

Psychometric Properties of the Turkish Young-Rygh Avoidance Inventory

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Coping styles such as overcompensation and avoidance are attempts that developed as survival mechanisms in difficult childhood environments. The objective of this study is to examine the psychometric properties of the Turkish version of the Young-Rygh Avoidance Inventory (YRAI). The sample ($n = 1,555$) randomly split into two groups to run principal component and confirmatory factor analyses (CFA). A parallel analysis was run to determine the factor number. CFA was carried out with maximum likelihood estimation robust method. Eight factors with 30 items were the final form of the Turkish YRAI. Cronbach alpha levels of each factor and inter-correlations with the Turkish Young Schema Questionnaire, Symptom Check List-90 revised, Beck Depression Inventory, and Beck Anxiety Inventory were calculated. Internal consistency analysis revealed acceptable coefficients. As to convergent validity, the correlational analysis showed statistically significant coefficients. Overall, the Turkish YRAI was found to have acceptable levels of reliability and validity.

Keywords: schema therapy; The Turkish Young-Rygh avoidance inventory; psychometric properties; coping strategies

Young's schema-focused theory conceptualizes early maladaptive schemas (EMSs) as broad, pervasive themes or patterns that are comprised of memories, emotions, cognitions, and bodily sensations regarding oneself and one's relationships with others (Rafaeli et al., 2011; Young, 1990). They generally develop in childhood or adolescence and are functional in terms of providing adjustment to one's family/environment and act as a template for processing and defining later behaviors, thoughts, feelings, and relationships. On the other hand, these schemas might become maladaptive in later life because they are rigid and resistant to change (Young & Gluhoski, 1996; Young et al., 2003).

From this theoretical framework, Young et al. (2003) also suggest that patients develop maladaptive coping styles and responses early in life in order to adapt to schemas, so that they do not have to experience the intense, overwhelming emotions that schemas usually engender. According to this model, these maladaptive styles are categorized as overcompensation, avoidance, and surrender. These correspond to the three basic responses that all organisms generate in order to

deal with threats: fight, flight, and freeze. In the context of childhood, an EMS represents the presence of a threat. The threat is the frustration of one of the child's core emotional needs (for secure attachment, autonomy, free self-expression, spontaneity and play, or realistic limits). These coping styles are usually adaptive in childhood and can be viewed as healthy survival mechanisms (Rafaeli et al., 2011). But they become maladaptive as the child grows older; because the coping styles continue to perpetuate the schema even when the conditions change and the individual has more promising options. Young et al. (2003) defined the "Schema Avoidance" as a coping style arranging life to prevent schema activations. Namely, individuals attempt to live without awareness, as though schema does not exist. They block images, thoughts, feelings, and avoid situations that are likely to trigger EMSs (Young et al., 2003).

The aforementioned theoretical suggestions have drawn attention to the need for enclosing the avoidance dimension in schema assessment protocols. Accordingly, Young and Rygh (1994) developed a schema questionnaire to evaluate schema avoidance [Young-Rygh Avoidance Inventory (YRAI)] including items relating to behavioral reactions in response to the experience of negative affect (i.e., avoidance of the processing of threatening information through cognitive, emotional, behavioral, or somatic means).

