

# Adaptation of the Friedman Life Balance Scale in Nursing Students into Turkish: Methodological (Validity and Reliability) Study

## Friedman Yaşam Dengesi Ölçeği'nin Hemşirelik Öğrencilerinde Türkçeye Uyarlanması: Metodolojik (Geçerlilik ve Güvenilirlik) Çalışma

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**ABSTRACT Objective:** The aim of this study is to adapt the Friedman Life Balance Scale (FLBS), originally developed in the USA, into Turkish and to examine its validity and reliability for assessing life balance among nursing students. **Material and Methods:** This methodological study was conducted with a sample of 688 nursing students enrolled in the faculty of nursing between November 2023-February 2024. The data were collected using the Satisfaction with Life Scale (SLS), the Warwick-Edinburgh Mental Well-Being Scale Short Form (WEMWBSF), and the FLBS. Initially developed in English, the 15-item scale comprising 3 sub-dimensions underwent Turkish language and content validity procedures. **Results:** The factor analysis results of the FLBS indicated that the construct validity was satisfactory. Exploratory factor analysis revealed a 3-factor structure accounting for 55.9% of the total variance. The goodness of fit values ( $\chi^2/df=3.516$ ; Comparative Fit Index=0.953; Normed Fit Index=0.936; Incremental Fit Index=0.954; Tucker-Lewis Index (TLI)=0.931; Root Mean Square Error of Approximation=0.060) of the model obtained with this 3-factor confirmatory factor analysis were good. The internal consistency Cronbach's alpha score of the FLBS was 0.861. In parallel form reliability of the FLBS, there was a low-level positive relationship between the FLBS and SLS ( $r=0.348$ ,  $p<0.001$ ) and a moderate positive relationship between the FLBS and WEMWBS ( $r=0.594$ ,  $p<0.001$ ). **Conclusion:** In this study, the Turkish version of the FLBS is a reliable and valid measurement tool for measuring life balance in nursing students. FLBS is a short and practical scale to measure life balance. It is thought that the FLBS can be used to measure life balance in students and health professionals.

**Keywords:** Life balance; scale adaptation; validity; reliability; nursing students

**ÖZET Amaç:** Bu çalışmanın amacı, ABD'de geliştirilen "Friedman Yaşam Dengesi Ölçeği'nin (FYDÖ)" hemşirelik öğrencilerinde yaşam dengesini değerlendirmek üzere Türkçeye uyarlanması ve geçerlilik ve güvenilirlik çalışmalarının yapılmasıdır. **Gereç ve Yöntemler:** Metodolojik tipteki araştırmanın örneklemini, Kasım 2023-Şubat 2024 tarihleri arasında hemşirelik fakültesinde öğrenim gören 688 hemşirelik öğrencisi oluşturmuştur. Veriler, Yaşam Doyumu Ölçeği (YDÖ), Warwick-Edinburgh Mental İyi Oluş Ölçeği (WEMİO) ve FYDÖ kullanılarak toplanmıştır. İlk olarak İngilizce dilinde olan, 3 alt boyuttan oluşan 15 maddelik ölçeğin Türkçe dil ve kapsam geçerliliği yapılmıştır. **Bulgular:** FYDÖ'nün faktör analizi sonuçları, yapı geçerliğinin uygun olduğunu göstermiştir. Açıklayıcı faktör analizi sonucunda, toplam varyansın %55,9'unu açıklayan 3 faktörlü bir yapı elde edilmiştir. Üç faktörlü modelin doğrulayıcı faktör analizi sonuçlarına göre uyum iyiliği indeksleri ( $\chi^2/sd=3,516$ ; Karşılaştırmalı Uyum İndeksi=0,953; Normlu Uyum İndeksi=0,936; Fazlalık Uyum İndeksi=0,954; Tucker-Lewis İndeksi (TLI)=0,931; Tahmin Hatalarının Ortalamasının Karekökü=0,060) iyi düzeyde bulunmuştur. Ölçeğin iç tutarlılığı için Cronbach alfa katsayısı 0,861 olarak hesaplanmıştır. Paralel form güvenilirliği kapsamında, FYDÖ ile YDÖ arasında düşük düzeyde pozitif bir ilişki ( $r=0,348$ ,  $p<0,001$ ), FYDÖ ile WEMİO arasında ise orta düzeyde pozitif bir ilişki ( $r=0,594$ ,  $p<0,001$ ) tespit edilmiştir. **Sonuç:** Bu çalışma, FYDÖ'nün Türkçe versiyonunun, hemşirelik öğrencilerinde yaşam dengesini ölçmek için geçerli ve güvenilir bir ölçüm aracı olduğunu ortaya koymuştur. FYDÖ, yaşam dengesini ölçmek için kısa ve pratik bir ölçek olup, öğrenciler ve sağlık profesyonelleri arasında yaşam dengesini değerlendirmek amacıyla kullanılabileceği düşünülmektedir.

