

# Assessing the Psychometric Properties of the Turkish Version of Attitudes and Practice of Health Care Providers Regarding Intimate Partner Violence Survey Scale

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This study was planned to assess the psychometric properties of the Turkish version of the “attitudes and practices of health care providers regarding intimate partner violence” (APHCPs-IPV) survey scale. The sample consisted of 355 primary health care providers. A Likert-type scale composed of eight subfactors, and 43 items were used. Means and standard deviations were calculated for interval-level data. A *p* value of less than .05 was considered statistically significant. The Turkish version consisted of eight factor groups. The Cronbach’s alpha of the general scale was .66, and the Cronbach’s alpha of the factor groups ranged from .29 to .81. It was determined that the APHCPs-IPV scale was a valid and reliable scale to be used in Turkish society, on the condition that item number 33 be removed.

**Keywords:** intimate partner violence; reproducibility of results; primary health care; health occupations

Intimate partner violence (IPV) against women, along with its resultant negative physical and mental health consequences, is becoming increasingly recognized as a pervasive problem within both developed and developing countries, including Turkey (Kocacık, Kutlar, & Erselcan, 2007). It is estimated that approximately 20%–75% of women are beaten at some stage in their life in most populations surveyed globally (Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008; Moreno, Jansen, Ellsberg, & Heis 2005). Although estimates of the prevalence of IPV within Turkey vary widely (from approximately 25% to 49%, with differences in study methods at least partly responsible for the diverse estimates), previous research suggests that IPV is a common occurrence within Turkey, as it is within many other countries (Altınay & Arat, 2007; Turkish Family Research Institute, 1998). According to a study conducted for the Turkish Institution of Statistics 4 years ago, 42.1% of women are the victims of physical violence by their husbands or partners at some point in their lifetime (Turkish Statistical Institute, 2010). This means that at least one in every four women has been subjected to and suffered from their partners’ violence at some point in their lives.

Culture is known to affect violence, and the meaning ascribed to different acts might differ depending on cultural differences (Heise, Ellsberg, & Gottemoeller, 1999). Turkey, as a patriarchal society with unequal gender relations supported by both deeply rooted social and cultural norms as well as economic problems is no exception to this rule (Ağır, 2012). Legal arrangements on issues such as women rights and violence have been developed in Turkey, but most women are not aware of their rights. Women tend to accept violence as something normal. This might be related to several factors: Culturally, men possess women; manhood is associated with violence; sexual roles are rigidly differentiated; and violence is widely accepted as a form of behavior. The Islamic rules that prescribe obedience to women may also contribute to this because women consider opposing their husband as a sin. In addition, domestic affairs are typically kept private (Kocacık & Doğan, 2006). Although the problem of IPV is extensive in Turkey, there is no comprehensive legislation concerning domestic violence. Very few women report IPV to the authorities. The few women who do go to the authorities claim that the police are not gender-sensitive and attempt to find a compromise between the husband and wife rather than treating the violence as a crime. In addition, when a complaint is successfully filed, the punishments are often weak, sometimes as little as 1 week in prison, if there is any punishment at all. Within such a system, most women prefer to stay silent than to report the crime to the police and risk retaliation by their husbands or other members of the family because the police will not likely take protective measures for the victim (World Organization Against Torture, 2003).

Abuse within families has a serious impact on the survival, well-being, and general health of women (Ellsberg et al., 2008; Garcia-Moreno, 2002; McCloskey et al., 2006; Svavarsdottir & Orlygsdottir, 2009). Many women seek medical treatment through hospital emergency rooms, clinics, and primary health care (PHC) offices for injuries they have received from physical or sexual assault (Ellsberg et al., 2008; Nicolaidis & Touhouliotis, 2006; Sullivan & Hagen, 2005). Because women use their health systems more frequently than men for various reasons, one of the first professional groups encountered by abused women is that of health practitioners. However, practitioners often treat these women's injuries only symptomatically. Consequently, the health care system often overlooks its significant responsibilities for treatment, and the victims continue to suffer with the physical and emotional results of abuse (Hamberger, Ambuel, Marbella, & Donze, 1998).

