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Reliability and Validity of Attentional Style Questionnaire: Turkish Form*

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ABSTRACT

Attention is an important part of cognitive and perceptual processes. Attention includes both external processes related to the environment and internal processes such as heredity. In addition, measuring attention processes, which have two dimensions, top-down and bottom-up, is important in terms of both learning processes and determining some psychopathologies. Based on this, it was aimed to adapt the Attention Style Questionnaire (ASQ) into Turkish in this study. The study group includes of 372 university students. Data collection materials included personal information form, Attention Styles Questionnaire and Control Dimension of Self-regulation Scale. Language validity and criterion-related validity analysis were performed for validity studies. Confirmatory factor analysis and test-retest analysis were utilized for reliability studies. The two-factor structure in the original structure of the scale was confirmed through confirmatory factor analysis results. Furthermore, the ASQ was found to be highly correlated with the Control Dimension of Self-regulation Scale. According to the findings obtained for reliability, Cronbach's alpha coefficients were found as .81 for the cognitive avoidance sub-dimension and .70 for the focusing sub-dimension. Test-retest correlation coefficients were determined as .76 for the cognitive avoidance sub-dimension and .75 for the focusing sub-dimension. Research results indicate that Attention Style Questionnaire is a reliable and valid measurement tool in determining the style of the attention to university students in Türkiye.

Keywords: Attention, attention style, attention control, CFA, scale adaptation

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1. INTRODUCTION

Attention is the core aspect of all perceptual and cognitive processes (Chun, Golomb, & Turk-Browne, 2011). It involves external conditions related to the environment and internal conditions associated with the mental conditions, culture and heredity (Sharma & Sharma, 2006). Attention is necessary because the world provides us with far more sensory information than can be effectively processed, our memory is full of competing hints to be recalled, and the kinds of responses are far greater than we can handle (Chun et al., 2011; Katsuki & Constantinidis, 2014). Further, the nature of attention is multifaceted, where the internal and external orientation of it and top-down and bottom-up interact in different ways (Van Calster, D'Argembeau, & Majerus, 2018). Increased knowledge of these dimensions and interactions might help to understand issues with attention deficit, which, in turn, may have implications for developing attentional test batteries and assisting people experiencing attention problems. Specifically, in Turkish literature, there are not any scales to measure attentional styles. This study aims to adapt the Attentional Style Questionnaire (ASQ) by Van Calster et al. (2018) into Turkish. The scale is an encompassing questionnaire that measures a person's common inclination of attentional control along a bottom-up and top-down dimensions. ASQ measures both dimensions of attention and predicts a possible psychopathology. As it aims to measure two different dimensions of young adults' attentional style, Turkish adaptation of this scale will facilitate researchers to evaluate young adults' attention control, distractibility/cognitive avoidance and focus degrees.

* Ethical permission was approved by the ethics committee of Fatih Sultan Mehmet Vakıf University in İstanbul, Türkiye, and the ethical permission date and number is 14/12/2020-53.

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1.1. Statement of the Problem

Our ability to selectively focus our awareness on objects and events relevant to our immediate goals while filtering irrelevant information is essential as it allows us to adapt to a more complicated world (Hopfinger, Buonocore, & Mangun, 2000; Ward, 2004). Attentional processes, including top-down and bottom-up, can be internal and external (Posner, 1980). The issue of top-down versus bottom-up control has played an important role in explaining the attentional capacity of human beings (Van et al., 2018). While the top-down attentional process is goal-directed, involves in and is influenced by current goals, expectations and knowledge governed, the bottom-up attentional process is stimulus-driven and involves in and influenced by the salience of environmental input systems (Coombes, Higgins, Gamble, Cauraugh, & Janelle, 2009). Bottom-up attention processes cover the external environment's rapid and unexpected attentional stimulation and intrusive thoughts (Clark & Purdon, 1995). According to studies, when top-down attentional systems are imposed, as the case, for instance, in a high-load short-term memory situation, bottom-up attentional processes interplay, as reflected by a reduced sensitivity towards task-irrelevant distractor stimulant (Todd, Fougnie, & Marois, 2005; Shulman et al., 2007; Bruno et al., 2012).

