Turkish validity and reliability study of midwifery student evaluation of practice (MidSTEP) tool

Demet Aktaş [*], Sakine Yilmaz

Faculty of Health Science, Çankırı Karatekin University, Çankırı, Turkey

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ABSTRACT

Background: In midwifery education, clinical learning environments have a significant impact on students' acquisition of clinical competence and professional self-identity. The Turkish version of the MidSTEP can be used a measurement tool to assess midwifery students' perceptions of their clinical learning environment experiences and the positive effects of preceptor on the professional development of midwifery students.
Aim: This research was conducted to determine the Turkish validity-reliability of MidSTEP.
Method: This research, which was designed as a methodological study, was conducted with volunteer students studying in the first, second, and third years of midwifery at a university in Turkey. The MidSTEP consists of the Clinical Learning Environment Scale and Impact of the Midwifery Preceptor Scale, each with two subscales. The validity and reliability of the MidSTEP were assessed using Exploratory Factor Analysis, Cronbach's alpha, and Intraclass Correlation Coefficient.
Participants: In this study, 205 students were included in the research sample, considering that it may not be sufficient to reveal the factor structure when the number of scale items and the sample size is less than 200.
Results: As a result of the factor analysis a 26 item measurement tool of two scales and each with two sub-dimensions was achieved. The Turkish version of the MidSTEP Tool matched the original scale in terms of the number of items and factor structure.
Conclusions and implications for practice: The Turkish version of the MidSTEP is a valid and reliable instrument. The measurement tool can confidently be used in undergraduate midwifery clinical education.

Introduction

In midwifery education, clinical learning environments have a significant impact on students' acquisition of clinical competence and professional self-identity (Griffiths et al., 2020). Therefore, clinical learning in midwifery constitutes an important component of the midwifery curriculum and cannot be considered separately from theoretical education (Alparslan, 2017). The clinical learning environment in midwifery refers to an educational process that allows the student to transfer theoretical knowledge into practice and to transition from student to professional. As part of the clinical education environment, midwifery students fulfill the profession-specific practices by communicating with the woman and her healthcare team, while also developing psychomotor abilities (Biçer et al., 2015). Throughout this process, the midwifery student develops competencies such as making the right decision, applying it, solving problems, effectively communicating, understanding herself, and acquiring a sense of teamwork (Biçer

et al., 2015).

Globally, midwifery education focuses on practice-oriented, evidence-based approaches to develop adequate professional skills, while also recognizing the need to develop curricula that are designed to accommodate adult learning principles and self-efficiency (Dereli Yılmaz and Erkal Aksoy, 2019; The International Confederation of Midwives (ICM, 2017). In Turkey, midwifery education involves a 4-year midwifery undergraduate program, and theoretical/clinical learning is carried out in an integrated manner (Dereli Yılmaz and Erkal Aksoy, 2019). To graduate from the midwifery undergraduate program, the graduation criteria determined by European Union directives must be met and 240 European Credit Transfer and Accumulation System (ECTS) credit hours must be completed (Ebelik Ulusal Çekirdek Eğitim Programı (EUÇEP), 2016). In midwifery education, the duration of clinical learning accounts for 50 % of the total education (Thompson et al., 2019). The International Confederation of Midwifery (ICM) recommends that midwifery education consist of a minimum of 50 % practice

in order to obtain sufficient professional competencies (ICM, 2017). In Australia and New Zealand, clinical practice accounts for 50 % of the total training time in midwifery education (Dereli Yılmaz, 2019; Griffiths et al., 2020). Other countries, such as the United Kingdom, Iceland, Ireland, and Denmark, also offer similar education programs (Dereli Yılmaz, 2019).

Along with providing a clinical learning environment, midwifery education should also address students' needs for support, guidance, and assistance in practices that require clinical skills (Biçer et al., 2015). In particular, the student needs to be supported by academic and clinical preceptors in order to ensure skill competence in profession-specific practices in the clinical learning environment. The collaboration between midwifery students and academic and clinical preceptors in clinical settings is of paramount importance. The role of academicians and clinical preceptors is important for students because they serve as role models (Özcan, 2014). Previous studies have demonstrated that students who receive support and acceptance from clinician colleagues and preceptors are more satisfied with their education, more willing to learn, and more committed to the profession as a whole (Gamble et al., 2022; Bayrı Bingöl et al., 2020; Özcan, 2014). Furthermore, midwifery students were found to be more capable of integrating theoretical knowledge into practice and viewing themselves as a team member (Gamble et al., 2022; Özcan, 2014).