Health care providers (HCPs) typically share the same cultural values and societal attitudes toward abuse that are dominant in the society at large (Heise et al., 1999). In Turkey, nurses sometimes do not intervene in IPV cases because of the personal attitudes they have previously developed regarding domestic violence. Personal attitudes and behaviors develop within the context of a society's attitudes and behaviors. The family is considered a private institution in Turkish society. The society believes that problems within the family should be solved by the family. It is traditionally suggested that the women stay silent so that the family union can continue (World Organization Against Torture, 2003; Yaman & Taşkın, 2012). Nurses are also affected by this view and can accept the same attitudes. Yazıcı and Mamuk (2010) reported that 28.7% of the 94 health care workers in their study agreed with the following statement: "Family life is private, no one should intervene in what transpires." Other studies from Turkey have similarly reported that HCPs do not intervene in domestic violence cases and see it as a family matter (Aksan & Aksu, 2007; Gömbül & Buldukoğlu 1997; Hotun, Dişsiz, Sömek, & Dinç, 2008; Tunçel, Dündar, & Peşkel, 2007; Yaman & Taşkın, 2012). HCPs should realize that they are actually intervening in an important health care problem when they intervene in domestic violence. One may believe that domestic violence should be solved with family-related solutions

because it takes place within the family. One needs to consider whether an HCP's duty is to eliminate the problem of domestic violence completely. Looking at the problem and responsibility in this way, HCPs feel that domestic violence cannot be solved and that HCPs therefore do not intervene in these cases because they do not believe that there is anything they can do (Yaman & Taşkın, 2012).

These factors are important for research about the professionals to whom victims go for help, how these professionals detect women who have been subjected to abuse, and the factors that affect how HCPs work with these women (Campbell, Abrahams, & Martin, 2008; Gerbert et al., 2002; Glaister & Kesling 2002; Hinderliter, Doughty, Delaney, Pitula, & Campbell, 2003; Lutenbacher, Cohen, & Mitzel, 2003). Despite a rapid proliferation of descriptive studies of providers and intervention protocols, a lack of reliable instruments to assess the attitudes, beliefs, and behaviors of HCPs regarding IPV-related practices limits these efforts (John, Lawoko, Swanström, & Mohammed, 2010; Maiuro et al., 2000). Unfortunately, these studies have employed single items or a series of items that lack reliability and validity data (Moore, Zaccaro, & Parsons, 1998). Little work has been conducted to develop psychometrically sound, multidomain measures of IPV-related attitudes, beliefs, and behaviors specifically geared to HCPs (Cann, Withnell, Shakespeare, Doll, & Thomas, 2001; Dickson & Tutty, 1998; Gutmanis, Beynon, Tutty, Wathen, & Macmillan, 2007). Consequently, it is difficult to interpret the reliability, meaning, and practical implications of many previous studies. Dickson and Tutty (1998) designed The Public Health Nurses' Responses to Women Who Are Abused (PHNR) scale to measure the degree of nurses' helpfulness to women who are abused by their partners. This scale used two vignettes of nursing practice situations. Gutmanis et al. (2007) prepared a scale including 43 items related to the attitudes and practices of health care providers regarding intimate partner violence (APHCPs-IPV) with a review of the literature and an examination of instruments, particularly the work by Dickson and Tutty.

The rationale behind this research is that if attitudes and practices are adequately identified and measured, strategies to overcome them can be implemented in practical settings, thus improving women's health. One question that arises is whether the scale, which was developed and tested in Canada (Gutmanis et al., 2007), can adequately reflect the perceptions of nurses in Turkey. From this point of view, the aim of this study was to assess the psychometric properties of the Turkish version of the survey scale on the APHCPs-IPV.

## **RESEARCH QUESTIONS AND HYPOTHESES**

The following hypotheses were tested: "The APHCPs-IPV is a valid measurement tool for Turkish health care providers," and "The APHCPs-IPV survey scale is a reliable measurement tool for Turkish health care providers."

## **METHODS**

### **Participants**

Methodological research was conducted at PHC centers in Izmir from September to November 2010. The population of the study consisted of 2,330 HCPs (doctors, nurses, midwives, health officers) employed in 166 PHC centers (family health centers, community health centers,

mother–child health and family planning centers) in Izmir. The sample size was considered sufficient because it was 10 times the 43 items of the scale (Aksakoğlu 2001; Özdamar, 2002). This research was conducted with a sample of 430 HCPs chosen with simple random and stratified weighted sampling methods at 75 PHC centers. In all, 430 HCPs from mother–child health and family planning centers were approached. Of these, 355 (including 284 from family health centers, 40 from community health centers, and 31 from mother–child health and family planning centers) individuals agreed to take part in the study, for a response rate of 83%.

