THE PSYHOMETRIC PROPERTIES OF MINDFULNESS IN PARENTING QUESTIONNAIRE (MIPQ) IN TURKISH SAMPLE

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Abstract:

The aim of the study is to examine the psychometric properties of the Mindfulness in Parenting Questionnaire developed by McCaffrey, Reitman and Black (2017) in Turkish parents. At the beginning of the study, linguistic equivalence was examined. After observing that the scale is linguistically equivalent to the original form, the Confirmatory Factor Analysis (CFA) was applied for testing the construct validity. The results showed that goodness of fit indices of the scale are within acceptable ranges for the two factor structure (χ2/sd=1.927, RMSEA=.049, GFI=.90, CFI=.90, IFI=.90) as well as for the single factor model of the scale (χ2/sd=1.904, RMSEA=.049, GFI=.90, CFI=.90, TLI=.90). The Cronbach's alpha internal consistency coefficient was found to range between .73 and .87 for each subscale and the whole scale. The results revealed that corrected item total correlations were between .50 and .85 and the t-test results for the upper 27% and lower 27% of scores were significant (p<.05). Also, the scale was found to be significantly correlated to the Parent-Child Communication Scale and the Mindful Attention Awareness Scale. To conclude, Mindfulness in Parenting Questionnaire appears to be a valid and reliable measure of mindful parenting in Turkish parents.

Keywords: mindfulness, mindfulness in parenting, validity, reliability

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1. Introduction

Kabat-Zinn (1990) defines mindfulness as the process of bringing one's attention to the experiences occurring in the present moment. This attention process includes curiosity, acceptance, openness to new experiences, and a directed awareness to what's happening in the moment. During the mindful awareness, cognitive styles, personality traits, and cognitive abilities are looked over (Kabat-Zinn, 1990). According to Germer (2005), mindfulness is a chance for being fully aware of our way of living. For human-being, all experiences whether they are positive, negative, or neutral are related to reducing pain and enhancing well-being. Mindfulness is an individual effort to balance negative emotions and thoughts, in other words, it is neither over-identifying with negative emotions and thoughts nor surrendering to them. People having higher levels of mindfulness don't categorize their experiences as good-bad or healthy-unhealthy. On the contrary, they accept them as they are (Akın et al., 2007). Mindfulness has its roots in Buddhism, which is an awakening tenet that brings human beings closer to themselves and the reality. From the perspective of Buddhism, mindfulness enables us to live by reaching all the possibilities in our consciousness and unconsciousness, by helping us to wake up from unconsciousness through meditation, and by questioning who we are, how we see the world and our place in the world (Kabat-Zinn, 1994). According to the Buddhism psychology (Grabovac, Lau, and Willett, 2011), mindfulness relieves clinical symptoms and enhances well-being by ensuring acceptance, compassion and attention regulation. This explanation for mindfulness and well-being is also supported by related studies (Baer et al., 2008; Howell et. al., 2010; Brown and Ryan, 2003; Falkenström, 2010; Howell, Digdon, Schonert-Reichl, and Lawlor, 2010).

According to Khoury (2017), although none of the Eastern and Western definitions of mindfulness explicitly refer to interpersonal/social dimensions, the attention and mindfulness mechanisms underlying these definitions integrate both internal processes (e.g. bodily sensations) and external stimulus (e.g. social/interpersonal interactions). Thus, mindfulness can be evaluated as including both personal and interpersonal dimensions. As interpersonal mindfulness is a recent field of inquiry, how this process works in parenting is also an object of curiosity. The initial studies examining the role of mindfulness on parenting practices focused on addressing the mindfulness levels of parents. Especially the mindfulness programs organized for parents have a significant role in such studies. In the literature, mindfulness based training programs for parents are found to be effective in increasing the level of mindfulness of parents; in addition, these programs are shown to be effective in reducing stress, anxiety (Benn et al., 2012), parenting stress and parental over-reactivity (Lunsky et al., 2017), as well as children's symptoms of ODD and ADHD (Van der Oord et al., 2012). However, the main tendency of such programs was discovering the effects of mindful parenting on parenting skills and children rather than mindfulness in parenting by itself.

