



Original Article

Development of an interview skills assessment checklist for nursing students: Validity and reliability study

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Abstract

Objectives: In nursing education, although students receive training in communication and interview techniques, the objective assessment of these skills remains a challenge. This study aimed to develop a valid and reliable checklist to evaluate nursing students' interview skills, guided by Peplau's Interpersonal Relations Theory.

Methods: The study employed a methodological design and was conducted with 95 intern nursing students. The Interview Skills Assessment Checklist (ISAC) was developed by the researchers based on theoretical and expert input. Content validity was assessed using expert evaluation and Kendall's W coefficient ($W=0.595$, $p<0.001$). Discriminative validity was examined using the independent samples t-test between upper and lower 27% groups. Internal consistency was measured using Cronbach's alpha, and construct validity was tested via exploratory factor analysis.

Results: The checklist consists of 14 items structured into three sub-dimensions: management of the interview, setting up the interview framework, and interview-related skills. Cronbach's alpha was 0.821, and the three-factor structure explained 53.17% of the total variance. Each item is scored on a 3-point Likert scale (1=insufficient, 3=sufficient), with higher scores indicating better performance. No test-retest analysis was conducted, as the students' skills were expected to develop over time.

Conclusion: The developed checklist is a valid and reliable tool for evaluating nursing students' interview performance. It can be used both to monitor students' progress throughout their training (formative assessment) and to evaluate their competency at the end of the educational process (summative assessment). Additionally, it can be adapted for use in the education of other health professions where similar skills are assessed.

Keywords: Checklist; communication skills; interview skills; nurse education; nursing students

Interviews between the patient and nurse are an important tool in establishing and maintaining the therapeutic relationship.^[1] Interviews are patient/client-centered and conducted as a purposeful interaction process. As nurses collect data to plan care, they observe the patient and conduct focused interviews with the patient.^[2] The aims of the interview are to develop a therapeutic relationship with the patient, to identify how the patient perceives his/her problems and their effects on his/her life, to diagnose stressors, to determine needs and

priorities, and to reveal the motivations and emotions underlying his/her behaviors.^[1,3,4] Therefore, the quality of the interview is one of the critical factors in maintaining therapeutic collaboration and obtaining the right information to guide nursing diagnosis, care management, and patient outcomes.^[5]

For the interview to be effective, nurses should use their communication skills effectively.^[6] The effectiveness of communication is important in establishing trust between nurses and patients, creating a therapeutic relationship, enabling patients

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to express their feelings and thoughts comfortably, helping them manage stressors, and supporting compliance.^[5,7] Similarly, studies show that effective communication has positive effects on quality of care, patient satisfaction, improving patients' therapeutic alliance, and maintaining well-being and quality of life.^[7-9] At this point, it is of critical importance that nursing students graduate with effective communication skills.^[10] In the interview process, nurses should exhibit a supportive and non-judgmental attitude, observe how the patient can express themselves more comfortably, allow the patient to express their feelings and thoughts, and support the patient in line with the steps of the interview.^[11,12] However, research suggests that patients experience ineffective relationships and communication with nurses.^[13-15] Similarly, nurses have difficulties in interviews and in communicating with patients.^[16-18] Due to these difficulties, nurses tend to not prioritize dialogue and may exhibit avoidant approaches such as focusing on routine work and practical tasks.^[19,20] As a result, the quality of care is negatively affected, and effective communication is described as an element of safe and quality patient care.^[21,22]

The ability to communicate effectively is essential for nurses to develop therapeutic relationships with their patients and achieve greater patient satisfaction.^[11] It is important to provide nurses with effective communication and interviewing skills during the training process.^[23,24] Similarly, the importance of current and active learning methods in nursing education is emphasized, and the need to support students in developing critical thinking and communication knowledge and skills in providing safe patient care is highlighted.^[25] Evaluating the outcomes of these skills is another important point. There is a need for valid and reliable measurement tools that will help to evaluate not only knowledge but also skills in nursing education.^[26] The literature highlights the lack of valid and reliable measurement tools to assess nursing students' communication skills.^[26] Similarly, although there are guidelines for the principles of interviewing skills, valid and reliable tools for the behavioral and attitudinal assessment of interviewing skills have not been found. In the behavioral assessment of interviewing skills, these skills should be measured in a consistent, stable, repeatable, applicable, and understandable way.^[27]

When the relevant literature on this subject was examined, the Simulated Client Interview Rating Scale, in which both communication skills and motivational interviewing skills are used in interviewing patients with alcohol/substance problems, was found. The tool was developed to assess the ability to conduct motivational interviewing with individuals who use alcohol and substances, and its validity and reliability were established.^[27] A short, easy-to-use interview assessment tool and/or checklist that includes communication skills and stages of the interview process was not found. From this point of view, the aim of this study is to develop an observation-based

What is presently known on this subject?