## Measures

The data were collected at the participating PHC centers by the researchers. Self-administered questionnaire forms were distributed to each HCP by the researchers and were collected 1 week later. A questionnaire was used for the demographic data in addition to the APHCPs-IPV survey scale, originally developed by Gutmanis et al. (2007). The questionnaire began with a practice scenario regarding a pseudonymous patient. The respondents were asked to respond to 43 statements designed to reflect either a barrier or a facilitator to their current practices of routine inquiry—termed *screening* in the survey questions—using either their own experience or the provided scenario. For each statement, the respondents were asked to select one of four possible responses: “strongly agree,” “agree,” “disagree,” or “strongly disagree.” Higher scores reflected greater self-reported preparedness, self-confidence, feelings of professional support, comfort with abuse inquiries, and comfort with discussions following disclosure as well as decreased concern about the consequences of abuse inquiries and decreased feelings of no control and system pressures (Gutmanis et al., 2007).

## Ethical Considerations

Permission for use of the scale was obtained by e-mail from Gutmanis et al. (2007), and written approval was obtained at the planning stage of the study from the Ethical Committee of Ege University School of Nursing. When obtaining oral consent, the researchers informed the health professionals about the purpose of the research and their right to withdraw from participation in the research.

## Data Analysis

To ensure the quality of the Turkish version of the scale, an internationally accepted forward–backward translation technique was used to translate the English version of the scale to a Turkish equivalent of the original instrument (Erefe, 2002; Erkut, Alarcon, Garcia Coll, Trop, & Vazquez Garcia, 1999). The APHCPs-IPV survey scale was first translated from English to Turkish separately by six teaching staff whose native language is Turkish. Subsequently, it was translated back from Turkish to English by two experts whose native language is English. All of the translators worked independently and were not associated with the research in any other way. After these forward and backward translations were completed, the original and back translations of both the English and Turkish versions were carefully compared. Then, the scale was evaluated by two teaching staff members, and the final version was adapted by the researchers according to the suggestions.

The Statistical Package for the Social Sciences (SPSS, version 15.0) was used to compute frequency and descriptive statistics related to demographic data. To ensure *content validity*, content analysis was based on a panel of experts. Content validity refers to the extent to which the instrument measures the phenomenon for which it is designed

(Aksakoğlu, 2001; Gözüim & Aksayan, 2003). Confirmatory factor analysis (CFA) was performed for structural equation modeling. The LISREL program was used to perform the factor analysis of the 43 items (Kelloway, 1998). A  $p$  value of less than .05 was considered statistically significant. The Kaiser-Meyer-Olkin (KMO) test was used to measure sample adequacy, and Bartlett's test of sphericity (BS) was used to examine the correlation matrix (Aksakoğlu, 2001; Özdamar, 2002). Means, standard deviations, and the range of the adopted scale were calculated and presented as descriptive characteristics. The Kolmogorov-Smirnov test for normality was used to determine whether the responses had a normal curve around the mean. Reliability was assessed using the internal consistency approach, and Cronbach's alpha coefficient was calculated to assess the degree of internal consistency and homogeneity between the items. Test-retest stability, separated by 3 weeks, was calculated using a Spearman rank correlation to determine the strength of the relationship between participants (Aksakoğlu, 2001; Özdamar, 2002; Polit, 1996).

## RESULTS

### Descriptive Statistics

The mean age of the respondents was 40.51 years ( $SD = 6.42$  years). There were 256 respondents (72.1%) who were females. Of the respondents, 154 (43.4%) were doctors, 98 (27.6%) were midwives, 93 (26.2%) were nurses, and 10 (2.8%) were health officers. Although only 9.6% of the HCPs had received education regarding domestic violence during their undergraduate education, 67% of them had in-service education.