The first debate on the topic of mindfulness in parenting was highlighted by Kabat-Zinn. His study explains mindfulness in parenting over three dimensions:

autonomy, acceptance and empathy. According to Duncan and colleagues (2009), mindfulness in parenting consists of five basic dimensions: listening with full attention, nonjudgmental acceptance of self and child, emotional awareness of self and child, self-regulation in the parenting relationship, and compassion for self and others. Mindfulness in parenting is defined as a skill or practice expanding the concept of mindfulness within the context of parent-child relationship (Kabat-Zinn and Kabat-Zinn, 1997). Mindful parenting was found to be related with self-compassion, well-being (Medeiros et al., 2016; Moreira et al., 2018), internalizing and externalizing problems in children (Carlson, 2017; Geurtzen et al., 2014), parenting (Carlson, 2017; Parent et al., 2016), parenting stress (Parent et al., 2016), and more participation in child-related parenting tasks (MacDonald and Hastings, 2010). With the emergence of the concept of mindfulness in parenting practices, training programs in this field started dramatically. Such programs were explored to have positive effects on life quality of children (Dehkordian et al., 2017), externalizing and attention problems reported by parents, self-control (Bögels et al., 2008), psychopathology of children and parents (Meppeling et al., 2016), automatic behaviors of parents (Dumas, 2005), and other family members (Singh et. al. 2007).

In both correlational and experimental studies conducted to examine mindfulness in parenting recently, two measurement tools measuring this concept come into prominence. One of them is 'Interpersonal Mindfulness in Parenting Scale' (IM-P) developed by Duncan and colleagues (2009) and the other one is 'Mindfulness in Parenting Questionnaire' developed by McCaffrey and colleagues (2017).

Duncan and colleagues (2009), proposed a theoretical model for mindfulness in parenting and developed a measurement tool that assesses mindful parenting on an individual basis. The validity of the Interpersonal Mindfulness in Parenting Scale (IM-P) (Duncan, 2007) was examined in a sample consisted of parents with children aged between 10 and 14. In the validity study of the original 10-item version of the IM-P, Duncan and colleagues (2009) reached a four-factor model: present-centered attention in parenting, present-centered emotional awareness in parenting, non-reactivity/low-reactivity in parenting, and non-judgmental acceptance in parenting. Afterwards, this short version of the IM-P was expanded to a 31-item version that includes five subscales corresponding to the five dimensions of mindfulness in parenting proposed by Duncan and colleagues (2009). These subscales are: (1) listening with full attention that refers to listening to the child with focused attention and awareness of experiences in the present moment (five items), (2) emotional awareness of self and child implies parents' ability to be aware of their own emotions as well as their children's (six items), (3) self-regulation in the parenting relationship refers to parents being less reactive to their child's behavior and adopting a calmer parenting style without immediately reacting (six items), (4) non-judgmental acceptance of self and child points out the need for parents to become more aware of the unconscious expectations they often have about their child's behavior and to adopt a more non-judgmental acceptance of the traits and behaviors of themselves and their child (seven items), and (5) compassion for the self and child refers to developing a genuine stance of caring and compassion for both their

child and themselves as parents (seven items) (Duncan et al., 2009). According to this framework, parenting, parental well-being, parent–child affection, and child rearing practices get better through these five practices, which in turn will bring along symptom reduction and better child well-being.

The psychometric properties of the 31-item version of IM-P were examined in a Dutch sample. In this study, the sample of which was the mothers of adolescents aged between 12 and 15, the scale was reduced to 29 items along with a six-factor structure. The internal consistency of the subscales ranged from .54 to .83 (De Bruin et al., 2012). Furthermore, as an evidence for the convergent validity of the scale, Dutch version of the IM-P was significantly correlated with depression and optimism in this sample.