In order to cultivate graduates who remain professionally competent and complete their fields of practice successfully, it is important for educators to understand how their learning experiences in clinical learning environments contribute to their development as professionals (Gamble et al., 2022). Therefore, it is important to have standardized measurement tools for evaluating midwifery students' perceptions of their learning experiences in clinical education settings and the effects of preceptors on their professional development. It is necessary to analyse reliable assessment data regarding the quality of clinical learning experiences of midwifery students, as well as monitor and review the outputs, structure, and processes of the program. To date, there are no valid and reliable measurement tools available in Turkey that assess midwifery students' perceptions of their clinical learning experiences and the effectiveness of their clinical preceptors. In previous studies evaluating students' clinical learning environments, the majority of research focused on school-hospital collaboration, comparisons of mentoring models, and the use of simulations in clinical education (Bayrı Bingöl et al., 2020; Olafsdottir et al., 2018; Alparslan, 2017; Aydın Kartal and Yazıcı, 2017). In a study conducted by Alparslan (2017), it was determined that students stated that the school-hospital collaboration and clinical practices improved their hand-skills (89.5 %) and increased their passion for the profession (63.7%) (Alparslan, 2017). With this several studies identified that the supervisor of clinical education role was effective in optimising the midwifery students learning but did not adequately facilitate or support clinicians to engage with the students (Olafsdottir et al., 2018; O'Brien et al., 2014; Finnerty and Collington, 2013). In the another study determined that training in a simulated environment promotes academic motivation, midwifery skills, self- confidence, and satisfaction among midwifery students (Sadat Pajohideh et al., 2023). Despite that, few valid and reliable measurement tools assess midwifery students' perceptions of the clinical learning environment abroad (Griffiths et al., 2020). The MidSTEP developed by Griffiths et al. (2020) is a measurement tool designed to assess how well midwifery students' clinical learning environment "supports their sense of ability, purpose, resourcefulness, commitment, sense of identity as a midwife, how well instructors support their sense of commitment, and how they influence students' identity as a midwife (Griffiths et al., 2020). In Australia and New Zealand, this instrument is widely used by universities as part of their curriculum (Griffiths et al., 2020).

Aim

This research was conducted to determine the Turkish validity-reliability of the Midwifery Student Evaluation of Practice (MidSTEP), which is considered a qualified measurement tool to evaluate how midwifery students perceive clinical learning environments, the effects of clinical preceptors on their professional development, and the current situation in Turkey regarding midwifery.

Methods

The method of the research was conducted in two distinct phases.

Phase I: translation and intercultural adaption process

Translation and intercultural adaptation process

The Turkish validity and reliability study of the Midwifery Student Evaluation of Practice (MidSTEP) Tool was conducted according to the guidelines of intercultural scale adaptation stages and language and culture adaptation, updated by Çapık et al. (2018). For the adaptation of the measurement tool to Turkish, the target culture's language, we used the translation-reverse translation method in accordance with the cross-cultural scale adaptation stages, language, and culture adaptation guidelines. In order to ensure the validity of the Turkish version of the instrument, two linguists independently translated the original version of the instrument from English to Turkish. Then, 11 experts in the field of midwifery and women's health were consulted in order to evaluate the equivalence and intelligibility of the original items of the measurement tool and its translated form. The necessary arrangements were made according to the opinions of the experts, and a common Turkish text was produced in accordance with the expressions in the measurement tool. The items of the Turkish version of the measurement tool were evaluated by three different linguists for compliance with the rules of the Turkish language. The Turkish version of the Midwifery Student Evaluation of Practice (MidSTEP) Tool was re-translated from Turkish to English by two experts working independently of each other. After the translation was completed, the researchers evaluated the similarities and inconsistencies between the original measurement tool and the translated measurement tool from Turkish to English and gave the measurement tool its final form. Following all the evaluations, it was determined that both scales were similar to each other. Therefore, the validity and reliability study was started on the Turkish version of the measurement tool.