### Validity Analyses

To test content validity, which included item clarity, the translated version was submitted to a panel of six experts who were informed about the scale and the concepts involved. The experts included three nursing academics and three public health physicians with special interest and expertise in domestic violence. They reviewed the readability and acceptability of the APHCPs-IPV scale. Content validity indices (CVIs) were assessed by asking the panel members to rate each item's relevance to the construct using a 4-point Likert scale. On this scale, 4 = very relevant, 3 = relevant with some adjustment to phrasing, 2 = only relevant if phrasing is profoundly adjusted, and 1 = not relevant. Each expert reviewed the instrument and critiqued the items for clarity and relevance. An acceptable CVI score is greater than .8 (Yurdugül, 2005). Thus, some items (11, 18, 26, 33, 38, and 42) that were less than .80 were rearranged and reevaluated by the expert panel. The CVI among the experts was .91 for the instrument. This result indicated that the items in the questionnaire were relevant to the measurement of APHCPs-IPV in Turkey. The experts' feedback was used to revise the items before the scales were used for testing.

The 43-item scale was implemented in a pilot test involving a group of nurses. The scale form was then given to 20 nurses who were not involved in the sample, and necessary changes were made in accordance with the feedback that they provided. The nurses who had been subjected to the preimplementation phase were not included in the scope of the research.

In terms of structural validity, for the CFA, the KMO measure of sampling adequacy was .89, with a significant BS ( $\chi^2 = 6063.51, p < .001$ ). The items' relationship with the factors was explained by the factor loading value. In this model, the factor loading of the items in the scale ranged from .10 to .71 (Table 1). An acceptable  $t$  score is greater than 1.96. Thus,

**TABLE 1. Item Analysis for Survey Scale**

| Preparedness   | Item Mean<br>( <i>SD</i> ) | Item—Total |
|--|----------------------------|------------|
| 1. I would like to talk about the issue of abuse but don't know what to say. <sup>a</sup>  | 2.86 (0.77)                | 0.36       |
| 2. I would be hesitant to ask about WA because I have little or no experience in dealing with this situation. <sup>a</sup>   | 2.85 (0.75)                | 0.52       |
| 3. I feel prepared asking about abuse of women who appear to me to be at risk of having been or being abused. <sup>b</sup>   | 2.10 (0.60)                | 0.42       |
| 4. I feel prepared asking about abuse of women who do not appear to me to be at risk of having been or being abused. <sup>b</sup>  | 2.24 (0.68)                | 0.38       |
| 5. I feel ready to respond to a woman who says "no" to my question about abuse. <sup>b</sup>   | 2.32 (1.24)                | 0.38       |
| 6. I feel ready to respond to a woman who says "yes" to my question about abuse. <sup>b</sup>  | 2.04 (0.57)                | 0.34       |
| 7. I feel prepared sharing information on WA to clients who respond no. <sup>b</sup>   | 2.13 (0.58)                | 0.27       |
| 8. I am hesitant to ask about WA because I have not been appropriately trained. <sup>a</sup>   | 3.03 (1.74)                | 0.43       |
| <b>Self-Confidence</b>   |                            |            |
| 1. I am confident with my ability to address the issue of WA. <sup>b</sup>   | 2.11 (0.71)                | 0.37       |
| 2. I feel that I am able to support this woman while she gets the right help. <sup>b</sup>   | 2.08 (0.60)                | 0.42       |
| 3. I would feel confident if I were required to ask women about abuse. <sup>b</sup>  | 2.19 (1.76)                | 0.52       |
| 4. I feel that I am a competent helper whether or not the woman and her situation change at this time. <sup>b</sup>  | 2.36 (0.69)                | 0.41       |
| 5. I feel comfortable supporting the woman during the interview even though she may not be ready to deal with this problem in the same way I would want her to. <sup>b</sup> | 1.96 (0.49)                | 0.29       |
| 6. I feel comfortable discussing these practice situations with colleagues to help me deal effectively with WA. <sup>b</sup>   | 1.92 (0.58)                | 0.34       |
| 7. I feel comfortable helping this woman access resources to help deal with the abuse. <sup>b</sup>  | 2.22 (0.64)                | 0.34       |

(Continued)

