



Psychometrics of the Youth Internalizing Problems Screener with Turkish adolescents

Gökmen Arslan & Tyler L. Renshaw

To cite this article: Gökmen Arslan & Tyler L. Renshaw (2018): Psychometrics of the Youth Internalizing Problems Screener with Turkish adolescents, International Journal of School & Educational Psychology, DOI: [10.1080/21683603.2018.1459990](https://doi.org/10.1080/21683603.2018.1459990)

To link to this article: <https://doi.org/10.1080/21683603.2018.1459990>



Published online: 10 Aug 2018.



Submit your article to this journal [↗](#)



View Crossmark data [↗](#)

ARTICLE



Psychometrics of the Youth Internalizing Problems Screener with Turkish adolescents

Gökmen Arslan^a and Tyler L. Renshaw^b

^aHope Psychology: Counseling and Development Center, Isparta, Turkey; ^bDepartment of Psychology, Utah State University, Logan, Utah, USA

ABSTRACT

This study presents initial evidence supporting the language adaptation of a brief measure of youths' internalizing problems—the Youth Internalizing Problems Screener (YIPS)—for use with Turkish adolescents within the context of school mental health screening. Results showed that responses to the Turkish version of the YIPS were characterized by a psychometrically sound, single-factor measurement model, and that scores derived from this measure were moderately negatively associated with scores from several school-specific and domain-general well-being measures. Overall, results suggest that responses to the Turkish version of the YIPS may be useful in schools to identify youth with elevated levels of internalizing problems and concurrently poor quality-of-life outcomes, providing a warrant for school-based intervention. Yet further research is needed to probe the direct utility of this measure for classification and treatment purposes in schools.

KEYWORDS

quality of life; subjective well-being; internalizing problems; rating scales; screening

The term “internalizing problems” is used to refer to a broad class of mental health problems characterized by the experience of excessive and aversive private behaviors (i.e., thoughts and feelings) that are directed toward oneself (Achenbach, 1985). The two most common subtypes of internalizing problems among youth are depression and anxiety (Forms, Abad, & Kirchner, 2011). Although depression and anxiety can be understood using psychosocial and psychobiological theories that differ substantially for both types of problems (see Zahn-Waxler, Klimes-Dougan, & Slatterly, 2000 for a review of theoretical approaches), it is the shared core of excessive and aversive thoughts and feelings directed toward the self that gives these problems similar structural features. Despite such similarity, however, they also have key differentiating structural features, with diminished levels of positive affectivity being unique to depression and elevated levels of somatic tension and arousal being unique to anxiety (Clark & Watson, 1991). Recognizing these differences, other theorists have offered a functional and contextual approach for understanding depression and anxiety as similar mental health problems, positing that both are characterized by psychological inflexibility resulting from the same problematic processes: cognitive fusion and experiential avoidance (Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Kashdan & Rottenberg, 2010). No matter which theoretical approach is assumed (structural, functional,

or contextual), it is clear that anxiety and depression share core clinical features and that they often co-occur in youth (Seligman & Ollendick, 1998).

Internalizing problems are usually considered undesirable for their own sake, because they are inherently aversive experiences that people tend to avoid (Hayes et al., 2006). However, internalizing problems are also undesirable for many other reasons, given that they negatively covary with well-being outcomes. For example, research has shown that internalizing problems are associated with poor concurrent and future educational outcomes among youth, such as low academic achievement, high rates of absenteeism, and low graduation rates (Bradley, Doolittle, & Bartolotta, 2008; McLeod & Kaiser, 2004). Studies have also consistently shown that internalizing problems among youth are associated with poor outcomes in the areas of physical health, interpersonal relationships, and other quality-of-life domains (World Health Organization, 2014). Given that internalizing problems are doubly undesirable—as they are both inherently aversive and tend to interfere with well-being—many researchers have recommended increased efforts toward identifying and treating these problems among youth, especially within school settings (Dowdy, Furlong, Eklund, Saeki, & Ritchey, 2010). Providing services targeting internalizing problems within school settings would allow mental health and educational professionals to potentially prevent the onset or exacerbation of such

problems at the population level, leading to increased probabilities that greater numbers of youth will experience greater quality of life and well-being in the future (Albers, Glover, & Kratochwill, 2007; Levitt, Saka, Romanelli, & Hoagwood, 2007).