- It is essential to teach nurses effective interviewing skills during their education. Interviewing skills are important in patient assessment and care planning. A short and easy-to-use interview skills assessment tool for nursing students has not been found.

What does this article add to the existing knowledge?

- The Interview Skills Assessment Checklist was found to be a valid and reliable tool.

What are the implications for practice?

- This checklist can be used to evaluate the interviewing skills of nursing students.

assessment tool that covers all communication skills and the interview process in the evaluation of interview skills. A valid and reliable interview skills assessment tool will provide a standardized assessment of the interview method in which communication skills are actively used in nursing.^[28] The most important contribution of the research is to provide the field with a direct observation-based assessment tool for interview skills that covers all communication skills.

Materials and Method

Design

This study was conducted with a methodological design.

Population and Sample

The study was conducted in an accredited nursing faculty in Western Türkiye between November 2022 and June 2023. The sample of the study consisted of 4th-year nursing students studying at the Faculty of Nursing (n=95). The sampling criterion for students was to have successfully completed the communication courses in the curriculum of the relevant nursing faculty.

Students received theoretical knowledge about communication and interview skills in the 1st- and 2nd-year communication courses, and in the 3rd year they experienced interviewing at least once in different clinical placements with a real patient. The checklist items involve the use of the interview process and therapeutic communication skills. Intern nursing students (4th year), as nurse candidates, undertake internships and are expected to continuously use their interview skills. Therefore, it was considered that the best group to assess interview skills would be intern students. The sample size was calculated using the non-probability purposive sampling method in accordance with the 5–10–15 structuring, by taking 25% more than 5 times the number of instrument items, since the number of items was 14 and the sample included 95 students.

Tools Used in the Research

The Participants Characteristics Form and the Interview Skills Assessment Checklist were used to collect the necessary data for the study. The Participants Characteristics Form, organized by the researchers to obtain information

about the characteristics of nursing students, included questions about age and gender.

Interview Skills Assessment Checklist

The Interview Skills Assessment Checklist (ISAC) is a 14-item instrument structured into three sub-dimensions, each reflecting a distinct component of interview skills. It provides a structured means to assess nursing students' interview competencies. Items are rated on a 3-point Likert scale (1=insufficient, 2=partially sufficient, 3=sufficient), with higher total scores indicating better overall performance.

Creation and Content Validity of the Interview Skills Assessment Checklist

Peplau's Interpersonal Relations Theory was used conceptually in the development of the checklist steps. Peplau's theory of interpersonal relationships focuses on the nurse-patient relationship and the therapeutic process. The theory defines the nurse-patient relationship in three stages [orientation, exploitation, and resolution] and provides a framework for basic nursing approaches in these stages.^[29] These stages defined by Peplau provide a basic framework for structuring the interview process.^[30] According to this theory, the interview skills checklist structure was organized into preparation/initiation, working, and termination stages. In addition, a pool of 16 items was created by reviewing the relevant literature and existing checklists on the topic.^[31–33]

After obtaining the necessary institutional and ethical approvals for the research, expert opinions were sought to examine the psycholinguistic features of the checklist and its content validity. Accordingly, 12 experts with academic or clinical expertise in communication and interview skills were consulted. The Content Validity Index (CVI) was determined using the Lawshe technique.^[34] The experts rated each item on a three-point checklist: 1=unnecessary, 2=necessary but not sufficient, 3=necessary. If experts gave a score of 2 or less, they were asked to provide suggestions for that item. The scores given by the experts ranged between 0.5 and 1. For criterion content validity, the content validity index is expected to be above 0.80.^[35] As a result of the experts' evaluations, the CVI value was found to be 0.85, which is at a sufficient level. Then, expert opinions were discussed by the researchers; one item was removed from the checklist, and two new items were added, resulting in a 16-item checklist.