To our knowledge, a very limited number of studies have been conducted to investigate the psychometric properties of this questionnaire (e.g., Alfasfos, 2009; Grutschpalk, 2009; Luck et al., 2005; Sheffield et al., 2009; Soleimani-Sefat, et al., 2017; Spranger et al., 2001). The study of Luck et al. (2005) showed that the YRAI had two factors—behavioral/somatic avoidance and cognitive/emotional avoidance. They reported significant differences between clinical and nonclinical samples as a discriminative power of these subscales. The study of Sheffield et al. (2009) indicated some further evidence for the reliability and validity of the YRAI. Their findings revealed that the clinical group scored significantly higher than the nonclinical group on the YRAI behavioral/somatic avoidance scale, but lower on the YRAI cognitive/emotional avoidance scale. They suggested that behavioral-somatic avoidance is the more dysfunctional avoidance strategy measured by the YRAI, whereas cognitive-emotional avoidance is a more adaptive way of dealing with affect. However, further studies that were carried out by Grutschpalk (2009) and Alfasfos (2009) had not found out such an integrative factor structure for the questionnaire. They reported acceptable reliability for only 3 of the 14 subscales: denial of unhappiness, psychosomatic symptom, and withdrawal from people. These authors suggested that the YRAI should be modified to improve its utilization for research purposes. The study of Soleimani-Sefat et al. (2017), which examined the Persian version of the inventory on a university sample, exhibited more promising findings in terms of factorial structure and convergent-divergent validity. They reported eight factors as follows: isolation, substance abuse, denied dissatisfaction, rationality and extreme control, passively blocking troublesome excitement, psychotic symptoms, distraction, and denying internal experiences.

To provide the groundwork for schema therapy practice and facilitate the use of the inventories in schema-focused research in Turkey, we have conducted a series of psychometric studies including all Schema Inventories (e.g., Karaosmanoğlu et al., 2013; Soygüt et al., 2008, 2009). As a furtherance of our previous research, we designed this study to preliminarily establish the psychometric validity and reliability of the Turkish version of the YRAI in a clinical sample to enhance valuable insight for both clinical and research settings. Our study sought to answer the following question: what are the psychometric properties of the Turkish version of the YRAI in a clinical sample? Our hypotheses were (a) the Turkish version of the YRAI was expected to have good psychometric properties, (b) the Turkish YRAI was expected to exhibit similar factor structure with the original YRAI, and (c) the scale was expected to exhibit significant positive correlations with other measures regarding psychological symptoms and EMSs.

METHOD

Participants

The participants consisted of 1,555 patients (1,090 females and 465 males) who applied to a psychotherapy center for treatment. Study data were collected throughout 2014 to 2019. The group's mean age was 32.88 years ($SD = 7.78$, range = 18–60). One hundred and sixty-six participants did not answer the question about their age but since the psychotherapy center was for adults, we know that these participants were over the age of 18. Psychiatric symptoms were assessed with the Symptom Checklist-90 (Derogatis, 1977), Beck Depression Inventory (BDI) (Beck et al., 1988), and Beck Anxiety Inventory (BAI) (Beck et al., 1988), nonetheless there was not any formal diagnostic assessment for the participants. Additionally, the study's inclusion criteria were (a) being literate, (b) being 18 years and older, and (c) applying for psychotherapy. Our exclusion criterion was psychosis.

Procedure

All participants completed five self-report questionnaires and a demographic information form. Participants were informed at the end of their first appointment and completed the questionnaires at the therapy center. They filled out the questionnaires on the Internet through the secured website of the psychotherapy center. All participants were asked for their written consent and informed that responses were anonymous and would be kept confidential.

Measures

Young Schema Questionnaire-Short Form 3 (YSQ-SF3). Within the framework of Schema Therapy, the YSQ-SF3 was developed by Young (2005). The original scale proposes 18 subscales grouped into five schema domains. The original form of the questionnaire consists of 90 items that are rated on a 6-point Likert-type scale (1 = entirely untrue of me, 6 = describes me perfectly). As each subscale consists of five items, the score obtained on the subscales varies between 5 and 30. Soygüt et al. (2009) conducted the validity and reliability studies of the Turkish version of the Young Schema Questionnaire-Short Form - 3 and reported that the Turkish form revealed 14 interpretable factors with good reliability, and with high internal consistency (varied between $\alpha = .63$ and $\alpha = .80$), test-retest reliability (varied between $r = .66$ and $r = .83$ [$p < .01$]) and validity (e.g., significant correlations with SCL-90). The obtained factors are as follows: Emotional Deprivation, Failure, Pessimism, Social Isolation/Mistrust, Emotional Inhibition, Approval Seeking, Enmeshment/Dependence, Entitlement/Insufficient Self Control, Self-Sacrifice, Abandonment, Punitiveness, Defectiveness, Vulnerability to Harm, and Unrelenting Standards. In the current study, the Cronbach alpha level of the whole questionnaire was .96.