Internal and external attention are two separate dimensions of attention control. Attentional control is an adaptive process that manages awareness of important parts of internal states or the external environment, while filtering out less important aspects (Posner & Rothbart, 2007). Eysenck's (1992) Attentional Control Theory is a prevailing one which has informed studies on attentional control. Attentional Control Theory is a theoretical framework that is interested in anxiety and cognition and tries to explain the relationship between anxiety and attention (Englert & Bertrams, 2015). According to the Attentional Control Theory, the effective functioning of the goal-directed attention and the balance in the attentional systems can be negatively impacted by anxiety; and anxiety can intervene the stimulus-driven attentional process. While anxiety can reduce the attentional control, it can manipulate attention toward threat-related situations (Eysenck, Derakshan, Santos, & Calvo, 2007; Eysenck & Derakshan, 2011). The difficulties in controlling attention are closely related to high levels of negative affect, depression, and anxiety as well (Fackowska & Derryberry, 2010; Reinholdt-Dunne, Mogg, & Bradley, 2013). This assumption relies on the distinction between two attentional systems where attention is regulated by the goal-oriented and the stimulus-driven systems (Corbetta & Shulman, 2002). While the goal-directed attentional process includes top-down control, the stimulus-driven attentional process is involved in bottom-up control (Coombes et al., 2009).

Differential attentional control mechanisms, such as top-down and bottom-up or internal and external, are essential to understand so that different mental health states are explained by a particular system within which a particular type of information is taken (Kraft et al. 2019). The importance of attentional control in mental health shows us the requirement of such scales to assess differential attentional control. Although the attentional dimensions of top-down and bottom-up and internal and external attentional processes are critical in explaining everyday person attention, there are few scales accessible to evaluate the personal diversity of these dimensions. Attentional Control Scale is one prevalent questionnaire used to measure individual differences in attention (Derryberry & Reed, 2002). It includes 20 items that aim to assess one's ability to focus and shift attention and control thought (Derryberry & Reed, 2002). Akın et al. (2013) adapted this questionnaire to Turkish with a university student sample. The Attentional Control Scale measures externally oriented top-down attentional control capacity rather than internally intended top-down attentional control capacity. The Attentional Style Questionnaire, the adaptation of which is the purpose of this study, takes into account both the top-down versus bottom-up and the external versus internal dimensions of attention. The items of the Attentional Style Questionnaire reflect a continuum between both attentional states because attentional states have an antagonistic nature of bottom-up and top-down states (Van Calster et al., 2018).

1.2. Purpose of the Study

This research aims to conduct the adaptation studies of Attentional Style Questionnaire (ASQ; Van Calster et al., 2018) into Turkish. Both the top-down versus bottom-up and the external versus internal dimensions of attention are measured in the Attentional Style Questionnaire. With this study, researchers aim to introduce a measurement tool into Turkish literature that measures both dimensions of attention and predicts possible impairments. As it aims to measure two different dimensions of young adults' attentional style, we believe the Turkish adaptation of this scale will facilitate researchers to measure young adults' attention control, distractibility/cognitive avoidance and level of focus. This adapted scale can evaluate attention in some adverse situations related to cognition by considering attention in two dimensions: focus and dispersion against stimuli, which are highly affected by internal and external factors. By measuring this feature of attention style, the scale can function to evaluate attention by researchers studying different forms of psychopathology, such as depression, obsessive-compulsive disorder, or anxiety, and behavior disorders like attention deficit disorder. Therefore, it is important to adapt this measurement tool to Turkish.

1.3. Problem of the Study

The internal and external types of information, together with top-down and bottom-up dimensions of attention, yield significant indicators for mental health in accordance with individual differences. However, no available scale measures attention control in terms of both dimensions (top-down and bottom-up) and levels (internal and external) for the Turkish population. This study will fill an essential literature gap and benefit researchers.

2. METHODOLOGY

This study is a measurement tool adaptation study using CFA. SPSS (Statistical Package for Social Sciences) and the Mplus Base Program were used for statistical analyses. Required permissions were taken from the authors to conduct the scale adaptation studies with the Turkish population. Ethical permission was approved by the ethics committee of Fatih Sultan Mehmet Vakıf University in İstanbul, Türkiye, and the ethical permission date and number is 14/12/2020-53.

