Diyabet, Obezite ve Hipertansiyonda

Hemşirelik forumu

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Psychometric Properties of the Perceived Diabetes Self-Management Scale in Turkish Patient with Type 2 Diabetes

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Summary

Objectives: This study aimed at investigating the psychometric characteristics of the Perceived Diabetes Self-Management Scale (PDSMS) in Turkish population with type-2 diabetes.

Methods: In this methodological study, 283 patients were recruited. The language validity of PDSMS was tested. The psychometric properties of the Turkish PDSMS (T-PDSMS) were examined by internal consistency, stability, confirmatory factor analysis, and construct, predictive, and concurrent validity.

Results: Internal consistency coefficient α of the total scale was found to be 0.77. It was found that the exploratory factor analysis explained 47.96% of the total variance. The factor loading ranged from 0.39 to 0.65 for 7 items. The confirmatory factor analysis yielded good fitness indexes; the norm χ2/df value was lower than 2, GFI was 0.95, CFI was 0.99, SRMR was 0.02, and RMSEA was 0.037. The GFI (0.95) was over 0.8, while RMSEA (0.037) and SRMR (0.02) were under 0.05. The confirmatory factor analysis revealed that the T-PDSMS was acceptable. The instrument showed a good reliability and concurrent validity with the Diabetes Self-Efficacy Scale and the Health Belief Model Scale (p<0.001). In the evaluation of predictive validity, the PDSMS scores were correlated with various parameters including BMI, FBG, PPG, and HbA1c.

Conclusions: The validity and reliability of the T-PDSMS, which consists of 7 items and one dimension, were confirmed for the clinical use by nurses.

Keywords: Diabetes mellitus, Self-efficacy, Perceived diabetes self-management, Reliability, Validity.

Özet

Tip 2 Diyabetli Türk Hastada Algılanan Diyabet Kendi Kendini Yönetme Ölçeğinin Psikometrik Özellikleri

Amaç: Bu çalışmanın amacı, Tip 2 diyabetli Türk Toplumunda Algılanan Diyabet Kendi Kendini Yönetme Ölçeğinin (PDSMS) psikometrik özelliklerini incelemektir.

Yöntem: Çalışma topları metotolojik. Çalışmaya 283 hasta katıldı. PDSMS’nin dil geçerliliği test edildi. Türk PDSMS’nin (T-PDSMS) psikometrik özellikleri iç tutarlılık, kararlılık, yapısı geçerliliği, doğruluk faktör analizi, eşzamanlı geçerlilik ve öngörücü geçerlilik ile incelenmiştir.

Bulgular: Toplam ölçünün iç tutarlılığı 0.77’dir (cronbach a). Bulgular, açıklamaları faktör analizinin toplam varyansı 47.96’ya ulaşmıştır. Faktör yükler 7 madde için 0.39 ile 0.65 arasında değişmektedir. Doğruluk faktör analizi’yle uyum indekslerine sahiptir; norm χ2/df değerleri 2’den düşük, GFI 0.95, CFI 0.99, SRMR 0.02 ve RMSEA 0.037 idi. GFI (0.95) 0.8’in üzerinde iken RMSEA (0.037) ve SRMR (0.02) 0.05’in altında bulundu. Doğruluk faktör analizi, PDSMS’nin kabul edilebilir olduğu ortaya koydu. Skala Sağlık İlanı Modeli Ölçeği ve Diyabet Öz Yetenek Ölçeği ile iyi bir güvenilirlik ve eszamanlı geçerlilik (p<0.001) gösterdi. Tahminleri geçerli değerlendirmeinde PDSMS puanları, BMI, FBG, PPG ve HbA1c gibi çeşitli parametrelerle ilişkilendirilmiştir.

Author's Note: This article is derived from the author’s doctoral thesis titled “The Relationship Between Cardiovascular Risk Factors and Health Belief and Self-Efficacy in Type 2 Diabetics”.

