fits the data better than the "smaller" model" (p. 3). The chi-square difference test was significant, x^2 (50) = 101.01, $p<$ .05, indicating that Model 2, which was the larger model, had a better fit.

3. METHOD - Study 2: Validation of the PSCS Short Form

Following standards for educational and psychological testing (AERA et al., 2014), we collected additional data for validation of PSCS-S. As AERA et al. (2014) reported, the Study 2's aim was to provide evidence based on internal structure and relations to other variables for the PSCS short form. In this step, two variables were added for convergent validity: (a) mattering and (b) grit. Mattering is an individual's sense of importance and belonging to family, friends, and society (Sarı & Karaman, 2018). We included mattering because the PSCS has Emotional Support and Social Support subscales which are related to mattering. The second variable, grit, is one's perseverance and passion toward his/her goals (Cavazos Vela, Hinojosa, & Karaman, 2018). Therefore, we aimed to test if school counselor support was significantly correlated with grit. The following sections include detailed information of the process.

3.1. Participants and Procedures

The data of Study 1 and Study 2 were collected from the same schools within a two-month interval. A total of 760 participants were involved in Study 2. Eight participants were removed from the data set because of high rate of unanswered items. Missing values were replaced by imputed values (EM). The final data set included 752 participants.

Participants' age ranged from 13 to 18 (*M*= 16.10 years, *SD*= 1.17). There were 341 boys (45.3%) and 408 girls (54.3%). Three participants preferred not to answer this question. Participants reported their level of classes as follows: 9th grade (n = 194, 29%), 10th grade (n = 228, 30%), 11th grade (n = 161, 21.4%), and 12th grade (n=142, 19%). Four participants

failed to respond to this demographic query. To the question of whether they had ever visited the school counselor, 703 of the students (94%) said yes and 45 (6%) said no. Four participants failed to respond to this demographic query. In terms of the reasons to visit their school counselors, 290 students (38.6%) visited due to academic reasons, 198 (26.3%) due to college and career plans, 89 (11.8%) due to emotional issues, 97 (13%) due to social relationships, and 29 participants (3.9%) because of other reasons.

3.2. Measures

Perceived School Counselor Support Scale- short form (PSCS-S): Based on Study 2's aim, we used the short version of the PSCS. The instrument consists of 16 items under four factors: Academic Support, Career Support, Emotional Support, and Social Support. Cronbach's alpha coefficient scores ranged from .86 to .92.

General Mattering Scale: We used the Turkish version of the General Mattering Scale (GMS; Haktanir, Lenz, Can, & Watson, 2016) for the current study. Marcus (1991) developed the original GMS to assess the degree to which individuals believe they are important to others. This 5-point Likert-type assessment yields a single scale score based on participant responses that range from *Very Much* to *Not at All*. Possible scores range from 5 to 20, with higher scores indicative of a greater perception of mattering. Mattering is accounted for by participant responses to items such as "How important do you feel you are to other people?" and "How interested are people generally in what you have to say?" Haktanir et al. (2016) reported an alpha coefficient of .74 for the GMS among first year college students. For the current study, we calculated a Cronbach's alpha of .81.

Short Grit Scale: We used the Turkish version of the Short Grit Scale (GRIT-S; Sarıçam, Çelik, & O uz, 2016). The GRIT-S was created by Duckworth and Quinn (2009), measuring grit for long-range goals and trait-level perseverance. The Grit-S is a self-report measure consisting of eight items such as "I am a hard worker" and "I often set a goal but later choose to pursue a different one." A 5-point Likert scale ranging from "Very much like me" to "Not like me at all" is used to indicate the degree to which respondents believe each statement reflects their level of grit. Items 1, 3, 5, and 6 are reverse coded. Duckworth and Quinn (2009) indicated that the scale had adequate test-retest reliability (r = .68) after one year and sufficient internal consistency (= .82, .84). Duckworth and Quinn (2009) also determined that self-reporting grit is as reliable as informant reporting. Sarıçam et al. (2016) reported Cronbach alpha coefficient score of .83 for the whole instrument and .68 for test- retest reliability. For the current study, the Grit-S had an internal consistency coefficient of .72.