Recently, a new measurement tool was developed to measure mindfulness in parenting. The psychometric properties of Mindfulness in Parenting Questionnaire (MIPQ), developed by McCaffrey, Reitman and Black (2017), are based on the data from parents of children aged 2 to 16 years. As a result of that study, this measurement tool, the first version of which has 61 items, reached its final version as including 29 items with a two-factor structure. There are two basic dimensions of mindfulness in parenting in MIPQ: parental self-efficacy and being in the moment with the child. While parental self-efficacy refers to a parent-oriented structure that includes goal-focused parenting and mindful parenting, being in the moment with the child refers to a child-oriented structure including present-centered attention, empathic understanding of the child and acceptance.

It is shown that MIPQ, as in the structure of mindfulness, describes mindfulness in parenting with both parent-oriented and child-oriented processes. In addition, that the people in the sample group are parents who have children in a wide age range (2-16) that gives a chance to test the structure of mindfulness in parenting within a large sample. In this study, the validity, reliability and psychometric properties of MIPQ (McCaffrey et al. 2017) were examined in Turkish parents.

2. Method

2.1. Participants

The sample of the study was determined by the convenience sampling method. The sample consisted of 380 parents who live in Istanbul and have children aged between 3 and 18 years. 78.2% of the parents (N= 297) were female and 21.8% were male (N = 83). The mean age of the participants was 40; the minimum age was 20 and the maximum age was 65. 7.9% of the participants were primary school graduates (N = 30), 8.4% were secondary school graduates (N = 32), 26.8% were high school graduates (N = 102), 17.6% had associate's degrees (N=67), 29.7% had bachelor's degrees (N = 113), and 9.5% had postgraduate degrees (N = 36). Based on the number of children, it was found that 27.6% of the participants had one child (N = 105), 51.6% of them had two children (N = 196), and 20.8% of them had 3 or more children (N = 79).

2.2. Instruments

In this study, Mindful Attention Awareness Scale (Brown and Ryan, 2003), Parent-Child Communication Scale (Kahraman, 2016), Mindfulness in Parenting Questionnaire (McCaffrey, Reitman, and Black, 2017), and Demographic Information Form developed by the researchers were used. Psychometric properties of these instruments were presented in the next section.

2.2.1. Mindful Attention Awareness Scale (MAAS)

Mindful Attention Awareness Scale (MAAS) developed by Brown and Ryan (2003) is a 15-item scale that measures the general tendency of being aware of the spontaneous experiences in daily life and attending to what is occurring in the present moment. MAAS has a single factor structure and gives a total score. Higher scores from the scale indicate higher mindful attention awareness. MAAS is a 6-point Likert type scale (almost always, very frequently, somewhat frequently, somewhat infrequently, very infrequently, almost never). To test the construct validity of the scale, both exploratory and confirmatory factor analysis were performed. In exploratory factor analysis, MAAS showed a single factor structure. Factor loadings ranged from .27 to .78. According to the results of the confirmatory factor analysis, model fit indices indicated that MAAS had a single factor structure ($\chi2$ /sd)=189.57/90, GFI; .92, CFI: .91, RMSEA: .058). The internal consistency coefficient (Cronbach's alpha) of the scale was .82. The item-total correlations varied between .25 and .72. The test-retest reliability of MAAS was tested with a 4-week-interval and the relationship between the two administrations was found to be .81. For the criterion-related validity of the MAAS, Five Factor Personality Traits, Trait Mood Inventory, Mindfulness/Mindlessness Scale and Self-Consciousness Scale were used and significant correlations were found between the MAAS and these scales.