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Diabetes mellitus is one of the leading global health emergencies of this century across the world (1). The International Diabetes Federation (IDF) reports that the number of the patients with diabetes mellitus in the world is 425 million as of 2017, and this number is estimated to rise to 629 million in 2045 with an increase of 48%. Again, according to the estimations in the IDF diabetes atlas, the prevalence of diabetes in the age group of 20-79 is 12.8%. The prevalence of diabetes in the Turkish community is 12.8%, which ranks the third after Germany and Russian Federation in Europe (2). TURDEP-II (Turkish Epidemiology Survey of Diabetes, Hypertension, Obesity, and Endocrine Disease) reports that 16.5% of the Turkish people have diabetes (3).

Diabetes should be managed comprehensively based on a plan (4). In addition, patients with diabetes mellitus should manage this disease themselves to reach an optimum outcome (5). In case of a poor management, all types of diabetes can cause some complications, especially cardiovascular diseases, stroke, and renal diseases (2, 4).

Patients’ self-efficacy beliefs about diabetes significantly affect their ability to cope with diabetes process in self-care management (6, 7). Self-efficacy refers to the beliefs that one is able to successfully exhibit behaviors necessary to reach given outcomes (8). It affects not only the individual’s choice of behaviors, but also how they motivate themselves to accomplish a given task under their responsibility (9, 10).

Diabetes is a chronic disease progressing with macrovascular and microvascular complications (cardiovascular, retinopathy, nephropathy, neuropathy, diabetic foot ulceration, encephalopathy, etc.) (2). Performing complex care activities is an important part of successfully preventing the complications (11). In several studies on diabetes in the literature, it has been reported that self-efficacy is associated with the self-care activities of diabetes management (6,7). It has been asserted that self-efficacy is a significant factor in health outcomes such as HbA1c, Body Mass Index (BMI), Post-prandial glucose (PPG) level, and Fasting Blood Glucose (FBG) level (12-14).

In a study assessing the relationships between self-care and efficacy strengths of diabetic patients, it was found that the level of self-efficacy related to nutrition and insulin treatment increased in the cases who participated in diabetes training programs and who were visited by a home care nurse (15). In another study, individuals with a low self-efficacy level were reported to have insufficient diabetes-related self-care behaviors and to fail in diabetes management (16). It is thought that the evaluation of disease-related self-efficacy levels of individuals will be useful for an effective and successful diabetes self-care.
The T-PDSMS form of the scale was revised with the opinions of expert panel members consisting of 16 diabetes professionals. The diabetes specialists were asked to evaluate the linguistic suitability (whether it is relevant, clear, and comprehensive) of all the scale items on a rating scale of 1-4 according to Davis (1992) technique. (1 point: unsuitable, 2 points: partially suitable/item needs to be corrected, 3 points: suitable but minor corrections need to be done, 4 points: absolutely suitable) In this technique, the item-related “content validity index” is calculated by dividing the number of experts who selected “absolutely suitable” and “suitable but minor corrections need to be done” by the total number of experts (21). A value of 0.80 is acceptable (22). Accordingly, it was expected that 80% of the items would receive 3 and 4 points (23). In line with the expert opinions and suggestions, the 2nd item of the PDSMS was modified to be adapted to Turkish and easily understood by Turkish patients. Subsequently, the questionnaire was translated back from Turkish to English by a language expert. The backtranslated and original forms of the PDSMS were then compared. After the scale was translated into Turkish, 10 individuals with type-2 diabetes were asked to fill in the T-PDSMS to test its equivalence.

Pretest study
In order to test whether the measurement items were understood by Turkish people with diabetes, a questionnaire was applied to 10 people with diabetes before the study. The questionnaires used in the pretest were not included in the study.

Data collection
After the T-PDSMS was prepared, data of the study was collected by the researchers. After about a two-week period from the 1st interview, the participants were called via phone by a researcher. The second interviews were carried out to check the T-PDSMS in terms of test-retest reliability.

Demographic information questionnaire
4 questions were asked to the participants to collect information about their gender, age, duration of diagnosis, and treatment modality. The duration of diagnosis was measured in years, and treatment modalities were categorized into three: (1) oral antidiabetic agent(s) alone, (2) insulin injection alone, and (3) both insulin injection and oral antidiabetic agent(s). In addition to this information, the fasting plasma glucose (FPG), PPG, glycosylated hemoglobin A1c (HbA1c), and body mass index (BMI) were measured (24). BMI was computed as the ratio of weight (kg) to the square of height (m) (25). FPG: The level of glucose in a venous blood sample collected after at least 10 hours of hunger. PPG: The glucose level in the blood when measured 2 hours after a meal. Glycosylated hemoglobin HbA1c: The average of blood sugar in three months (24).