**TABLE 1. Item Analysis for Survey Scale (Continued)**

| Practitioner Lack of Control   | Item Mean<br>(SD) | Item—Total |
|--|-------------------|------------|
| 1. Because this is a private family matter, I should not interfere. <sup>a</sup>   | 3.10 (0.79)       | 0.45       |
| 2. There isn't anything I can do unless she asks for help. <sup>a</sup>  | 2.61 (0.85)       | 0.51       |
| 3. I would not ask her about WA because I don't think she is ready to tell me. <sup>a</sup>  | 2.80 (0.73)       | 0.40       |
| 4. I feel that I am not able to help women who are abused. <sup>a</sup>  | 2.89 (0.77)       | 0.42       |
| 5. I am reluctant to intervene in case I make matters worse. <sup>a</sup>  | 2.87 (0.73)       | 0.58       |
| 6. I would not offer any assistance because there is no effective treatment for WA. <sup>a</sup>   | 2.84 (0.62)       | 0.37       |
| 7. I would give her written information about WA and/or available resources but would not talk about her situation. <sup>a</sup>   | 3.09 (0.63)       | 0.47       |
| <b>Comfort Following Disclosure</b>  |                   |            |
| 1. I feel I am able to listen to women's stories as they disclose the abuse they have experienced. <sup>b</sup>  | 1.89 (0.53)       | 0.41       |
| 2. I am able to continue the discussion after a disclosure to assess the needs of the client. <sup>b</sup>   | 1.89 (0.49)       | 0.43       |
| <b>Professional Supports</b>   |                   |            |
| 1. I feel comfortable discussing these practice situations with colleagues to help them deal effectively with WA. <sup>b</sup>   | 1.91 (0.57)       | 0.38       |
| 2. I have enough supports from colleagues, mentors, supervisors, and so forth to help me feel comfortable in asking about WA and in dealing with the responses. <sup>b</sup> | 2.47 (0.74)       | 0.33       |
| 3. I participate with my practice colleagues in planning and evaluating methods to develop or improve program delivery regarding WA. <sup>b</sup>                            | 2.41 (0.66)       | 0.42       |
| 4. I have opportunities for consultations regarding how to deal with situations such as AB's. <sup>b</sup>   | 2.69 (0.73)       | 0.38       |

(Continued)

**TABLE 1. Item Analysis for Survey Scale (Continued)**

| Practice Pressures   | Item Mean<br>( <i>SD</i> ) | Item—Total |
|--|----------------------------|------------|
| 1. I may forget to ask her about WA. <sup>a</sup>  | 2.87 (0.68)                | 0.35       |
| 2. I just don't have time today to address this possible abuse issue. <sup>a</sup>   | 3.01 (0.70)                | 0.39       |
| 3. I am reluctant to ask about WA because there are no sufficient community resources to provide assistance. <sup>a</sup>        | 2.86 (1.76)                | 0.70       |
| 4. I am hesitant to ask about WA because I might have to call the CAS or the police. <sup>a</sup>                                | 2.89 (0.68)                | 0.49       |
| 5. I feel frustrated because I don't have the time to talk about abuse. <sup>a</sup>   | 2.70 (0.72)                | 0.31       |
| <b>Abuse Inquiry</b>   |                            |            |
| 1. I routinely initiate the topic of WA. <sup>b</sup>  | 2.68 (0.80)                | 0.26       |
| 2. I would ask her directly if her husband has ever hit her. <sup>b</sup>  | 2.45 (0.81)                | 0.24       |
| 3. I won't put her on the spot by initiating the topic of abuse. <sup>a</sup>  | 2.77 (0.75)                | 0.31       |
| 4. I am hesitant to ask about WA in case the woman stops seeing me. <sup>a</sup>   | 3.03 (0.63)                | 0.40       |
| 5. I am hesitant to ask some clients about WA because to them, it is culturally acceptable. <sup>a</sup>                         | 2.02 (0.53)                | 0.18       |
| 6. I would introduce WA by stating that abuse frequently occurs and that often women are hesitant to talk about it. <sup>b</sup> | 1.89 (0.53)                | 0.36       |
| <b>Practitioner Consequences of Asking</b>   |                            |            |
| 1. I worry about my own safety when inquiring about WA. <sup>a</sup>   | 2.57 (0.81)                | 0.39       |
| 2. I think about possible legal consequences when asking about WA. <sup>a</sup>  | 2.19 (1.24)                | 0.09       |
| 3. I am hesitant to ask about WA because I also treat/deal with other family members. <sup>a</sup>                               | 3.01 (0.61)                | 0.44       |

*Note.* WA = woman abuse; CAS = Children's Aid Society. AB = abbreviation used instead of patient's name.

<sup>a</sup>Items scoring: strongly agree (1), agree (2), disagree (3), strongly disagree (4).