To date, population-based screening for internalizing problems has yet to become common practice in schools (Bruhn, Woods-Grove, & Huddle, 2014). Although there is evidence to suggest that this technique may be useful, there are several barriers preventing schools from sponsoring mental health screening initiatives. One of the most common barriers is the lack of contextually appropriate, technically sound, and usable instruments for carrying out screening in school settings (Glover & Albers, 2007). So far, the majority of scholarly work in this area has focused on validating the latent structure and classification utility of informant-report behavior rating scales for use in primary schools (e.g., Cook et al., 2011; Eklund & Dowdy, 2014), with much less empirical attention focused on self-report instruments that are efficient and effective for use in secondary school settings (Renshaw & Cook, 2016). Additionally, the majority of screening-related research has been conducted in English-speaking nations (e.g., Erhart et al., 2009; Furukawa, Kessler, Slade, & Andrews, 2003), with far fewer studies being conducted in other areas of the world. Thus, mental health screening measures for use with youth and in schools are often unavailable in many international contexts. Given the relationship among internalizing problems and poor quality-of-life outcomes has been found among youth worldwide (World Health Organization, 2014), not only in English-speaking nations, there is a warrant for research that aims to develop and validate measures of internalizing problems that might be used with youth in school settings around the world.

The purpose of the present study was to address this scholarly and practical need by (a) creating a language adaptation of an English screener targeting internalizing problems—the Youth Internalizing Problems Screener (YIPS; Renshaw & Cook, 2016)—for use with youth in Turkey, and then (b) investigating the technical adequacy of responses to this measure when used within an analog school mental health screening framework with Turkish adolescents. Similar to trends in the United States and internationally, research has demonstrated that internalizing problems are one of the most common mental health concerns for Turkish youth—and that these problems are likewise associated with various undesirable educational and quality-of-life outcomes with this cultural context (Araş, Ünlü, & Taş, 2007; Eskin, Ertekin, Harlak, & Dereboy, 2008; Özfirat, Pehlivan, & Özdemir, 2009).

Currently, the most common self-report instrument used for measuring youth internalizing problems in Turkey is the Strengths and Difficulties Questionnaire (SDQ; Goodman, 2001). The SDQ consists of 20 items, yet only one subscale with 5 items—the Emotional Symptoms Scale—targets internalizing problems. Research investigating the psychometric properties of the SDQ with Turkish adolescents has shown that the ESS has adequate internal reliability and concurrent validity with criterion variables (Güvenir et al., 2008; Yalın, Özbek, Güvenir, & Baydur, 2013). That said, no other research into other potentially viable screeners has been undertaken with Turkish youth—and thus the present study was conducted in an attempt to establish initial validity evidence for another instrument that might prove useful for screening internalizing problems in Turkish schools.

We hypothesized that the Turkish adaptation of the YIPS (hereafter referred to as the YIPS-T) would yield responses indicating a sound single-factor measurement model (representing overall internalizing problems) and that scores derived from this measure would show moderately negative associations with both school-specific and domain-general subjective well-being indicators. Both types of concurrent well-being indicators were chosen, given that previous research with Turkish youth has indicated that internalizing problems are correlated with both school-specific and domain-general well-being outcomes (e.g., Araş et al., 2007; Eskin et al., 2008; Özfirat et al., 2009). Ultimately, we anticipated that findings congruent with these hypotheses would provide preliminary evidence in support of using the YIPS-T to identify youth who were experiencing both elevated internalizing problems and concurrently poor quality-of-life outcomes, which would offer an initial empirical warrant for the provision of intervention and supports to youth with internalizing problems in Turkish schools.

Method

Participants

Participants were 284 adolescents (55.3% female) enrolled in Grades 6–11 in two public schools in a small city in Turkey. The participants ranged in age from 11 to 18 years old ($M = 15.11$, $SD = 1.68$). All participants identified as having the same ethnic background (i.e., Turkish), yet their socioeconomic status (SES) varied across classes (low SES = 34.9%, middle SES = 35.2%, high SES = 29.9%). All participants completed a paper-and-pencil survey during school hours, which included demographic items, the YIPS-T, and several subjective well-being measures to

gauge quality of life (describe below). Completion of all measures took approximately 25 min across participants.

Measures

Youth Internalizing Problems Screener (YIPS)

The YIPS is comprised of 10 self-report items that can be summed to create an overall internalizing problems score (Renshaw & Cook, 2016). All items are directly phrased (e.g., “I feel nervous or afraid”), requiring no reverse scoring, and are arranged along a 4-point, relative frequency-based response scale (1 = *almost never*, 2 = *sometimes*, 3 = *often*, 4 = *almost always*). Previous research demonstrates that responses to the YIPS demonstrate a single-factor measurement model and strong internal consistency reliability ($\alpha \geq .82$). Findings have also shown that scores derived from the YIPS have good-to-excellent classification accuracy for discriminating between students with depression and anxiety caseness, with YIPS scores ≥ 21 being used to identify students experiencing clinical-level internalizing problems (Renshaw & Cook, 2016).