**Anahtar Kelimeler:** Yaşam dengesi; ölçek uyarlama; geçerlilik; güvenilirlik; hemşirelik öğrencisi

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Life balance refers to the balance of roles that meet psychological needs and contain meaning and life purposes.<sup>1-3</sup> The life balance model emphasizes our ability to shape our own reality and live our lives in alignment with our desires and aspirations.<sup>4,5</sup> This balance model is based on the following 5 main requirements: meeting the basic needs for biological health and physical security constantly, having satisfying and meaningful relationships with other people, feeling competent, challenging, and competent, creating a meaningful and fulfilling self, and planning time and energy well to achieve important personal goals.<sup>4</sup> This balance defines a state of spiritual well-being that involves determining one's lifestyle according to the values one creates in line with one's own meaning and goals.<sup>2,4</sup>

It is known that nurses' ability to establish a healthy balance in different areas (physical, mental, emotional and social) in their roles will positively affect their quality of life and general health.<sup>6</sup> Life balance is considered important for subjective satisfaction, professional quality of life, and general health and happiness in nurses.<sup>7</sup> Studies have focused on the concept of work-life balance in nursing.<sup>8</sup> Studies conducted with nursing students and educators have revealed that work-life balance is positively associated with job satisfaction and quality of life and negatively associated with burnout and secondary traumatic stress.<sup>8,9</sup> There are various measurement tools to measure the work-life balance of nurses and nursing students. However, measuring work-life balance may not adequately reflect how individuals feel about the use of their time.

The concept of life balance in nursing students should also be investigated. For nursing students, life balance is an important factor because it can affect both their academic and professional achievement.<sup>10</sup> Nursing students have a busy schedule that includes challenging courses, clinical studies, internships, and long working hours.<sup>11</sup> A healthy life balance helps nursing students cope with stress, maintain their mental health, and improve their overall health.<sup>12,13</sup> It has been revealed that with a good life balance, students can perform better in stressful and intense working conditions, which can increase their professional sat-

isfaction and prevent problems such as job dissatisfaction and burnout.<sup>6,14</sup> A healthy life balance improves nursing students' professional performance, which helps them better serve their patients.<sup>15,16</sup> Therefore, nursing students' life balance levels should be measured regularly and supportive approaches should be structured.<sup>15,16</sup>

It can be difficult to measure life balance in individuals because it is a variable and subjective experience. The Life Balance Inventory, developed by Matuska, is used to assess the perceived congruence between how much time people spend in various areas, how much importance is given to these areas, how skilled they are in these areas, and how much they enjoy these areas.<sup>3</sup> The Juhnke-Balkin Life Balance Inventory, was developed by Davis et al. to assess the client's life balance and to identify the client's areas of imbalance, anxiety, and dissatisfaction.<sup>17</sup> Both scales were adapted into Turkish.<sup>18,19</sup> However, the use of these 2 scales in nursing students and nursing studies is limited, and the mostly emphasized sub-concept is work-life balance. As pointed out by Zhao et al. the Chinese version of the Friedman Life Balance Scale (FLBS) is a valid and reliable tool for nursing students.<sup>13</sup> However, in Türkiye, no measurement tool that allows nursing students to measure their life balance healthily is available. Thus, it seems appropriate to adapt the FLBS into Turkish because it is a valuable tool for international research and could be administered to nursing students from different cultures and languages. As a result, it would be possible to accurately measure not only life balance in nursing students but also dimensions affecting their academic and professional success. This study aimed at adapting the FLBS into Turkish to assess life balance in nursing students and performing a validity and reliability study.

