



Original Article

Development of the psychiatric nursing course evaluation form and a validity-reliability study

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Abstract

Objectives: The aim of the study is to develop the evaluation form for the psychiatric nursing course and to examine its validity and reliability.

Methods: The methodologically designed study involved 272 undergraduate nursing students voluntarily participating in the theory and practice of psychiatric nursing course, out of a total enrollment of 375 students, during the period from April to July 2021. Data were collected through the “descriptive information form” and “psychiatric nursing course evaluation form” (PNCEF) developed by the researchers. The data analysis employed SPSS-25 and AMOS-21 software packages. In the validity evaluation of the scale, content validity, construct validity, in reliability evaluation, internal consistency analyzes were performed.

Results: 80.5% of the students were women, 76.1% of them took the theory of psychiatric nursing, 81.3% of them took the practice online (remotely), and only 28.7% of them stated that they gave nursing care to an individual with a psychiatric disorder. After the candidate items (57 items) of the PNCEF were evaluated by experts, 9 items were removed and the content validity index (CGI) of the items was found to be 0.91. In construct validity evaluation, the form was factorable (Kaiser-Meyer-Olkin=0.974), the scale confirmed the single-factor structure according to explanatory factor analysis, and factor loads were between 0.67 and 0.86. Split half Spearman-Brown reliability coefficient was 0.956. Internal consistency Cronbach’s alpha reliability coefficient was 0.986 and 0.986. Item test correlation values were found to be between 0.546 and 0.840. As a result of the fit analysis, it was calculated as CFI=0.849, TLI=0.839, RMSEA=0.095, and Chi-square/df=3.452.

Conclusion: Following meticulous analyses, the conclusive version of the 43-item form demonstrated robust content and construct validity, quasi-test reliability, and internal consistency measured by Cronbach’s alpha. These findings affirm the form’s status as a valid and reliable instrument, adept at assessing student nurses’ perceptions within the undergraduate program concerning both theoretical and practical accomplishments in the mental health and psychiatric nursing course.

Keywords: Psychiatric nursing; reliability and validity; scale.

Psychiatry is a specialized field that deals with the treatment and care of special vulnerable patients. The approach, care, and treatment of these special patients require special competencies. In the mental health and psychiatric nursing course in which these competencies are taught, it is aimed to gain some

privileged skills.^[1-3] Mental health and psychiatric nursing education aim to provide students with the ability to effectively use the basic principles of mental health and psychiatric nursing in the protection, development, and maintenance of mental health, care, treatment, and rehabilitation of mental illnesses.

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^[4] In line with this goal, student nurses have some competencies and competencies that need to be developed through the theory and practice of the course, in the field of mental health and psychiatric nursing, as in every other field.^[5,6] Students' awareness of the learning outcomes that include these competencies and competencies expected from them for a course increases their learning responsibilities and increases their course success.^[7,8] In the literature, besides the studies stating that the theoretical and practical training of mental health and psychiatric nursing in the nursing undergraduate program increases negative beliefs and stigmatization toward mental illnesses,^[9,10] there are also studies indicating that it is effective in developing positive beliefs and attitudes toward mental illnesses.^[11-14] This is important because it is a known fact that student nurses' perceptions of psychiatry are affected by their beliefs about mental illnesses and their views on the course they take on mental illnesses.^[12,15] In line with this information, it is an important issue to evaluate the achievements of the students for the mental health and psychiatric nursing courses they take. Clearly defining this assessment with a standard technique or criterion will help students understand their achievements.^[16,17] When the national literature was examined, one measurement tool was found to evaluate the education of student nurses in psychiatric nursing.^[12,15] As stated by Baysan-Arabacı and Çam (2009), validity-reliability assessment was not performed for the original measurement tool developed by Wynaden and Papescu (1999).^[18] Although the data obtained for the scale, which was adapted from another culture and language to Turkish, show that the scale is a valid and reliable measurement instrument, it is seen that the scale items evaluate the perception of the student toward the psychiatry course within the university curriculum, rather than evaluating how well the course objectives have been achieved. It was found that it did not fully meet its objectives.^[17] Apart from this measurement tool, no other measurement tool could be found in the literature. Developing a tool that will be used to evaluate mental health and psychiatric nursing course outcomes will provide in-depth information about the views of student nurses about the course and provide more successful teaching. In addition, the evaluation of the students about the mental health and psychiatric nursing course will contribute to the development of the content of the education program and will increase the quality of mental health and psychiatric nursing education. There is a need for a standard measurement tool to evaluate the perceptions of student nurses about the learning outcomes of the psychiatric nursing course. It is thought that this need will be met with this study.

