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ASSESSMENT

Turkish Version of Self-Reflection and Insight Scale: A Preliminary Study for Validity and Reliability of the Constructs

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Abstract The current study aims to explore the validity and reliability characteristics of the self-reflection and insight scale originally developed by Grant et al. (Soc Behav Pers 30(8):821–836, 2002). The study includes two convenience samples, comprising a total of 659 university students. The test–retest reliability study was carried out in a private university in Istanbul. The validity study was carried out in a state university that is located in Samsun, a city in the black sea region of Turkey. Both schools recruit students coming from various regions in Turkey. The results revealed a 10-item scale as a better fit compared to the original 20-item scale. The presence of both subfactors self-reflection and insight were confirmed. The Cronbach's alpha for the whole scale was .70, .80 for the self-reflection and .65 for the insight subscales. The convergent and discriminant validity analyses revealed a negative relationship between private self-consciousness and insight scores, positive relationship between self-reflection and social anxiety plus external locus of control. There was no significant relationship between private self-consciousness and self-reflection scores. A negative relationship was found between insight and public self-consciousness, a positive relationship between mindfulness and insight scores, and finally a nonsignificant relationship between narcissism and insight scores.

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Introduction

The current study aims to explore the reliability and validity characteristics of the self-reflection and insight scale (SRIS) in Turkish. Given the importance of self-awareness and related terms for the cultivation of well-being and psychotherapy practices, we believed it would be valuable to benefit from a scale that could be used also in this population. Up to date, there is no validated scale that could be used especially for self-reflection (SR) and insight (IN) in Turkish. There is one for mindfulness (Özyeşil, Arslan, Kesici, & Deniz, 2011) and one for self-consciousness (SC) (Akın, Abacı, & Öveç, 2007), but there is no other Turkish study carried out in this line of research. Given the increasing number of original and follow-up research in the West, we thought it would be beneficial to look at self-reflection and insight this time in a Turkish context which has a different self and cultural makeup (Kağıtçıbaşı, 1996a).

Self-Consciousness as a Construct

SR and IN are concepts born out of the term SC. Originally, all of these concepts were born out of the term self-awareness. According to Fenigstein et al. (1975), self-awareness has been mainly used in psychoanalysis as one's capacity to explore oneself to achieve psychological health and also as a goal in and of itself. Later on, existential, transactional, and other related psychotherapy approaches have also stressed the term's importance. Fenigstein et al. (1975) mentioned self-awareness also to be looked at from

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a social psychological perspective which involved its importance for the self in social interactions. This represented the capacity to examine what was inside one's self and what was around the self.

In their attempt to understand the individual differences as related to the construct of self-awareness, Fenigstein et al. (1975) suggested that self-awareness would be more like a state (not a trait) because of its sensitive position with regard to situational variables. In the current paper, SC was suggested as trait which was argued to reflect a consistent attentive pattern of the persons inward or outward.

In their original research where they came up with the earliest measure of SC, Fenigstein et al. (1975) found two separate dimensions of SC: private and public. Both of them involved attentive processes. The private self-consciousness (PrivSC) connoted attention directed to one's self, and public self-consciousness (PubSC) meant attending to how self appeared to others. Related to PubSC, the researchers also found that it might serve as an antecedent to social anxiety and related problems.

Self-Reflection and Insight as Constructs

Numbers of research have been carried out to further validate the original two-dimensional structure of SC. It was repeatedly found that PrivSC factor actually was composed of two factors which were later on named as *internal self-awareness* and *self-reflectiveness* (see Harrington & Loffredo, 2011).

However, the follow-up studies for the psychometric properties of the SC scales were still unsatisfactory for some researchers. Further studies were carried out in an attempt for improvement. One of those studies was by Grant, Franklin, and Langford (2002).

According to Grant et al. (2002: 823), the SR items of the scale were argued not to be able to capture the true essence of the construct as it has usually been associated with psychopathology, not constructive SR. In addition, the authors strongly asserted that there is a fundamental confound when one thinks about the SR subscale which seems not capable of capturing the SR component, since the motivation to perform a specific act (*motive*) and the execution of that act (*execution*) are logically independent.

The second component of the PrivSC scale, internal state awareness (ISA; IN in Grant's terms), was associated with the ability to identify and express thoughts, feelings, and behaviors. Conceptually, process of IN development is deemed to be logically independent of SR. One might carry out SR and may not acquire IN. IN connotes mostly an outcome rather than means to achieve that outcome. However, these two concepts were both named as metacognitive in nature.

Through our literature search especially concentrating on SR and IN as variables, we have not come across any other study taking a positive psychology perspective. Available were studies or theoretical papers mostly carried out with participants who were having serious psychological problems (see Greenfeld, Strauss, Bowers, & Mandelkern, 1989). Here the approach by Grant and his colleagues was important as they have concentrated on SR and IN from a perspective which was based upon human capacity (instead of deficiency) that was metacognitive. This positive approach was also evident in the original Fenigstein et al. (1975) study. Considering the potential importance of IN which gives individual the power to be able to manage his or her understanding of life, people, and his or her future goals, we believed it would be valuable to study it further for both science and practice.

Studies by Grant and Colleagues

Grant et al. (2002) carried out a total of three studies for the SRIS. In their first study exploratory factor analysis was conducted on the data gathered from 260 undergraduate psychology students. Out of 30 items, the results of the analyses revealed 20 items, 12 belonging to SR, and 8 to the IN subscale. Originally, the researchers thought that there would be two factors to be loaded underneath the SR which would differentiate the "motive" aspect from the "execution" aspect. They consecutively named those factors as "need for SR" and "engagement in SR." Although suggested as representing two logically separate factors, both loaded under one factor: SR. The reliability coefficient for the SR was found as .91 and .87 for the IN scale. However, the two factors did not significantly correlate with one another. This finding was also contrary to the expectations and to the model of self-regulation.

As a result of the second study with twenty-eight undergraduate psychology students, test–retest reliability was .77 for the SR and .78 for the IN. A third study was carried out for the convergent validity and also used a normative sample which was keeping diaries. The results revealed a positive correlation between the PrivSC scale and SR, a negative correlation between the PrivSC scale and IN. Scores on IN negatively correlated with scores on depression, anxiety, stress, and alexithymia, and positively correlated with cognitive flexibility and self-regulation. SR scores did not correlate with cognitive flexibility scores or self-regulation scores. There were positive correlations between the SR and anxiety and stress scores, but no relationship was found between SR and depression and alexithymia. As for diary keeping, those who did not keep diaries had lower scores on the SR compared to those who did. And for those who kept diaries, lower scores on IN were reported.

As a result of the three studies, Grant et al. (2002) concluded by saying that SRIS is an advance on the PrivSC scale for the following reasons: First, IN and SR loaded on to different factors; second, SRIS includes more items making explicit reference to all three domains of human experience; third, the internal and test–retest reliabilities were better; and fourth, the scale demonstrated good convergent and discriminant validity.

However, the study is not without its shortcomings. First of all, contrary to the author's expectations, SR has been found to be related more to a dysfunctional rumination style compared to a healthy style relevant for self-regulation. Regarding relationship between the two constructs, SR and IN, study 1 and study 3 gave inconsistent findings. Initially they appeared to have no relationship, but later on they were negatively related. In addition, the sample used in all three studies was quite small (especially the sample in the retest phase) and homogeneous.