## MATERIAL AND METHODS

### STUDY DESIGN

This methodological study was conducted to adapt a Turkish scale and to perform a methodological study.

## SETTING AND PARTICIPANTS

The present population consists of all nursing students studying at Dokuz Eylül University Faculty of Nursing between November 2023-February 2024. The study population consisted of all students enrolled in the faculty of nursing, amounting to 1,086 students. The nursing faculty where the study will be conducted has been chosen in terms of reaching the targeted sample size. The minimum sample size was intended to be consistent with the view that it should be 5-10-15 times the number of items in the FLBS using the non-probability-purposive sampling method.<sup>20</sup> In this regard, the sample size might range between 450-1,350. The inclusion criteria were as follows: “Being a student at the faculty of nursing”, “being a native speaker of Turkish”, and “agreeing to participate in the study”.

In this study, validity and reliability studies of the Turkish version of the FLBS were conducted to investigate its psychometric properties. To perform the validity and reliability measurements, the FLBS, SLS, and WEMWBS-SF were administered to all nursing students who volunteered to participate in the study. The research was completed with 688 students who met the inclusion criteria and agreed to participate in the study. The data for this study were collected face-to-face at the end of the class, following permission from the course instructor. The 1<sup>st</sup> and 2<sup>nd</sup> researchers conducted the data collection by attending the classroom at the conclusion of the session.

## INSTRUMENTS

The following data collection tools were used to collect the study data:

**Personal information form:** The form developed by the researchers to obtain information about the characteristics of the participants includes items that question variables.

**Satisfaction with Life Scale:** The Satisfaction with Life Scale (SLS) was adapted into Turkish by Dağlı and Baysal in 2016.<sup>21</sup> The SLS has five items whose responses are rated on a 7-point scale ranging from “strongly disagree” to 7 “strongly agree”. In the Turkish version of the SLS, there are 5 items too, but responses given to the items are rated on a 5-point

Likert-type scale ranging from 1 to 5 (1: strongly disagree, 2: slightly agree, 3: moderately agree, 4: mostly agree, and 5: strongly agree). The Cronbach’s alpha internal consistency coefficient of the SLS was 0.88 and the test-retest reliability was 0.97. Exploratory factor analysis (EFA) performed for the construct validity of the SLS yielded a single-factor structure.

**Warwick-Edinburgh Mental Well-Being Scale-Short Form:** The Warwick-Edinburgh Mental Well-Being Scale-Short Form (WEMWBS-SF) was adapted into Turkish by Demirtaş and Baytemir in 2019.<sup>22</sup> The WEMWBS was developed to measure respondents’ mental well-being levels. The WEMWBS has 2 subscales namely “psychological well-being” and “subjective well-being” and 14 positively keyed items. In the application, participants were asked to consider their experiences in the last 2 weeks. The higher the score obtained from the WEMWBS, the better the respondent’s mental well-being. On the other hand, in the WEMWBS-SF, there are 7 positively keyed items whose responses are rated on a 5-point Likert-type scale ranging from 1 (Never) to 5 (Always). The Cronbach’s alpha internal consistency coefficient of the WEMWBS-SF was 0.86 in that study.

## FRIEDMAN LIFE BALANCE SCALE

The 17-item FLBS was developed by Friedman in 2018 to measure life balance.<sup>23</sup> However, Friedman revised the FLBS and reduced the number of items to 15 in 2020.<sup>4</sup> Responses given to the items are rated on a 6-point Likert-type scale ranging from 0 (not at all) to 5 (a great deal). The higher the score obtained from the FLBS, the higher the respondent’s level of life balance. The 15-item FLBS has the following three sub-dimensions: “Reflect Clarify Sort” (items 1-5), “Understand Self and Others” (items 6-10), “Self-Forgive Compassion Love” (items 11-15). The Cronbach’s alpha values for the overall FLBS and its 3 subscales are 0.93, 0.86, 0.86, and 0.80, respectively. The construct validity results of the FLBS indicated an acceptable model fit. In this study, FLBS was adapted to Turkish culture, and a study of its validity and reliability was conducted.