This research was conducted to develop a measurement tool to evaluate the perceptions of student nurses regarding the theoretical and practical achievements of the psychiatric nursing course and to evaluate the validity-reliability of this tool.

Materials and Method

In the research, "Is the form developed to evaluate the psychiatric nursing course a valid and reliable tool?" search for an answer to the question.

What is presently known on this subject?

- In the national literature, there is no measurement tool that fully meets the national objectives of the psychiatric nursing course and evaluates the perceptions of students regarding the theoretical and practical achievements of the course.

What does this article add to the existing knowledge?

- With this study, a contribution was made to the field by developing the psychiatric nursing course evaluation form (PNCEF) to evaluate the perceptions of student nurses about the theoretical and practical gains of the psychiatric nursing course and by examining its validity and reliability.

What are the implications for practice?

- It is a valid and safe tool that can be used to evaluate the psychiatric nursing course. The use of PNCEF will provide in-depth information about the views of student nurses about the course and the teaching will be more successful, will contribute to the development of the content of the education program, and will increase the quality of mental health and psychiatric nursing education.

Type of Research

The research was carried out in a methodological design.

Population and sample of the research

The research was conducted between April 2021 and July 2021. Due to the pandemic, the data were collected online from 272 students who were studying in the faculty of health sciences nursing undergraduate program of two different universities, enrolled in the theory and practice of psychiatric nursing (n=375), and volunteered to participate in the research.

Inclusion criteria for research

Nursing students who completed the theory and practice of the psychiatric nursing course at the end of the spring semester of the 2020–2021 academic year and agreed to participate in the research were included in the study.

Data Collection Tools

"Introductory Information form" and "psychiatric nursing course evaluation form (PNCEF)" were used to collect data in the research.

Introductory information form

Developed by the researchers, it was developed by the researchers according to the sociodemographic characteristics of the students (age, gender, working status as a nurse), educational characteristics (university/class), and participation in mental health and psychiatric nursing courses (education method for the theoretical and practical course, training method for the psychiatric patient). It consists of 10 closed and open-ended questions about his views on mental health and psychiatric nursing (desire to work in a psychiatry clinic, wanting to do a master's degree).

PNCEF

To determine the candidate items of the scale developed by the researchers, various scales developed in the field of psy-

chiatric nursing in the literature and mental health and psychiatric nursing determined as a result of the workshops organized by the national nursing core education program and the psychiatric nursing association. Core education program objectives were examined.^[5,6,17] After the literature review, statements that could be scale items were determined by the researcher. Then, these statements, which were created together with the researcher and a specialist in the field of psychiatric nursing, were arranged to be scale items, and a candidate scale item pool consisting of 57 items was created and validity-reliability analyses were made.

Data Collection Process

The data were collected online through Google Forms. The online form link was sent to the students through their social media account (WhatsApp). An informed consent form was added to the beginning of the form and the students who declared that they accepted were able to continue the survey.

Evaluation of Data

The Statistical Package for the Social Sciences 25 and AMOS 21 package programs were used to analyze the data of the study. In the evaluation of descriptive data, number-percent-age distributions were made. In the validity evaluation of the scale, content validity (Lawshe technique), construct validity (explanatory and confirmatory factor analyses), and reliability evaluation and internal consistency (split-half reliability, Cronbach's alpha reliability coefficient, and item-total correlation) analyses were performed (Table 1). In all analyses, the level of statistical significance was accepted as $p < 0.05$ at the 95% confidence interval.