Previous Research

To date, few studies were carried out using Grant et al. (2002)'s SRIS. The first one to report is Grant's own study in (2003). In an effort to explain the impact of life coaching on goal attainment, metacognition, and mental health, Grant (2003) has concluded that over-engagement in SR may not facilitate reaching goals, meaning that the coaches who are in the business of personal development should be reminded that their practices should be oriented toward results rather than deep introspections.

There were more studies carried out, in fact mostly 6 years after the scale development (may be partly due to an increase of interest in positive psychology in the last decade). One important study is by Roberts and Stark (2008). In trying to understand the readiness for self-directed change in medical doctor students' professional behaviors, it was found that motivation or need for reflection is a requirement for development of IN, whereby carrying out SR alone is not. This finding is consistent with Grant et al. (2002)'s original idea that SR and IN represent logically independent processes.

Another study was by Lyke (2009) who looked at the relationship of the two subscales with certain outcomes such as subjective happiness, life satisfaction, and psychological distress. Especially high levels of IN were significantly related to positive outcomes, and, contrary to expectations, engagement in SR did not positively interact with IN. Finally, in a sample of 233 young adults, Silvia and Phillips (2011) also found that IN, but not SR, covaried with lower depression levels, higher positive affect, higher self-esteem, and lower anxiety. In contrast, SR significantly predicted depression and negative

affectivity. There was no significant relationship found between the two subscales.

A recent study by Stein and Grant (2014) showed that SR can lead to well-being through the development of IN. This positive effect of SR on IN ($\beta = .13$, $p < .01$) particularly appears when there is low levels of dysfunctional attitudes and higher levels of positive self-evaluations.

As previous research revealed some relevant findings with the original one, we thought it might also be useful to explore the relationship of SRIS constructs with other possibly related ones such as mindfulness, locus of control (LOC), and narcissism. As Grant et al. (2002) originated their scale using SC factors, we felt it is also necessary to include a related measure of SC in our current study.

Measures in Parallel

Self-Consciousness

We have used the five-dimensional scale of SC by Mittal and Balasubramanian (1987) for the main purpose of its availability in Turkish. Mittal and Balasubramanian (1987) carried out the internal and external consistency tests of unidimensionality for the 23-item SC scale (Fenigstein et al., 1975) and found that this scale is in fact five dimensional. SR and ISA loaded under PrivSC. In addition, style consciousness, appearance consciousness, and social anxiety make up the remaining dimensions. The researchers ended up with nineteen items for the final scale. Akın et al. (2007) provided the validity and reliability of the scale in Turkish. The coefficient alphas of the subscales varied between .84 and .91, and the test–retest reliabilities ranged between .91 and .96.

Mindfulness

The original studies including the follow-ups mostly looked at the relationship of SC factors with problematic states such as social anxiety (Fenigstein et al., 1975), anxiety, stress and depression (Grant et al., 2002), and rumination (Borders, Earleywine, & Jajodia, 2010; Harrington & Loffredo, 2011; Trapnell & Campbell, 1999). Not many studies concentrated on its relationship with positive human experiences such as mindfulness, happiness, well-being, or life satisfaction (Lyke, 2009). One of those few studies exploring those relationships was by Lyke (2009). In her study with 208 community members, she found that IN, not SR, had relations with both life satisfaction and happiness.

In their comparative analysis of integrative self-knowledge, mindfulness, and PrivSC in predicting responses to

stress, Ghorbani, Cunningham, and Watson (2010) found that both mindfulness and integrative self-knowledge predicted resistance to physical symptoms, while present awareness and resistance to stress are better accomplished through mindfulness as compared to PrivSC. With its increasing popularity as a concept, mindfulness is related to cognitive flexibility as individuals who are mindful actually are able to shift between their affective states easily and momentarily (Borders, Earleywine, & Jajodia, 2010). Levesque and Brown (2007: 285) further clarified the relationship between SC and mindfulness by saying that mindfulness is "pre-reflexive" that it does not interfere with experience. As Brown and Ryan (2003) originally stated, it does not very much relate to SR part of consciousness but that it is associated with enhanced self-awareness. The validity and reliability of the scale for Turkish culture were provided by Özyeşil et al. (2011). The coefficient alpha of the translated scale was .80, and the test–retest reliability was found .86 ($p < .001$).

Locus of Control

In her suggestion for a conceptual model of psychological mindedness, Hall (1992) talks about its resemblance with the construct of LOC that similarly requires individual's own responsibility in his or her own internal experience. She further goes on saying that the construct should both include interest/ability dimensions as well as intellect/affect dimensions quite like the distinction we have here as IN and SR. Like mindfulness, internal LOC has also been associated with less psychological symptoms, more with personal well-being, and coping better with stress (e.g., Hale & Cochran, 1987; Klonowicz, 2001; Peacock & Wong, 1996; Watson, 1998). The Turkish version of the scale was created by Dağ (2002). The coefficient alpha of the translated scale was .92, and the test–retest reliability was .88 ($p < .001$). About the specific relationship of LOC with PrivSC factors, not many studies were reported except those by Ginsberg (2000) and Ghorbani, Watson, Davison, and Bing (2004a). In her analysis of the determinants of stuttering, Ginsberg (2000) tried to understand the combined effects of shame, SC and LOC, with latter having no predictor value in that relationship. In trying to explain the factors underlying obsessive thinking in Iranian and American university students, Ghorbani et al. (2004a) found that self-reflectiveness and ISA correlated positively with higher internal control; and there was a negative correlation between ISA and external control in both samples. Because of Grant et al.(2002)'s previous contention that the SRIS was mainly created to understand a person's self-regulatory processes in reaching goals, we believe it might be useful to explore the measure as it relates to LOC.

Personality

An earlier study which looked at the relationship between personality (16 PF) and SC factors was by Davies (1982). Using SC scale by Fenigstein et al. (1975), Davies (1982) found significant correlations between the emotionality factor and all three SC factors. Later on, some cross-cultural studies were also carried out using SC scale. Using the Estonian version of the SC scale and the NEO-PI personality inventory, Realo and Allik (1998) have found significant relations between PubSC and neuroticism and between PrivSC and openness to experience. According to Trapnell and Campbell (1999), these two constructs (N and O) are said to be independent domains of individual differences. The authors give these explanations with one exception: Narcissism that involves chronic self-attention but not necessarily negative self-regard. Related to its relationship with SC factors, Watson and Biderman (1993) contended that narcissism might be a result of a fragmented self (as put forward by Kohut, 1971); therefore, except internal state awareness, which is defined to be a healthy form of SC, other forms of awareness might reflect more of a psychological liability as in SR. These and related findings led us to consider narcissism as a personality construct suitable for our validity analyses. The original 40-item self-report narcissism scale was developed by Raskin and Terry (1988). The shortened 16-item scale by Ames, Rose, and Anderson (2006) was studied by Atay (2009) who provided the validity and reliability of the scale for the Turkish culture. The coefficient alpha of the translated scale was .62.