Young-Rygh Avoidance Inventory (YRAI). The YRAI is a 40-item self-report questionnaire to assess schema avoidance (Young & Rygh, 1994). Participants rate their responses to each item on a scale of 1 (completely untrue of me) to 6 (describes me perfectly). Higher scores are the reflections of greater schema avoidance. The YRAI was originally developed through clinical observation of personality disorders. Accordingly, Young and Rygh (1994) proposed 14 subscales as follows: intentionally not thinking about upsetting things, substance abuse, denial of unhappiness, excessive rationality and control, suppression of anger, psychosomatic symptoms, withdrawal from people, denial of memories, avoidance through sleep/lack of energy, distraction through activity, self-soothing (eating, shopping, etc.), passive blocking of upsetting emotions, passive distraction: fantasy, daydreaming, television, avoidance of upsetting situations.

Beck Depression Inventory (BDI)—Revised Version. BDI—Revised Version is a self-report questionnaire composed of 21 items aimed to measure the severity of depression (Beck et al., 1978).

Participants were asked to rate their answers on a 4-point Likert scale (range, 0–3) for the past week including today. The total score provides an estimate of the severity of depression symptoms (range, 0–63). The original form of the inventory has been shown to be reliable (Cronbach $\alpha = .86$) and valid (Beck et al., 1988). BDI-R was translated and adapted for the Turkish population by Hisli (1989) and has been found to have good reliability (Cronbach's $\alpha = .74$) and validity. In the current study, the Cronbach alpha level was .89.

Beck Anxiety Inventory (BAI). The BAI is a 21-item, self-report questionnaire that is aimed to assess the severity of anxiety symptoms (Beck et al., 1988). Each item is rated on a 4-point Likert scale (range, 0–3) for the past week including today. The total score of the 21 items (range, 0–63) provides an estimate of the severity of anxiety symptoms (Beck & Steer, 1993). The original form of the BAI has good psychometric properties (Beck et al., 1988). Ulusoy et al. (1996) conducted the psychometric study of the BAI for a Turkish population and found that the scale has been found to have a good reliability with high internal consistency ($\alpha = .93$), test–retest reliability ($r = .57$) and validity (Ulusoy et al., 1996). In the current study, the Cronbach alpha level was .92.

Symptom Checklist—Revised (SCL-90-R). SCL-90-R is a 90-item, self-report symptom checklist that measures how distressed respondents felt during the past 7 days. The original form of the SCL-90-R was developed by Derogatis (1977) and adapted to a Turkish sample by Dağ (1991). Each item is rated on a 5-point Likert scale. The SCL-90-R measures nine symptom subscales: Depression, Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism as well as a Global Severity Index (GSI), a Positive Symptom Total, and a Positive Distress Index. The reliability and validity of the widely used scale are supported by several studies. For the current study, the GSI, which is a summary measure of the whole questionnaire was used. In the current study, the Cronbach alpha level of the whole questionnaire was .97.

Translation

The YRAI's items were translated to Turkish according to Guillemin, Bombardier, and Beaton's guideline (1993) after getting the permission and approval of Young and Rygh (1994). Initially, the Turkish translation of the scale was administered to a group of 20 students to evaluate the language and statement comprehensibility. The necessary adjustments were done according to the feedbacks. Then, a back-translation was conducted to test translation accuracy. The items of the English and the Turkish versions did not have any substantial differences in meaning.