2.1. Participants

The sample consisted of university students enrolled in various public and private universities in Istanbul, Türkiye. Overall, the sample included 372 participants who were recruited through university visits. Participants were selected through random sampling. The scale questions were delivered in a way that participants could not leave any question blank. Thus, data loss was prevented and the data was used in accordance with the purpose of the study. The sample consists of relatively similar numbers of females (n = 215, 57.8%) and males (n = 215, 57.8%). The age of females ranged from 17 to 42 (M = 21.90, SD = 3.23), and males ranged from 17 to 33 (M = 21.76, SD = 2.90). A separate sample of 48 undergraduates (47.9% female, 52.1% male) was formed to determine test-retest reliability and language validity. Before the data collection, participants were informed about research aims and procedures and asked to provide their verbal consent. No incentives were provided, and participation relied on volunteering.

2.2. Data Collection Tools

2.2.1. Personal information form

A personal information form was used as part of the data collection process to help researchers and readers to familiarize themselves with the sample. The form included questions on demographic information, including gender, age, monthly income level and the type of faculty.

2.2.2. Attentional style questionnaire

This research aims to conduct adaptation studies of the Attentional Style Questionnaire (ASQ; Van Calster et al., 2018) in Turkish. The scale development study consisted of 206 French-speaking participants aged 18 to 45 (M = 23.25, SD = 5.2). Item pool included statements describing daily behavior that needs attentional control for external or internal placement (i.e., "I have trouble concentrating when there is movement in the room I am in", "In general, I stay in control of my thoughts and do not let myself get distracted by interfering thoughts"). In order to avoid measuring attentional control for a specific situation, investigators designed the items to refer to an overall inclination of maintaining attentional control for situations that was likely to encounter over time. The primary pool consisted of 17 items on a Likert-type scale ranging from 1 (total disagreement) to 6 (total agreement). After reversing some items, the overall score on the questionnaire aimed to demonstrate the individual's attentional type. High scores showed a marked bottom-up oriented attentional type, low scores indicated a marked top-down oriented attentional style (Van Calster et al., 2018). Further analyses confirmed the two-factor structure of the scale with 12 items (χ^2 (103, 206) =174.6, $p < 0.001$).

The factor structure for the ASQ within was evaluated by Kraft et al. (2019) with an English-speaking population with the item translations (French to English) provided by Van Calster et al. (2018). Instead of conducting a confirmatory factor analysis (CFA) with 12 items based on the two-factor structure of Van Calster et al. (2018), Kraft et al. (2019) used the initial 17-item pool. Participants comprised 286 English-speaking individuals aged between 24 and 60 (M = 35.61, SD = 10.41). The results of the exploratory factor analysis (EFA) showed that the two-factor solution provided an adequate model fit. Items 4 and 17 were dropped from the scale due to non-significant cross-loadings and unclear wording. The CFA suggested an acceptable model fit ($\chi^2[67] = 135.53$, $p < 0.001$), so that two indices showed a sufficient fit to the data (TLI = 0.925, SRMR = 0.081) and two an excellent fit (CFI = 0.952; RMSEA = 0.067). A total of 15 items were retained, representing two factors: distractibility/cognitive avoidance and concentration. In contrast to the original measurement, no items were reversed. The original article by Van Calster et al. (2018) found a two-factor structure consisting of attentional control of external stimuli (with item loadings: 1, 6, 11, 14, 16) and attentional control of internal stimuli (with item loadings: 2, 7, 8, 9, 10, 12, 13), whereas Kraft et al. (2019) reported a two-factor structure consisting of distractibility/cognitive avoidance (with item loadings: 1, 3, 7, 8, 9, 12, 13, 16) and focusing (with item loadings: 2, 5, 6, 10, 11, 14, 15). Considering the difference between factor structures in these two studies, to prevent any confusion, it is important to indicate that this current study will conduct the analyses based on the factor structure provided by Kraft et al. (2019) with 15 items. For this reason, a CFA will be performed with 15 items to see the validity and reliability of ASQ for the Turkish population.