Table 1. Statistical analyzes used in the validity-reliability evaluation of the psychiatric nursing course evaluation form

Method	Used techniques
Validity	
Content/Scope Validity	– Lawshe Technique CVI (10 experts) *Calculation of CVI, CVR
Structure Validity	<i>To assess the adequacy of your sample for factor analysis</i> – Kaiseer-Meyer-Olkin (KMO) – Bartlett test – Exploratory factor analysis – Confirmatory factor analysis
Reliability	
Internal Consistence	– Split half test * Correlation analysis – Cronbach alpha coefficient – Item total correlation

CVI: Content validity index.

Ethical Disclosures

Approval was obtained from the non-interventional clinical research ethics committee of a university with the decision number 0181 dated April 01, 2021. The study was conducted in accordance with the principles of the Declaration of Helsinki. Written permission was obtained from the institutions where the research was conducted. Written consent was obtained from the students who volunteered to participate in the study by marking the "I agree to participate in the study" statement online at the end of the informed consent at the beginning of the Google Form.

Results

80.5% of the students participating in the study were women and the mean age was 21.92 ± 1.27 . 76.1% of the students took the theory and 81.3% of the practice of psychiatric nursing online (remotely), and 60.7% of them stated that they used the lecture notes as a source in the course. 28.7% of the students stated that they gave nursing care to an individual with a psychiatric disorder, 62.5% of them stated that they could work in a psychiatry clinic after graduation, and 53.7% of them wanted to specialize in this field.

Validity Assessment

Content validity

The "Lawshe technique" was used to ensure the content validity of the scale. For content validity, 57 scale candidate items were sent through e-mail to a group of 15 experts (13 academic nurses [12 in the field of mental health and diseases nursing, 1 in the field of nursing education], 1 academican educational science specialist, and 1 psychiatric nursing residency student). Experts were asked to rate each scale item as "3=appropriate", "2=need to be adjusted," and "1=not suitable". Scope validity index (CGI) values for each item were obtained by combining the evaluations of 11 experts who gave feedback in a single form. After corrections and additions were made to the scale items, taking into account the CGI values of the items and the suggestions of the experts, the restructured scale consisting of 52 items was sent back to 11 experts for evaluation. The experts were asked to re-evaluate all the items, especially the ones that were changed and added in line with the suggestions. As a result of the re-evaluations of the 10 experts who returned, the CGI values were calculated for each item and eight items were found to be statistically insignificant according to the minimum scope validity criterion (CDS=0.62) at a significance level of $\alpha=0.05$ (4, 6, 8, 9, 10, 11, 24, and 34) were removed from the scale and the content validity index (CGI) for 44 items constituting the scale was calculated as 0.91 as a result of expert evaluation.

Surface validity

The scale was first examined by experts and then by 10 students, who were not included in the research sample, in terms of intelligibility and expression. The experts and the scale

Table 2. Explanatory factor analysis and reliability coefficients and descriptive statistics of psychiatric nursing course evaluation form