In the study, the diabetes-related health outcomes were determined as the period of diagnosis, BMI, FBG, PPG, and HbA1c. Analyses were conducted in a laboratory affiliated to Diabetes and Endocrinology Outpatient Clinic of Istanbul University Medical Faculty.

The Perceived Diabetes Self-Management Scale (PDSMS)
PDSMS was designed by Wallston through the modification of the Perceived Competence Health Scale (PCHS) (26). This scale could easily be adapted for a disease-specific self-management. PDSMS has 8 items and is evaluated with a 5-point Likert type scale where "strongly disagree" corresponds to 1 point, "disagree" to 2 points, "neutral" to 3 points, "agree" to 4 points, and "strongly agree" to 5 points. Four items of the scale were negative questions. Therefore, these 4 items were reverse scored. PDSMS scores range between 8 and 40, and the higher the score, the more the confidence in one's diabetes self-management (5).

In this study, it was aimed to evaluate the criterion-related validity of the PDSMS using other scales (concurrent validity) and diabetes outcomes (predictive validity). Therefore, DSES and HBMS, which represent self-care management behaviors in diabetes, were used. These scales have been adapted to the Turkish population (17,18).

Self-Efficacy
Jaap van der Bijl et al. developed DSES for people with type-II diabetes and administered it to Dutch and British populations. DSES was adapted to Turkish by Kara et al. (2006) and its validity and reliability were confirmed. The scale consists of 20 items. The response categories of the DSES items include "No, I'm not sure" (1), "no" (2), "Neither yes nor no" (3), "Yes" (4), and "Yes, I'm sure" (5). Each item receives a score ranging from 1 to 5. In the factor analysis, a total of 3 dimensions were found: diet and foot control (12 items), medical treatment (5 items), and physical exercise (3 items). The scale consists of 20 items and does not include any negative items. A minimum of 20 and a maximum of 100 points can be obtained from the total scale (17,27,28).

Health Belief Model
HBMS was adapted for people with type-II diabetes by Tan (2004).
HBMS was then adapted to Turkish by Kartal & Altuğ-Özsoy in 2007. It has 5 components: sensitivity perception (4 items), seriousness/caring perception (3 items), benefit perception (7 items), barrier perception (9 items), and health motivation (10 items). HBMS is a 5-point Likert scale consisting of 33 items. 12 items were reverse scored in this scale. Thus, a minimum of 33 and a maximum of 165 points can be obtained from the total scale (18,29). Kartal and Altuğ-Özsoy (2007) carried out the reliability and validity study of this scale.

Data analysis
All the data were entered and checked twice. To analyze data, SPSS 16.0 and LISREL 8.50 programs were used (30,31). Descriptive statistics were used to analyze the demographical information. Cronbach's alpha coefficient was used to check the internal consistency reliability of PDSMS. Exploratory and confirmatory factor analyses were conducted to test its construct validity. In order to test the criterion-related validity of the scale, Spearman correlations were calculated. Relevant diabetes outcomes such as period of diagnosis, BMI, FBG, P3G, and Hba1c were used in order to evaluate the predictive validity of the scale.

Ethical considerations
Primarily, the necessary permission was obtained from Kenneth A. Wallston to use PDSMS in this Turkish adaptation study. DSES and HBMS were used to establish the criterion related to the validation of the scale. We received permissions from Magriet Kara for using DSES and Asyje Kartal for using HBMS. The required ethics approvals were obtained from the Ethics Committee of the Medical Faculty (IRB number: 08/1331). The purpose of the research was explained to the participants and their written consents were received. The study was carried out in line with the confidentiality precautions stipulated in Helsinki Declaration.