2.2.3. Control dimension of self-regulation scale

The Self-Regulation Scale was developed by Schwarzer, Diehl and Schmitz (1999) in German at first. After, Diehl, Semegon and Schwarzer (2006) was adapted to English the Self-Regulation Scale. The Self-Regulation Scale, including 7 items and one factor, was adapted by Çevik, Haşlaman, Mumcu and Gökçearslan (2015) into Turkish. The sample of the adaptation study included

389 undergraduate students in a public university in Ankara. The Cronbach's Alpha internal consistency coefficient of the scale was found .84. The test-retest correlation was calculated .67.

3. FINDINGS

3.1. Translation Process

The AQS was translated from English to Turkish independently by five field experts. The final form was determined by a field professional. The professional is working as a full-time professor at the psychological counselling and guidance branch at Marmara University. The main type of ASQ and its Turkish type were ran twice with an interval of 2 weeks (Turkish version at T1 and English version at T2). Participants consisted of 27 volunteer students (23 female and 4 male) studying at the translation and interpreting department of Marmara University. The mean age was 23.7 (SD = 2.35, range = 9). Paired samples tests' results indicated that there were no significant differences between T1 and T2 for both subscales, namely Distractibility/Cognitive Avoidance and Focusing subscales ($t(26)= -1.88$, $p = .072$; $t(26)= .29$, $p = .772$, respectively). The correlation coefficient of the 8-item Distractibility/Cognitive Avoidance subscale across T1 (M = 3.23, SD = .60) and T2 (M = 3.05; SD = .73) was significant, $r = .73$ ($p < .001$). The correlation coefficient of the 7-item Focusing subscale across T1 (M = 3.30; SD = .79) and T2 (M = 3.32; SD = .85) was significant, $r = .84$ ($p < .001$). Hence, the translated type was accepted as equivalent to the original.

3.2. Confirmatory Factor Analysis

The factor validity of ASQ subscales was analyzed to decide whether the 2-factor construct in the original ASQ accomplished a good fit with the data collected in the current study by using the Mplus base program. The initial data set consisted of 523 participants. Prior to proceeding with the analysis, data was controlled for normality and conformity of analysis assumptions. Any participant with z-scores of the observed variables outside the -3.5 to 3.5 range was excluded from the data. Multivariate outliers were identified by computing the Mahalanobis distance for each case. The normality assumption was assessed through each observed variable's skewness and kurtosis values. Participants with outlying scores were excluded from the dataset. In the last case, CFA was performed with 372 individuals recruited through university visits. The majority of the sample consisted of university students enrolled in various public and private universities in Istanbul province. The sample was primarily female (n = 215, 57.8%), aged 17 to 42 (M = 21.90, SD = 3.23). The remaining sample comprised 157 males (42.2%) aged 17 to 33 (M = 21.76, SD = 2.90). The fit indexes were found as χ^2 (df = 89, $p < 0.001$) = 279.48, $\chi^2/df = 3.14$, SRMR = 0.059, CFI = 0.851, TLI = 0.824, and RMSEA = 0.076, suggesting that items tapped into two latent factors. Based on modification indices, post hoc modifications, that are both theoretically and practically reasonable, are done. A search for modification indices showed that there are significant error covariations between Items 1 and 3; 11 and 12; and between ıtems 6 and 14. By looking at the three item pairs, it is this is highly probably the result of the content which is overlap between the two items. , For example, when the interviewee conveys as if that there is a sound in the environment than I get easily distracted than his or her score will increase on both ıtem 1 and 3. The fit was improved when modifications between item1 and item3, item6 and item14, and item11 and item12 were performed: χ^2 (df = 86, $p < 0.001$) = 189.471, $\chi^2/df = 2.20$, SRMR = 0.052, CFI = 0.919, TLI = 0.901, and RMSEA = 0.057. Analysis results of CFA demonstrate that the model is coherent. The factor loadings of the items changed between 0.42 (item 5) and 0.76 (item 13 and item 8), and all loadings were statistically important ($p < 0.001$) (see Figure 1). Cronbach's alpha coefficients were estimated for subscales. The internal consistency scores for Distractibility/Cognitive Avoidance and Focusing subscales were 0.81 and .70, respectively. Correlation between Distractibility/Cognitive Avoidance subscale (M = 3.42, SD = .93) and Focusing subscale (M = 3.50, SD = .81) was found statistically significant at .01 level ($r = -.31$).