Data Analytic Procedure

The factorial structure of the Turkish YRAI was assessed through both principal component analysis (PCA) and confirmatory factor analysis (CFA). The SPSS for Windows version 20.0, the R Studio and Lavaan package (Yves, 2012) were utilized for statistical analyses. Considering the relatively large sample size, we randomly split the data. The age and gender characteristics of the participants can be seen in Table 1. Distribution of normality was examined before conducting further analysis. Although the majority of items normally distributed according to skewness and kurtosis levels, and z scores, the items 7 (“I use drugs to feel better.”) and 39 (“When people have left me or died, I didn't feel too upset.”) had non-normal distributions through participants (i.e., relatively low scored). Considering the clinical nature of the questionnaire and items and the reservations of Bakker and Wicherts (2014) about removing outliers, we chose to keep possible outlier participants in the data. These items might work for other samples such as forensic samples and/or addictions studies.

TABLE 1. DISTRIBUTION OF THE PARTICIPANTS ACCORDING TO GENDER AND AGE

	Female	Male
PCA Group ($N = 801$)	32.77 (7.85) ($n = 507$)	33.24 (7.70) ($n = 217$)
CFA Group ($N = 754$)	32.63 (7.40) ($n = 469$)	33.39 (8.52) ($n = 196$)
Total	32.70 (7.64) ($n = 976$)	33.31 (8.01) ($n = 413$)

Note. The sample sizes in parentheses represent the participants who answered the both questions about gender and age.

To explore the factor structure of the Turkish YRAI, firstly a parallel analysis was run to investigate the possible factor number (with paramap package, O'Connor, 2017), then a PCA was conducted using equamax rotation. Subsequently, a CFA was run to test the suggested factor structure. For testing the internal reliability of the Turkish YRAI, Cronbach alpha levels calculated. Inter-correlations between the Young Schema Questionnaire, Symptom Check List 90-R, BDI, and BAI also calculated to test convergent validity.

RESULTS

Principal Component Analysis

To explore the factor structure of the Turkish YRAI, PCA was conducted. The screeplot graphic was ambiguous and there were 11 factors above the Eigenvalue of 1. Thus, to determine the factor structure of the Turkish YRAI accurately, we ran a parallel analysis. The parallel analysis result suggests eight factors for the questionnaire (i.e., intentionally not thinking about upsetting things, withdrawal from people, psychosomatic symptoms, avoidance through sleep/lack of energy, suppression of anger, excessive rationality and control, denial of memories, substance abuse). PCA with equamax rotation was implemented based on eight factors solution (explained variance was 47.31%). The equamax rotation was used to distribute highly loaded variables uniformly across factors and simplify the factor structure. The Keiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were used ($KMO = .81$; χ^2 Bartlett's test (780) = 7629.48; $p < .001$). According to PCA results, nine items were removed: seven items had factor loading below the level of .40 (e.g., I watch a lot of TV when I'm alone.) and two items had high cross-loadings (e.g., I was fortunate to have such good parents.). Table 2 shows the preliminary factor structure based on the PCA results.

Confirmatory Factor Analysis

Based on the PCA results, eight-factor solution with 31 items was tested through the CFA using the R software. The CFA was carried with the maximum likelihood estimation robust method. The robust method was used due to the non-normal distribution of some items of the Turkish YRAI. The preliminary indices of the CFA were, $CFI = .81$, $TLI = .78$, $\chi^2 = 1286.02$, $df = 406$, $p < .001$, $RMSEA = .05$ [90% CI = .05-.06]. In the line of suggested modifications, a number of covariances added to the model. While doing this, we added covariances only within subscales and appropriate to theory. Further, item 24 had many suggested covariance, so it was removed from the model. The final model has 30 items and fit indices were acceptable ($CFI = .90$, $TLI = .88$, $\chi^2 = 773.25$, $df = 346$, $p < .001$, $RMSEA = .04$ [90% CI = .037-.044]). The internal consistency levels of the factors ranged between .49 and .75. The final form of the Turkish YRAI, related regression weights, and the Cronbach alpha levels for each subscale were presented in Table 3.