Results
Descriptive statistics for T-PDSMS
The mean age of the diabetic people was 55.8 years (SD:7.3) and 68.4% of the participants were female. The participants had been having type-2 diabetes for 10.9 years (SD:6.8) and most of the participants (52.2%) were using oral antidiabetic medicines (Table 1).

Content validity
All the items received 3 or 4 points. The mean relevance at the item level was 3.60. CVI is accepted as 0.80 when the majority of scale items are scored 3 and 4 points (22). Minor revisions were recommended for the item 2 by the experts ("I find efforts to change things I don't like about my diabetes are ineffective" was modified as "I do not believe in the necessity for changes that I must do in my disease"). This item was changed based on the expert panel's recommendations since it was not appropriate for the Turkish culture.

Table 1: Sociodemographic and clinical characteristics of the participants (n=263).

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Mean±SD or n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>55.8 (± 7.3)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>83 (31.6)</td>
</tr>
<tr>
<td>Female</td>
<td>180 (68.4)</td>
</tr>
<tr>
<td>Duration of diabetes diagnosis (years)</td>
<td>10.9 (±6.8)</td>
</tr>
<tr>
<td>Treatment modality</td>
<td></td>
</tr>
<tr>
<td>Oral antidiabetic medicine alone</td>
<td>130 (52.2)</td>
</tr>
<tr>
<td>Insulin alone</td>
<td>35 (14.1)</td>
</tr>
<tr>
<td>Both oral antidiabetic medicine and insulin</td>
<td>84 (33.7)</td>
</tr>
<tr>
<td>FPG</td>
<td>157.8 (57.9)</td>
</tr>
<tr>
<td>PPG</td>
<td>193.8 (64.8)</td>
</tr>
<tr>
<td>Hba1c</td>
<td>7.9 (±4.2)</td>
</tr>
<tr>
<td>BMI</td>
<td>30.0 (±5.1)</td>
</tr>
</tbody>
</table>

Reliability
Test-retest reliability
Fifteen percent of the participants accepted to fill in the scale on telephone for the 2nd time after 2 weeks. As a result of the two-week test-retest reliability, the general intra-class correlation coefficient was found to be 0.89 (p<0.001) (95% CI): 0.80-0.94.

Internal consistency reliability
Cronbach's alpha coefficients were analyzed to test whether the items in the scale were homogeneous. As a result, one item (item 2) was found to have a correlation coefficient below 0.30 (Table 2). Therefore, this item was removed from the scale. The rest of the items in the scale had significant correlations (0.70-0.77) within acceptable limits (Table 2).

Construct validity
Confirmatory factor analysis was carried out to test the construct validity of the scale by structural equation modeling (32).

Exploratory factor analysis
Sample size was found to be suitable for factor analysis (32,33) according to the Kaiser-Meyer-Olkin value (KMO=0.798) and the data was found to be suitable according to the Barlett test (p<0.001). Table 3 shows the results of the exploratory factor analysis. Two factors of the T-PDSMS with an eigenvalue of >1.00 were excluded from the analysis. The Factor 1 consisted of five items with factor loadings of >0.30, and it explained 24.71% of the variance. The Factor 2 consisted of two items, which accounted for 23.25% of the
variance. In general, these two factors explained 47.96% of the total variance (Table 3).

**Confirmatory factor analysis**

Confirmatory factor analysis was carried out using the structural equation modeling based on the results of the exploratory factor analysis. Construct validity was determined using Robust Maximum Likelihood method (30, 32). Two items (Q3–Q4) were significantly caused by the dimension "maintaining behavior" (p< 0.01), and the responses to five items, that is, Q1, Q5, Q6, Q7, and Q8 were also significantly caused the dimension "managing diabetes" (p < 0.01). In the study, χ²/df (χ² divided by degree of freedom) value was used since it is less influenced by the sample. This value should be 2 or below (33,34). Root Mean Square Error of Approximation (RMSEA) is a measure for approximate fitness in the main sample. It ranges between zero and one (35). Goodness-of-Fit Index (GFI) indicates the extent to which the model can measure the covariance matrix in a given sample. GFI value ranges between 0 and 1. A GFI value greater than 0.90 refers to a good model (36). Comparative Fit Index (CFI) is the model that predicts that no relationship exists between the variables. It ranges between 0 and 1 (37). Standard Root Mean Square Residual (SRMR): The model has a better goodness of fit as this value approaches to 0 (38). The confirmatory factor analysis yielded good fitness indexes; the norm χ² was 19.11, χ²/df value was lower than 2, GFI was 0.95, CFI was 0.99, SRMR was 0.02, and RMSEA was 0.037. The GFI (0.95) was over 0.8, while RMSEA (0.037) and SRMR (0.02) were under 0.05 (34).