For the purposes of this study, a language adaptation of the English version of the YIPS was created by translating the measure into Turkish using a process consonant with the International Test Commission (2005) guidelines for adapting tests. First, the English version of the measure was sent to three independent language experts studying counseling psychology in Turkey, who then translated the measure into Turkish. Following, the Turkish version of the YIPS was provided to two additional language experts, who reviewed the wording of the measure for readability considerations. The Turkish version of the YIPS was then translated back into English by two additional language experts, after which another expert compared the validity of the back-translation with the original English version of the measure. Following this translation validation process, the Turkish version of the YIPS was deemed to be an adequate language adaptation of the English version of the measure. Like the original measure, the YIPS-T included 10 items arranged along the same 4-point response scale. Although the English version of the items is presented herein (see Table 1), a copy of the Turkish version of the measure can be obtained by contacting the first author.

Satisfaction With Life Scale (SWLS)

The SWLS is a 5-item self-report scale for measuring one’s general life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985). All items are worded positively (e.g., “In most ways my life is close to my ideal” and “I am satisfied with my life”), requiring no reverse scoring, and are arranged along a 7-point response scale (1 = *strongly agree*, 2 = *disagree*, 3 = *slightly disagree*, 4 = *neither agree*

Table 1. YIPS-T factor loadings, indicator reliabilities, and average interitem correlations.

Items	Domain	λ	ℓ^2	r
1. I feel nervous or afraid.	Anxiety	.54	.29	.51
2. I feel very tired and drained of energy.	Depression	.63	.40	.60
3. I find it hard to relax and settle down.	Anxiety	.61	.37	.58
4. I get bothered by things that didn’t bother me before.	Depression	.70	.49	.66
5. I have uncomfortable and tense feelings in my body.	Anxiety	.78	.61	.71
6. I feel moody or grumpy.	Depression	.72	.52	.66
7. I feel like I’m going to panic or think I might lose control.	Anxiety	.57	.33	.55
8. I do not really enjoy doing anything anymore.	Depression	.64	.40	.60
9. I feel worthless or lonely when I’m around other people.	Depression	.74	.54	.67
10. I have headaches, stomachaches, or other pains.	Anxiety	.52	.27	.49

Note. λ = factor loading, ℓ^2 = indicator reliability, r = average interitem correlation.

nor disagree, 5 = *slightly agree*, 6 = *agree*, 7 = *strongly agree*). Previous research demonstrates that responses to the SWLS are characterized by a single-factor measurement model and have strong internal consistency (Diener et al., 1985). For the purposes of the present study, a preexisting Turkish adaptation of the SWLS (referred to hereafter as the SWLS-T) was used, which has also been shown to have strong internal consistency reliability (Köker, 1991). The internal reliability of the SWLS-T with the present sample was also observed to be strong ($\alpha = .83$).

UCLA Loneliness Scale (ULS)

The ULS is comprised of 20 self-report items for measuring feelings of subjective loneliness (Russell, Peplau, & Cutrona, 1980). Eleven of its items are worded to directly assess loneliness (e.g., “I lack companionship”), whereas the other items are worded to indirectly assess loneliness (e.g., “I feel in tune with the people around me”) and therefore require reverse scoring. All ULS items are arranged along the same 4-point response scale (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*). Previous research demonstrates that responses to the ULS are characterized by a sound measurement model and strong internal consistency (Russell et al., 1980). For the purposes of the present study, a preexisting Turkish adaptation of a briefer, 8-item version of the ULS (Hays & DiMatteo, 1987) was used (referred to hereafter as the ULS-T), which has also demonstrated sound psychometric properties (Yıldız & Duy, 2014). The internal reliability of the ULS-T with the present sample was observed to be adequate-to-strong ($\alpha = .79$).