Phase II: validation

Settings and samples

The study, which was designed as a methodological study, involved volunteer midwifery students from a Turkish university who were enrolled in the first, second, or third year of their midwifery education in the fall semester of 2022–2023. The research was conducted between July 2022 and December 2022. Beginning in the fall semester, first-year students in the midwifery department perform laboratory practice for twelve weeks. Students in the second and third years of midwifery receive 20 weeks of clinical practice instruction in both semesters (fall and spring). The total number of students enrolled in the midwifery department is 210. The literature suggests that a validity and reliability study conducted to adapt a scale to another culture should reach at least 5 to 10 times as many participants as the number of items within the scale. In the present study, a minimum of 205 volunteer students were included in the research sample, taking into account that a sample size of less than 200 may not be sufficient to reveal the factor structure (International Test Commission (ITC), 2018). Moreover, a test-retest was conducted with at least 82 students (40 % of the sample size) and the consistency of the scale over time was evaluated.

Data collection tools

The data collection package consisted of two tools. The first was a brief survey designed to elicit student demographic information such as age, grade, practice status, clinical practice area and education model. The brief survey was prepared by the researchers by reviewing the literature to determine data on some characteristics of the students (Bayrı Bingöl et al., 2020; Thompson et al., 2019; Demirbaş Meydan and Kaya, 2018; Aydın Kartal and Yazıcı, 2017). The second was the Midwifery Student Evaluation of Practice (MidSTEP) tool developed by Australian researchers Griffiths et al. (2020). MidSTEP was designed to assess midwifery students' perceptions of their clinical learning experiences and the positive impact of academic/clinical preceptors on midwifery students' professional development. Midwifery students' responses to the instrument can provide valuable feedback and guidance to academics and clinical preceptors on how best to provide quality clinical training for midwifery students.

In this study, the original version of the MidSTEP was used (Griffiths et al., 2020). The original MidSTEP has two separate scales "Clinical Learning Environment" and "Midwifery Preceptor" and each scale has two sub-dimensions (skill development, midwifery practice philosophy). The scales in the measurement tool can be used both separately and in combination. However, since both scales in the measurement tool have a close relationship with each other and using the scales in combination provides a more complete assessment of midwifery students' perceptions of clinical learning environments, it requires them to be used together. The MidSTEP is a 2-point Likert-type questionnaire. This scale consists of 26 items, including 16 items pertaining to the Clinical Learning Environment (eight items pertain to skill development, eight items pertain to midwifery practice philosophy) and 10 items pertaining to the Midwifery Preceptor Scale (5 items pertain to skill development, five items pertain to midwifery practice philosophy). The item definitions of the measurement tool are "*1- Disagree, 2- Agree*". Disagree is rated "1 point" and Agree is rated "2 points". The high total scores of the measurement tool and its sub-dimensions indicate that midwifery students' perceptions of their clinical learning environment experiences and the effects of their preceptors on their professional development are positive. Furthermore, Cronbach's alpha values of the original measurement tool were found to be 0.84, indicating that the tool was valid and reliable (Griffiths et al., 2020).

Data collection procedure

The data collection package was administered to students via the Internet through the use of "Google Forms". In line with recommendations by Terzioğlu et al. (2019) the MIDSTEP tool was readministered to midwifery students twice at 3-week intervals to facilitate evaluation over time (Terzioğlu et al., 2019). In the first administration phase, the measurement tool was administered to 205 volunteer midwifery students. Then, three weeks after the first administration of the measurement tool, the re-test administration was repeated and completed with 82 students.

Data analysis

SPSS 22.0 software (SPSS 22.0 version IBM, New York, USA) was used for statistical analysis of the data. In this study, the test-retest method was used to evaluate the reliability of the measurement tool. Exploratory factor analysis (EFA) with Varimax rotation was used to determine the factor structure and validity of the Turkish version of the MidSTEP. Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity were used to determine the adequacy of the sample size. As reliability analyses, the Cronbach alpha (α) coefficient was used to determine the internal consistency of the scale items, and the intraclass correlation coefficient (ICC) was used to determine the test-retest agreement. The significance of the Bartlett test was set as p $\langle$ 0.05 and KMO $\rangle$ 0.60. In the exploratory factor analysis, factor loadings above 0.500 were considered significant.

Ethical aspect of the research

In order to conduct the research, permission was obtained from the relevant institution (23.11.2022/E-52950036–100–102433) as well as ethical approval from a university ethics committee (28.06.2022/26). Prior to data collection, all participants included in the sample were informed about the subject, purpose, and the method of the study. Written informed consent was obtained from the participants who agreed to participate in the study. Midwifery students were informed that participation in the study was voluntary, that their information would remain confidential, and that they could withdraw from the study at any time. In addition, the necessary permission was obtained from the authors who developed the scale via e-mail in order to use the scale in the study.