3.3. Results

The analysis showed that all regression coefficients between the latent variables and items were significant. The lowest and highest factor loadings were between latent variables and

Item 16 (.79) and Item 11 (.94), respectively (see Figure 1). The results of model fit indices showed that the χ^2 was significant for the hypothesized model, $\chi^2(98) = 572.83$, $p < .001$; χ^2/df = 5.84. The fit indices indicated a good fit for the data, GFI = .91, TLI = .95, CFI = .96, RMSEA = .08 (90% CI = .074–.087), and SRMR =.03.

Next, to address evidence of relationships to other variables for the PSCS-S, correlational analysis was conducted with the GRIT-S (Duckworth & Quinn, 2009; Sarıçam et al., 2016) and GMS (Haktanir et al., 2016; Marcus, 1991). Table 3 provides descriptive data and correlations. As this table shows, we found evidence for criterion validity. A statistically significant and positive relationship was found between the perceived school counselor total scores and grit ($r = .08$; $p < .05$) and the general mattering scores ($r = .17$; $p < .05$). Based on this analysis, higher perceived school counselor scores were correlated with higher grit and general mattering scores.
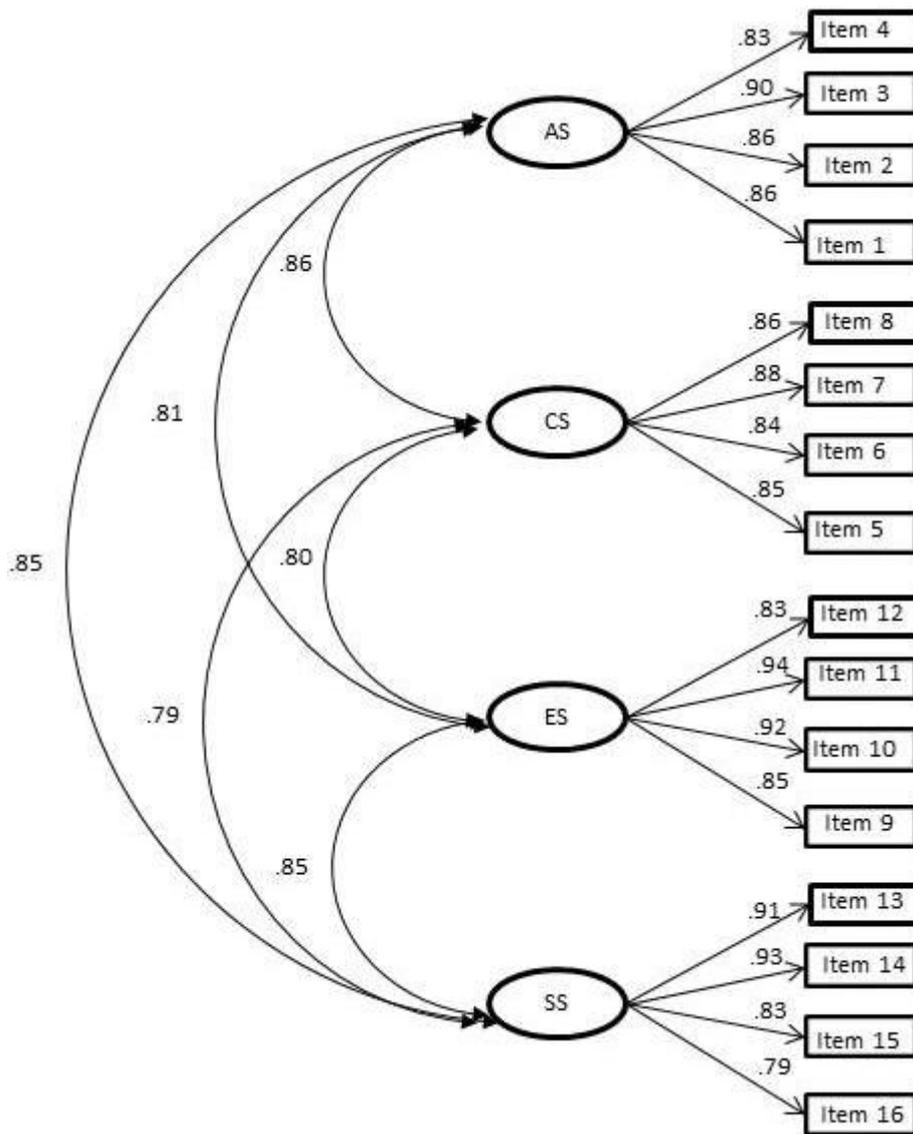
Figure 1. The confirmatory factor analysis model of the Short Perceived School Counselor Support Scale (PSCS-S). The standardized parameter estimates for the PSCS-S are listed. Rectangles indicate the 16 items on the PSCS-S, and ovals represent the 4 latent factors of subscales. Abbreviations represents: CS= Career Support, ES= Emotional Support, SS= Social Support, AS= Academic Support