Students Subjective Well-Being Questionnaire (SSWQ)

The Student Subjective Well-Being Questionnaire (SSWQ) is a 16-item self-report scale for measuring students' school-specific subjective well-being (Renshaw, Long, & Cook, 2015). The SSWQ is comprised of four, 4-item subscales: school connectedness (SC), educational purpose (EP), joy of learning (JL), and academic efficacy (AE). Subscale scores can also be summed to produce an total student well-being (TSW) scale. All items for all subscales are directly worded to assess the constructs of interest (e.g., "I am a successful student" and "I get excited about learning new things in class") and are arranged along the same 4-point response scale (1 = *almost never*, 2 = *sometimes*, 3 = *often*, 4 = *almost always*). Previous research has demonstrated that responses to the SSWQ are characterized by a consistent multidimensional measurement model and strong internal reliability (Renshaw, 2015; Renshaw & Chenier, 2016). For the purposes of the present study, a preexisting Turkish adaptation of the SSWQ (referred to hereafter as the SSWQ-T) was used, which has also demonstrated technical adequacy (Arslan & Renshaw, 2017; Renshaw & Arslan, 2016). The internal reliability of the SSWQ-T with the present sample was observed to be strong (SC $\alpha = .83$, JL $\alpha = .80$, EP $\alpha = .82$, AE $\alpha = .85$, TSW $\alpha = .92$).

School Belongingness Scale (SBS)

Unlike the other measures described above, the School Belongingness Scale (SBS) was developed specifically for the purpose of assessing sense of belonging at school among Turkish adolescents (Arslan & Duru, 2016), and therefore no language adaptation was necessary in previous studies. The SBS is comprised of 10 items that represent two subscales: school exclusion and school acceptance. All items are directly worded to assess the constructs of interest (e.g., "I think that I am not involved in most of the activities at school" and "I feel that I am accepted by other people at school") and are arranged along a 4-point response scale (1 = *almost never*, 2 = *sometimes*, 3 = *often*, 4 = *almost always*). Results from previous research demonstrate that responses to the SBS have sound psychometric properties (Arslan & Duru, 2016). The internal reliability of the SBS with the present sample was observed to be strong ($\alpha = .84$).

Data analyses

To probe the structural validity of responses to the YIPS-T, confirmatory factor analysis (CFA) was conducted using the maximum likelihood estimator. Factor loadings (λ) $\geq .50$ were considered to be strong, as they account for $\geq 25\%$ of the variance extracted

from each item by the latent factor. A combination of fit indices and their associated decision rules were used to evaluate data-model fit. Comparative fit index (CFI) values ranging .90-.95 as well as root mean square error of approximation (RMSEA) values and standardized root mean square residual (SRMR) values of .05-.08 were taken to indicate adequate data-model fit. CFI values $> .95$ as well as RMSEA and SRMR values $< .05$ were taken to indicate good data-model fit (Kenny, 2015; Kline, 2016). Latent construct reliability coefficients (H) $\geq .70$, which are analogous to internal consistency coefficients derived at the level of observed scores, were also considered desirable (Mueller & Hancock, 2008). After demonstrating the structural validity of responses to the YIPS-T, descriptive analyses were conducted to explore the observed characteristics of scores derived from the measure.

Prior to proceeding to the concurrent validity analyses, descriptive analyses were also conducted on the observed scores for all other measures used in the present study, to check the assumptions of internal consistency reliability and relative normality of response distributions. Next, the association of YIPS-T scores with concurrent subjective well-being outcomes was investigated using two phases of analyses. First, a series of bivariate correlations was conducted, associating YIPS-T scores with the five school-specific well-being scores derived from the SSWQ-T (i.e., school connectedness, joy of learning, academic efficacy, educational purpose, and total student well-being). The magnitude of these correlations was evaluated using traditional effect size ranges for Pearson r , as recommended by Cohen (1988): .10-.29 = small, .30-.49 = medium, .50 or more = large. Second, a series of independent samples t -tests was conducted, examining the differences in other well-being scores (i.e., school belongingness, life satisfaction, and loneliness) as a function of internalizing problems caseness. In the present study, such caseness was defined using the recommended YIPS cutoff score (≥ 21) for identifying clinical-level internalizing problems (case group = met or exceeded cutoff score; noncase group = did not meet cutoff score of 21). The magnitude of these between-group differences was evaluated using traditional effect-size ranges for standardized mean differences (Cohen's d or Hedge's g), as recommended by Cohen (1988): .20-.49 = small, .50-.79 = medium, .80 or more = large. All data analyses were conducted using SPSS and AMOS version 22.