Results

Sample characteristics

The mean age of 205 midwifery students included in the study was 20.33 ± 2.18 years, and all of them (100.0 %) were female. All three classes have a similar distribution of students at a rate of one-third (34 %, 34 %, 32 %). Moreover, it was found that two-thirds of midwifery students went to the field of practice (65.5 %), had clinical learning experience (65.5 %), and studied in large groups (68.3 %) in practices (laboratory + clinic) as an education model.

Validity

The suitability of the data for exploratory factor analysis was analysed via the KMO coefficient and Barlett sphericity test. The fact that KMO is higher than 0.60 and the Barlett sphericity test is significant indicates that the data are fit for factor analysis (Büyüköztürk, 2005). It was determined that the KMO values for the Clinical Learning Environment and Midwifery Preceptor Scales of MidSTEP were 0.805 and 0.707, respectively, based on the analysis of the data collected following the administration of the measurement tool during the validity studies. In light of these findings, it was determined that the results of factor analysis applied to the data were valid and useful. As a result of the Bartlett test, it was concluded that there was a significant high correlation between the variables and the data were suitable for factor analysis (Table 1; X^2: 902.445, SD: 28, $p < 0.001$; X^2: 950.522, SD: 28, $p < 0.001$).

Explanatory Factor Analysis (EFA) was used to evaluate the construct validity of the Turkish version of MidSTEP. As a result of the correlation matrix analysis to evaluate the contribution of the items to the scales, it was found that a total of 16 items constituting the Clinical Learning Environment scale and 10 items constituting the Midwifery Preceptor scale showed moderate correlation with each other. As a result of the factor analysis and Varimax rotation method, it was seen that 16 items in the Clinical Learning Environment scale and 10 items in the Midwifery Preceptor scale loaded on two factors and their factor loadings were above 0.500. The variance explanation ratios of the two sub-dimensions of each scale in the measurement tool are shown in Table 2, and the factor loadings are shown in Tables 3 and 4. After the application of Varimax rotation, it was found that the Clinical Learning Environment scale of MidSTEP explained 41.229 % of the variance with one dimension and 57.080 % of the variance with two dimensions and that the

Table 1
KMO and Bartlett's results.

MidSTEP	Kaiser Meyer Olkin (KMO)	Bartlett Sphericity Test		
		X^2	SD	p
Clinical Learning Environment	0.805	902.445	28	0.001
Midwifery Preceptor	0.707	950.522	28	0.001

Table 2

Variance explanation table of MidSTEP.

MidSTEP		Clinical Learning Environment		Midwifery Preceptor	
		Factor		Factor	
		Dimensions 1	Dimensions 2	Dimensions 1	Dimensions 2
Initial Eigenvalues	Total	3.374	1.193	3.526	1.032
	Explaining Variance%	42.172	14.908	44.075	12.898
	Cumulative	42.172	57.080	44.075	56.974
Varimax Total Factor Loadings	Total	3.298	1.268	3.285	1.273
	Explaining Variance%	41.229	15.851	41.060	15.914
	Cumulative	41.229	57.080	41.060	56.974

Table 3

Factor loadings on clinical learning environment items of the MidSTEP.

Items			
My clinical practice environment provides:		Dimensions 1	Dimensions 2
Item 1	Appropriate clinical experiences to support my learning of midwifery knowledge	0.824	
Item 2	Experiences that enable me to work to my full scope of practice appropriate to my year level	0.633	
Item 3	Opportunities to achieve the mandatory clinical requirements	0.750	
Item 4	A culture that facilitates evidence-based midwifery practice	0.856	
Item 5	Staff that understand the requirements and capabilities of each year level	0.644	
Item 6	Opportunities for me to practice self-care strategies (e.g. taking breaks, managing fatigue)	0.767	
Item 7	A self-directed approach to my learning	0.564	
Item 8	Opportunities to voice any concerns I have regarding my clinical placement	0.602	
Item 9	Experiences that reinforce the positive influence I can have as a student on the health and well-being of women and their families		0.558
Item 10	Experiences that prepare me to be a change agent for maternity services reform		0.896
Item 11	Experiences that align with my own midwifery philosophy		0.733
Item 12	Experiences that promote the importance of midwifery continuity of care		0.803
Item 13	Experiences that enable me to develop new insights into the complexity of care that a midwife can offer		0.644
Item 14	Experiences that help me discover the midwife I want to be		0.704
Item 15	Experiences that support my professional growth as a midwife		0.782
Item 16	Experiences that show the importance of the midwife in supporting women to have a positive birth experience		0.764

Dimensions 1: skill development; Dimensions 2: philosophy of midwifery practice.