Items	EFA	R ²	t
Item 1	0.670	0.450	14.88
Item 2	0.639	0.409	13.67
Item 3	0.790	0.623	21.11
Item 4	0.806	0.646	22.20
Item 5	0.802	0.641	21.96
Item 6	0.787	0.614	20.74
Item 7	0.814	0.660	22.88
Item 8	0.759	0.579	19.29
Item 9	0.775	0.605	20.33
Item 10	0.746	0.558	18.47
Item 11	0.808	0.646	22.19
Item 12	0.698	0.503	16.52
Item 13	0.700	0.505	16.59
Item 14	0.822	0.673	23.58
Item 15	0.824	0.681	24.03
Item 16	0.821	0.679	23.89
Item 17	0.760	0.586	19.57
Item 18	0.844	0.717	26.17
Item 19	0.809	0.656	22.69
Item 20	0.826	0.681	23.99
Item 21	0.787	0.625	21.19
Item 22	0.739	0.561	18.57
Item 23	0.747	0.564	18.68
Item 24	0.748	0.574	19.06
Item 25	0.674	0.469	15.43
Item 26	0.799	0.649	23.33
Item 27	0.856	0.730	27.03
Item 29	0.778	0.604	20.28
Item 30	0.857	0.726	26.78
Item 31	0.844	0.701	25.14
Item 32	0.860	0.728	26.86
Item 33	0.862	0.728	26.87
Item 34	0.851	0.707	25.53
Item 35	0.846	0.702	25.34
Item 36	0.858	0.721	26.41
Item 37	0.858	0.724	26.59
Item 38	0.860	0.731	27.06
Item 39	0.841	0.695	24.79
Item 40	0.831	0.685	24.25
Item 41	0.847	0.708	25.60
Item 42	0.822	0.608	23.97
Item 43	0.804	0.652	22.50
Item 44	0.741	0.565	18.72

Explained variance (%) 63.63; Explained total variance (%) 63.63
KMO=0.974; Bartlett X² (p) 2927,24 p<0.001. Significant at the p<0.001 level, EFA: Explanatory factor analysis.

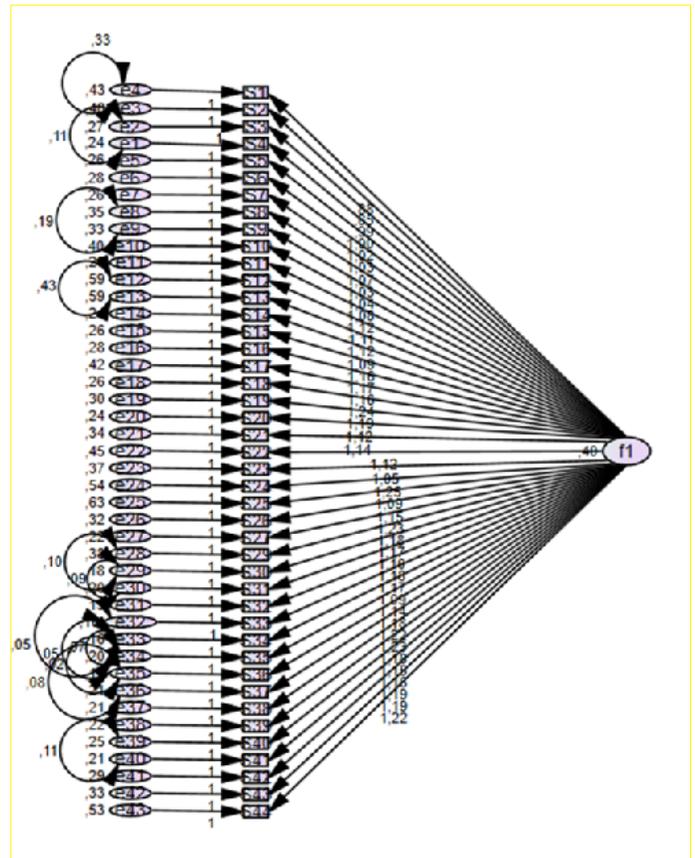


Figure 1. Path diagram of the standardized coefficients for the explanatory factor analysis of the psychiatric nursing course evaluation form.

items in the pilot application were evaluated in terms of “correctness, clarity of terms, clarity, and clarity of meaning in the items”. Adjustments and additions were made to some items in line with the suggestions from the experts, but no change was made in any item in the pilot study conducted with the students.

Construct validity (factor analysis)

Factor analysis method was used to evaluate the scale’s ability to measure the concept it should measure. Kaiser-Meyer-Olkin (KMO)=0.974 and Chi-square value of Bartlett’s test of Sphericity statistic was 2927.24 (degree of freedom=848) calculated to evaluate whether the sample size was sufficient for factor analysis, and this value was statistically significant at p<0.001 which was found to be significant.