The Turkish adaptation study of the Mindful Attention Awareness Scale (MAAS) was conducted by Özyeşil, Arslan, Kesici, and Deniz (2011). The results of the confirmatory factor analysis confirmed the single factor structure of the instrument and the goodness of fit indices were at an acceptable level in the Turkish version of the scale ($\chi2$/sd=2.086, RMSEA= .06, standardized RMS= .06, GFI= .93, and AGFI= .91).The goodness of fit indices of the Turkish version was found to be similar to the goodness of fit indices of the original form of the MAAS The results of item-total correlations showed that all items of MAAS have these values above .40.The item factor loadings of MAAS for each item ranged from .48 to .81.The Cronbach's alpha internal consistency coefficient was found to be .80 and the test-retest reliability was .86.

2.2.2. Parent-Child Communication Scale (PCCS)

Parent-Child Communication Scale was developed by Kahraman (2016) to measure the communication of parents with their children who are between the ages of 0-18. The scale is a 5-point Likert type and the participants fill each item with "5 = always", "4 = often", "3 = sometimes", "2 = rarely", or "1 = never". Parent child communication consists of five factors including problem solving, openness to sharing, respect-acceptance, sensitivity and unhindered listening. Exploratory factor analysis was

conducted within the scope of the validity studies of the scale. When the varimax rotation and scree plot were examined to determine the factor structure of the scale, it was observed that the remaining 27 items of the scale involve five factors and 54,36% of the total variance was explained by these items. Factor loadings of all items were above .35.

Internal consistency and test-retest reliability were examined within the scope of the reliability analyses of the scale. The Cronbach's alpha values and r-values were calculated for the total scale (α= .865; r= .899), and for the sub-dimensions of the scale (problem solving (α= .762, r= .610); openness to sharing (α=.842, r=.690);respect-acceptance (α=.768, r=.881); sensitivity (α= .769, r= .741);unobstructed listening (α= .703, r= .453).Test-retest reliability that was tested through a 4-week-interval was found .90 for the total scale and there were statistically significant relationships between the two administrations for the sub-dimensions, except for unhindered listening.

2.2.3. Mindfulness in Parenting Questionnaire (MIPQ)

Mindfulness in Parenting Questionnaire (MIPQ) was developed by McCaffrey, Reitman, and Black (2017) to measure the level of mindful parenting for parents of children and adolescents. The original form of the scale has 28 items. Parents respond using a 4-point Likert type scale and higher scores from the scale indicate higher levels of mindfulness in parenting and lower scores indicate lower levels of mindfulness in parenting. The development of the original scale was conducted with the data obtained from 203 parents of children and adolescents, ranging in age from 2 to 16 years. Factor structure of the original scale was tested by using partial credit model in WINSTEPS program and it was observed that there are two factors as "Parental Self-Efficacy" and "Being in the Moment with the Child". It was found that "Parental Self-Efficacy" that explained 42.3% of the total variance, had a person separation reliability of .84, and item separation reliability of .96. "Being in the Moment with the Child" that explained 43.4% of the total variance, had a person separation reliability of .82, and item separation reliability of .89.

The validity of the original scale was tested with convergent and discriminant validity. Convergent validity of the original scale was examined by using Parental Authority Questionnaire-PAQ, Parenting Scale-PS, and Mindful Attention Awareness Scale-MAAS. There was a positive correlation between the original scale and the Mindful Attention Awareness Scale (for Parental Self-Efficacy r= .23, p= .001; for Being in the Moment with the Child r= .17, p= .014). When the relationship between the original form of MIPQ and Parental Authority Questionnaire was examined, it showed positive correlations with authoritative parenting attitude (for Parental Self-Efficacy r=.37, p<.001; for Being in the Moment with the Child r= .40, p<.001) and negative correlations with permissive parenting attitude (for Parental Self-Efficacy r = -.19, p<.05; for Being in the Moment with the Child r= -.21, p<.05).There was a significant negative relationship between Parental Self-Efficacy and authoritarian attitude (r= -.17, p=.016).The over reactivity dimension of Parenting Scale showed statistically significant relationships with both Parental Self-Efficacy(r = −.33, p < .001) and Being in the