Cultural Factors

There have been countless studies which explored cultural differences in self and self-related concepts. The outline of such cultural differences in self will be given just below. In relation to self-focused attention, most research has been reported to concentrate on European American samples (Chentsova-Dutton & Tsai, 2010). Until Chentsova-Dutton and Tsai (2010) study, no single study had looked at the interdependent models of self-focused attention. In that study, the researchers found clear cultural differences in terms of self-focused attention effect on emotional reactivity. The emotional reactivity was activated only when a culturally related part of the self was attended to. As SR is a form of attention directed to the self, we believe it might be helpful to further explore its cultural underpinnings.

Similarly, in relation to IN, there seems to be cultural factors at play. It was argued previously that conceptions of mental illness and its treatment were rooted in normative constructions which were social and cultural (Saravanan, Jacob, Prince, Bhugra, & David, 2004). In their article

where they talked about IN in psychosis patients, Saravanan et al. (2004) reframed IN as a cultural phenomenon. In a separate article that involved results of some studies related with schizophrenia, Saravanan, et al. (2005) stated that current multidimensional models were not culturally sensitive to assess IN. Apart from these findings about individuals with psychosis, we could not locate any study that has been carried out about the role of IN in other cultures.

Both qualitatively and quantitatively, studying self-related processes cross-culturally seems to be important and would be very beneficial in terms of understanding the influence of culture further. When we look at cross-cultural studies carried out especially related to the SC scale validity and reliability, we see that those studies carried out in Western cultures (see Heinemann, 1979; Lindwall, 2004; Vleeming & Engelse, 1981) clearly outnumber studies carried out in non-Western contexts.

Self and Culture

Regarding Turkish culture characteristics, Kağıtçıbaşı (2005), after years of longitudinal research, contended that it has interdependent aspects. Therefore, the main assumptions that all aspects related to self should be independent, autonomous, separate therefore healthy in fact reflect a Western ideology (Kağıtçıbaşı, 1996b; see also Chentsova-Dutton & Tsai, 2010) of how a normal self should be. This relates to many self-related concepts such as SC, awareness, and many others. As for a brief cultural description, Turkish culture has been found to be more feminine compared to masculine (Hofstede, 1980), more collectivistic than individualistic (Hofstede, 1980; Özdikmenli-Demir & Sayıl, 2009), and more "relational" (Üskül, Hynie, & Lalonde, 2004).

Because of these cultural characteristics and the fact that SR and IN were not previously explored in this culture, we thought our study might add valuable insight into the ongoing discussion of culture and the self.

Cross-Cultural Findings

Many studies were carried out testing the SC factors by Fenigstein et al. (1975) in different cultures. In general, most of the research was carried out in Western populations with the same factor structure as the original (for German version see Heinemann, 1979; for Swedish version see Lindwall, 2004 and also Nystedt & Smari, 1989; for Dutch see Vleeming & Engelse, 1981). Similar findings were also obtained from a few studies in Asia and the Middle East (such as Alanazi, 2001 in Saudi Arabia; Shek, 1994 for the Chinese version). However, a study from United Arab Emirates (Bendania & Abed, 1997 for the

Arabic version) came up with unexpected findings related to the factor structure and also the relationship between the subscales. Scores on the PrivSC correlated with those on the PubSC and also slightly with social anxiety scale. Another study demonstrated the culture effect was by Tsai and Lau (2011). In their analysis of the comparison between adaptive and maladaptive SR processes between Asian and European Americans, they found that SR over a negative experience is less harmful for Asian Americans compared to European Americans. In another study comparing the SC factors between Iranian and American students, Ghorbani, Watson, Krauss, Bing, and Davison (2004b) found that ISA predicts psychological adjustment in both cultures, whereas self-reflectiveness predicts so only in the Iranian sample.

These studies should be reminding us that culture issues render SC and related variables even more complex than originally thought.

Aim of the Current Study

The current study aims to explore the psychometric properties of the SRIS in a Turkish sample. As there is an increasing trend for the positive psychology and related terms in the psychology literature, many scales which have been replicated and tried out in different populations have become target studies for Turkish academia and research. Mindful attention awareness scale (Brown & Ryan, 2003), SC scale (Mittal & Balasubramanian, 1987), self-compassion scale (Neff, 2003), resilience scales, and many others have been translated and studied in Turkish populations. Therefore, we felt it might be useful to study the reliability and validity characteristics of the SRIS both for purposes of research and practice.

Method

Translation Phase

Translation study of the SRIS was conducted by using conventional procedures of Brislin, Lonner, and Thorndike (1973). Initially, two native domain language experts translated the scale into Turkish. Both translators were lecturers of the English language and the literature for over 15 years. Secondly, three professors of psychology (one of them had started her schooling in the USA and studied in the USA for several years, the second one had carried out her doctorate studies in the UK where she also worked and lived for 13 years. Another one attended a British school since sixth grade, and then studied in the USA in her high school years, while completed all her psychology studies in a university having American

standards and which provides all curricula in English) reviewed the scale in terms of its simplicity, understandability, and clarity. Next, another two domain native experts who did not have access to the original version of the scale back-translated the scale into English. After reviewing the back-translation of the scale, some of the items were revised. As an example, item 3 was back-translated as "*I often review my feelings,*" item 4 as "*I don't think about why I behave in that manner,*" item 7 as "*I don't care about analyzing my thoughts,*" and item 18 "*When I think about my thoughts, I get more confused.*" The original items were slightly different as item 3 was "*I frequently examine my feelings,*" item 4 "*I don't really think about why I behave in the way that I do,*" item 7 "*I am not really interested in analyzing my behavior,*" and item 18 "*Thinking about my thoughts makes me more confused,*" After checking the differences between these specific items, final version of the scale was formed with corrected items and was cross-checked by three professors mentioned above. The original and the Turkish version of the items can be found in "Appendix".

Sample

This study includes two convenience samples, comprising a total of 659 participants. Sample-1 consisted of 159 undergraduate students, 40 male (25.8%) and 118 female (74.2%) and 1 missing (did not code gender) (.6%) studying different disciplines in a private university in Istanbul, Turkey. Sample-2 consisted of 500 undergraduate students, 147 male (29.4%), and 353 female (70.6%) from different disciplines from a state university in the black sea region of Turkey. Age range was between 17 and 42 years ($M = 21.20$, SD = 3.12) for Sample-1 and between 17 and 43 years ($M = 21.75$, SD = 3.08) for Sample-2. We used Sample-1 merely in the test–retest procedures and employed Sample-2 for the validity study.

Measures

The Self-Reflection and Insight Scale

The 20-item self-report scale, rated on a six-point Likert type (1 = strongly disagree, 6 = strongly agree) was developed by Grant et al. (2002). The SR factor has twelve items (1*, 2*, 5, 7, 8*, 10, 12, 13*, 15, 16, 18, 19) that assess a tendency to think about and evaluate thoughts, feelings, and actions, and the IN factor has eight items (3, 4*, 6, 9*, 11*, 14*, 17*, 20) that assess the clarity of experience and self-knowledge (* shows the reversed items). Higher scores show higher levels of IN and SR tendencies.