According to the exploratory factor analysis applied for construct validity, it was determined that the scale confirmed the single-factor structure and factor loads were between 0.63 and 0.86 (Table 2) (Fig. 1). According to the correlation analysis performed to evaluate the agreement between the scale items, it was observed that the inter-item agreement index ranged between 0.339 and 0.910. It was determined that there was excessive agreement (r=0.91) between the 27th and 28th items and it was decided to remove the 28th item from

Table 3. Structural equation model compliance indices for confirmatory factor analysis of PNCEF

Measure	Ideal compliance	Acceptable compliance	Incompatibility	PNCEF's compliance index values
CFI	1	0.90–0.99	<0.90	0.85
TLI1	0.95–0.99	<0.95	0.84	
RMSEA	0–0.05	0.05–0.09	>0.10	0.095
X ² /df	≤2	2–5	5+	3.452

PNCEF: Psychiatric nursing course evaluation form.

the scale. As a result of the fit analysis, CFI=0.849, TLI=0.839, RMSEA=0.095, and Chi-square/df=3.452 ($p<0.05$) (Table 3).

Reliability Evaluation

Cronbach's alpha internal consistency coefficient, quasi-test reliability, and item-test correlation analyses were used to evaluate the reliability of the scale.

Internal consistency

The internal consistency level of the scale was determined by calculating the Cronbach's alpha coefficient and item-total correlation. The Cronbach's alpha reliability coefficient of the scale was calculated as 0.986. It was determined that the correlation coefficients of each item of the scale with the total score ranged between 0.546 and 0.840 (Table 4).

Semi-test reliability

The split-half Spearman–Brown reliability coefficient calculated for the reliability evaluation of the scale was found to be 0.956 (alpha value 0.971 for the first section consisting of 22 items and 0.977 for the second section consisting of 21 items).

Discussion

In the study, the PNCEF was developed and the validity-reliability analysis of this measurement tool was conducted to evaluate the perceptions of student nurses about the theoretical and practical gains of the psychiatric nursing course.

Validity Evaluation

Validity is a concept about how accurately a test measures what. The property of a measurement tool that it aims to measure is the degree to which it can measure accurately and may vary depending on the purpose of use, sampling, and application.^[19,20]

Content validity

In this study, the Lawshe technique was used for content validity and candidate scale items were submitted to expert opinion twice. After the analyses made after the expert evaluations, the first eight items and then one item were removed from the scale. As a result, since the CVI value calculated for the candidate scale consisting of 44 items was \geq CVR, it was decided that the items represented the area to be measured

and provided content validity.^[21]

Construct validity

It is done to evaluate how accurately the measurement tool can measure the structure to be measured. To make factor analysis, first of all, KMO and Bartlett sphericity tests were performed. KMO value below 0.50 is unacceptable, 0.50–0.59 low, 0.60–0.69 moderate, 0.70–0.79 good, 0.80–0.89 very good, and 0.90–1 excellent.^[22,23] KMO=0.97 and Bartlett's test of sphericity statistics obtained in the study show that Chi-square value=2927.24, $p<0.001$ value is sufficient and suitable for factor analysis of PNCEF.

Factor analysis is the process of obtaining a factor as a result of grouping the variables that are related to each other and measuring the same dimension by calculating the correlation between the variables according to the answers given on a subject.^[24] For factor analysis of PNCEF, exploratory factor analysis was performed using the principal component method. As a result of the analysis, it was observed that PNCEF confirmed the single-factor structure and factor loads varied between 0.67 and 0.86 within acceptable limits. In the evaluation of multicollinearity among the variables, VIF>5 was accepted, and the 28th item with a value above VIF>5 was removed.^[25] Thus, the scale took its final form consisting of 43 items.