TABLE 2. PRELIMINARY FACTOR STRUCTURE OF THE TURKISH YOUNG-RYGH AVOIDANCE INVENTORY (YRAI)

	Component							
	1	2	3	4	5	6	7	8
Item 1	.68							
Item 31	.66							
Item 27	.66							
Item 19	.62							
Item 28	.50							
Item 32	.48					.31		
Item 26*	.32							
Item 30		.76						
Item 13		.76						
Item 20		.74						
Item 15			.64					
Item 10			.56					
Item 12			.53					
Item 38			.46					
Item 11			.37	.60				
Item 22				.60				
Item 14			.38	.57				
Item 24	.37			-.53				
Item 37*	.31			.38				
Item 25*				.34				
Item 16*				.26				
Item 18					.71			
Item 3				-.34	.64			
Item 4			-.32	-.36	.54			
Item 6					.51			
Item 23*				-.30	.31			
Item 5						.70		
Item 39						.59		
Item 33						.56		
Item 35						.56		
Item 17						.46		
Item 40*						.28		
Item 21							.74	
Item 8							.72	
Item 29*			-.40		.43		-.51	
Item 34*			-.33		.43		-.44	
Item 2								.65
Item 7								.65
Item 9								.58
Item 36*								.30

Note. The items with * were not included further analysis. Loadings below the level .40 and/or high cross-loadings are shown in italic.

TABLE 3. CFA RESULTS ($N = 754$)

Item No	Estimate	Std.Err	z-value	$p(> z)$
Intentionally Not Thinking About Upsetting Things ($\alpha = .74$)				
1	.81	.07	12.32	.000
19	1.09	.08	13.71	.000
27	.79	.08	9.28	.000
28	.41	.10	4.81	.000
31	.74	.09	8.34	.000
32	1.04	.08	13.06	.000
Withdrawal from People ($\alpha = .75$)				
13	1.23	.08	16.17	.000
20	.94	.11	8.64	.000
30	.89	.06	13.42	.000
Psychosomatic Symptoms ($\alpha = .64$)				
10	.93	.08	11.74	.000
12	.89	.07	13.33	.000
15	1.11	.07	16.01	.000
38	.90	.07	13.22	.000
Avoidance Through Sleep/Lack of Energy ($\alpha = .70$)				
11	1.20	.08	14.24	.000
14	1.39	.08	16.81	.000
22	.57	.06	9.43	.000
Suppression of Anger ($\alpha = .59$)				
3	1.13	.04	26.81	.000
4	.95	.04	21.73	.000
6	.20	.06	2.98	.003
18	.33	.07	4.91	.000
Excessive Rationality and Control ($\alpha = .63$)				
5	.43	.09	4.74	.000
17	.48	.07	6.78	.000
33	1.16	.12	9.34	.000
35	.79	.07	10.99	.000
39	.46	.07	6.69	.000
Denial of Memories ($\alpha = .74$)				
8	1.17	.08	14.04	.000
21	1.22	.09	14.03	.000
Substance Abuse ($\alpha = .49$)				
2	.68	.10	6.87	.000
7	.44	.10	4.37	.000
9	1.44	.18	7.92	.000