**Criterion - related validity**

Criterion validity is the degree of correlative association of an instrument with another instrument (concurrent validity) or another criterion of the same observable fact (predictive validity) (33).

**Predictive validity**

The correlations between the diabetes self-management scores and the parameters related to diabetes were examined (Table 4). A positive relationship was found to exist between diagnosis duration (r=0.10) and T-PDMS scores (p<0.001), and a negative relationship

<table>
<thead>
<tr>
<th>Table 3: Factor analysis of PDMS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>PDSMS 1</td>
</tr>
<tr>
<td>PDSMS 5</td>
</tr>
<tr>
<td>PDSMS 6</td>
</tr>
<tr>
<td>PDSMS 7</td>
</tr>
<tr>
<td>PDSMS 8</td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
</tr>
<tr>
<td><strong>Variance</strong></td>
</tr>
</tbody>
</table>

**Table 2: PDMS item-total correlations and Cronbach’s alpha coefficients**

<table>
<thead>
<tr>
<th>PDMS Item Wording</th>
<th>Mean (SD)</th>
<th>Corrected item total correlation</th>
<th>Cronbach alpha in case the item is removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is difficult for me to find effective solutions for problems that occur with managing my diabetes.</td>
<td>3.14 (1.19)</td>
<td>0.38</td>
<td>0.77</td>
</tr>
<tr>
<td>2. I find efforts to change things I don’t like about my diabetes are ineffective.**</td>
<td>3.88 (1.03)</td>
<td>0.27</td>
<td>0.77</td>
</tr>
<tr>
<td>3. I handle myself well with respect to my diabetes.</td>
<td>3.84 (0.85)</td>
<td>0.51</td>
<td>0.74</td>
</tr>
<tr>
<td>4. I am able to manage things related to my diabetes as well as most other people.</td>
<td>3.97 (0.77)</td>
<td>0.59</td>
<td>0.73</td>
</tr>
<tr>
<td>5. I succeed in the projects I undertake to manage my diabetes.</td>
<td>3.86 (0.83)</td>
<td>0.61</td>
<td>0.72</td>
</tr>
<tr>
<td>6. Typically, my plans for managing my diabetes don’t work out well.</td>
<td>3.31(1.10)</td>
<td>0.44</td>
<td>0.75</td>
</tr>
<tr>
<td>7. No matter how hard I try, managing my diabetes doesn’t turn out the way I would like.</td>
<td>3.34 (1.14)</td>
<td>0.38</td>
<td>0.77</td>
</tr>
<tr>
<td>8. I’m generally able to accomplish my goals with respect to managing diabetes.</td>
<td>3.46 (1.07)</td>
<td>0.65</td>
<td>0.70</td>
</tr>
<tr>
<td><strong>T-PDMS with 7 items correlations and Cronbach’s Alpha Coefficients</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
between BMI (r = -0.28), FPG (r = -0.29), PGB (r = -0.25), HbA1c (r = -0.34) values, and T-PDMS scores (p < 0.001).

Concurrent validity
The compliance between the scale scores and the DSES and HBMS scores were evaluated through correlations (Table 3). Positive significant relationships were found between T-PDMS, DSES, and HBMS (p < 0.001) (Table 5).

Discussion
The purpose of this study was to examine the psychometric characteristics of T-PDMS by testing its reliability and construct, concurrent, and criterion-related validities. This study presented a cultural adaptation of T-PDMS by following international methodological procedures. The results reached in this study confirmed the good psychometric characteristics of T-PDMS which consists of 7 items.