Results

Findings from the baseline CFA for the YIPS-T measurement model, which structured each of the 10 items

as indicators of a single latent factor (representing overall internalizing problems), indicated good data-model fit: $\chi^2 = 89.586$, $df = 35$, $p = .00$; SRMR = .044, RMSEA [90% CI] = .074 [.055-.093], TLI = .93, CFI = .95. Factor loadings (λ) from this CFA were generally strong, ranging .52-.78, with robust indicator reliabilities (ℓ^2), ranging from .27 to .61 (see Table 1). The latent construct reliability coefficient for the internalizing problems factor was also strong, $H = .89$. Taken together, these findings provide structural validity evidence in favor of the YIPS-T as a brief, unidimensional measure of Turkish youths' internalizing problems. Thus, observed scale scores derived from the YIPS-T were examined, with results showing that scale scores were relatively normally distributed with strong internal consistency (see Table 2). Descriptive characteristics of scale scores for all other measures used in the present study (described above) were also calculated at this time, with findings indicating that responses to all instruments yielded relatively normal distributions (see Table 2). After probing these assumptions, it was deemed appropriate to conduct the concurrent validity analyses.

Results from the series of bivariate correlations conducted between YIPS-T observed scores and all SSWQ-T scale scores indicated moderately negative associations between internalizing problems and concurrent school-specific subjective well-being outcomes: school connectedness ($r = -.34$, $p < .001$), joy of learning ($r = .32$, $p < .001$), educational purpose ($r = -.30$, $p < .001$), academic efficacy ($r = -.35$, $p < .001$), and total student well-being ($r = -.41$, $p < .001$). Furthermore, findings from the series of independent samples t -tests indicated substantial differences between youth classified as internalizing cases (YIPS-T scores ≥ 21) and noncases (YIPS-T scores < 21), which were characterized by statistically significant effects with moderate-to-large effect sizes, for each of the other concurrent subjective well-being outcomes: school belongingness,

Table 2. Observed scale characteristics for all study measures.

Scale	Items	<i>M</i>	<i>SD</i>	Min.	Max.	Skew.	Kurt.	α
YIPS-T	10	20.69	7.03	10	4	.60	-.08	.88
SWLS-T	5	23.33	7.07	5	35	-.50	-.05	.83
ULS-T	8	15.39	5.14	8	32	.81	.62	.79
SBS	10	31.53	6.12	13	40	-.36	-.72	.84
SSWQ-T								
SC	4	12.54	3.06	4	16	-.79	.03	.82
JL	4	12.51	2.93	4	16	-.73	-.03	.80
EP	4	13.35	2.76	4	16	-1.02	.36	.82
AE	4	12.65	2.69	4	16	-.61	-.14	.85
TSW	16	51.40	9.32	16	64	-.77	.17	.92

Note. YIPS-T = Youth Internalizing Problems Screener-Turkish version, SWLS = Satisfaction With Life Scale-Turkish version, ULS-T = UCLA Loneliness Scale-Turkish version, SBS = School Belongingness Scale, SSWQ-T = Student Subjective Wellbeing Questionnaire-Turkish version, SC = School Connectedness, JL = Joy of Learning, EP = Educational Purpose, AE = Academic Engagement, TSSW = Total Student WellBeing.

Table 3. Between-group comparisons for analog classification utility.

Measure	<i>t</i>	<i>df</i>	<i>p</i>	<i>M</i> diff.	<i>g</i> [95% CI]
SWLS-T	-5.398	221	< .001	-4.585	.68 [-.14, 1.50]
ULS-T	5.459	244	< .001	3.386	.70 [.09, 1.30]
SBS	-7.125	283	< .001	-4.774	.84 [-.19, 1.50]

Note. SWLS = Satisfaction With Life Scale-Turkish Version, ULS-T = UCLA Loneliness Scale-Turkish Version, SBS = School Belongingness Scale.

life satisfaction, and loneliness (see Table 3). Taken together, these results provide initial evidence in support of using the YIPS-T to identify youth who are experiencing both elevated internalizing problems and concurrent poor quality-of-life outcomes, providing a warrant for the provision of intervention and supports in school settings.

Discussion

Given the importance of internalizing problems and the need for brief measures that could be used in schools around the world to identify youth experiencing these problems, the purpose of the present study was to create a language adaption of the YIPS (Renshaw & Cook, 2016) for use with youth in Turkey—and then to investigate the technical adequacy of responses to this measure within an analog school mental health screening framework in Turkish schools. Similar to trends in the United States and internationally, research has demonstrated that internalizing problems are one of the most common mental health concerns for Turkish youth—and that these problems are likewise associated with various undesirable educational and quality-of-life outcomes within this cultural context (Araş et al., 2007; Eskin et al., 2008; Özfirat et al., 2009). We hypothesized that the Turkish adaptation of the YIPS (YIPS-T) would yield responses indicating a sound single-factor measurement model (representing overall internalizing problems) and that scores derived from this measure would show moderately negative associations with both school-specific and domain-general subjective well-being indicators. Ultimately, we anticipated that findings congruent with these hypotheses would provide preliminary evidence in support of using the YIPS-T to identify youth who were experiencing both elevated internalizing problems and concurrently poor quality-of-life outcomes, which would offer an initial empirical warrant for the provision of intervention and supports to youth with internalizing problems in Turkish schools.