Pilot Study of Interview Skills Assessment Checklist

It is recommended that the sample size for the pilot study should constitute 10% of the main study's sample.^[36] Since the main study sample was calculated as 80, 8 students were targeted for the pilot study. The pilot study was conducted with a 10–15 minute role-play application, including the structured

scenario used in the data collection process. A student and a researcher role-played the scenario while two observers made independent assessments using the interview skills checklist. Feedback was received from each student, and the functionality of the checklist items was discussed by three researchers. After the pilot study was completed, the checklist items were organized, and the application was started with a 16-item checklist.

Data Collection

The data collection process of the Interview Skills Assessment Checklist was carried out in a quiet room suitable for the interview process. Each interview was conducted in accordance with a structured scenario with volunteer students and a mental health nursing PhD student in the patient role. The structured scenario was designed to enable the student to experience the entire interview process within the scope of interviewing a patient hospitalized in the orthopedics clinic. In this scenario, a patient who was hospitalized in the orthopedics clinic with a diagnosis of fracture and was in the preoperative period experienced concerns about maintaining his/her job and family life after surgery. The student was expected to conduct an interview with the individual to identify stressors and coping skills related to the pre- and postoperative period.

The structured scenario, and the date and time the students would arrive, were emailed to them and explained verbally before the interview practice. The interviews were conducted over a period of 4 weeks, with one full day allocated each week. On each interview day, the students arrived at the designated time and place to attend the interviews. On average, 25 students completed their interviews in a single day. At least 15 minutes were given to each student to conduct their interview in a quiet room. Each interview lasted 15–20 minutes. The student played the role of the interviewing nurse, and the researcher played the role of the patient who had been admitted to the orthopedic clinic with a diagnosis of fracture and was in the preoperative phase. Two observers, who were intern lecturers in mental health nursing, assessed the interview process independently by using the Interview Skills Assessment Checklist.

Statistical Analysis

SPSS (Statistical Package for the Social Sciences) 22.0 was used to analyze the data. Sociodemographic data were evaluated in terms of frequencies, percentages, and means. The normal distribution of the data was assessed using the Shapiro-Wilk test and by examining kurtosis and skewness coefficients. The statistic of each of kurtosis and skewness in the descriptive statistics table was divided by its standard error, and the resulting value was observed to be between +1.96 and –1.96 at the 5% significance level.^[37] As a result of the analysis, it was determined that the data were normally distributed. Therefore, parametric tests were used in the

Table 1. Checklist development process and analysis methods

Phases	Objectives	Method/tool used
Phase I	Preparation of item pools	Review of relevant literature
Step 1	Examining item content validity	Using expert opinion
	Determining checklist items	The assessment of content validity
Step 2	Pilot application	Pilot application checklist and item corrections
Step 3	Collect data	Socio -demographic data form
		Draft Checklist form
		Role-Play
		Observer evaluation
Phase II	Items identification	
Step 1	Evaluating validity of checklist	The assessment of content validity (Lashwe technique)
		The distinctiveness item analysis (high/low group comparison)
Step 2	Evaluating reliability of checklist Inter-observer agreement	Cronbach Alpha
		Kendall's coefficient of concordance
		Item total score correlation coefficient
		Explanatory factor analysis

analysis. The content validity of the checklist was calculated according to the Lawshe technique.[34] Kendall's W coefficient of concordance was used to evaluate inter-observer agreement.[38,39] Cronbach's alpha internal consistency coefficient was used to determine whether the items were consistent with each other.[40] In the item validity analysis of the difference between the lower and upper group means, an independent group t-test was used to evaluate the difference between the upper 27% group (with the highest scores) and the lower 27% group (with the lowest scores).[41] The statistical significance level was accepted as $p=0.05$.

After the checklist was developed, the content validity index was used to evaluate content (scope) validity, and explanatory factor analysis with the Varimax rotation method was used to evaluate construct validity. The content validity index, Pearson product of moments, and Cronbach's alpha coefficient analysis methods were used to evaluate reliability. The analysis methods used in the study are given in Table 1.

Ethical Considerations

Approval was obtained from the relevant institution and the Ethics Committee for Non-Interventional Studies prior to the data collection phase of the study (Date of Decree: 2022/38-17, Number of Decree: 2015/01-18). The purpose of the study was explained to the students. Written informed consent was obtained from the students who wished to participate. To protect the psychological safety of the students, two researchers who were not responsible for their evaluation conducted the data collection phase. At the same time, the students were informed that their performance would

not be evaluated. Feedback on their performance was given constructively to those students who requested it, and they were encouraged to improve their communication skills. The study was conducted in accordance with the principles of the Declaration of Helsinki. This study, which benefited from previously created texts, cited the sources in the references in accordance with research and publication ethics.