Moment with the Child (r = −.23 p < .001); the laxness dimension of Parenting Scale was significantly correlated with Being in the Moment with the Child dimension of the MIPQ (r = −.19, p = .010). For the discriminant validity of the scale, the relationship of MIPQ with age, gender, socio-economic status (working status, education level, and monthly income), and ethnic origin were examined. The results of the study showed that the sub-dimensions of Mindfulness in Parenting Questionnaire did not differ significantly according to the age, gender, working status, and education level of the parent. Also, it was found that there was no significant relationship between the "Parental Self-Efficacy" and level of income; however, "Being in the Moment with the Child" was significantly correlated with the level of income. Accordingly, parents in the lower income level got significantly lower scores from the dimension of "Being in the Moment with the Child" than the parents in the middle-income level (p= .001). Also, it was observed that the scores obtained from the Mindfulness in Parenting Questionnaire significantly differed according to the ethnic origin (p< .001); for instance, the scores of African Americans were significantly lower than the scores of White and Latin Americans. All these findings show that the original form of Mindfulness in Parenting Questionnaire is a valid and reliable measurement tool. In the scope of this study, Turkish adaptation, validity and reliability study of the 28-item version of the Mindfulness in Parenting Questionnaire was conducted.

2.3. Data Analysis

Confirmatory factor analysis was conducted in order to test whether the original factor structure of Mindfulness in Parenting Questionnaire fits in the Turkish parents. First of all, before conducting the confirmatory factor analysis, missing values were screened and mean substitution was conducted due to the fact that the number of empty cells was less than 5% of the total cells. Then, a number of assumptions for CFA were tested before the main analysis. In addition, univarite outliers were examined based on the ±3.29 criterion for the z scores yielding 18 data staying out the criterion ranges. The sufficient sample size in CFA is suggested to be minimum 200 cases along with 5 or 10 units that is 362 for this study satisfying that requirement (Kline, 2011). Lastly, screening of Skewness and Kurtosis parameters for normality assumption and bivariate scatterplots for the linearity requirement of CFA disclosed that the data has a normal and linear distribution for the sample (Tabachnick and Fidell, 2006).

At first, corrected item-total correlations were calculated to determine to what extent these items distinguish the participants in terms of the construct they measure. In addition, t-test was used to determine whether there is a significant difference between the upper 27% and lower 27% of the group in terms of the subscale (factor) scores, and item scores. To determine the reliability of the scale, Cronbach's alpha internal consistency coefficient and test-retest correlation were calculated.

3. Results

3.1. Translating the Mindfulness in Parenting Questionnaire into Turkish

Firstly, the authors translated the Mindfulness in Parenting Questionnaire into Turkish. In order to evaluate the accuracy of both translation and the measurement tool, he Expert Evaluation Form (EEF) was presented to five experts who were at least having a PhD. In the EEF, the purpose of the study, the expectations from the expert, and the theoretical background of the study were clarified. The experts were asked to evaluate the suitability of the content of each item for its factor, and the translation of the items on a 5-point Likert type scale (1= Absolutely not suitable, 5= Exactly suitable). There was a blank box for each item in order to allow experts to write out their suggestions. Following the corrections based on the feedback received from the experts, a linguist from the Turkish Language Department evaluated the accuracy of the translation for the Turkish language. Also, both the structure of the items and the format of the scale were examined by the experts who are in the field of assessment and evaluation. The scale was not translated into English again for especially avoiding the item bias (Van de Vijver and Hambleton, 1996).

3.2. Validity and Reliability Analysis of the Mindfulness in Parenting Questionnaire

Confirmatory Factor Analysis was performed to test the construct validity of the Turkish version of the scale. Mindful Attention Awareness Scale and Parent-Child Communication Scale were used to examine the convergent validity. To test the reliability of the Turkish version of the MIPQ, internal consistency coefficient was calculated and the relationship between the lower 27% and the upper 27% of the group was examined.