## TRANSLATION AND CULTURAL ADAPTATION

A 6-stage linguistic and content validity process was conducted for the adaptation of the FLBS. These adaptation stages included translation, review, expert evaluation, back-translation, re-evaluation, and pilot testing.<sup>24</sup> First, permission was obtained from the developer of the FLBS to conduct a validity and reliability study of the scale in the Turkish population. The FLBS was translated into Turkish by 3 individuals whose native language is Turkish and who are proficient in English. A common version was created by synthesizing the 3 translations. Subsequently, the original and back-translated versions of the FLBS were compared and examined by an expert committee consisting of 8 experts. Among them, 3 specialized in the fundamentals of nursing, while 5 specialized in psychiatric nursing. Additionally, 6 experts had experience in educational and research activities involving nursing students. Based on expert evaluations, a total of 6 items received feedback, with items 9 and 14 receiving common feedback. All feedback was related to the structure of the sentences. The content validity index of the FLBS was determined to be 0.83 based on the evaluations of the 8 experts. After receiving the feedback, the researchers convened to review and revise the items by comparing them with the original scale and considering expert opinions. Subsequently, the scale was back-translated from Turkish to English by an individual who had not been involved in the initial translation process. The back-translated scale was then sent to the scale developer, and feedback was obtained regarding its compatibility with the original scale, leading to necessary revisions. Following this process, the preliminary final version of the Turkish scale was established. A total of 15 nursing students who met the inclusion criteria evaluated the clarity of the final version of the scale and provided feedback.<sup>24</sup> After completing the pilot group evaluations, the FLBS reached its final form.

## STATISTICAL ANALYSIS

Statistical analyses were performed using the SPSS 26.0 (IBM, ABD) software and validity study, content validity was assessed using the content validity index calculated by experts. Construct validity was

examined through the EFA, the KMO test, and Bartlett's test of sphericity. Confirmatory factor analysis (CFA) was performed to verify the factor structure. Parallel form reliability was evaluated using Pearson correlation analysis, while internal consistency was measured through item-total score analysis and Cronbach's alpha coefficient.

## ETHICAL CONSIDERATIONS

All stages of the study adhered to the ethical principles outlined in the Declaration of Helsinki. Ethical approval for the study procedures was granted by Dokuz Eylül University Non-Interventional Research Ethics Committee, and research permission was obtained from the relevant institution (date: May 10, 2023; no: 2023/15-10). Written consent to adapt the FLBS was secured from the scale's developer. Before completing the survey, participating students provided written informed consent. The collected data were securely stored on a password-protected computer, accessible only to the principal investigator.

## RESULTS

### DEMOGRAPHIC CHARACTERISTICS OF THE PARTICIPANTS

Of the nursing students participating in the study, 68.9% were women, 29.5% were in their 1<sup>st</sup> year, 57.6% had middle income, and 89.1% were not employed. It was observed that the average age of the nursing students was 20.54±1.94 (Table 1).

### PSYCHOMETRIC TESTING OF THE FLBS

The exploratory factor analysis of the FLBS tool was significant and in accordance with the hypothesis, according to the KMO coefficient of 0.898 and the Bartlett's test with  $\chi^2=3343.771$  and  $p=0.000$ . After the assumptions were completed, a 3-factor structure emerged in the direct oblman rotation, explaining 55.9% of the total variance with an eigenvalue above 1. The eigenvalue of the 1<sup>st</sup> sub-dimension is 3.277, that of the 2<sup>nd</sup> sub-dimension is 3.002, and that of the 3<sup>rd</sup> sub-dimension is 2.269. It was observed that the explained variances were 35.943 for the 1<sup>st</sup> factor, 10.838 for the 2<sup>nd</sup> factor, and 9.204 for the 3<sup>rd</sup> factor.