Results

All of the students were intern nursing students who had taken the basic communication skills course in the first year and the communication skills in nursing course in the second year. Of the students, 53.7% ($n=51$) were male, and the mean age was 22.50 ± 1.31 (min-max: 20–28). Although the difference was not statistically significant ($p>0.05$), female students demonstrated higher mean scores ($M=35.60$, $SD=5.60$) compared to male students ($M=32.58$, $SD=5.86$), suggesting a non-significant gender-related trend in favor of females regarding interview performance.

Validity Findings

The content validity index of the Interview Skills Assessment Checklist was found to be 0.85. After the expert opinion, the checklist was finalized according to the analysis of the content validity index. It was found that the mean scores of each item differed between the 27% group with the highest score on the checklist and the 27% group with the lowest score ($p<0.05$). The checklist was found to be valid, and the distinctiveness of the characteristics being measured was confirmed.

Table 2. Item statistics and corrected item-total correlation

Item (N=95)	Average	SD	Corrected item total correlation
1. Arranges the meeting environment appropriately.	2.726	0.659	0.308
2. Explains the purpose of the interview	2.136	0.906	0.437
3. Explains who conversation data can be shared with.	1.621	0.901	0.506
4. It reveals the individual's feelings and thoughts about the purpose of the interview.	2.273	0.6595	0.638
5. Using appropriate questioning techniques according to the flow of the conversation (open and closed questions).	2.515	0.562	0.580
6. Promoting the clarity of the individual's intangible expressions.	2.168	0.974	0.410
7. Using statements that demonstrate her/his active listening to the person (Hmm, hmm, okay, go on, etc.)	2.589	0.555	0.580
8. Using empathetic expressions regarding the individual's feelings and thoughts.	1.705	0.861	0.487
9. Throughout the interview, use spoken words that the person can understand.	2.894	0.308	0.279
10. Conduct the interview in accordance with the purpose of the meeting.	2.515	0.666	0.472
11. Using appropriate body language throughout the interview (maintaining eye contact, turning towards the person, tone of voice, etc.).	2.757	0.454	0.348
12. At the end of the interview, asks the individual to summarise the interview.	1.947	0.993	0.424
13. Summarises the interview at the end of the interview	2.147	0.967	0.422
14. Asking the individual what they want to add about the subject of the interview.	1.968	0.994	0.274
15. Introduces him/herself and explains his/her role.	2.421	0.894	0.088
16. Plans the next meeting.	2.042	0.977	0.052

SD: Standard deviation

Reliability Findings

The reliability of inter-observer agreement was tested by having two observers complete the form independently. Kendall's Concordance Test was used to examine the level of agreement between the expert opinions, and it was found that there was a high level of agreement (Kendall's $W=0.595$, $p<0.001$).

Cronbach's alpha internal consistency coefficient was calculated to determine whether the items were consistent with each other. In this study, Cronbach's alpha coefficient was found to be 0.82.

The mean scores of the items ranged from 1.621 to 2.894. For the reliability criterion, the value of the corrected item-total score correlation coefficient was taken as 0.20. However, since the corrected total item correlation coefficient of the 15th and 16th items was below this value, they were excluded from the checklist. The final checklist consists of 14 items (Table 2).

Explanatory Factor Analysis (EFA) was carried out to test the construct validity of the checklist and to determine the factor loads and subdimensions. The Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's test of sphericity were used to evaluate the suitability of the data for factor analysis. Applying the EFA, the checklist was separated into each factor with an eigenvalue greater than 1. The variance explained

by these factors regarding the checklist was 53.17%. Of the items, two with a factor load of less than 0.30 or an item-total score correlation of less than 0.30 were excluded from the analysis. The factor loads of the checklist items ranged from 0.447 to 0.863. Subdimensions with two or fewer items were excluded (Table 3).

The developed checklist contains 14 items organized into 3 sub-dimensions. Each item is rated on a 3-point Likert scale, with higher total scores indicating better overall performance.

Table 4 shows the reliability analyses of the checklist and its subdimensions. The total variance value explained for the checklist is 53.17%, and each subdimension explains more than 5% of the variance. The eigenvalue of each of the subdimensions is higher than 1. Internal consistency coefficients are as follows: 0.580 for the subdimension "management of the interview", 0.689 for the subdimension "setup of the interview framework", and 0.813 for the subdimension "communication skills". The internal consistency coefficient obtained for the whole checklist was determined as 0.821.