3.2.1. Validity Analysis

A. Confirmatory Factor Analysis (CFA): The factor structure of the Turkish version of MIPQ was tested with the Confirmatory Factor Analysis (CFA). It should be noted that since the factor loading of the item 18 (.20) was below .30 in the initial analysis, this item was removed in the subsequent analyses. Then, the model fit indices were examined. The criterion indices used to test the goodness of fit of the scale are normed chi square value, Tucker-Lewis index (TLI) and comparative fit index (CFI), root mean square error of approximation (RMSEA) and goodness of fit index (GFI) (Kline, 2011). In this model, the goodness of fit values were found as $\chi2/sd$= 2.859, TLI= .71, CFI= .74, GFI= .83, and RMSEA= .072. When the fit indices were examined, $\chi2/sd$ was less than 3 (Kline, 2011) and RMSEA was less than .08, which show that model fit indices were in acceptable limits. However, CFI, GFI and AGFI values were not within the expected ranges. Therefore, the modification indices were examined. When the modification indices were examined, it was observed that the items 4, 5 and 19 showed high error covariance with two and/or more items; thus, it was decided to exclude these items from the further analyses. After making the necessary modifications in the two-factor model consisting of 24-items,the goodness of fit values were found as $\chi2/sd$=1.927,

GFI=.90, CFI=.90, IFI=.90 and RMSEA=.049. The factor loadings of the items were all above .30. In the CFA analysis conducted to test the single factor structure of the scale (General Mindfulness in Parenting), the item that the factor loading was below .30 (item 18), and the items that showed high error covariance with more than one item (4, 5, and 19) were excluded from the scale. After making necessary modifications, the goodness of fit indices for the 24-item single factor structure were found as $\chi2/sd=1.904$, GFI=.90, CFI=.90, TLI=.90 and RMSEA=.049. In the single factor structure, factor loadings were found .30 and above (factor loading for item 3= .27). These findings show that both two-factor and single-factor structure of the MIPQ was supported in Turkish sample.

B. Convergent Validity: The results of the Pearson Correlation Analysis conducted for the convergent validity of MIPQ are presented in Table 1.

Table 1: The Pearson Correlations for Convergent Validity

Variables	MAAS		PCCS	
	R	p	R	p
MIPQ Total	.289**	.000	.594**	.000
Factor 1 Parental Self-efficacy	.291**	.000	.525**	.000
Factor 2 Being in the moment	.234**	.000	.571**	.000

**p<.001

3.2.3. Reliability Analysis

A. MIPQ Cronbach's Alpha Internal Consistency Coefficient: The internal consistency coefficient of MIPQ was examined for the two-factor structure and the single factor structure, separately. The results showed that Cronbach's alpha internal consistency coefficient was .83 for Parental Self-Efficacy; .73 for Being in the Moment with the Child; and .87 for the total scale.

B. T-Test for Comparing Upper 27% and Lower 27% Groups of MIPQ: The t-test results conducted to test the significance of the corrected item-total correlations and the difference between the mean of item scores in the upper 27% and lower 27% of the group were presented in Table 2.

Table 2: T-Test for Comparing Upper 27% and Lower 27% Groups and
Corrected Item Total Correlations

Factors	Item Number	Corrected item total correlations	t (upper %27 lower %27)
	1	.459	11.975***
	2	.361	8.756***
	3	.337	6.674***
	6	.406	7.951***
Factor 2	7	.360	9.666***
	8	.447	11.363***
	9	.422	9.068***
	10	.436	10.238***
	11	.443	10.206***

	12	.334	9.329***
	13	.286	8.134***
	14	.458	10.841***
	15	.380	8.901***
	16	.581	12.756***
	17	.567	11.843***
	20	.518	12.044***
	21	.306	5.682***
Factor 1	**22**	.551	12.240***
	23	.444	9.502***
	24	.508	11.695***
	25	.477	11.063***
	26	.502	10.269***
	27	.464	8.735***
	28	.352	6.363***

***p<.001

As shown in the Table-2, T-test results of upper %27 and lower %27 groups are statistically significant for all 28 items and each item showed positive correlations with the other items.