<sup>b</sup>Items scoring: strongly agree (4), agree (3), disagree (2), strongly disagree (1).



Item 33 (“It is expected to inquire about abuse to women”) was deleted because its *t* test score was 0.11. After deleting Item 33, the scale with 42 items was implemented in the CFA.

Nested model comparisons were performed, and the  $\chi^2/df$  ( $\Delta\chi^2$ ) differences of the model were compared. The goodness of fit index (GFI), adjusted goodness of fit index (AGFI), and root mean square error of approximation (RMSEA) were assessed.

The  $\chi^2/SD$  rate was found to be 3.34 for the model, which was considered an indicator of high goodness of fit. The RMSEA is an estimate of the mean difference between the observed and reproduced correlations. An acceptable fit requires a value of less than .08 (Hu & Bentler, 1999); the RMSEA for our data was .08. The GFI indicates how well the theoretical model reproduces the observed correlations, and the comparative fit index (CFI) indicates how well the model fits the data compared to a null model that represents no relationships among variables. The AGFI is a variant of the GFI that uses mean squares instead of total sums of squares in the numerator. A value of .90 or more is required for a good fit, and the obtained values were within the acceptable range (GFI = .96 and AGFI = .96).

**Reliability Analyses**

The standard deviation of the total score of the scale was 0.17, and the total mean item score was 2.51 (95% CI [2.50–2.54]). The Kolmogorov-Smirnov test showed that the values of the scale were not normally distributed (Kolmogorov-Smirnov *Z* = 0.096, *p* = 0.001).

Cronbach’s alpha coefficients were used to evaluate the internal consistency reliability of the scale. Cronbach’s alpha of the general scale was .66, and Cronbach’s alpha of the factor groups ranged from .29 to .81 (Table 2).

Because the values of the scale items were not distributed normally, a nonparametric correlation test was used to determine test–retest reliability. The test–retest reliability, separated by 3 weeks, was calculated using a Spearman rank correlation to determine the

**TABLE 2 Reliability Analyses Results of the Survey Scale (N = 355)**

|                                      | Mean ± SD   | Cronbach’s α | Test–Retest Correlation <sup>a</sup> (n = 50) |
|--------------------------------------|-------------|--------------|---|
| General Scale                        | 2.49 ± 0.14 | .66          | r = .903                                      |
| Subscales                            |             |              |   |
| Preparedness                         | 2.39 ± 0.18 | .31          | r = .915                                      |
| Self-confidence                      | 2.08 ± 0.34 | .79          | r = .930                                      |
| Practitioner lack of control         | 2.86 ± 0.43 | .81          | r = .920                                      |
| Comfort following disclosure         | 1.87 ± 0.43 | .80          | r = .897                                      |
| Professional supports                | 2.30 ± 0.46 | .64          | r = .887                                      |
| Practice pressures                   | 2.88 ± 0.42 | .72          | r = .917                                      |
| Abuse inquiry                        | 2.62 ± 0.35 | .29          | r = .904                                      |
| Practitioner consequences of inquiry | 2.62 ± 0.49 | .51          | r = .979                                      |

<sup>a</sup>All correlations are statistically significant at *p* < .001.

strength of the relationship between participants ( $n = 50$ ) and the APHCs-IPV survey scale over time. A Spearman rank correlation coefficient of .90 for the total scores indicated that the instrument was stable over time.

## DISCUSSION

This study evaluated the psychometric properties of the Turkish version of the APHCs-IPV survey scale. The results show that the psychometric characteristics of the Turkish version of this scale are promising. The panel review regarding the content of the Turkish version of the APHCs-IPV survey scale indicated that there was no need to modify its translation or content. However, a large sample size is needed to confirm the semantic equivalence.

When factor analysis is conducted, sample adequacy is a significant issue for consideration. The literature indicates that this study's sample was sufficiently large for a satisfactory factor analysis and that further validation (factor solution) could proceed with a similar sample size in this study. This sample size was adequate for factor analysis (Özdamar, 2002).