Discussion

The creation of the Interview Skills Assessment Checklist and its validity and reliability study provided an observation-based assessment tool for interviewing skills, which is an important competency in nursing education.

Table 3. Factor analysis results and subdimensions of the checklist

Factor	Item	Item content	Item factor load
Interview management	1	Arranges the meeting environment appropriately.	0.863
	2	Using appropriate body language throughout the interview (maintaining eye contact, turning towards the person, tone of voice, etc.)	0.753
Setting up the interview framework	3	Asking the individual what they want to add about the subject of the interview.	0.456
	4	Explains the purpose of the interview	0.447
	5	Explains who conversation data can be shared with.	0.696
	6	At the end of the interview, asks the individual to summarize the interview.	0.715
	7	Summarizes the interview at the end of the interview	0.783
Communication skills	8	It reveals the individual's feelings and thoughts about the purpose of the interview.	0.622
	9	Using appropriate questioning techniques according to the flow of the conversation (open and closed questions)	0.759
	10	Promoting the clarity of the individual's intangible expressions.	0.589
	11	Using statements that demonstrate her/his active listening to the person (Hmm, hmm, okay, go on, etc.)	0.734
	12	Using empathetic expressions regarding the individual's feelings and thoughts.	0.571
	13	Throughout the interview, use spoken words that the person can understand.	0.583
	14	Conduct the interview in accordance with the purpose of the meeting.	0.685

Table 4. Checklist and subdimensions reliability analysis

Factor name	Eigenvalue	Variance explained	Cumulative variance	Cronbach's α
Communication skills	4.395	31.340	31.340	0.813
Setup the interview framework	1.655	11.590	42.930	0.689
Management of the interview	1.444	10.247	53.177	0.580
Total	7.494	53.177	53.177	0.821

Validity Data of the Interview Skills Assessment Checklist

The steps of Peplau's Interpersonal Relations Theory were used as the conceptual framework for the checklist. The structure of the theory allows the interviewing skill to be shaped and completed in a certain structure and process.^[24] The items of the checklist were developed by reviewing the relevant literature and scales related to communication skills.^[25-27]

In the identification and working phases, the checklist focused on skills such as active listening, asking effective questions, using therapeutic communication techniques (e.g., demonstrating empathy), employing clear and comprehensible language, and maintaining a goal-oriented approach. The termination phase included skills such as summarizing to appropriately conclude the communication. According to Peplau's Interpersonal Relations Theory, the nurse-patient relationship is a dynamic process, and the nurse assumes multiple roles throughout this process. The nurse's possession of interview skills is the basis for ensuring a therapeutic relationship between the patient and the nurse. Although Peplau's theory does not cover all stages of the theoretical process, it is also important for the applica-

bility of all nursing theories that emphasize the therapeutic role of the patient-nurse relationship.^[42]

The most commonly used measure for determining content validity is the content validity index. The Lawshe technique, one of the content validity indices, requires a minimum of 5 and a maximum of 40 expert opinions. Expert opinions on each item are rated as "the item measures the intended construct," "the item is related to the construct but unnecessary," or "the item cannot measure the intended construct." The checklist prepared according to the Lawshe technique^[28] was developed in a three-point Likert format and presented to 12 experts. The experts' scores ranged between 0.5 and 1. For criterion content validity, the content validity index is expected to be above 0.80. The content validity index of the checklist was 0.85 and was found to be at a good level.^[29]

In the item analysis of the difference between the upper and lower group means, the independent samples t-test was used to assess the difference between the upper 27% group with the highest scores and the lower 27% group with the lowest scores.^[37] It was found that the mean scores of each item differed significantly between the highest-scoring 27% group and the lowest-scoring 27% group, indicating that the

checklist items have good discriminative ability. This result demonstrates that the items on the checklist can successfully differentiate between individuals with high and low levels of the measured construct. High item discrimination is crucial in checklist development, as it indicates that the items are sensitive enough to capture meaningful differences among respondents. Scientifically, a high level of item discrimination supports the validity and effectiveness of the checklist in distinguishing variations in the trait or skill being measured. The ability to differentiate among individuals' performance levels adds to the checklist's credibility and reinforces its potential use in both educational assessment and feedback.^[43]

Reliability Data of the Interview Skills Assessment Checklist

The literature does not provide a standard cutoff value for the item-total correlation coefficient below which reliability is considered insufficient. Some sources state that the reliability of items with a coefficient less than 0.50 should be doubted, some state it should be above 0.30, but most studies use 0.20 as the cutoff.^[31] In line with this information, it is noted that the reliability criterion can vary according to the purpose of the research and the nature of the measurement, and that researchers decide which test items are reliable or unreliable.^[38]

Cronbach's alpha internal consistency coefficient was calculated to determine whether the remaining items were consistent with each other. The reliability limit for the checklist was assumed to be 0.70.^[33] Cronbach's alpha coefficient was found to be 0.82. This value shows that the checklist is reliable at a good level.