Mindful Attention Awareness Scale

In this 15-item self-report scale (Brown & Ryan, 2003), rated on a six-point Likert type (1 = almost always, 6 = almost never), higher scores indicate lower scores on the mindful attention awareness of the individuals. The Turkish version of the scale was validated by Özyeşil et al. (2011).

Self-Consciousness Scale

The original 23-item self-report scale, rated on a five-point Likert type (1 = strongly disagree, 5 = strongly agree), was developed by Fenigstein et al. (1975). Mittal and Balasubramanian (1987) proposed that 19-item revised version of the scale is more valid and reliable. This version of the scale consists of three subfactors as PrivSC, PubSC, and social anxiety. Higher scores show an increase in all subdimensions of SC. The Turkish version of the scale was created by Akın et al. (2007).

Locus of Control Scale

The answers were rated on a typical five-point Likert-type (1 = strongly disagree, 5 = strongly agree) scale. A lower score indicates an internal control while a higher score indicates an external control. The Turkish validity study was carried out by Dağ (2002).

Narcissistic Personality Inventory

Narcissistic personality score was computed as the mean across the 16 items, with narcissism-consistent responses coded as "1" and narcissism-inconsistent responses coded as "0" (Ames et al., 2006). Higher scores indicate an inclination for the narcissistic personality. The Turkish validity study was carried out by Atay (2009).

Procedure

Both studies were carried out during students' class times. Related consents by their professors were taken before the data collection. All data were collected in the beginning of the class times. The students were asked to fulfill their demographic information correctly and were asked to give answers honestly. They were told that their answers would be evaluated anonymously and only the researcher would have access to their information.

Statistical Analyses

Participants completed the SRIS as well as the measures of mindful attention awareness, SC, LOC, and narcissistic

personality. We have followed Bagozzi, Yi, and Phillips (1991)'s suggestions and conducted confirmatory factor analysis for the structural validity of the scale. The measures mentioned above were used to determine the convergent and discriminant validity of the scale. We examined the test–retest reliability for the scale over a 3-week interval. We expected a high Pearson's correlation coefficient between pretest and posttest scores over this period. The Cronbach's alpha coefficients of the scale and subscales were calculated, and differences of the means for the high- and low-score groups were compared for the internal consistency of the scale. The data were analyzed by using SPSS v20.0 and Amos v20.0.

Results

The means, standard deviations, and gender differences of the subscales are presented in Table 1. The results showed that participants had above average scores for the subdimensions. Males scored significantly higher ($M = 4.59$, SD = .97) than females ($M = 4.20$, SD = .95) in the SR factor ($t = 4.095$, $p < .001$; Cohen's $d = .406$).

The Cronbach's alpha coefficient of the 20-item scale was calculated as .68. Item response statistics and item-total correlations are presented in the Table 2. The results demonstrated that 18 out of 20 items had acceptable skewness and kurtosis values and 14 items correlated adequately ($r > .20$) with the total score.

Validity Study

Factor Analyses

We conducted confirmatory factor analysis for the 20-item SRIS using the original factor structure proposed by Grant et al. (2002). Maximum likelihood estimation method is employed to explore the two-factor structure which best fit the data. The results showed that the original factor structure of the scale has low fit indices values (model 1 in Table 3). Alternatively, the three-factor model that has been proposed by Roberts and Stark (2008) was tested, but the fit indices values were also found as inadequate for the fit (model 2 in Table 3). Our primary focus was to describe

a model that best fits the sample data and determine the source of the problem. We followed Hooper, Coughlan, and Mullen (2008)'s suggestions for improving the fit indexes of the model. First, we examined the covariance matrix of the model, searched the items with low multiple r^2 (less than .20), and calculated the modification indices of the covariances and regression weights to determine the causes of the discriminant validity problem. Then, we deleted the indiscriminant items one after another by testing the model at each turn, till best fit indexes are achieved. In conclusion, we came up with the 10-item factor structure of the scale that is represented by six SR items and four IN items which has adequate fit indices values (model 3 in Table 3).

The factor loadings of the items ranged between .46 to .74, and the variances of the IN dimension and the SR dimensions were estimated to be 42 percent and 79 percent, respectively. Moreover, the convenient model (Fig. 1) also captured the subdimensions of the SR factor as needed for SR (items: 5, 7, 12, 18) and engagement in SR (items: 16, 19). When compared with the Grant's original two-factor solution, these findings corresponded with Grant et al. (2000)'s proposed solution which consists of two factors and that the subscales of engagement in SR and need for SR loading on to the same factor.

The single-headed arrows show the standardized regression weights of the items ($p < .01$), and double-headed arrow shows the correlation between the factors.

Convergent and Discriminant Validity Studies

To investigate the convergent validity of the 10-item scale, we used mindful attention awareness scale (Brown & Ryan, 2003), SC scale (Mittal & Balasubramanian, 1987), LOC scale (Dağ, 2002), and narcissistic personality inventory (Raskin & Terry, 1988). We expected positive relations between IN and internal LOC, low PrivSC, low PubSC, and high mindful attention awareness. We also expected positive relations between SR and external LOC, social anxiety, and low mindful attention awareness. We anticipated no relations between narcissistic personality and SR or IN for the discriminant validity of the scale.

The observed Pearson correlations between the measures mentioned above are presented in Table 4. The

	All		Male		Female		t	p	Cohen's d
	N	M (SD)	N	M (SD)	N	M (SD)			
Insight	500	3.49 (.97)	147	3.55 (1.02)	353	3.47 (.95)	.902	.367	.081
Self-reflection	500	4.31 (.97)	147	4.59 (.99)	353	4.20 (.95)	4.095	.000	.406

Table 1 Mean values and gender differences in self-reflection and insight scale

t and p values indicate tests of mean differences for male versus female

Table 2 Item response statistics of the 20-item self-reflection and insight scale

	M	SD	Skw.	Krt.	CITC	AIID
1. I don't often think about my thoughts	3.88	1.63	−.178	−1.137	.258	.678
2. I'm not really interested in analyzing my behavior	4.00	1.53	−.455	−.763	.367	.666
3. I'm usually aware of my thoughts	4.53	1.36	−.856	−.047	.458	.659
4. I'm often confused about how I really feel about things	3.05	1.41	.314	−.698	−.092	.711
5. It's important to me to evaluate the things I do	4.52	1.38	−.890	.024	.488	.655
6. I usually have a very clear idea about why I have behaved in a certain way	4.28	1.37	−.660	−.305	.402	.664
7. I find it really interesting to examine what I think about	4.31	1.34	−.656	−.227	.374	.667
8. I rarely spend time "self-reflecting"	2.97	1.52	.468	−.823	−.133	.718
9. I often notice that I'm feeling something, but often I don't know what exactly I'm feeling	3.06	1.41	.277	−.750	−.001	.703
10. I often examine my feelings	4.27	1.42	−.624	−.440	.379	.666
11. My behavior often puzzles me	3.50	1.52	−.056	−1.001	.131	.692
12. It's important for me to try to understand what my feelings mean	4.30	1.45	−.689	−.464	.464	.657
13. I don't really think about why I behave in the way that I behave	3.97	1.55	−.425	−.860	.290	.675
14. Thinking about my thoughts makes me more confused	3.55	1.44	−.078	−.838	.232	.681
15. I have a definite need to understand how my mind works	3.70	1.40	−.111	−.799	.062	.697
16. I often take time to reflect on my thoughts	4.12	1.34	−.458	−.437	.354	.669
17. I often find it difficult to really understand how I feel about things	3.39	1.38	−.017	−.823	.021	.700
18. It's important for me to be able to understand how my thoughts arise	4.37	1.38	−.669	−.330	.486	.656
19. I often think about how I feel about things	4.28	1.37	−.602	−.413	.430	.661
20. I usually know why I feel the way I feel	4.44	1.32	−.688	−.058	.399	.665