TABLE 4. DESCRIPTIVE OF THE TURKISH YRAI, TURKISH YSQ, SCL-90-R, BDI, AND BAI

	<i>N</i>	<i>Mean</i>	<i>SD</i>
the Turkish YSQ			
Emotional deprivation	1217	1.94	.87
Failure	1217	1.78	.86
Pessimism	1217	1.94	.91
Social isolation/mistrust	1217	1.49	.84
Emotional inhibition	1217	1.75	.84
Approval seeking	1217	1.92	.72
Enmeshment/dependence	1217	2.55	.86
Entitlement/insufficient self-control	1217	2.12	.74
Self-sacrifice	1217	1.91	.94
Abandonment	1217	1.72	.90
Punitiveness	1217	2.17	.84
Defectiveness	1217	1.48	.78
Vulnerability to harm	1217	2.05	.89
the Turkish YRAI			
Unrelenting standards	1217	1.88	1.10
Intentionally not thinking about upsetting things	1555	2.92	.95
Psychosomatic symptoms	1555	2.98	1.18
Avoidance through sleep/lack of energy	1555	2.83	1.26
Suppression of anger	1555	3.30	.98
Excessive rationality and control	1555	2.89	.82
Denial of memories	1555	2.51	1.36
Substance abuse	1555	2.23	1.10
Withdrawal from people	1555	4.18	1.19
SCL-90-R	773	1.34	.63
BDI	1116	.88	.48
BAI	1096	.89	.59

Note. BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; SCL-90-R = Symptom Check List 90- Revised; YRAI = Young-Rygh Avoidance Inventory; YSQ = Young Schema Questionnaire.

The means and standard deviations of the Turkish YRAI, Turkish YSQ, SCL-90-R, BDI, and BAI are shown in Table 4.

Inter-correlations between the Turkish YRAI presented in Table 5. Additionally, the correlation coefficients between the total The Turkish YRAI scores and the BDI, BAI, the SCL-90-R, and the Turkish YSQ's subscales are shown in Table 6.

DISCUSSION

The primary aim of this study was to evaluate the psychometric properties of the Turkish YRAI. To achieve this, we carried out a PCA and CFA. Along with the factor analyses, we also calculated the internal reliabilities and conducted correlation analyses. Overall, the Turkish YRAI

TABLE 5. INTER-CORRELATION MATRIX OF THE SUBSCALES OF THE TURKISH YRAI (N = 1,555)

	1	2	3	4	5	6	7	8
1. Intentionally not thinking about upsetting things	–							
2. Withdrawal from people	.20**	–						
3. Psychosomatic symptoms	.02	.30**	–					
4. Avoidance through sleep/lack of energy	.03	.34**	.46**	–				
5. Suppression of anger	.25**	-.06*	-.21**	-.29**	–			
6. Excessive rationality and control	.35**	.21**	.00	.11*	.19**	–		
7. Denial of memories	.20**	.12**	.03	.14**	.00	.17**	–	
8. Substance abuse	.09**	.12**	.19**	.21**	-.13**	.04	.11**	–

* $p < .05$. ** $p < .001$.

has questionable to acceptable levels of reliability and acceptable validity, and has support to use by clinicians and researchers to evaluate clients' avoidance style and changes in avoidant behaviors in the Schema Therapy Model (STM) framework.

As a starting point, considering the large sample size, we randomly split our sample to conduct PCA and CFA. Before the PCA, we ran a parallel analysis to understand the structure of the questionnaire; accordingly, the PCA was run based on the eight-factor solution. As a result of the PCA, nine items were deleted, and the CFA was run based on 31 items. We kept some of the items for the final analysis, considering further studies. For example, item 7 is related to drug use and the participants might not have wanted to answer this question due to legal reasons. After applying the suggested modifications, the final form was included 30 items. The fit indices of the questionnaire might suggest a good fit when all indices have taken together. However, according to the recommendations of Hu and Bentler (1999) regarding the cutoff levels, the Turkish YRAI has relatively low CFI and TLI levels ($<.95$) but good RMSEA ($<.06$), and χ^2/df ratio. The relatively low CFI and TLI levels might reflect low correlations between the observed variables or the complexity of the model. Even though the discrepancy between the RMSEA and CFI level was not notable in our study, according to Lai and Green (2016) it is very common to have two indices such as RMSEA and CFI suggesting different conclusions regarding the model. Moreover, regarding the cutoff levels of the model indices, some other researchers do not recommend restrictive approaches (e.g., Marsh et al., 2005; Marsh et al., 2004).