Table 2. *Correlations between the Subscales, Means (M), and Standard Deviations (SD) of the PSCS*

Scale	*M*		*SD*	1	2	3
1 Career Support	2.43	.94	1.42			
2 Emotional Support	3.27	.95	1.56	.48*		
3 Social Support	2.39	.95	1.45	-.56*	-.52*	
4 Academic Support	2.39	.94	1.39	.63*	.46*	-.63*

Note. PSCS= Perceived School Counselor Support Scale
*p<.01

Table 3. *Means (M), Cronbach's alpha, Correlations between Variables, and Standard Deviations (SD) of Variable Scores of the PSCS-S*

Variable	*M*		*SD*	1	2	3	4	5	6
1. Career Support	3.39	.92	1.23	-	.74*	.74*	.79*	.07	.14*
2. Emotional Support	3.45	.92	1.30		-	.80*	.75*	.09**	.17*
3. Social Support	3.03	.92	1.29			-	.80*	.05	.11*
4. Academic Support	3.11	.88	1.27				-	.08**	.18*
5. Grit	3.30	.72	.69					-	.36*
6. General Mattering	2.91	.81	.71						-

Note. PSCS-S= Perceived School Counselor Support Scale Short Form
* *p*<.01
** *p*<.05

4. DISCUSSION

The purpose of this study was to develop and establish validity evidence for an instrument to assess perceptions of school counselor support among high school students. Because researchers, practitioners, and professional organizations are interested in evaluating students' perceptions of school counselor support (Lapan et al., 2017; Vela, Zamarripa, Balkin, Johnson, & Smith, 2013), having accurate information for measures of perceptions of support advances a school counseling approach by providing researchers and practitioners with information regarding psychometric properties. With the increasing interest in school counseling and different areas of services, there is a need to provide validity evidence for instruments in different languages with high school students.

In today's world, school counselors and the services they provide in terms of academic, career, and social/emotional support have more value. Therefore, contemporary school counseling standards and models are adapted to the needs of the age, such as ASCA's National Model (2003, 2005, 2014a) and the international model for school counseling programs (Fezler & Brown, 2011). Instruments with validity evidence can help researchers, school counselors, and policy makers understand the nature of school counseling and delivering efficient services. We also agree with Lapan et al. (2017) who said that assessments with validity evidence "*give students and their families a way to have a voice and advocate for their needs, to know what to expect….to better understand what kinds of college and career services they should be receiving*" (p. 85).

Researchers (Lapan et al., 2017; Vela et al., 2013) highlighted the lack of instruments with a theoretical approach and validity evidence that measure perceptions of support from school counselors. The current study used ASCA National Model (2003, 2005, 2014a), ASCA Mindsets & Behaviors for Students Success (2014b), and developmental approach to create items and subscales. The ASCA Mindsets & Behaviors for Students Success highlights three broad domains enhancing learning process and creating a culture of college and career readiness. The results of this study supported the theoretical based PSCS long and short forms providing initial and strong evidence based on internal structure and relations to other variables (AERA et al., 2014). Internal consistency estimates on subscales ranged from good to strong. Also, the PA, EFA, and CFA resulted in a 4-factor model (Factor 1, Factor 2, Factor 3, and Factor 4) with 39 items and accounting for 70% of variance. Factor 1, *Career Support,* contained 9 items reflecting students' perceptions of school counselors' support in career development. Factor 2, *Emotional Support,* contained nine items focusing on students' perceptions of emotional support from school counselors. Factor 3, *Social Support,* contained 10 items reflecting students' perceived social support from school counselor(s). Finally, factor

4, *Academic Support*, contained 10 items to reflect students' perceptions of academic support from school counselor(s).

The short form was also created to be practical and efficient for school counselors and researchers. Therefore, two models were created following previous researchers' suggestions (MacCallum et al., 2001; Raubenheimer, 2004). The complex model including four factors with 16 items had a better fit. In terms of scoring of the subscales, both long and short forms have the same scoring methods. The instrument does not have a total score because each factor's score is calculated separately and evaluated in itself. The logic behind this scoring is related to students' aim to visit counseling services or schools. In other words, one can visit a school counselor for academic reasons but not for emotional or social support. Hence, having a total score will not give an accurate assessment of student's perception on school counselors.