Results from the present study provide positive support for our hypotheses, showing that responses to the YIPS-T were characterized by a psychometrically sound one-factor measurement model, and that observed scores derived from this measure did indeed have moderate negative

associations with both school-specific and domain-general well-being indicators. On the whole, then, results from the present study can be considered promising, as they provide positive empirical support for both (a) the use of the YIPS–T as a brief measure of Turkish adolescents internalizing problems and (b) the strength and directionality of the relationship between Turkish youths' internalizing problems and other valued quality-of-life outcomes. These findings are congruent with and affirm previous research supporting the technical adequacy of the English version of the YIPS (Renshaw & Cook, 2016) as well as the larger body of scholarship demonstrating the negative association between internalizing problems and well-being among Turkish youth (e.g., Araş et al., 2007; Eskin et al., 2008; Özfırat et al., 2009) and youth internationally (World Health Organization, 2014). It therefore seems reasonable to suggest that the YIPS–T may be another useful instrument (in addition to the SDQ, as mentioned above) for identifying adolescents with elevated internalizing problems in Turkish schools. Future research is therefore warranted to directly explore the relative validity of responses to the YIPS–T compared with responses to the Turkish version of the SDQ. Additionally, given the psychometrically sound measurement model observed for the YIPS–T in the present study, additional research could be conducted to explore language adaptations of this measure within other cultural contexts that are likewise lacking empirically supported school-based mental health screeners.

Despite such promising findings, it is important to recognize the preliminary nature and methodological limitations of the present study. One of the primary limitations is the potential lack of generalizability to the broader population of Turkish youth, given that the sample was composed of adolescents from two schools located in a single small town in Turkey. Larger and more representative studies are therefore warranted to replicate and generalize these findings to Turkish youth more broadly. Additionally, this study was also likely limited by relying on self-report as the singular source of data, suggesting the possibility of common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Considering that quality of life and well-being indicators can be sourced through various other data collection methods, including informant-report measures (e.g., teacher ratings of student functioning) and objective performance measures (e.g., student academic achievement scores), future research is warranted to substantiate the relationships observed herein using a broader methodological repertoire of student well-being measures. Lastly, given that the present study was only a screening analogue and did not actually assign identified participants to either (a) additional assessment or (b) intervention as a function of screening classification,

the actual clinical utility of scores derived from the YIPS–T in practice is currently unknown. Thus, future research is warranted to test the applied classification and treatment utility of YIPS–T scores in practice. Until such research is accomplished, we suggest that this measure be adopted for practical purposes only with proper caution.

About the authors

Gökmen Arslan, PhD, works at Hope Psychology: Counseling and Development Center in Turkey. His research interests are centered on measuring and improving youths' psychological functioning in school settings.

Tyler L. Renshaw, PhD, is an Assistant Professor in the School Psychology Program within the Department of Psychology at Utah State University. His research interests are broadly focused on developing and validating measurement and intervention methods for promoting youths' well-being and mental health in schools.