The inter-correlations between the subscales of the Turkish YRAI were mostly significant and there were insignificant and weak correlations. Undoubtedly, people may avoid in various ways and these ways may exclude each other, and the low correlations might result from this complexity. In terms of the correlations between the subscales of the Turkish YRAI and the BDI, BAI, and SCL-90-R we might say that the Turkish YRAI has consistent and promising value for further use in clinical and research area. In the BDI, BAI, and SCL-90-R we ask some well-known symptoms related to psychopathologies such as excessive sleep, substance use, withdrawal, and psychosomatic symptoms. Given that the scale evaluates schema-driven avoidance patterns, weak

TABLE 6. CORRELATION COEFFICIENTS BETWEEN THE TOTAL THE TURKISH YRAI SCORES AND THE BDI, BAI, THE SCL-90-R, AND THE TURKISH YSQ

	Intentionally not Thinking About Upset- ting Things	Withdrawal from Peo- ple	Psychoso- matic Symp- toms	Avoidance Thought Sleep/Lack of Energy	Suppres- sion of Anger	Excessive Rational- ity and Control	Denial of Memo- ries	Sub- stance Abuse	n
BDI	-.04	.32**	.42**	.46**	-.34**	-.04	.12**	.26**	1116
BAI	-.01	.22**	.51**	.35**	-.25**	-.05	.01	.26**	1096
SCL-90-R	.03	.37**	.53**	.53**	-.37**	.04	.11**	.31**	773
Emotional deprivation	.14**	.31**	.32**	.45**	-.23**	.10**	.19**	.24**	1217
Failure	.11**	.28**	.27**	.44**	-.28**	.08**	.17**	.23**	1217
Pessimism	.07**	.24**	.27**	.44**	-.28**	.02	.16**	.22**	1217
Social isola- tion/mistrust	.14**	.31**	.28**	.46**	-.32**	.18**	.21**	.18**	1217
Emotional inhibition	.15**	.28**	.27**	.36**	-.25**	.11**	.17**	.18**	1217
Approval seeking	.18**	.32**	.22**	.25**	-.20**	.24**	.17**	.15**	1217
Enmeshment/ dependence	.08**	.33**	.34**	.38**	-.31**	.07*	.13**	.25*	1217
Entitlement/ insufficient self-control	.10**	.30**	.28**	.39**	-.22**	.13**	.16**	.26**	1217

(continued)

TABLE 6. CORRELATION COEFFICIENTS BETWEEN THE TOTAL THE TURKISH YRAI SCORES AND THE BDI, BAI, THE SCL-90-R, AND THE TURKISH YSQ(CONTINUED)

	Intentionally not Thinking About Upset- ting Things	Withdrawal from Peo- ple	Psychoso- matic Symp- toms	Avoidance Thought Sleep/ Lack of Energy	Suppres- sion of Anger	Excessive Rational- ity and Control	Denial of Memo- ries	Sub- stance Abuse	<i>n</i>
Self-sacrifice	.13**	.34**	.33**	.37**	-.19**	.12**	.18**	.17**	1217
Abandonment	.07**	.34**	.26**	.46**	-.27**	.11**	.21**	.19**	1217
Punitiveness	.18**	.36**	.29**	.39**	-.14**	.16**	.21**	.19**	1217
Defectiveness	.10**	.27**	.24**	.39**	-.26**	.17**	.16**	.12**	1217
Vulnerability to harm	.12**	.24**	.27**	.38**	-.25**	.15**	.12**	.17**	1217
Unrelenting standards	.00	.24**	.27**	.37**	-.32**	.02	.10**	.21**	1217

Note. BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; SCL-90-R = Symptom Check List 90- Revised; Turkish YRAI = Turkish Young-Rygh Avoidance Inventory; Turkish YSQ = Turkish Young Schema Questionnaire.
p* < .05. *p* < .001.

to moderate significant correlations between the related subscales of the Turkish YRAI and these questionnaires are congruent with our expectations.