Having a psychometrically sound instrument is also related to evidence of validity based on relations with other variables (AERA et al., 2014). Bivariate correlations analyses provided promising support for convergent validity of the PSCS short form with perceptions of mattering and grit. Evidence based on relations to other variables can influence treatment interventions, program services, or allocation of resources. As an example, if school counselors identify that most students perceive lack of emotional support, they will be able to use this information to create more interventions and services to address students' emotional concerns. Given the sources of validity evidence identified in the current study, exploration of the PSCS-S may provide researchers and school counselors with a meaningful and culturally valuable tool to measure perceptions of support in academic, career, social, and emotional domains.

5. IMPLICATIONS for PRACTICE

First, school counselors may find the PSSC-S useful in identifying the extent to which students met specific career, academic, personal, and social development goals. The PSCS-S offers school counselors with a tool to evaluate students' perceptions of counselor support in various domains. School counselors have an important responsibility to provide direct services to high school students in personal, academic, social, and emotional areas (ASCA, 2016). As a result, the PSCS-S offers school counselors with a mechanism to gather students' perceptions of support and facilitate conversations regarding areas of improvement. Second, the PSCS-S might serve as an outcome tool that can provide evidence to school administrators and policy makers with information regarding the effectiveness of school counseling interventions. As one example, results from a survey with high school students might lead to conclusions that although perceptions of emotional support from counselors are high, perceptions of career support is inadequate. School counselors can gather these types of feedback to determine areas of improvement and inform future services and allocation of resources.

5.1. Implications for Future Research

First, researchers should validate the PSCS-S in different languages with other culturally-diverse populations. These areas of scholarship may assist in determining the degree that some items on other versions of this instrument may be useful and whether items need to be revised. Second, investigations identifying relationships between perceptions of counselor support with other constructs would be useful to demonstrate evidence based on relations to other variables (AERA et al., 2014). If researchers provide convergent and predictive evidences between counselor support and other factors, an important body of literature for the PSCS-S might emerge. Other important factors to investigate include high school test scores, college grade point average, mental health, college self-efficacy, and vocational outcome expectations. Next, researchers can use single group pre-test post-test or between-group designs to examine the impact of school counseling programs and services on students' perceptions of counselor support in career, academic, emotional, and social areas. Potential school counseling methods

that could increase perceptions of development include narrative therapy (White & Epston, 1990), positive psychology (Seligman, 2002), and creative journal arts therapy (Vela et al., 2016). Finally, we created and validated Turkish versions of the counselor support scale with high school students. Factor structure can vary by development levels so researchers should conduct a cross-cultural validation of this instrument with middle school students.

5.2. Limitations

Several limitations warrant consideration. First, all data collected in the current investigation came from a non-clinical sample of predominantly Turkish-heritage students from a high school. As a result, validity evidence in the current study is only meaningful if these measures are administered in Turkish with a similar group of high school students. Researchers evaluating factor structure of different versions of the PSCS-S with other populations may provide greater accountability for their perceptions of school counselors. Additionally, findings are not causal (Balkin, 2014) and represent some levels of subjectivity in terms of selecting and developing instrument-items to measure perceptions of school counselor support in academic, social, emotional, and career domains.

6. CONCLUSION

In summary, we sought to develop and examine validity evidence of the PSCS-S with a sample of Turkish high school students. The results indicated that the ASCA National Model and Turkey's developmental model of counseling worked in Turkish culture. The items in the instrument, which were written by authors who are from the US and Turkey, reflected a diverse perspective and supported efforts to create an international model of school counseling (Fezler & Brown, 2011). Results from this study also provide promising support for using the PSCS-S to evaluate students' perceptions of counselor support in academic, career, emotional, and social domains. With instruments with strong validity evidence to measure perceptions of counselor support, school counselors and policy makers may be able to evaluate and improve students' perceived feelings of personal, social, academic, and emotional development. The PSCS-S also can help students become self-aware of their perceptions of school counseling services and evaluate interventions, programs, or services provided by school counselors. Furthermore, in the future, this instrument can be adapted and validated in different languages and cultures to measure students' perceptions of support from their school counselors in academic, career, social, and emotional areas.

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