$N = 500$; M mean, SD standard deviation, Skw. skewness, Krt. kurtosis, CITC corrected item-total correlation, AIID alpha if item deleted

Table 3 Results of the confirmatory factor analysis models

Models	χ^2	df	RMSEA	NFI	TLI	CFI
Model 1 (20-item, 2-factor)	913.35	169	.094	.70	.69	.71
Model 2 (20-item, 3-factor)	1002.14	167	.100	.58	.57	.62
Model 3 (10-item, 2-factor, after improved fit indices)	86.22	33	.072	.94	.93	.95

$N = 500$; χ^2 Chi-square, df degrees of freedom, RMSEA root mean square error of approximation, NFI normed fit index, TLI Tucker–Lewis index, CFI comparative fit index

Fig. 1 Factor structure of the self-reflection and insight scale
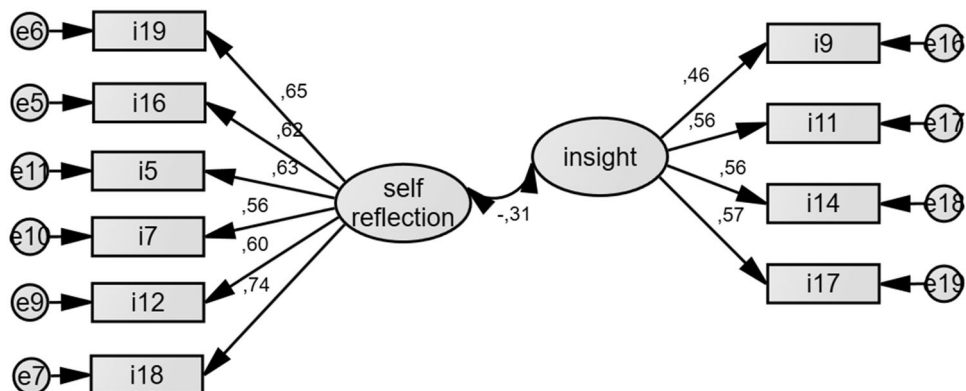
results showed that there is a negative relationship between IN and SR subscales ($r = −.220$, $p < .01$). This finding confirms previous research findings. There was a significant positive correlation between IN and mindful attention awareness ($r = .376$, $p < .01$), and negative correlations between IN and LOC ($r = −.247$, $p < .01$),

Table 4 Means, standard deviations, Cronbach's alpha reliabilities, and correlations of the scales

	Mean (SD)	α	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Insight	3.37 (.98)	(.72)							
2. Self-reflection	4.32 (.97)	(.80)	−.220**						
3. Mindful attention awareness	2.57 (.93)	(.80)	.376**	.021					
4. Narcissistic personality	6.89 (2.34)	(.81)	−.095*	−.012	−.102*				
5. Locus of control	3.11 (.52)	(.84)	−.247**	.120**	.024	.060			
6. Private self-consciousness	3.77 (.63)	(.79)	−.305**	−.018	−.264**	.071	.174**		
7. Public self-consciousness	3.05 (.86)	(.75)	−.337**	.016	−.282**	−.033	.207**	.123**	
8. Social anxiety	3.05 (.95)	(.58)	−.040	.323**	.039	.017	.234**	.112*	.578**

$N = 500$; * $p < .05$; ** $p < .01$; *** $p < .001$

PrivSC ($r = -.305$, $p < .01$), and PubSC ($r = -.337$, $p < .01$). The results also introduced significant positive correlations between SR and LOC ($r = .120$, $p < .01$) and social anxiety ($r = .323$, $p < .01$). For discriminant validity, the IN subscale had significant but minor negative correlation ($r = .095$, $p < .05$) with narcissistic personality scores, while SR had insignificant correlations with the same measure.

Reliability Studies

Test–Retest Reliability

A total of 159 undergraduate students completed the survey battery to determine the test–retest reliability. The scale was administered twice within 21 days. Pearson's correlations for the 10-item scale were .63 ($p < .01$), and the subscales were .64 ($p < .01$) for the SR and .61 ($p < .01$) for the IN. These results showed that the 10-item scale has adequate level of test–retest reliability.

Internal Consistency

The Cronbach's alpha for the 10-item scale and subscales were calculated to determine the internal consistency of the scale. The Cronbach's alpha for the 10-item scale was .70 and .80 for SR and .65 for IN. We also compared the differences of means by using the t statistics for the high- and low-score groups. The scores were divided into high and low according to one standard deviation above the mean and one standard deviation below the mean. Transformed low–high procedures introduced that the mean of the higher score group ($M = 4.93$, SD = .32) was significantly different from the mean of the lower score group ($M = 3.03$, SD = .41, $t = -32.027$, $p < .01$; Cohen's $d = -3.698$). These results altogether support the internal consistency of the 10-item scale.

Discussion

The main purpose of this study was to explore the psychometric properties of the SRIS in a Turkish sample. We explored the factorial structure, convergent and discriminant validity and also test–retest reliability and internal consistency of the scale.

Factorial Structure

Technical Issues

To examine the factorial structure of the scale, we used confirmatory factor analysis for the 20-item SRIS. Initially we assumed the presence of the Grant et al. (2002)'s two-factor structure. The results showed that first model fit was unsatisfactory. Then, following the findings of the Roberts and Stark (2008), we used the three-factor model that assumed SR to be composed of engagement in SR and the need for SR. We found that the fit indices of the three-factor model were also inadequate. As our primary focus was to describe a model that fits the sample data and determine the source of the fit problem, we followed the model modification indices for improving model fit. We removed the indiscriminant items by testing the model at each turn and found fit for the two-factor solution with ten items. The two-factor model covered the SR and IN subdimensions of the scale, and moreover, both engagement and need for SR were represented by two and four items, respectively. Although half of the total items were deleted from the original scale, the ten-item scale not only had acceptable structural validity but also paralleled the original PrivSC factors that embody two subfactors. Results of the factorial analysis in the current study demonstrated that the abbreviated scale of SR and IN is a psychometrically sound instrument for the selected sample. The ten items with two factors found in the present study were similar to

those found in previous studies that focused on the subdimensions of the PrivSC scale (Akın et al., 2007; Anderson et al., 1996; Burnkrant & Page, 1984; Kingree & Ruback, 1996; Mittal & Balasubramanian, 1987; Sauter, Heyne, & Blöte, 2010; Vleeming & Engelse, 1981).