Furthermore, Cronbach's alpha of the subscales of Turkish YRAI ranged between .49 and .76. The lowest internal reliability level belonged to the *substance abuse* subscale. This relatively low internal reliability level might be related to our sample characteristics or legal reservations. There could be some inconsistency about reporting alcohol use and drug abuse which resulting low variance. Furthermore, the items in that subscale might not be representatives of the domain. Additionally, the correlations between the subscales of the Turkish YRAI and BDI, BAI, and SCL-90 were mostly significant. As expected, subscales named *intentionally not thinking about upsetting things* and *excessive rationality and control* had very low and insignificant correlations with symptomatic questionnaires as well as the correlation between the *denial of memories* and *intentionally not thinking about upsetting things* was also insignificant. The correlations between the subscales of the YSQ and the Turkish YRAI were also mostly significant except the correlations between *unrelenting standards* and *intentionally not thinking about upsetting things*; *unrelenting self* and *excessive rationality and control*; *pessimism* and *excessive rationality and control*. Different from earlier studies that put forth only two factors—behavioral/somatic avoidance and cognitive/emotional avoidance (Luck et al., 2005); and remarked that the YRAI has no such an integrative factor structure (Alfasfos, 2009; Grutschpalk, 2009) the factorial structure of the Turkish version of the YRAI seem relatively more overlapping with the originally proposed factorial structure (Young and Rygh, 1994) and the Persian version (Soleimani-Sefat et al., 2017).

In summary, taken together of the good RMSEA level and χ^2/df ratio, and relatively adequate CFI and TLI levels, Cronbach alpha levels, and significant correlations between the SCL-90-R, BDI, BAI, YSQ, and the Turkish YRAI could suggest that the Turkish YRAI might be useful for research and clinical purposes and seemed congruent with the STM.

CONCLUSION

The general evaluation of the findings suggests that the Turkish YRAI has acceptable levels of validity and reliability for both clinical and research settings. The result of PCA and CFA analyses revealed 8 factors with 30 items and this factor structure compatible with the theory. However, researchers and clinicians should be aware of the low reliability levels of some subscales and evaluate the questionnaire cautiously.

The convergent validity was determined using correlations of the scale to the Turkish YSQ and psychological symptoms (e.g., SCL-90-R, BDI, and BAI). These analyses revealed statistically significant and theoretically meaningful correlations. According to correlational analyses' results, the Turkish YRAI has good convergent validity. Also, it is important to note that incongruent with the model, avoidance styles were connected to more than one schema, so avoidance styles are not specific to the given schema. The same pattern was observed by Karaosmanoğlu et al. (2013) in the context of the compensation styles. The researchers and clinicians should take into consideration that avoidance style might exhibit a complex structure. Specifically, in the clinical settings, these complex avoidance styles might cover the underlying schemas and hinder the appropriate interventions.

One of the limitations of the study was related to the sample's diagnostic categories. Despite the current study being conducted with a large sample and having symptom severity information, we did not have a formal diagnostic assessment for the sample. Future studies should include diagnostic information and test the Turkish YRAI across various diagnoses. Another limitation of this study is that there was not a follow-up assessment for testing the test–retest reliability. In the line of the STM, schema avoidance behaviors may be consistent in time hence further studies could contribute to the Turkish YRAI's psychometric evaluation by having tested the test–retest

reliability. Since we have a large sample, our analyses are statistically significant. Further studies should test psychometric properties of the Turkish YRAI in relatively small but homogeneous samples, such as specific symptom groups.

Despite these limitations, the overall findings of this research showed that the Turkish YRAI might be a useful tool for evaluating avoidance strategies across clinical and nonclinical samples. Thus, further examination of the inventory in various clinical populations; samples with different cultural backgrounds might shed more insight into the psychometric properties of the tool.

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