**TABLE 1:** Demographic characteristics of the participants

Sociodemographic factor		X±SD	Minimum-maximum
Age		20.54±1.94	17-33
		n	%
Gender	Women	474	68.9
	Men	214	31.1
Year at school	1 <sup>st</sup>	203	29.5
	2 <sup>nd</sup>	150	21.8
	3 <sup>rd</sup>	147	21.4
	4 <sup>th</sup>	188	27.3
Perceived income level	Insufficient	257	37.3
	Medium	396	57.6
	Enough	35	5.1
Employment status	Not employed	613	89.1
	Part time	63	9.2
	Employed	12	1.7
Total		688	100

SD: Standard deviation

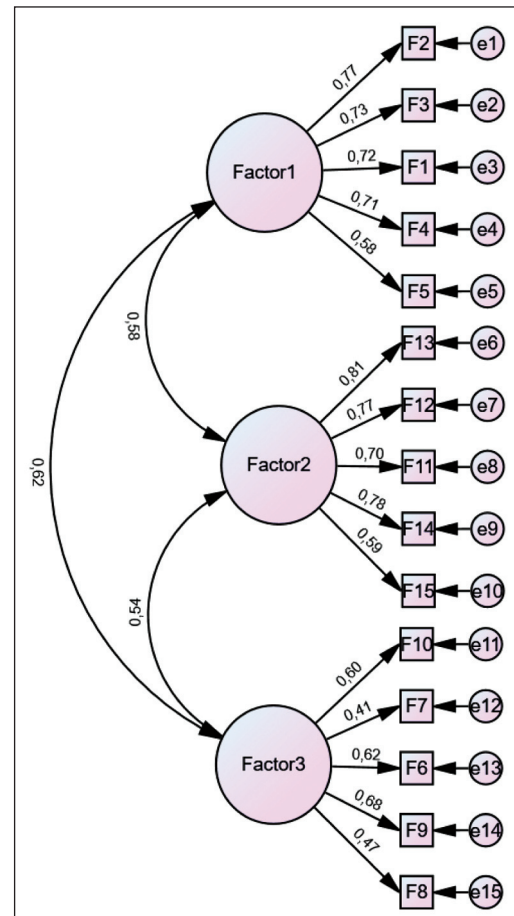
**TABLE 2:** Distribution of item factor loadings of the exploratory factor analysis of the Friedman Life Balance Scale

Items	Factor loadings		
	Factor 1	Factor 2	Factor 3
Item 2	0.871		
Item 3	0.804		
Item 1	0.780		
Item 4	0.728		
Item 5	0.406		
Item 13		-0.844	
Item 12		-0.831	
Item 11		-0.800	
Item 14		-0.772	
Item 15		-0.691	
Item 10			0.790
Item 7			0.743
Item 6			0.556
Item 9			0.494
Item 8			0.392

The 1<sup>st</sup> of the sub-dimensions obtained through the EFA consisting of 5 items explains 35.94% of the total variance, and factor loadings vary between 0.406-0.871. The 2<sup>nd</sup> sub-dimension consists of 5 items and accounts for 10.83% of the total variance. The factor loadings of this subdimension range between 0.844-0.691. The 3<sup>rd</sup> sub-dimension consists of 5 items and accounts for 9.204% of the total variance. The factor loadings of this subdimension range between 0.790-0.392 (Table 2).

The analysis of the relationships between the sub-dimensions of the FLBS demonstrated a low level and statistically significant correlation between all the sub-dimensions, ranging between 0.338-0.465 ( $p < 0.05$ ).

The subscales obtained through the exploratory factor analysis of the FLBS tool were tested using confirmatory factor analysis. The goodness of fit values for the obtained model are [ $\chi^2/df=3.516$ ; Comparative Fit Index=0.953; Normed Fit Index (NFI)=0.936; Incremental Fit Index=0.954; Tucker-Lewis Index (TLI)=0.931; RMSEA=0.060], which indicates that the model has a good fit and that the 3-factor structure was distributed harmoniously (Figure 1).

**FIGURE 1:** Confirmatory factor analysis factor loading distribution of Friedman Life Balance Scale



**TABLE 3:** Level of relationship between parallel forms of FLBS (n=688)

	X±SD		SLS	WEMWBS	FLBS	FLBS-f1	FLBS-f2	FLBS-f3
SLS	13.56±3.92	r	1					
		p						
WEMWBS	23.95±4.94	r	0.442*	1				
		p	0.000					
FLBS	56.77±8.87	r	0.348*	0.594*				
		p	0.000	000				
FLBS-f1	19.55±3.24	r	0.240*	0.461*	0.797*	1		
		p	0.000	0.000	0.000			
FLBS-f2	19.92±3.30	r	0.193*	0.332*	0.729*	0.489*		
		p	0.000	0.000	0.000	0.000		
FLBS-f3	17.13±4.74	r	0.343*	0.545*	0.858*	0.512*	0.388*	1
		p	0.000	0.000	0.000	0.000	0.000	