Inter-observer agreement was assessed by having two independent raters complete the checklist separately. Kendall's coefficient of concordance was employed to evaluate the level of agreement, yielding a moderate to high concordance (Kendall's $W=0.595$, $p<0.001$).^[40] This finding supports that the checklist items are consistently interpreted across different raters, ensuring that the instrument can be applied in an objective, reliable, and standardized manner. Furthermore, the reproducibility of the assessment process underscores its potential for broader implementation. It is recommended that inter-observer reliability be re-examined in future applications of the checklist to ensure sustained measurement precision.

It is important that the sample be large enough to provide reliability for correlation analyses. In a scale development study, the KMO test is performed to determine the adequacy of the sample.^[33,34] KMO criteria are evaluated as excellent between 0.90 and 1.00, very good between 0.80 and 0.89, good between 0.70 and 0.79, and moderate between 0.60 and 0.69.^[39] The KMO value of the items in the checklist (0.74) was evaluated as "good." Bartlett's test of sphericity ($\chi^2=435.957$, $p<0.001$) was statistically significant, indicating that the data set is suitable for EFA.^[29]

There were no items with factor loadings of 0.40 or less, indicating that each item contributed adequately to the theoretical structure. The total variance explained is reported to be 40%–60% in some sources^[29] and 50%–70% in others.^[34] The total variance explained by the checklist in this study is 41.98%, which falls within the recommended range. In the literature, three or more items are recommended for subdimensions.^[35,36,40] Three factors were identified by EFA for the 14-item checklist, explaining 53.17% of the total variance. Each subdimension accounted for more than 5% of the variance. The factor loadings of items in each subdimension were above 0.30. The EFA findings met the criteria used as a basis for determining the factors and the items within them, and satisfied the aforementioned criteria.^[36]

Reliability refers to the consistency between the answers given by study participants to the test items and the extent to which the scale reflects the problem of interest. In the reliability studies for the scale, Spearman-Brown correlation and Cronbach's alpha were used. The item-total score correlation represents the relationship between the scores of individual test items and the total test score. A positive and high item-total correlation indicates that items measure similar attitudes and that the test has high internal consistency.^[30] It is recommended that the item-total score correlation should not be negative and should be at least 0.20.^[33] In the initial item analysis, two items with an item-total score correlation below 0.20 were removed from the checklist, resulting in a 14-item checklist. A scale is considered reliable if Cronbach's alpha is between 0.60 and 0.80, and very reliable if it is 0.80 or above.^[42,43]

Limitations and Strengths

Peplau's Theory of Interpersonal Relations was used as a conceptual framework in the development of the checklist, and the item pool for the interview skills checklist was created accordingly. Peplau's theory provides a strong theoretical foundation for conducting interview skills, making it a fundamental model in guiding the structure of the instrument. The use of a theoretical framework in the development of the checklist is a strength of this study.

A limitation of this study is that there is no checklist assessing interviewing skills in the literature, which made it difficult to compare the validity and reliability results. Therefore, the discussion section of the study includes the comparison of parallel test validity and reliability results within normal ranges. Another limitation of the study is that it was conducted with a single nursing faculty.

This study did not include a test-retest analysis. This decision was based on the expectation that students would improve their interview skills over time as part of their training. A repeated administration of the checklist with the same students

would likely reflect their skill development rather than the stability of the checklist. In the context of behavioral checklists such as this one, test-retest reliability is more appropriate when the skills being measured are expected to remain stable. This omission is acknowledged as a limitation of the study, and other reliability analyses (e.g., internal consistency, inter-rater agreement) have been conducted and reported accordingly.

Conclusion and Recommendations

This study aimed to develop and validate the Interview Skills Assessment Checklist (ISAC), and the results demonstrated that the instrument is both valid and reliable. Interview skills play a crucial role in patient assessment, care planning, and implementation. The developed checklist offers a standardized method for evaluating and enhancing these skills in nursing education and can be adapted for use in other health professions. Additionally, the checklist supports students in monitoring and improving their own performance and may also be utilized for peer-based evaluation of interview skills. The checklist also holds potential for use in clinical education settings as a feedback and evaluation tool during student-patient interactions. Future research is recommended to further examine the applicability of the checklist in diverse educational and professional contexts.