When the fit indices in Table 4 are examined, it is acceptable that the near-minimum value is >0.90 for CFI and >0.95 for TLI, and it is between 2 and 5 for X²/df, but >0.80 for CFI and TLI according to some sources. can be considered.^[26] Also, the near-minimum value for RMSEA is expected to be 0.05–0.09. However, the maximum value, in other words, the discordance value >0.10 , showed that the RMSEA value (0.095) found for this study was not discordant and suggested that it could be considered acceptable.^[27] In summary, according to the results of the fit analysis, it can be said that the PNCEF has an acceptable fit, although it is not a good fit.^[26,27] In summary, according to the results of the fit analysis, although it is not a good fit, it can be said that it is an acceptable fit.^[26,27]

In the study, the validity and reliability study of a measurement tool that evaluates the students' perceptions of how well the theoretical and practical learning goals of the psychiatry course have been achieved was conducted. However, only 1/3 of the students who participated in the research conducted during the pandemic process had the opportunity to practice

Table 4. Item analysis results of psychiatric nursing course evaluation form

	Items	Arithmetic average of distribution when item	Variance of distribution when item is removed	Correlation of items with total test	Cronbach's alpha values of the scale when item is removed
Cronbach Alfa: 0.986	Item 1	165,39	929,109	0.655	0.986
Number of items: 43	Item 2	165,44	930,217	0.622	0.986
X: 169,75±31,05	Item 3	165,67	925,109	0.779	0.985
N: 272	Item 4	165,59	924,804	0.794	0.985
	Item 5	165,73	924,123	0.791	0.985
	Item 6	165,7	923,901	0.773	0.985
	Item 7	165,75	922,336	0.803	0.985
	Item 8	165,85	923,272	0.749	0.986
	Item 9	165,87	922,765	0.766	0.986
	Item 10	165,86	921,956	0.733	0.986
	Item 11	165,66	920,741	0.793	0.985
	Item 12	166,07	919,485	0.692	0.986
	Item 13	166,1	919,226	0.693	0.986
	Item 14	165,69	921,898	0.811	0.985
	Item 15	165,93	919,15	0.816	0.985
	Item 16	165,77	918,236	0.814	0.985
	Item 17	165,94	918,605	0.752	0.986
	Item 18	165,88	915,871	0.838	0.985
	Item 19	165,97	918,158	0.799	0.985
	Item 20	165,76	920,921	0.816	0.985
	Item 21	165,96	919,644	0.779	0.985
	Item 22	166,2	919,682	0.735	0.986
	Item 23	165,92	923,123	0.738	0.986
	Item 24	166,15	914,667	0.742	0.986
	Item 25	166,32	920,618	0.666	0.986
	Item 26	165,99	918,745	0.794	0.985
	Item 27	165,72	916,584	0.846	0.985
	Item 29	165,71	918,31	0.764	0.986
	Item 30	165,66	918,904	0.844	0.985
	Item 31	165,63	921,777	0.829	0.985
	Item 32	165,64	918,858	0.845	0.985
	Item 33	165,63	919,386	0.845	0.985
	Item 34	165,6	922,499	0.833	0.985
	Item 35	165,67	920,503	0.829	0.985
	Item 36	165,62	919,137	0.841	0.985
	Item 37	165,64	917,626	0.842	0.985
	Item 38	165,72	917,095	0.847	0.985
	Item 39	165,71	919,345	0.825	0.985
	Item 40	165,67	919,573	0.819	0.985
	Item 41	165,65	919,565	0.833	0.985
	Item 42	165,92	917,65	0.815	0.985
	Item 43	165,9	917,696	0.797	0.985
	Item 44	166,1	915,799	0.736	0.986

face-to-face and contact a psychiatric patient. Other students, who could not be in the clinical practice environment due to the pandemic, provided the course application online, with a different case each week, through case analysis of 12 different

chronic mental disorders (such as data analysis, identifying symptoms, diagnosing nursing, and structuring the nursing process) were carried out. It is thought that more than half of the students did not have the opportunity to meet face-

to-face psychiatric patients in a real clinical setting, and this situation, which is within the limitations of the research, may have negatively affected the students' self-efficacy perceptions in reaching their learning goals, and this may have been reflected in the analysis results.