Validity and Reliability Findings

Our results demonstrated a negative relationship between SR and IN scores. This finding is somewhat different from the original Grant et al. (2002) study findings which initially found no significant relationship between the two constructs. Later on, in their second study, they also found a negative relationship between the two constructs. However, as the authors have also argued, the relationship between IN and SR has always been somewhat ambiguous. In line with their findings, our results also showed that no distinction was found between need for SR and engagement in SR. Both factors just loaded on to the SR factor.

With regard to the correlation between PrivSC factor and the factors in the SRIS, there was a negative relationship with the IN factor and an insignificant relationship with the SR. The negative relationship between IN and PrivSC has also been replicated in many other studies (Grant, 2003; Silvia & Phillips, 2011) including Grant et al. (2002)'s original study. This result is also in line with what Hixon and Swann (1993) say about what one is and why one is have different ramifications in terms of IN development.

In Grant's (2003) own study that looked at the impact of life coaching on goals and metacognition including mental health, he argued that high levels of SR may be more related to the self-focused rumination rather than a healthy form of self-inquiry. Very similarly, Watson, Ghorbani, Davison, Bing, Hood, and Ghramaleki (2002) had also mentioned that self-reflectiveness and social anxiety have correlated with psychological dysfunction in an earlier study by Ghorbani, Bing, Watson, Davison, and LeBreton (2002) and by Watson et al. (1994, 1996). In our study, we found a significant positive relationship between SR and social anxiety and no relationship between IN and social anxiety which is again similar to what Nystedt and Ljungberg (2002) found with a Swedish sample.

In a study investigating the relationship between intrinsic motivation and SC, Plant and Ryan (1985) found no relationship for the private, while a significantly negative relationship was found for the PubSC. This means that the higher the level of PubSC, the less intrinsic motivation. Similarly, in our study, we found a negative relationship between IN and PubSC. Although IN and "intrinsic motivation" are different constructs, both stem from the individual him or herself and no outside influence plays a significant role.

As predicted, there was a significant positive relationship between mindful attention awareness scores and IN. This might indicate an ability to be momentarily aware by those individuals who are insightful or vice versa. Of course we must guard against drawing any causal connections at this point.

The external LOC was found to be related to higher SR and internal LOC associated with higher IN levels. In their analysis of the effects of PrivSC and success outcome on causal dimensions, Brière and Vallerand (2001) have found that when the subjects with high PrivSC knew they have done well in an achievement task, they have made more internal-stable and controllable attributions. This shows the reliance on an internal source for making attributions for the self-quite relevant with our current findings.

Coming to Narcissism, as expected, no relations were obtained with regard to both factors of the scale. As was put forward previously, narcissistic individuals are known to have a low motivation for self-development (Atay, 2009). This is especially important concerning IN which lies at the core of self-development. Similar to our findings, Watson and Biderman (1993) have also found zero correlations between internal state of awareness and narcissism, and zero correlations between maladaptive narcissism and self-reflectiveness.

In an attempt to suggest a new measure for measuring PrivSC, Grant (2003) concluded by saying that especially with regard to process and goals, more items should be developed as to represent two constructs more, which we absolutely agree. As it was argued several times, the relationship between SR, IN, and other psychological constructs are more complex than it seems (Grant et al., 2002; Lyke, 2009). This leads us back to the discussion of new measures of PrivSC still very much needed (Watson, Morris, Ramsey, Hickman, & Waddell, 1996).

Cultural Issues

When we look closely at the items that were excluded from the SR factor, we can see that they are those which represent deeper and more complex analysis of SC. Going back to the discussion by Triandis (1989), independent selves compared to interdependent selves can be more complex in their private aspects. However, according to Cousins (1989), this should not lead us to conclude that interdependent selves are less cognitively skilled compared to their counterparts. In fact, this difference needs to be understood more by a personal choice or interest rather than a skill set. In addition, half of the SR items confirmed were more reflective of personal values as "giving importance to SR." Grant et al. (2002) called those "need for SR." And, in comparison, the items of the original private consciousness denoted "engagement in SR," we

believe those two are different psychological constructs; therefore, it might not be surprising to find puzzling relationships, especially regarding the fact that we had very few items that fell under the engagement in SR. As Kim and Sherman (2007) state, when the meaningful aspects of the self become social and external, expression of internal attributes becomes less significant. Considering collectivism aspect of Turkish culture and the importance given to what others think, the students in our sample might have thought more about "what to think about is right" as compared to "what one really thinks about."

Finally, looking at the items on the IN subscale, we see that the items that represented "confusion, lack of self-knowledge, surprise, difficulty in understanding" related to one's individual experience were loaded together as four items. And items that were excluded from the analysis were those that represented "absolute knowing, awareness, being very clear" about one's experience. And both groups of excluded and included items encompassed the "feeling, thought and behavior" patterns altogether. The means of both groups were different from each other as those items which denoted inability of IN were more useful in measuring the related factor as for our sample.

Limitations of the Study

One of the limitations of the present study was that the 10 items of the original scale did not contribute as much to the model fit as other items, therefore, was not included in the confirmatory factor analysis. As a consequence, one of the subscales included only two items which limits the validity. Another limitation was that the sample's composition of university students limits the external validity of the results. Lastly some Cronbach's alphas have fair average values for the reliability. It is possible that the validity and reliability of the scale could be confirmed in better distributed samples.

Suggestions for Further Research

The results of the present study have both research and clinical implications. Turkish version of the SRIS provides a valid and reliable instrument to facilitate the exploration of PrivSC in all aspects by researchers and also clinicians. It is also important for future studies to explore the predictive validity and test the external validity of abbreviated structure of the SRIS in different samples.

Conclusion

Our results revealed interesting findings for the following reasons: First, it was important to test the reliability and validity characteristics of SRIS for the Turkish population as a very first attempt in this culture. Second, because the discussion surrounding SC and related constructs still continue, we believe our findings might have added more insight to future discussions that will follow. Third, SC and related concepts such as IN, awareness, and mindfulness can be considered new compared to the other ones such as self-esteem or self-efficacy; therefore, further exploration of these concepts especially in different cultures might be adding to their depth in meaning and inspire future research. Fourth and final, as culture and self are inseparable concepts, further exploration of self in cultures which have less scientific background compared to those in the West, we believe would benefit psychology as both science and practice.