\*p<0.001. SD: Standard deviation; SLS: Satisfaction with Life Scale; WEMWBS: Warwick-Edinburgh Mental Well-Being Scale Short Form; FLBS: Friedman Life Balance Scale; FLBS-f: Friedman Life Balance Scale-Factor

### FLBS RELIABILITY ANALYSIS

The Cronbach's alpha score was 0.861 for the overall FLBS. The Cronbach's alpha internal consistency scores of the subscales of the FLBS were as follows: Factor 1: 0.821, factor 2: 0.844 and factor 3: 0.682. For the overall 15-item FLBS, the mean score was 71.76±8.87, and the variance was 78.77. The average of all item scores was 4.785, and the average item variance was 1.031. The average rate of change of the 15 items was 0.998, and their variance change weight was 1.408. The average value of the correlations between all items was 0.302. The minimum correlation value between the items was 0.025, and the maximum correlation value was 0.648.

According to the analysis of the item-total score correlations of the FLBS, when any item was removed, the average of the remaining items varied between 66.69-67.68, and the variance created by the remaining items varied between 64.80-73.46. The corrected item-total correlation values ranged between 0.226-0.649. According to the item total variances of the FLBS, there was a difference between them because F was 79.67, p was <0.001, and there was no additivity feature. Item analysis based on the lower and upper groups, which was the discrimination analysis of the FLBS, showed that there was a significant difference between the averages of the

lower and upper groups because the difference values of all the items were p<0.05.

Parallel form reliability of the FLBS was assessed using the WEMWBS-SF and SLS. The concordance between the total scores for the FLBS and other scales demonstrated a low-level positive relationship between the FLBS and SLS (r=0.348, p<0.001) and a moderate positive relationship between the FLBS and WEMWBS-SF (r=0.594, p<0.001) (Table 3).

### DISCUSSION

In this study, the FLBS was adapted to the Turkish language. The FLBS developed within the scope of the life balance model, shows whether the respondent leads a spiritually balanced life. The mental well-being of nursing students can help them have a productive learning process. Students' adapting to the challenging practice of nursing education may make it easier for them to establish this balance in the future. In this respect, determining the validity and reliability of the FLBS measurement in nursing students will attach importance to their psychological health.

Before the validity and reliability process of the FLBS, the pilot test was given to a small group of stu-

dents after it was translated to Turkish and back translated, content validity was calculated, and expert opinions were obtained. The aim of the translation-back-translation method is to translate the scale back to its original language, which was translated to the targeted language by translators, and to have the scale developer check whether it is consistent with the original scale.<sup>25,26</sup> In the present study, the level of compliance was evaluated by the scale developer to ensure similarity with the original scale after translation, and the translation process was completed. In methodological studies, the content validity index, which is another step of the content validity process, should be calculated.<sup>27</sup> The Lashwe Content Validity Index used in the present study demonstrated that the scale had a valid structure because its score was above 0.78 according to the number of experts. The main purpose of administering a pilot test is to determine whether the responsiveness and applicability of the scale is acceptable in the measurement process.<sup>28</sup> According to the result of the pilot test in this study, the FLBS has less uncertainty and contains correct questions that are free from bias. The Turkish version of the scale is comprehensive and useful for nursing students. It may be considered equivalent in language for use by other university students.

The result of the EFA of the FLBS in the present study demonstrated a good fit between the KMO coefficient and the Bartlett's test of Sphericity, and that the FLBS had three subdimensions with eigenvalues greater than 1, which accounted for 55.9% of the total variance. In factor analysis, the maximum factor structure is reached when the total variance percentage is below 5%. In addition, the total variance percentage must be greater than 50%.<sup>29</sup> Accordingly, in this study, based on exploratory factor analysis, a 3-factor structure emerged. The significance of factor loadings varies with the sample size. In studies with a sample size of  $\geq 350$ , factor loadings above 0.3 are considered significant.<sup>30</sup> According to the factor loadings of this FLBS, the factor loadings of items 5 and 8 were low but above 0.3, which was consistent with the assumptions.