C. Test-retest reliability: To examine the test-retest reliability, the scale was administered to 30 participants within a 3-week interval. The results showed that the Pearson Correlation Coefficient was r=.57 (p <.01) for Parental Self-Efficacy; r=.39 (p<.05) for Being in the Moment with the Child, and it was r= .38 (p<.05) for the total scale.

4. Discussion

In this study, Mindfulness in Parenting Questionnaire (MIPQ), which was developed by McCaffrey, Reitman, and Black (2017) to measure the level of mindful parenting for parents of children and adolescents, was adapted to Turkish parents. Based on this purpose, the validity analyses of the scale that included (i) CFA and (ii) convergent validity and the reliability analyses of the scale that consisted of (iii) internal-consistency coefficient, (iv) independent-samples t-test that compares the upper 27% and lower 27% of the group and (v) test-retest reliability were conducted.

Both the two-factor and single-factor structure of the MIPQ were examined in Turkish sample by using CFA. At first, item factor loadings indicated by CFA were examined and the item 18 whose factor loading was below .30 was excluded from the analysis (Brown, 2006). Afterwards, the model was tested and it was observed that in both two-factor and single-factor structure of the scale, the items 4, 5 and 19 showed high error covariance with two and/or more items. These three items (4,5, and 19) were excluded from the scale and analyses were proceeded with the remaining 24 items. In the preliminary analysis of the two-factor and single-factor models, it was observed that item pairs of 10-11, 14-15, 16-17, 21-28, and 25-26 showed high error covariance. The error covariances of these item pairs are connected to each other since they are within the same factor and may be perceived as culturally similar. Following the modifications,

the two-factor (*χ2/sd=1.927, RMSEA=.049, GFI=.90, CFI=.90, IFI=.90)* and single-factor (*χ2/sd=1.904, RMSEA=.049, GFI=.90, CFI=.90, TLI=.90*) model of MIPQ showed good fit in the Turkish sample. The goodness of fit indices shows that MIPQ-Turkish Version has similar fit indexes with the original MIPQ (Hu and Bentler, 1990). The factor loadings were found to be over .30 in two models; however, only item 3 had a factor loading that is below .30 in the single-factor model. Due to the fact that the factor loading of this item is very close to .30 and mindfulness is a broadband construct, it was decided to keep this item in the scale (Hoyle, 2000).

To examine the convergent validity, the relationships of MIPQ with MAAS and PCCS were investigated. While the relationships of MAAS with the subscales and the total score of MIPQ were slightly significant, there were moderate positive correlations between MIPQ and PCCS. This finding that reveals the significant relationships between mindfulness in parenting and mindful attention awareness is similar to the findings in the literature. On the other hand, moderate correlations with PCCS are thought to be associated with the interpersonal aspects of mindfulness in parenting.

As a result of the reliability analysis, Cronbach's alpha internal consistency coefficient indicated that the reliability of the scale is high. Furthermore, that there were statistically significant and positive correlations between the upper 27% and lower 27% of the group indicated a high internal consistency of the Turkish version of MIPQ. Besides, the statistical significance of test-retest correlations with a 3-week interval revealed that MIPQ-TR is a reliable measurement tool.

All these findings indicate that the scale is a valid and reliable measure for the Turkish sample. It is thought that the validity and reliability analyses conducted with the data collected from the parents of children in a wide age range (3-18 years) facilitates the use of the scale in the research studies that will be carried out with the samples of parents that have children at different age groups. In addition, that the sample was consisted of mothers and fathers facilitates its use in training programs that can be applied to mothers and fathers separately.

The sample of the current study was consisted of parents having children who continued to their formal education. The parents in the sample were determined by convenience sampling method. For generalizability of the results, the application of the scale in the sample of parents having children who do not attend school and in families having children with special needs by using random or stratified sampling is expected to contribute more to the literature over mindfulness and parenting.

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