Ethics Committee Approval: The study was approved by the Dokuz Eylül University Non-interventional Research Ethics Committee (no: 2022/38-17, date: 30/11/2022).

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References

1. Stuart GW. Therapeutic nurse-patient relationship. In: Principles and practice of psychiatric nursing. China: Elsevier Mosby; 2013. p. 13–43.
2. Bademli K. Terapötik ilişki ve klinik görüşme. In: Oflaz F, Yıldırım N, editors. Psikiyatri hemşireliği sertifikası konuları. Ankara: Nobel Tıp Kitabevi; 2020. p. 77–87.
3. Durmaz H. Hasta ile görüşme, gözlem ve kayıt süreci. In: Gürhan N, editor. Ruh sağlığı ve psikiyatri hemşireliği. Ankara: Nobel Tıp Kitabevleri; 2016. p. 165–79.
4. Flanagan JS, Flanagan RS. Yönlendirme: Sorular ve eylem becerileri. In: Yorulmaz O, editor. Klinik görüşme. İstanbul: İthaki; 2015. p. 126–42.
5. Şengün İnan F. Birey/hasta ile iletişim ve hasta olmanın anlamı. In: Yılmaz M, editor. Sağlık profesyonelleri için iletişim. Ankara: Akademisyen Kitabevi; 2020. p. 25–57.
6. Şengün İnan F. Bakımın psikososyal boyutu. In: Kara Kasıkcı M, Akın E, editors. Temel hemşirelik: Esaslar, kavramlar, ilkeler, uygulamalar. İstanbul: İstanbul Tıp Kitabevleri; 2021. p. 239–56.
7. Chichirez CM, Purcărea VL. Interpersonal communication in healthcare. *J Med Life* 2018;11:119–22.
8. Littell RD, Kumar A, Einstein MH, Karam A, Bevis K. Advanced communication: A critical component of high quality gynecologic cancer care: A Society of Gynecologic Oncology evidence based review and guide. *Gynecol Oncol* 2019;155:161–9.
9. Sharkiya SH. Quality communication can improve patient-centred health outcomes among older patients: A rapid review. *BMC Health Serv Res* 2023;23:886.
10. Gutiérrez-Puertas L, Márquez-Hernández VV, Gutiérrez-Puertas V, Granados-Gómez G, Aguilera-Manrique G. Educational interventions for nursing students to develop communication skills with patients: A systematic review. *Int J Environ Res Public Health* 2020;17:2241.
11. Pivač S, Skela-Savič B, Jović D, Avdić M, Kalender-Smajlović S. Implementation of active learning methods by nurse educators in undergraduate nursing students' programs - a group interview. *BMC Nurs* 2021;20:173.
12. Barnhill JW. The psychiatric interview and mental status examination. Arlington, VA: American Psychiatric Publishing; 2014. p. 3–16.
13. Stephen TC, Skillen DL, Day RA, Jensen S. Interview and therapeutic dialogue. In: Canadian Jensen's nursing health assessment: A best practice approach. China: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2012. p. 21–4.
14. Stewart D, Burrow H, Duckworth A, Dhillon J, Fife S, Kelly S, et al. Thematic analysis of psychiatric patients' perceptions of nursing staff. *Int J Ment Health Nurs* 2015;24:82–90.
15. Thorne S, Oliffe JL, Stajduhar KI, Oglov V, Kim-Sing C, Hislop TG. Poor communication in cancer care: Patient perspectives on what it is and what to do about it. *Cancer Nurs* 2013;36:445–53.
16. Lotfi M, Zamanzadeh V, Valizadeh L, Khajehgoodari M. Assessment of nurse-patient communication and patient satisfaction from nursing care. *Nurs Open* 2019;6:1189–96.
17. Tay LH, Hegney D, Ang E. Factors affecting effective communication between registered nurses and adult cancer patients in an inpatient setting: A systematic review. *Int J Evid Based Healthc* 2011;9:151–64.