3.3. Reliability Study-Test- Retest

A separate sample of 48 undergraduates (47.9% female, 52.1% male) completed the ASQ on two occasions (T1 and T2), 3 weeks apart. Paired samples tests' results indicated that there were no significant differences between T1 and T2 for both subscales, namely Distractibility/Cognitive Avoidance and Focusing subscales ($t(47)= -1.23$, $p = .225$; $t(47)= -1.62$, $p = .113$, respectively). The intra-class correlation coefficient of the 8-item Distractibility/Cognitive Avoidance subscale across T1 (M = 3.10; SD = .950; $\alpha = .78$) and T2 (M = 3.23; SD = .918; $\alpha = .76$) was significant at .01 level ($r = .69$). The intra-class correlation coefficient of the 7-item Focusing subscale across T1 (M = 3.57; SD = .912; $\alpha = 0.69$) and T2 (M = 3.78; SD = .923; $\alpha = 0.75$) was significant at .01 level ($r = .53$). Results suggested good test–retest stability.

3.4. Validity Study

Criterion-related validity of ASQ was tested with the Self-Regulation Scale (Schwarzer et al., 1999), which is a one-dimensional 7-item Likert scale ranging from 1 (totally disagree) to 4 (totally agree). Demirarslan Çevik, Haşlaman, Kuşkaya Mumcu, & Gökçearslan (2015) were adapted to the scale into Turkish. The Cronbach's alpha coefficient of the scale was calculated to be .84. In this current study, analyses were conducted with 118 university students (69.5% female; 30.5% male). The mean age was 20.07 (SD = 2.08), ranging from 17 to 31. Correlation analysis result between Self-Regulation scale (M = 2.84, SD = .59, $\alpha = .77$) and Distractibility/Cognitive Avoidance subscale (M = 3.42; SD = .95, $\alpha = .73$) indicated a negative correlation ($r = -.39$, $p = .000$), but the Self-Regulation scale and Focusing subscale had a positive correlation between (M = 3.54; SD = .86, $\alpha = .56$) at .01 level ($r = .56$).