The fit of the 3-factor structure of FLBS obtained through EFA and CFA was analyzed. The chi-square minimum value required to test the general

suitability of the model with CFA is expected to be less than 5 in samples larger than 250 if the number of items is between 12-30.<sup>31</sup> The chi-square value of the FLBS has a structure modeled in accordance with these criteria. RMSEA, which shows the extent to which it is compatible with the main covariance matrix in CFA, should be less than 0.07 in this sample.<sup>29</sup> Similarly, the NFI value, which shows the significance of the chi-square value with the zero model, must be greater than 0.90 in this sample.<sup>29</sup> Because both RMSEA and NFI values of the FLBS complied with the limits, the "absolute fit indices" and "incremental fit indices" were in accordance with the assumptions. Thus, it can be said that this 3-factor model designed in this direction matched reality. The Chinese version of FLBS also had a similar 3-factor structure.<sup>13</sup> Therefore, in this study, in which the FLBS was adapted to Turkish, the scale was called the same because the same structure was preserved. Thus, factor 1 was named "Reflect Clarify Sort", factor 2 was named "Self-Forgive Compassion Love" and factor 3 was named "Understand Self and Others".

In the reliability measurement, internal consistency was ensured, and the Cronbach's alpha score of the FLBS was high and complied with the assumptions. Ensuring internal consistency in scale reliability indicates the degree to which this scale is free from errors.<sup>32,33</sup> The Cronbach's alpha score of the FLBS was 0.93 in studies in which the original scale was used, and 0.93 in its Chinese version conducted with nursing students.<sup>4,13,23</sup> In this study, because the total Cronbach's alpha value was within acceptable limits, no item in the FLBS was removed or revised.

The total correlation values of FLBS varied between 0.226-0.649, and the variance was significant. The actual lower limit for item-total score correlation reliability was 0.3.<sup>34</sup> In this study, when items close to the lower limit were removed, the number of items was preserved because the variance values were high. The averages of the lower 27% group and the upper 27% group, which was the discrimination analysis of FLBS, differed. It was concluded that the items of the FLBS had distinctive features in terms of life balance.

In this study, a positive significant relationship was found between mental well-being and life satisfaction. In studies in which the original FLBS was used, there was also a positive relationship between mental well-being and life satisfaction.<sup>4,23</sup> In a study conducted with nursing students in which the Chinese version of the FLBS was used, there was also a positive relationship between mental well-being and life satisfaction.<sup>13</sup>

## STRENGTHS OF THE STUDY

This study provides a significant contribution to the literature as the 1<sup>st</sup> Turkish adaptation of a scale specifically measuring life balance among nursing students. Additionally, the findings of this study provide a validated assessment tool that can be utilized in nursing education and mental health practices to support the development of targeted interventions aimed at improving student wellbeing.

## LIMITATIONS

In this study, validity and reliability analyses performed cross-sectional were used. Thus, longitudinal studies, including repeat tests, can be conducted. Although the sample size in this study is sufficient, its generalizability is limited.

## CONCLUSION

The results indicated that the Turkish version of the FLBS is a valid and reliable instrument for assessing

life balance among nursing students. As a brief and practical measurement tool, the FLBS holds potential for evaluating life balance in both student populations and healthcare professionals. In this regard, evaluating life balance-a critical factor in both academic and professional development-has the potential to inform nursing education policies and contribute to the establishment of more sustainable working conditions in the healthcare sector.

## Source of Finance

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## Conflict of Interest

*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.*

## Authorship Contributions

**Idea/Concept:** Gülsüm Zekiye Tuncer; **Design:** Gülsüm Zekiye Tuncer, Tülay Tuğçe Yigit; **Control/Supervision:** Gülsüm Zekiye Tuncer; **Data Collection and/or Processing:** Gülsüm Zekiye Tuncer, Tülay Tuğçe Yigit; **Analysis and/or Interpretation:** Metin Tuncer; **Literature Review:** Gülsüm Zekiye Tuncer, Metin Tuncer; **Writing the Article:** Gülsüm Zekiye Tuncer, Metin Tuncer; **Critical Review:** Gülsüm Zekiye Tuncer, Metin Tuncer, Tülay Tuğçe Yigit.



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