18. Baer L, Weinstein E. Improving oncology nurses' communication skills for difficult conversations. *Clin J Oncol Nurs* 2013;17:E45–51.
19. Opeyemi MO. A literature review on effective communication in nursing practice. *Acad J Nurs Health Educ* 2018;7:1–27.
20. Maguire P, Weiner JS. Communication with terminally ill patients and families. In: Chochinov HM, Breitbart W, editors. *Handbook of psychiatry in palliative medicine*. New York: Oxford University Press; 2009. p. 157–64.
21. Keser İ. Ağlayan birey ile iletişim. In: Yılmaz M, editor. *Sağlık profesyonelleri için iletişim*. Ankara: Akademisyen Kitabevi; 2020. p. 289–312.
22. Kwame A, Petrucka PM. Communication in nurse-patient interaction in healthcare settings in sub-Saharan Africa: A scoping review. *Int J Afr Nurs Sci* 2020;12:100198.
23. Australian Commission on Safety and Quality in Health Care. National safety and quality health service standards. Sydney: ACSQHC; 2021.
24. Sheldon LK, Hilaire DM. Development of communication skills in healthcare: Perspectives of new graduates of undergraduate nursing education. *J Nurs Educ Pract* 2015;5:30–7.
25. Grant MS, Jenkins LS. Communication education for pre-licensure nursing students: Literature review 2002–2013. *Nurse Educ Today* 2014;34:1375–81.
26. McMillan LR, Shannon D. Program evaluation of nursing school instruction in measuring students' perceived competence to empathetically communicate with patients. *Nurs Educ Perspect* 2011;32:150–4.
27. Arthur D. Assessing nursing students' basic communication and interviewing skills: The development and testing of a rating scale. *J Adv Nurs* 1999;29:658–65.
28. Makoul G, Krupat E, Chang CH. Measuring patient views of physician communication skills: Development and testing of the Communication Assessment Tool. *Patient Educ Couns* 2007;67:333–42.
29. Fawcett J. *Contemporary nursing knowledge: Analysis and evaluation of nursing models and theories*. Philadelphia: FA Davis; 2006. p. 528–48.
30. Sabancıoğulları S. Hemşirelikte iletişim, iletişim teorileri. In: Üstün B, Demir S, editors. *İstanbul: Akademi Basın ve Yayıncılık*; 2019. p. 29–30.
31. Rees C, Sheard C, Davies S. The development of a scale to measure medical students' attitudes towards communication skills learning: The Communication Skills Attitude Scale (CSAS). *Med Educ* 2002;36:141–7.
32. Lanning SK, Brickhouse TH, Gunsolley JC, Ranson SL, Willett RM. Communication skills instruction: An analysis of self, peer-group, student instructors and faculty assessment. *Patient Educ Couns* 2011;83:145–51.
33. Setyonugroho W, Kennedy KM, Kropmans TJ. Reliability and validity of OSCE checklists used to assess the communication skills of undergraduate medical students: A systematic review. *Patient Educ Couns* 2015;S0738-3991(15)00277-3.
34. Lawshe CH. A quantitative approach to content validity. *Pers Psychol* 1975;28:563–75.
35. Şencan H. *Sosyal ve davranışsal ölçümlerde geçerlilik ve güvenirlik*. Ankara: Seçkin Yayıncılık; 2005.
36. Hertzog MA. Considerations in determining sample size for pilot studies. *Res Nurs Health* 2008;31:180–91.
37. Büyüköztürk Ş. *Sosyal bilimler için veri analizi el kitabı*. Ankara: Pegem Akademi; 2016.
38. Gözüm S, Aksayan S. Kültürlerarası ölçek uyarlaması için rehber II: Psikometrik özellikler ve kültürlerarası karşılaştırma. *Hemşirelikte Araştırma Geliştirme Derg* 2003;1:3–14.
39. Karakoç A, Dönmez L. Ölçek geliştirme çalışmalarında temel ilkeler. *Tıp Eğitimi Dünyası* 2014;13:39–49.
40. Tavşancıl E. *Tutumların ölçülmesi ve SPSS ile veri analizi*. Ankara: Nobel Yayınevi; 2014.
41. Alpar CR. *Spor, sağlık ve eğitim bilimlerinden örneklerle uygulamalı istatistik ve geçerlik güvenirlik*. Ankara: Detay Yayıncılık; 2018.
42. Delaney KR, Shattell M, Johnson ME. Capturing the interpersonal process of psychiatric nurses: A model for engagement. *Arch Psychiatr Nurs* 2017;31:634–40.
43. DeVellis RF. *Scale development: Theory and applications*. Thousand Oaks (CA): Sage Publications; 2003.