The test–retest method was used to determine the reliability of the scale, and its internal consistency was examined. Hoover et al. (2008) asserted that an intra-class correlation coefficient of >0.75 indicated an excellent reproducibility and the values from 0.40 to 0.74 meant a fair to good reproducibility. The test–retest reliability of the scale was good.

According to Hoover et al. (2006), the item-total correlation coefficients of >0.30 and the Cronbach coefficients of >0.50 are good for the scale. Total item correlation coefficient (between 0.39 and 0.69) of 2nd item had a correlation coefficient of r = 0.27. In this study, the reliability of the T-PDMS was found to be good. The Cronbach’s alpha coefficient of the T-PDMS was determined to be 0.77 after excluding the 2nd item. In their study, Wallston et al. (2007) reported that the item analysis carried out on all eight items of PDMS yielded a Cronbach’s alpha of 0.834, with the corrected item-total correlations within the range of 0.390–0.707 (5). Also in the present study, an item analysis was carried out on all eight items of PDMS, and it yielded a Cronbach’s alpha of 0.77, with the corrected item-total correlations within the range of 0.42–0.77. The results of this study demonstrated a high reliability for the instrument with a correlation of 0.89, showing a stability for the findings measured with an interval of 2 weeks.

The data for the adequacy of the sample (KMO), the appropriateness of the factor model eigenvalues, the factor loadings in the exploratory factor analysis, and the model fit indexes of the confirmatory factor analysis were within the statistical standards for all values (33,34). The scale has a two-dimensional structure both in the present study and the study conducted by Wallston et al. In the present study, two dimensions explained 47.9% of the total variance. Additionally, a factor should include at least 3 items (30). Therefore, likewise in the original scale, sub-group were not needed in this study. The factor loads obtained from confirmatory factor analysis provided sufficient evidence for the validity of all items since they had a sufficiently high load on the structures to which they corresponded. The confirmatory factor analysis revealed a good fit for the model with 7 items.

The model fit should be examined according to multiple indicators. Indices of model fit, chi-square to degrees of freedom ratio (χ²/df) (34), CFI, RMSEA, GFI, and SRMR (38) were used in this study to examine the measurement models. The RMSEA values below 0.05 indicate a good fit (35). The models with a SRMR below 0.05 have a good fit (38). The CFI values above 0.90 indicate good model fit (37). The standardized SRMR values greater than 0.08 (38) are significant. Because between y² to its degree of freedom (χ²/df) was used, and the ratios less than 3 indicate an acceptable fit between the sample data and the hypothetical model (34). The confirmatory factor analysis yielded good fitness indexes; the norm y² was 19.11, χ²/df value was lower than 2, GFI (0.95) was over 0.80, CFI (0.99) was over 0.90, SRMR (0.02) was under 0.08, and RMSEA

<table>
<thead>
<tr>
<th>Table 4: Relationship of T-PDMS and diabetes control.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T – PDMS</strong></td>
</tr>
<tr>
<td>Period of diagnosis</td>
</tr>
<tr>
<td>BMI</td>
</tr>
<tr>
<td>FPG</td>
</tr>
<tr>
<td>PGB</td>
</tr>
<tr>
<td>HbA1c</td>
</tr>
</tbody>
</table>

* p < 0.001
r: Spearman’s correlation coefficient
PDMS with 7 items in the current study

<table>
<thead>
<tr>
<th>Table 5: The relationship between HBMS, DSES, and PDMS (n=263)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HBMS Score</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>r 0.256</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>r 0.226</th>
<th>p 0.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-PDMS Score</td>
<td>0.530</td>
<td>0.000</td>
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</tbody>
</table>
level of self-efficacy causes the diabetes self-management to be poor. For the success of diabetes management, nurses should evaluate and improve the perceived self-management of the people with diabetes.

There is a need for further research on PDSMS to examine its stability in case there is no self-management interventions. Furthermore, the longitudinal use of PDSMS is important for the predictive validity of the scale. In this way, the change in the perceived diabetes competence over time can be understood better, as well as the relationship of this change to the change in self-care behaviors and diabetes outcome.

Conflict of interest
There are no potential conflicts of interest.

References

Temmuz - Aralık 2020 • Cilt 12 • Sayı 2