Reliability Evaluation

Reliability is defined as the consistency of statements that make up a measurement tool applied to a specific sample.^[24] Reliability indicates the degree to which the measurement results are free from errors.^[19] The reliability coefficient takes a value between 0 and 1, and the reliability increases as this value approaches 1.^[20,24]

Internal consistency

In the literature, Cronbach's alpha reliability coefficient is considered acceptable when it is higher than 0.70.^[28] A Cronbach's alpha value between 0.80 and 0.90 indicates "good", and a value higher than 0.90 indicates excellent consistency.^[22] In this study, the Cronbach's alpha value was found to be 0.986. Accordingly, it can be said that the internal consistency of PNCEF is a measurement tool with a high level of reliability.

It is stated that the item-total score correlation should not be <0.20.^[22,23,29] When the item-total correlation analyses of the PNCEF were examined, it was found that the item-test correlation values were between 0.546 and 0.840. According to this finding, it can be said that all items in the scale measure the desired feature in a similar way.

Half-test reliability

Since the data were collected online through Google Form, the test-retest application was not carried out, as it was possible for the students to remember the scale items through the relevant link, and this situation might adversely affect the reliability. As stated in the literature, the split-half method was used for the reliability evaluation of the scale, based on the knowledge that the test can be divided into two halves in cases where re-administration is not possible.^[30]

In the halving method, the correlation between the scores obtained from the half scales in the analysis made by dividing the form into two equal parts provides a reliability estimate.^[31] The split-half Spearman-Brown reliability coefficient of PNCEF was found to be 0.956. Accordingly, the test reliability coefficients between the two halves of the scale were found to be statistically significantly high and it was understood that the form had reliability.

As a result of the analyses made for the internal consistency reliability evaluation of PNCEF, it was decided that the form is a reliable measurement tool.

Conclusion

As a result of the statistical evaluations, it was determined that the PNCEF consisting of 43 items had content/content and construct validity, quasi-test reliability, and Cronbach's alpha

consistency. According to this result, PNCEF is a valid and reliable measurement tool that can evaluate the perceptions of student nurses in the undergraduate program about the theoretical and practical achievements of the mental health and psychiatric nursing course.

The final version of the PNCEF, which evaluates students' perceptions of the theoretical and practical learning outcomes of the psychiatric nursing course, consists of 43 items. The form, which is evaluated in a five-point Likert type, is scored as "strongly disagree (1 point), disagree (2 points), partially agree (3 points), agree (4 points), completely agree (5 points)". There is no reverse-scored item. In the evaluation of the one-dimensional form, the sum of the points given by the students to the items is calculated. High scores indicate that students' perceptions of the theoretical and practical learning outcomes of the psychiatric nursing course are positive.

It is recommended that PNCEF should be used in undergraduate nursing education, in studies examining the self-evaluation of students for mental health and psychiatric nursing course, and in studies to improve the content of the education program.

Limitations of the Research

The fact that the research data were collected online due to the pandemic is thought to be a limitation of the research. In addition, the reliability evaluation of PHDDF could not be carried out because the data collection process was online and some students had graduated, thus it was not possible to reach the desired number of samples (at least 75 students) for retesting, which limited the reliability of the time invariance evaluation. This was considered as a limitation of the research.

Conflict of interest: There are no relevant conflicts of interest to disclose.

Peer-review: Externally peer-reviewed.

Authorship contributions: Concept – E.D.K., L.B.A.; Design – E.D.K., L.B.A., C.B.; Supervision – E.D.K., L.B.A.; Fundings – E.D.K., L.B.A., C.B.; Materials –E.D.K., C.B.; Data collection &/or processing – E.D.K., L.B.A., C.B.; Analysis and/or interpretation – E.D.K., L.B.A., C.B.; Literature search – E.D.K., L.B.A., C.B.; Writing – E.D.K., L.B.A., C.B.; Critical review – E.D.K., L.B.A., C.B.

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