Appendix

Factor loadings for the original 20-item and translated scale for each model

The original scale	The translated scale	Model-1	Model-2	Model-3
1 I don't often think about my thoughts[a]	Düşüncelerim hakkında sık kafa yormam*	.08	.07	–
2 I am not really interested in analyzing my behaviour[b]	Davranışlarımı analiz etmekle aslında çok da ilgilenmem*	.13	.14	–
3 I am usually aware of my thoughts[c]	Genellikle düşüncelerimin farkındayımdır*	.20	.19	–
4 I'm often confused about the way that I really feel about things[c]	Bir şeyler hakkında gerçekten nasıl hissettiğimle ilgili sık sık kafam karışır*	.58	.56	–
5 It is important for me to evaluate the things that I do[b]	Yapmakta olduğum şeyleri değerlendirmek benim için önemlidir	.62	.61	.63
6 I usually have a very clear idea about why I've behaved in a certain way[c]	Neden o şekilde davrandığım konusunda genellikle çok net bir fikrim vardır*	.15	.15	–
7 I am very interested in examining what I think about[b]	Ne hakkında düşündüğümü incelemekle çok ilgilenirim	.57	.57	.56
8 I rarely spend time in self-reflection[a]	Nadiren kendimle ilgili öz-değerlendirme yaparım*	.27	.28	–
9 I'm often aware that I'm having a feeling, but I often don't quite know what it is[c]	İçimde bir his oluştuğunun sıklıkla farkındayımdır; ama onun ne olduğunu pek bilmem	.47	.48	.46
10 I frequently examine my feelings[a]	Sıkça duygularımı gözden geçiririm*	.66	.63	–
11 My behavior often puzzles me[c]	Davranışlarım beni sık sık hayrete düşürür.	.47	.48	.56
12 It is important to me to try to understand what my feelings mean[b]	Hislerimin ne anlama geldiğini anlamaya çalışmak benim için önemlidir	.64	.64	.60
13 I don't really think about why I behave in the way that I do[a]	Açıkçası neden o şekilde davrandığımın üzerinde durmam*	.05	.03	–
14 Thinking about my thoughts makes me more confused[c]	Düşüncelerim hakkında düşündükçe kafam daha da karışır	.47	.47	.56
15 I have a definite need to understand the way that my mind works[b]	Mantığımın nasıl çalıştığını anlamaya kesin bir ihtiyaç duyuyorum*	.42	.41	–
16 I frequently take time to reflect on my thoughts[a]	Sıkça düşüncelerimin üzerinde durmaya vakit ayırırım	.61	.60	.62
17 Often I find it difficult to make sense of the way I feel about things[c]	Sık sık bir şeyler hakkında nasıl hissettiğimden anlam çıkarmayı zor buluyorum	.57	.59	.57
18 It is important to me to be able to understand how my thoughts arise[b]	Düşüncelerimin nasıl oluştuğunu anlayabilmek benim için önemlidir	.70	.70	.74
19 I often think about the way I feel about things[a]	Bir şeyler hakkında ne şekilde hissettiğim üzerine sık sık düşünürüm	.65	.63	.65
20 I usually know why I feel the way I do[c]	Neden o şekilde hissettiğimi genellikle bilirim*	.07	.07	–

* Items which were deleted for the purpose of improving the fit indices of the Model-3

[a] Engagement in self-reflection

[b] Need for self-reflection

[c] Insight

References

Akın, A., Abacı, R., & Öveç, Ü. (2007). The construct validity and reliability of the Turkish version of self-consciousness scale. *Ankara University, Journal of Faculty of Educational Sciences, 40*(2), 257–276.

Alanazi, F. M. (2001). The revised self-consciousness scale: An assessment of factor 3. *Personality, 29*(8), 763–776.

Ames, D. R., Rose, P., & Anderson, C. P. (2006). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality, 40,* 440–450.

Anderson, E. M., Bohon, L. M., & Berrigan, L. P. (1996). Factor structure of the private self-consciousness scale. *Journal of Personality Assessment, 66*(1), 144–152.

Atay, S. (2009). Narsistik kişilik envanteri'nin Türkçe'ye standardizasyonu. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 11*(1), 181–196.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Adminstrative Science Quarterly, 36*(3), 421–458.

Bendania, A., & Abed, A. S. (1997). Reliability and factorial structure of an Arabic translation of the self-consciousness scale. *Psychological Reports, 81,* 1091–1101.

Borders, A., Earleywine, M., & Jajodia, A. (2010). Could mindfulness decrease anger, hostility, and aggression by decreasing rumination? *Aggressive Behavior, 36,* 28–44.

Brière, N. M., & Vallerand, R. J. (2001). Effect of private self-consciousness and success outcome on causal dimensions. *The Journal of Social Psychology, 130*(3), 325–331.

Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). *Cross-cultural research methods*. New York: Wiley.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84,* 822–848.

Burnkrant, R. E., & Page, T. J., Jr. (1984). A modification of the Fenigstein, Scheier, and Buss Self-Consciousness Scales. *Journal of Personality Assessment, 48,* 629–637.

Chentsova-Dutton, Y. E., & Tsai, J. L. (2010). Self-focused attention and emotional reactivity: The role of culture. *Journal of Personality and Social Psychology, 98*(3), 507–519.

Cousins, S. D. (1989). Culture and self-perception in Japan and the United States. *Journal of Personality and Social Psychology, 56*(1), 124–131.

Dağ, İ. (2002). Kontrol odağı ölçeği (KOÖ): Ölçek geliştirme, güvenirlik ve geçerlik çalışması. [Locus of Control Scale (LOCS): Scale development, reliability and validity study]. *Türk Psikoloji Dergisi, 49,* 77–90.

Davies, M. F. (1982). Correlates of self-consciousness and the 16 personality factor questionnaire. *The Journal of Psychology, 111,* 123–128.

Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology, 43*(4), 522–527.

Ghorbani, N., Bing, M. N., Watson, P. J., Davison, H. K., & Mack, D. A. (2002). Self-reported emotional intelligence: Construct similarity and functional dissimilarity in Iran and the United States. *International Journal of Psychology, 37,* 297–308.

Ghorbani, N., Cunningham, C. J. L., & Watson, P. J. (2010). Comparative analysis of integrative self-knowledge, mindfulness, and private self-consciousness in predicting responses to stress in Iran. *International Journal of Psychology, 45*(2), 147–154.

Ghorbani, N., Watson, P. J., Davison, H. K., & Bing, M. N. (2004a). Private self-consciousness factors: Relationships with need for cognition, locus of control, and obsessive thinking in Iran and the United States. *The Journal of Social Psychology, 144*(4), 359–372.

Ghorbani, N., Watson, P. J., Krauss, S. W., Bing, M. N., & Davison, H. K. (2004b). Social science as dialogue: Narcissism, individualist and collectivist values, and religious interest in Iran and the United States. *Current Psychology, 23*(2), 111–123.

Ginsberg, A. P. (2000). Shame, self-consciousness, and locus of control in people who stutter. *The Journal of Genetic Psychology, 161*(4), 389–399.

Grant, A. M. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social Behavior and Personality, 31*(3), 253–264.

Grant, A. M., Franklin, J., & Langford, P. (2002). The self-reflection and insight scale: A new measure of private self-consciousness. *Social Behavior and Personality, 30*(8), 821–836.

Greenfeld, D., Strauss, J. S., Bowers, M. B., & Mandelkern, M. (1989). Insight and interpretation of illness in recovery from psychosis. *Schizophrenia Bulletin, 15*(2), 245–252.

Hale, W. D., & Cochran, C. D. (1987). The relationship between locus of control and self-reported psychopathology. *The Journal of Social Psychology, 127,* 31–37.

Hall, J. A. (1992). Psychological-mindedness: A conceptual model. *American Journal of Psychotherapy, XLVI*(1), 131–139.

Harrington, R., & Loffredo, D. A. (2011). Insight, rumination, and self-reflection as predictors of well-being. *The Journal of Psychology, 145*(1), 39–57.