The items' relationship with the factors is explained by the factor loading value. In this model, the factor loading of the items in the scale ranged from .10 to .71 (Table 1). According to the CFA, one model was developed in which the items were grouped into eight factor headings (preparedness, self-confidence of the practitioner, lack of control, comfort following disclosure, professional support, practice pressures, abuse inquiries, practitioner consequences of asking) that maintained the original conceptual model of the instrument (Gutmanis et al., 2007). Nested model comparisons were performed, and the  $\chi^2/df$  ( $\Delta\chi^2$ ) differences of the model were compared. The GFI, AGFI, and RMSEA goodness of fit indices were assessed. Because the  $\Delta\chi^2$  difference test shows significant results and the model with the lower  $\chi^2$  value meets the critical values expected by other fit indices, it is possible to state that a model that meets these conditions is a relatively more valid model (Kline, 1998).

Degrees of freedom ( $df$ ) is a crucial criterion for the  $\chi^2$  test. When  $df$  is high,  $\chi^2$  has a tendency to yield significant results. Therefore, the ratio of  $df$  to  $\chi^2$  can be used as a criterion for adequacy in certain cases. Kelloway (1998) states that when the chi-square/degrees of freedom ( $\chi^2/df$ ) ratio is smaller than 5, it can be interpreted as an indicator of a good fit. In the current model, the  $\chi^2/df$  ratio was found to be smaller than 5 (3.34). This value was considered to indicate high goodness of fit. The GFI indicates the extent to which the model measures the sample variance-covariance matrix and is accepted as the sample variance revealed by the model. GFI values range from 0 to 1. Because they are sensitive to sample size, they yield small values in large samples. Values equal to .90 or more are considered to indicate good fit. The AGFI is a GFI value that is adjusted according to the sample size. AGFI values range from 0 to 1. Although .95 or more is considered a perfect fit, .90 or more is interpreted as a satisfactory fit (Kelloway, 1998).

In this study, the GFI and AGFI goodness of fit indices for the first and second models were the same, both yielding high fit values (GFI = 0.96 and AGFI = 0.96). The RMSEA is an absolute fit index of the difference between the covariance among the variables observed in the sample and the parameters suggested in the model; in other words, it is an index developed based on the degrees of error. In contrast to the GFI and AGFI, it is expected to yield values close to "0." Values equal to or smaller than .05 are considered perfect, whereas values equal to .08 or less are considered reasonable, considering the

complexity of the model (Kelloway, 1998). The same RMSEA value (0.08) was obtained for the model and is considered to be a reasonable value. This scale yields separate scores for subscales and a single score for the entire scale. The goodness of fit indices for the second level of the CFA model were found to be high.

Based on the data obtained, the factor structure of the Turkish version of the scale was similar to that of the original instrument. The factors identified in this study were covered well by the basic concepts of the original scale items by Gutmanis et al. (2007), keeping in mind concerns about cultural sensitivity in the factorial results.

We tested the distributions of the items for skewness and kurtosis using the Kolmogorov-Smirnov test with an alpha level of  $p < .05$ . The results of the Kolmogorov-Smirnov test revealed that the scale scores were not normally distributed ( $p < .05$ ). HCPs have different educational backgrounds and professional responsibilities and may have perceived the scale items differently than their colleagues.

The Cronbach's alpha coefficients of the Turkish version of the APHCPs-IPV scale domains ranged from .29 to .81 (Table 2). These coefficients are not high, but they are acceptable because internal consistency estimates are based on all parameters in a unidimensional scale. However, some instruments are multidimensional. The current scale includes several different dimensions and is not a homogeneous structure. Furthermore, the content of the scale is long and complex. Therefore, it would be inappropriate to appraise the APHCPs-IPV scale in the same way as other scales. If a measurement tool has multiple dimensions, the alpha coefficient can be lower (Woods & Catanzaro, 1988). Cronbach's alpha of the original scale domains indicated good results, with the Cronbach's alpha index varying from .59 to .87 (Gutmanis et al., 2007).

Spearman's rank correlation for the test-retest reliability of the current scale was  $r = .90$  (Table 2). The literature suggests that the acceptable minimum point for test-retest reliability is .70 (Ereife, 2002). Therefore, the test-retest reliability was adequate for the scale.

## CONCLUSION

Based on the results, there is sufficient evidence of acceptable reliability and validity to use the Turkish version of the APHCPs-IPV scale. This study provides further cross-cultural evidence for the usefulness of this scale in a country with a different cultural background. However, additional studies in diverse population groups are needed to confirm these findings and to measure IPV-related attitudes. Self-reported behaviors can be used to profile training needs and evaluate training programs and policy interventions for HCPs.

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