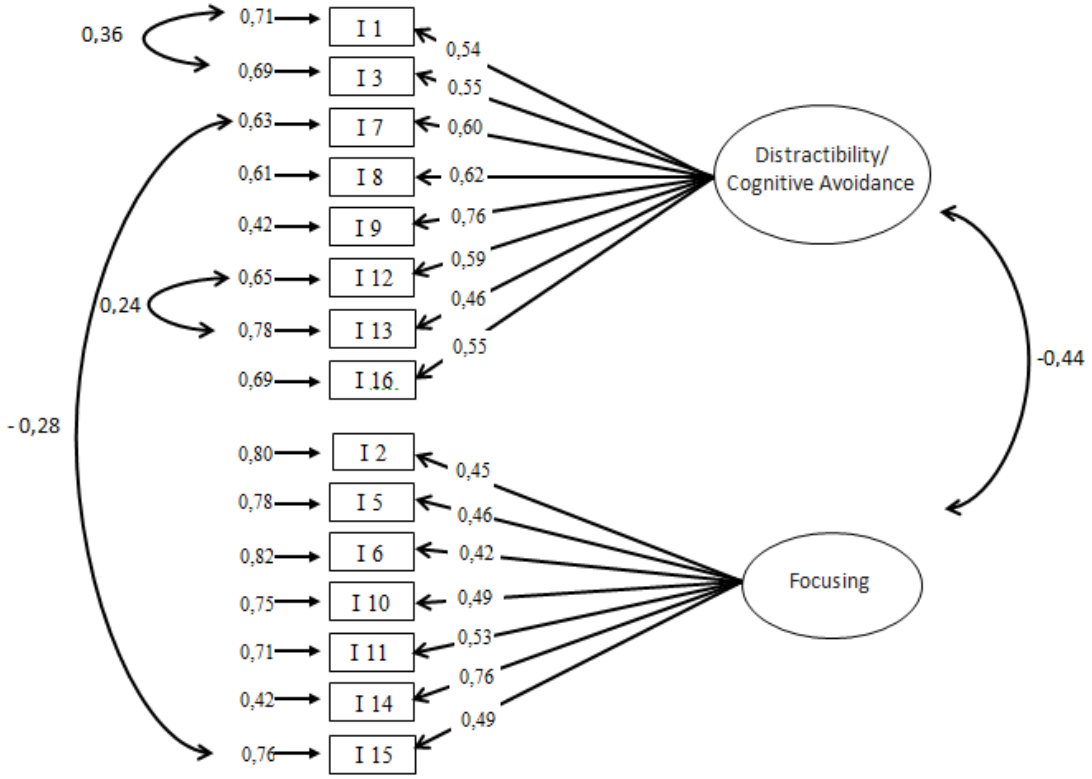

Figure 1. Standardized Factor-Item Correlations

4. RESULTS, DISCUSSION AND RECOMMENDATIONS

The study evaluated the factor structure of the Turkish translation of ASQ and its validity. Reliability and validity analysis of ASQ included four steps: language translation, construct validity, criterion-related validity, and test-retest reliability. CFA results indicated that the two-factor structure of the Turkish version of ASQ had good psychometric properties, and the model fit well with the data. The correlation of ASQ with the Self-Regulation scale was statistically significant, indicating acceptable criterion validity. According to the results of the analysis we can be said that the Turkish version of ASQ is a valid and reliable scale measuring an individual's attentional type (bottom-up or top-down) for the Turkish population. Higher scores on the "Distractibility/Cognitive Avoidance" subscale factor showed an extended predisposition for being distracted by a stimulus (external/internal). Higher scores on the "Focusing" subscale factor show an extended ability to focus on a work. In addition, these two factors seem to be negatively but weakly correlated, meaning they are not opposed to each other; instead, they represent two different sides of attentional control.

This study showed that the English version of ASQ and its Turkish version have similar factor structures. On the other hand, the Turkish version of ASQ and the original scale developed by Van Calster et al. (2018) for the French-speaking population have different factor structures. This implies that scale items after translation from English to Turkish did not create an important difference in meaning for the Turkish population. The discrepancy between the factor structures of the French, English and Turkish versions of the scale may be because, in adaptation studies, the translation of scale items properly and culturally adaptive is important to observe the factor structures clearly (Sperber, 2004). In their original study, Van Calster et al. (2018) included English equivalents of their French items, and in the English version of the scale, items provided by Van Calster et al. (2018) were used. Besides, the English translation was assessed in the French-speaking population (Kraft et al., 2019). So, the factor structure of the original and the English version of the scale show discrepancies. On the other hand, in the Turkish adaptation study, English items and their equivalent Turkish ones were assessed in the Turkish-speaking group. In the translation process, the items were not translated in word-to-word format; cultural appropriateness was considered to enable participants to relate to the statements.

Findings also showed that sustaining attention and attentional control are somehow related to self-regulation (Rueda, Posner & Rothbart, 2004). The subscales in this study, namely "Distractibility/Cognitive Avoidance" and "Focusing", were found to be correlated to the Self-Regulation Scale, which measures one's ability to sustain his/her attention in order to reach intended behaviour (Zimmerman, 2000). While the "Distractibility/Cognitive Avoidance" subscale was negatively correlated to self-regulation, the "Focusing" subscale is positively correlated. Easy distraction by inner or outer stimuli can be considered a weak self-regulation behaviour. On the other hand, focusing on a task in hand necessitates enduring attention. Trying to reach an aim necessitates setting clear-cut and reachable goals and overseeing the process carefully. In the context of self-regulation, the goals to reach it require desire, wish or patience, which are emotional variables. Some studies show attentional control paves the way for emotional regulation so a person's emotional well-being (Wadlinger & Isaacowitz, 2011). Research has also shown that the regulatory nature of attention as a cognitive task by neuroimaging in humans has been examined through attentional