References

- Achenbach, T. M. (1985). *Assessment and taxonomy of child and adolescent psychopathology*. Thousand Oaks, CA: Sage.
- Albers, C. A., Glover, T. A., & Kratochwill, T. R. (2007). Where are we, and where do we go now? Universal screening for enhanced educational and mental health outcomes. *Journal of School Psychology, 45*, 257–263. doi:10.1016/j.jsp.2006.12.003
- Araş, Ş., Ünlü, G., & Taş, F. V. (2007). Çocuk ve ergen psikiyatrisi polikliniğine başvuran hastalarda belirtiler, tanımlar ve tanıya yönelik incelemeler [Symptoms, diagnoses and diagnostic procedures of patients who presented to the child and adolescent psychiatry outpatient clinic]. *Klinik Psikiyatri Dergisi, 10*(1), 28–37.
- Arslan, G., & Duru, E. (2016). Initial development and validation of the school belongingness scale. *Child Indicators Research*. [Advance online publication] doi:10.1007/s12187-016-9414-y
- Arslan, G., & Renshaw, T. L. (2017). Student subjective well-being as a predictor of adolescents' problem behaviors: A comparison of first-order and second-order factor effects. *Child Indicators Research*. [Advance online publication] doi:10.1007/s12187-017-9444-0
- Bradley, R., Doolittle, J., & Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education, 17*(1), 4–23. doi:10.1007/s10864-007-9058-6
- Bruhn, A. L., Woods-Groves, S., & Huddle, S. (2014). A preliminary investigation of emotional and behavioral screening practices in K–12 schools. *Education & Treatment of Children, 37*, 611–634. doi:10.1353/etc.2014.0039
- Clark, L. A., & Watson, D. (1991). Tripartite model of anxiety and depression: Psychometric evidence and taxonomic implications. *Journal of Abnormal Psychology, 10*, 316–336. doi:10.1037/0021-843X.100.3.316

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cook, C. R., Rasetshwane, K. B., Truelson, E., Grant, S., Dart, E. H., Collins, T. A., & Sprague, J. (2011). Development and validation of the student internalizing behavior screener: Examination of reliability, validity, and classification accuracy. *Assessment for Effective Intervention, 36*, 71–79. doi:10.1177/1534508410390486
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*, 71–75. doi:10.1207/s15327752jpa4901_13
- Dowdy, E., Furlong, M., Eklund, K., Saeki, E., & Ritchey, K. (2010). Screening for mental health and wellness: Current school based practice and emerging possibilities. In B. Doll, W. Pfohl, & J. Yoon (Eds.), *Handbook of youth prevention science* (pp. 70–95). New York, NY: Routledge.
- Eklund, K., & Dowdy, E. (2014). Screening for behavioral and emotional risk versus traditional school identification methods. *School Mental Health, 6*, 40–49. doi:10.1007/s12310-013-9109-1
- Erhart, M., Ottova, V., Gaspar, T., Jericek, H., Schnohr, C., Alikasifoglu, M., Morgan, A. & Ravens-Sieberer, & the HBSC Positive Health Focus Group. (2009). Measuring mental health and well-being of school-children in 15 European countries using the KIDSCREEN-10 Index. *International Journal of Public Health, 54*, S160–S166. doi:10.1007/s00038-009-5407-7
- Eskin, M., Ertekin, K., Harlak, H., & Dereboy, Ç. (2008). Prevalence of and factors related to depression in high school students. *Turkish Journal of Psychiatry, 19*(4), 382–389.
- Forms, M., Abad, J., & Kirchner, T. (2011). Internalizing and externalizing problems. In R. J. R. Levesque (Ed.), *Encyclopedia of adolescence* (pp. 1464–1489). New York, NY: Springer.
- Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G. (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian National survey of mental health and well-being. *Psychological Medicine, 33*, 357–362. doi:10.1017/S0033291702006700
- Glover, T. A., & Albers, C. A. (2007). Considerations for evaluating universal screening instruments. *Journal of School Psychology, 45*, 117–135. doi:10.1016/j.jsp.2006.05.005
- Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal Of The American Academy Of Child & Adolescent Psychiatry, 40*, 1337–1345. doi: 10.1097/00004583200111000-00015
- Görker, I., Korkmazlar, Ü., Durukan, M., & Aydoğdu, A. (2004). Çocuk ve ergen psikiyatri kliniğine başvuran ergenlerde belirti ve tanı dağılımı [Symptoms and diagnoses of first-time adolescent applications to a child and adolescent psychiatry out-patient clinic]. *Klinik Psikiyatri Dergisi, 7*(2), 103–110.
- Güvenir, T., Özbek, A., Baykara, B., Arkar, H., Sentürk, B., & Incekas, S. (2008). Psychometric properties of the Turkish version of the strengths and difficulties questionnaire (SDQ). *Cocuk Ve Genclik Ruh Sagligi Dergisi, 15*(2), 65–74.
- Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour Research and Therapy, 44*, 1–25. doi:10.1016/j.brat.2005.06.006
- Hays, R. D., & DiMatteo, M. R. (1987). A short-form measure of loneliness. *Journal of Personality Assessment, 51*(1), 69–81. doi:10.1207/s15327752jpa5101_6
- International Test Commission. (2005). International guidelines on test adaptation. Retrieved from https://www.intest.com.org/files/guideline_test_adaptation.pdf
- Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review, 30*, 865–878. doi:10.1016/j.cpr.2010.03.001
- Kenny, D. A. (2015). *Measuring model fit in structural equation modeling*. Retrieved from www.davidakenny.net/cm/fit.htm
- Kline, R. B. (2016). *Principles and practices of structural equation modeling* (4th ed.). New York, NY: Guilford.
- Köker, S. (1991). *Normal ve sorunlu ergenlerin yaşam doyumu düzeylerinin karşılaştırılması* (Master's thesis). Ankara University, Ankara, Turkey.
- Levitt, J. M., Saka, N., Romanelli, L. H., & Hoagwood, K. (2007). Early identification of mental health problems in schools: The status of instrumentation. *Journal of School Psychology, 45*, 163–191. doi:10.1016/j.jsp.2006.11.005
- McLeod, J. D., & Kaiser, K. (2004). Childhood emotional and behavioral problems and educational attainment. *American Sociological Review, 69*, 636–658. doi:10.1177/000312240406900502
- Mueller, R. O., & Hancock, G. R. (2008). *Best Practices in Structural Equation Modeling*. In J. Osborne (Ed.), *Best practices in quantitative methods* (pp. 488–508). Thousand Oaks, CA: Sage. doi:10.4135/9781412995627.d38
- Özfirat, Ö., Pehlivan, E., & Özdemir, F. Ç. (2009). Malatya il merkezindeki lise son sınıf öğrencilerinde depresyon prevalansı ve ilişkili faktörler [Depression prevalence and related factors in the last-phase high-school students in the centre of Malatya]. *Turgut Özal Tıp Merkezi Dergisi, 16*(4), 247–255.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal Of Applied Psychology, 88*, 879–903. doi: 10.1037/0021-9010.88.5.879
- Renshaw, T. L. (2015). A replication of the technical adequacy of the student subjective wellbeing questionnaire. *Journal of Psychoeducational Assessment, 33*, 757–768. doi:10.1177/0734282915580885
- Renshaw, T. L., & Arslan, G. (2016). Psychometric properties of the student subjective wellbeing questionnaire with Turkish adolescents: A generalizability study. *Canadian Journal of School Psychology, 31*, 139–151. doi:10.1177/0829573516634644
- Renshaw, T. L., & Chenier, J. S. (2016). Further validation of the student subjective wellbeing questionnaire: Comparing first-order and second-order factor effects on actual school outcomes. *Journal of Psychoeducational Assessment*. [Advance online publication] doi:10.1177/0734282916678494
- Renshaw, T. L., & Cook, C. R. (2016). Initial development and validation of the youth internalizing problems screener. *Journal of Psychoeducational Assessment*. [Advance online publication] doi:10.1177/0734282916679757
- Renshaw, T. L., Long, A. C. J., & Cook, C. R. (2015). Assessing adolescents' positive psychological functioning