Midwifery Preceptor scale explained 41.060 % of the variance with one dimension and 56.974 % of the variance with two dimensions.

In the Turkish version of the MidSTEP Tool, the scales and sub-dimensions structure proposed by Griffiths et al. (2020) were validated. The contribution of the items constituting the measurement tool was evaluated through the use of a correlation matrix. Based on the factor analysis and Varimax rotation method, it was found that 16 items (Midwifery Preceptor) and 10 items (Clinical Learning Environment) were loaded into two separate factors. Turkish version of the measurement tool contains two scales and 26 items with two sub-dimensions

Table 4

Factor loadings on midwifery preceptor items of the MidSTEP.

Items			
In general, my midwifery preceptor		Dimensions 1	Dimensions 2
Item 1	Directly supports the development of my midwifery skills	0.553	
Item 2	Understands the academic elements of my degree program	0.664	
Item 3	Facilitates the progressive development of my confidence as a student midwife	0.747	
Item 4	Supports me to achieve my clinical requirements	0.890	
Item 5	Supports me to perform clinical skills	0.880	
Item 6	Role models positive self-care practices		0.803
Item 7	Creates a sense of belonging to the organisation		0.688
Item 8	Creates opportunities for sharing professional best practice		0.792
Item 9	Values my clinical opinion		0.739
Item 10	Supports me to advocate for women's rights		0.652

Dimensions 1: skill development; Dimensions 2: philosophy of midwifery practice.

each: Clinical Learning Environment scale with 16 items (items 1–8 for skill development and items 9–16 for midwifery practice philosophy) and Midwifery Preceptor scale with 10 items (items 1–5 for skill development, items 6–10 for midwifery practice philosophy).

Midwifery student responses on the scale were given into agree/disagree. Most of the midwifery students agreed with all items. Over 90 % of students scored all eight items on the Skills Development sub-dimension (90.0–96.0 %) of the Clinical Learning Environment scale positively and to a high extent (90.0–96.0 %). In the Philosophy of Midwifery Practice subdimension of the Clinical Learning Environment scale, over 95.6 % of students scored positively and to a high extent (95.6–99.0 %). In the Skill Development subdimension of the Midwifery Preceptor scale, more than 94 % of students stated that their clinical preceptors had enhanced their clinical skills and perceptions of skills (94 %–97 %). Over 95 % of students remarked that their preceptors refined their sense of professional commitment (95 %–96 %), based on the Philosophy of Midwifery Practice subdimension of the Midwifery Preceptor scale.

Reliability

For determining the reliability of the MidSTEP, the intraclass reliability coefficient (ICC) for test-retest reliability analysis and Cronbach's alpha coefficient for internal consistency analysis were calculated. As a result of the test-retest reliability analysis, the intraclass reliability coefficient of the Clinical Learning Environment scale, which consists of 16 items, was found to be $r = 0.87$ (CI: 0.84–0.90) and the Cronbach alpha internal consistency coefficient as $\alpha = 0.86$. The intraclass reliability coefficient of the Midwifery Preceptor scale, which consists of 10 items,

was found to be $r = 0.87$ (CI: 0.83–0.91), Cronbach's alpha internal consistency coefficient was found as $\alpha = 0.85$, and both scales in the MidSTEP were found to be highly reliable (Table 5).

Discussion

In this study, which was conducted to determine the Turkish validity and reliability of the original version of the MidSTEP Tool, which was developed by Griffiths et al. (2020), language and concept equivalence, construct validity, internal consistency analysis, and intraclass reliability coefficient were evaluated. The number of independent samples necessary to evaluate the reliability and validity of the Turkish version of the scale (in terms of the number and diversity of subjects) meets the prerequisites for statistical analysis. Especially in scale studies, it is important to use an appropriate large independent sample size (Terzioğlu et al., 2019). It is generally recommended that sample size should be determined based on the number of items in the scale in multivariate statistical methods (5–10 times) (Terzioğlu et al., 2019). The original measurement tool contains a total of 26 items. Therefore, the sample size in our study was determined to be slightly more than seven times the minimum number of items in the measurement tool, and participants were reached.