Heinemann, W. (1979). The assessment of private and public self-consciousness: A German replication. *European Journal of Social Psychology, 9,* 331–337.

Hixon, J. G., & Swann, W. B., Jr. (1993). When does introspection bear fruit? Self-reflection, self-insight, and interpersonal choices. *Journal of Personality and Social Psychology, 64*(1), 35–43.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modeling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods, 6*(1), 53–60.

Kağıtçıbaşı, Ç. (1996a). The autonomous-relational self: A new synthesis. *European Psychologist, 1*(3), 180–186.

Kağıtçıbaşı, Ç. (1996b). *Family and human development across cultures. A view from the other side*. New York and London: Psychology Press Taylor & Francis Group.

Kağıtçıbaşı, Ç. (2005). Autonomy and relatedness in a cultural context: Implications for self and family. *Journal of Cross-Cultural Psychology, 36,* 403–422.

Kim, H. S., & Sherman, D. K. (2007). "Express yourself": Culture and the effect of self-expression on choice. *Attitudes and Social Cognition, 92*(1), 1–11.

Kingree, J. B., & Ruback, R. B. (1996). Reconceptualizing the private self-consciousness scale. *Social Behavior & Personality, 24*(1), 1–8.

Klonowicz, T. (2001). Discontented people: Reactivity of locus of control as determinants of subjective well-being. *European Journal of Personality, 15*(1), 29–47.

Kohut, H. (1971). *The analysis of the self*. New York: International Universities Press.

Levesque, C., & Brown, K. W. (2007). Mindfulness as a moderator of the effect of implicit motivational self-concept on day-to-day behavioral motivation. *Motivation & Emotion, 31,* 284–299.

Lindwall, M. (2004). Factorial structure and invariance across gender of the Swedish self-consciousness scale. *Journal of Personality Assessment, 82*(2), 233–240.

Lyke, J. A. (2009). Insight, but not self-reflection, is related to subjective well-being. *Personality and Individual Differences, 46,* 66–70.

Mittal, B., & Balasubramanian, S. K. (1987). Testing the dimensionality of the self-consciousness scales. *Journal of Personality Assessment, 51*(1), 53–68.

Neff, K. D. (2003). Development and validation of a scale to measure self compassion. *Self and Identity, 2,* 223–250.

Nystedt, L., & Ljungberg, A. (2002). Facets of private and public self-consciousness: Construct and discriminant validity. *European Journal of Personality, 16,* 143–159.

Nystedt, L., & Smari, J. (1989). Assessment of the Fenigstein, Scheier, and Buss self-consciousness scale: A Swedish translation. *Journal of Personality Assessment, 53*(2), 342–352.

Özdikmenli-Demir, G., & Sayıl, M. (2009). Individualism-collectivism and conceptualizations of interpersonal relationships among Turkish children and their mothers. *Journal of Social and Personal Relationships, 26*(4), 371–387.

Özyeşil, Z., Arslan, C., Kesici, Ş., & Deniz, M. E. (2011). Bilinçli farkındalık ölçeği'ni Türkçeye uyarlama çalışması. (Adaptation of the mindful attention awareness scale into Turkish). *Education and Science, 36*(160), 224–235.

Peacock, E. J., & Wong, P. T. P. (1996). Anticipatory stress: The relation of locus of control, optimism, and control appraisals to coping. *Journal of Research in Personality, 30,* 204–222.

Plant, R. W., & Ryan, R. M. (1985). Intrinsic motivation and the effects of self-consciousness, self-awareness, and ego-involvement: An investigation of internally controlling styles. *Journal of Personality, 53*(3), 435–449.

Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology, 54*(5), 890–902.

Realo, A., & Allik, J. (1998). The Estonian self-consciousness scale and its relation to the five-factor model of personality. *Journal of Personality Assessment, 70*(1), 109–124.

Roberts, C., & Stark, P. (2008). Readiness for self-directed change in professional behaviours: Factorial validation of the self-reflection and insight scale. *Medical education, 42*, 1054–1063.

Saravanan, B., David, A., Bhugra, D., Prince, M., & Jacob, K. S. (2005). Insight in people with psychosis: The influence of culture. *International Review of Psychiatry, 17*(2), 83–87.

Saravanan, B., Jacob, K. S., Prince, M., Bhugra, D., & David, A. S. (2004). Culture and insight revisited. *British Journal of Psychiatry, 184*, 107–109.

Sauter, F. M., Heyne, D., & Blöte, A. W. (2010). Assessing therapy-relevant cognitive capacities in young people: Development and psychometric evaluation of the self-reflection and insight scale for youth. *Behavioural and Cognitive Psychotherapy, 38*, 303–317.

Shek, D. T. L. (1994). Assessment of private and public self-consciousness: A Chinese replication. *Journal of Clinical Psychology, 50*, 341–348.

Silvia, P. J., & Phillips, A. G. (2011). Evaluating self-reflection and insight as self-conscious traits. *Personality and Individual Differences, 50*, 234–237.

Stein, D., & Grant, A. M. (2014). Disentangling the relationships among self-reflection, insight, and subjective well-being: The role of dysfunctional attitudes and core self-evaluations. *The Journal of Psychology, 148*(5), 505–522.

Trapnell, P. D., & Campbell, J. D. (1999). Private self-consciousness and the five-factor model of personality: Distinguishing rumination from reflection. *Journal of Personality and Social Psychology, 76*, 284–304.

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*(3), 506–520.

Tsai, W., & Lau, A. (2011). Adaptive and maladaptive self-reflection: Are there cultural differences? *Asian American Psychological Association 2011 Convention Presentation.*

Üskül, A. K., Hynie, M., & Lalonde, R. N. (2004). Interdependence as a mediator between culture and interpersonal closeness for Euro-Canadians and Turks. *Journal of Cross-Cultural Psychology, 35*(2), 174–191.

Vleeming, R. G., & Engelse, J. A. (1981). Assessment of private and public self-consciousness: A Dutch replication. *Journal of Personality Assessment, 45*(4), 385–389.

Watson, D. C. (1998). The relationship of self-esteem, locus of control, and dimensional models to personality disorders. *Journal of Social Behavior and Personality, 13*(3), 399–420.

Watson, P. J., & Biderman, M. D. (1993). Narcissistic personality inventory factors, splitting, and self-consciousness. *Journal of Personality Assessment, 61*(1), 41–57.

Watson, P. J., Ghorbani, N., Davison, H. K., Bing, M. N., Hood, R. W., Jr., & Ghramaleki, A. F. (2002). Negatively reinforcing personal extrinsic motivations: Religious orientation, inner awareness, and mental health in Iran and the United States. *The International Journal for the Psychology of Religion, 12*(4), 255–276.

Watson, P. J., Hickman, S. E., Morris, R. J., Stutz, N. L., & Whiting, L. (1994). Complexity of self-consciousness subscales: Correlations of factors with self-esteem and dietary restraint. *Journal of Social Behavior and Personality, 9*, 761–774.

Watson, P. J., Morris, R. J., Ramsey, A., Hickman, S. E., & Waddell, M. G. (1996). Further contrasts between self-reflectiveness and internal state awareness factors of private self-consciousness. *The Journal of Psychology, 130*(2), 183–192.