control analysis by examining activated brain areas (Corbetta & Shulman, 2002). Kavianipoor, Farsi & Bahrami (2022) took attention the relationship between trait anxiety such an emotional in nature and attentional styles especially attentional control in athletes. Not only attentional styles impact the emotions but also the cognitions. .Based on the processes, top down and bottom up, and the direction, internal stimuli and external stimuli, of attention in a person, the study's results would be helpful to make improvements in that specific person's self-regulation which is totally related to cognitions and emotions. Moreover, psychopathology can be viewed from this perspective, so that psychopathologies such as major depressive disorder, obsessive-compulsive disorder or attention deficit hyperactivity disorder include both emotional and cognitive features in their nature and also show attention-related problems.

In conclusion, this study aimed to conduct adaptation studies of ASQ to Turkish. The two-factor structure of the Turkish version of the scale has similar factor structure with its English version. The scale can be used for its characteristic, which distinguishes internal and external orientation of attention in the same scale. Besides, attention and attentional control are somehow related to other cognitive, emotional, and behavioral situations and problems.

For the current research, there are some limitations and suggestions that should be noticed. First of all, the scale relies on self-statement answers. This self-statement answering contains itself the possibility of answering the items in a much more socially desirable way. The second limitation comes from the participants' demographic qualities. The participants are mainly from the upper or the middle socio economic status not included lower one. And also the participants totally from the university. From this point, it comes a suggestion for further researches in that the future studies should use the scale in lower socio economic group and from the other life periods so as to make the findings generalizable. All in all, Attentional Style Questionnaire has a good model fit indexes and reliability results making it one such a reliable and valid research instrument. Based on the importance of attention in both emotional and cognitive features of a person, than this scale can be used such a wide research area from education to psychopathology.

Research and Publication Ethics Statement

The authors declare that all information in this study has been obtained and presented in accordance with academic rules and ethical conduct.

Contribution Rates of Authors to the Article

The authors declare that each author made an important contribution to every stage of the study. The five authors worked together during the analysis and reporting of the data.

Statement of Interest

The authors declare that they have no competing interests.

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APPENDIX 1

Dikkat Stilleri Ölçeği

		Kesinlikle Katılmıyorum → Kesinlikle Katılıyorum					
		1	**2**	**3**	**4**	**5**	**6**
1	Bulunduğum ortamda hareketlilik olduğunda bir şeye konsantre olmakta zorlanırım.						
2	Genellikle düşüncelerimi kontrol edebilirim ve başka düşüncelerin dikkatimi dağıtmasına izin vermem.						
3	Bir iş ile uğraşırken, yaptığım işle alakalı olmayan uyaranlar olduğunda (örneğin, geçen insanların sesleri, evdeki sesler…) kolayca dikkatim dağılır.						
4	Bir iş yaparken o kadar çok odaklanırım ki, çevremde olup bitenleri fark etmem.						
5	Müzik dinlerken çalışmakta zorlanmam.						
6	Bir saat boyunca, belli bir işle uğraşmak / işi sürdürmek benim için zordur.						
7	Bir iş yaparken, yaptığım işle alakalı olmayan zihinsel imgeler ve düşünceler aklıma gelir.						
8	Başlamam veya devam ettirmem gereken başka bir işi düşündüğüm için, sık sık o an yaptığım işi askıya alır/bekletirim.						
9	Bitirinceye kadar tek bir işe odaklanırım.						
10	Etrafımda olup bitenleri kolaylıkla görmezden gelebilirim.						
11	Bazen, yaptığım bir çalışmayı, o işle alakasız olan herhangi bir ayrıntıyı kontrol etmek için yarıda keserim.						
12	Bilgisayar başında çalışırken, yaptığım işle ilgisi olmayan web sitelerini ziyaret etmek için sık sık internete girerim.						
13	İçinde bulunduğum ortamda hareketlilik olsa bile, kolaylıkla bir işe konsantre olabilirim.						
14	Bir soru üzerinde dakikalar harcayabilir ve dikkatle incelemeye çalışabilirim.						
15	Ortam gürültülü olduğunda, bu sesler yoğun olmasa bile düşünmekte güçlük yaşarım.						