Explanatory Factor Analysis (EFA) was used to determine the construct validity of the Turkish version of MidSTEP. As a result of the item analysis, a 16-item, 2-factor Clinical Learning Environment scale and a 10-item, 2-factor form of the Midwifery Preceptor scale were created. Our Turkish validity and reliability study results for the MidSTEP are similar to the results of Griffiths et al. (2020) and Gamble et al. (2022) in terms of the factor structure. In the study by Griffiths et al., it was determined that the items in the original version of the MidSTEP objectively assessed midwifery students' ability, purpose, skills, commitment to the profession, sense of identity in the practice environment, and the effects of clinical preceptors on their professional development (Griffiths et al., 2020). In other studies, it has been found that easy learning of professional skills in the clinical learning environment contributes to professional role development and that both the learning environment and midwifery preceptors have effects on the development of these situations (Gamble et al., 2022; Longworth, 2013). The MidSTEP can provide students with opportunities for regular, detailed, and comparative evaluation of their clinical learning environment experiences and preceptors (Gamble et al., 2022). In this regard, the scale contributes significantly to the evaluation of the student learning experience and quality of education, the improvement of quality in education, and the development cycle of quality education (McKellar and Graham, 2017). A further important advantage of MidSTEP is its ease of scoring, which provides feedback and guidance for improving education, both in universities and in practice. The results of our study suggest that it may be appropriate to use all items, as in the original measurement tool, to assess midwifery students' perceptions of their clinical learning environment experiences and the effects of academic/clinical preceptors on the professional development of midwifery students.

The majority of midwifery students in the present study scored all sixteen items positively and to a high extent on the Clinical Learning Environment Scale. In the Midwifery Preceptor Scale, students remarked that their clinical preceptors enhanced their clinical skills, perceptions of skills, and sense of commitment to the profession. In the present study results concur with the findings described in the literature (Griffiths et al., 2020). Based on these findings, midwifery students' perceptions of their clinical learning environment experiences and the impact of clinical preceptors on their professional development were positive.

According to the test-retest reliability analysis results in the reliability study of the Turkish version of the MidSTEP Tool, the Turkish version of the measurement tool was determined to be highly reliable. Hence, it has been shown that the Turkish version of the MidSTEP Tool can be used safely in studies with midwifery students.

Table 5
Reliability analysis of MidSTEP.

Scale	No. of items	r (95 %CI)	α	Reliability Level
Clinical Learning Environment Total	16	0.87 (CI: 0.0.84–0.90)	0.86	Highly Reliable
Skill Development subscale	8	0.82 (CI: 0.0.77–0.87)	0.81	Highly Reliable
Philosophy of Midwifery Practice subscale	8	0.79 (CI: 0.0.74–0.84)	0.78	Reliable
Midwifery Preceptor Total	10	0.87 (CI: 0.0.83–0.91)	0.85	Highly Reliable
Skill Development subscale	5	0.72 (CI: 0.0.70–0.74)	0.72	Reliable
Philosophy of Midwifery Practice subscale	5	0.80 (CI: 0.0.77–0.83)	0.79	Reliable

r: Test-retest Intraclass correlation coefficient (ICC) (95 %CI), IC = 95 % Confidence interval, α: Cronbach alfa coefficient.

Conclusion

According to the validity and reliability analyses, it was determined that the Turkish version of the MidSTEP Tool, which consists of two scales and 26 items each with two sub-dimensions (The Clinical Learning Environment Scale has 16 items, 2 factors, and the Midwifery Preceptor Scale has 10 items and 2 factors), has two scales and 26 items each with two sub-dimensions (Clinical Learning Environment scale had 16 items and 2 factors and the Midwifery Preceptor Scale had 10 items and 2 factors), and that the measurement tool is valid and reliable in its current state. The scales can be used separately or together. The Turkish version of the MidSTEP Tool can be used as a valid and reliable measurement tool to assess midwifery students' perceptions of their clinical learning environment experiences and the positive effects of instructors on the professional development of midwifery students. It is thought that the answers given by the students to the measurement tool after the assessment can provide positive feedback and guidance to preceptors in universities and practice settings on how best to provide quality clinical education to midwifery students.

Ethical approval

A university ethics committee provided approval for the study on June 28, 2022 (28.06.2022/26).

CRediT authorship contribution statement

Demet Aktaş: Data curation, Formal analysis, Writing – original draft. **Sakine Yilmaz:** Data curation, Formal analysis, Writing – original draft.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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