- at school: Development and validation of the student subjective wellbeing questionnaire. *School Psychology Quarterly*, 30, 534–552. doi:[10.1037/spq0000088](https://doi.org/10.1037/spq0000088)
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA loneliness scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39, 472–480. doi:[10.1037/0022-3514.39.3.472](https://doi.org/10.1037/0022-3514.39.3.472)
- Seligman, L. D., & Ollendick, T. H. (1998). Comorbidity of anxiety and depression in children and adolescents: An integrative review. *Clinical Child and Family Psychology Review*, 1, 125–144. doi:[10.1023/A:1021887712873](https://doi.org/10.1023/A:1021887712873)
- World Health Organization. (2014). *Health for the world's adolescents*. Available from www.who.int
- Yalın, Ş., Özbek, A., Güvenir, T., & Baydur, H. (2013). The advanced psychometric properties of the Turkish Strengths and Difficulties Questionnaire (SDQ). *Turkish Journal of Child and Adolescent Mental Health*, 20(1), 23–32.
- Yildiz, M. A., & Duy, B. (2014). Adaptation of the short-form of the UCLA loneliness scale (ULS-8) to Turkish for the Adolescents. *Dusunen Adam*, 27(3), 194–203. doi:[10.5350/DAJPN2014270302](https://doi.org/10.5350/DAJPN2014270302)
- Zahn-Waxler, C., Klimes-Dougan, B., & Slatterly, M. J. (2000). Internalizing problems of childhood and adolescence: Prospects, pitfalls, and progress in understanding the development of anxiety and depression. *Development and Psychopathology*, 12, 443–466. doi:[10.1017/S0954579400003102](https://doi.org/10.1017/S0954579400003102)