ORIGINAL ARTICLE

Developing and testing the EPICC Spiritual Care Competency Self-Assessment Tool for student nurses and midwives

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Abstract

Aims and objectives: To develop and psychometrically test a self-assessment tool that measures undergraduate nursing and midwifery students' perceptions of spiritual care competence in health care practice.

Background: Spiritual care is part of nurses/midwives' responsibility. There is a need to better benchmark students' competency development in spiritual care through their education. The EPICC Spiritual Care Education Standard served as groundwork for the development of the EPICC Spiritual Care Competency Self-Assessment Tool.

Design: Cross sectional, mixed methods design. A STROBE checklist was used.

Methods: The Tool (available in English, Dutch and Norwegian) was developed by an international group. It was tested between July–October 2020 with a convenience sample of 323 nursing/midwifery students at eight universities in five countries. The Tool was tested for validity using Kaiser–Meyer–Olkin (KMO) test, exploratory and confirmatory factor analysis, one-way ANOVA and independent samples t test. The reliability was tested by Cronbach's *alpha* coefficient. Qualitative data were analysed using thematic analysis.

Results: The KMO test for sampling adequacy was 0.90. All, but two, items were related to the same factor. Cronbach's *alpha* coefficient for the Tool was 0.91. Students found the Tool easy to use, and they gained new insights by completing it. However, students felt that some questions were repetitive and took time to complete.

Conclusions: The Tool has construct and discriminant validity, and high internal consistency (is reliable). In addition, students found the Tool useful, especially in early stages of education.

Relevance to clinical practice: The Tool affords student nurses and midwives the opportunity to self-evaluate their knowledge, skills and attitudes about spirituality and spiritual care. The Tool offers students, educators and preceptors in clinical practice a tangible way of discussing and evaluating spiritual care competency.

1 | INTRODUCTION

It is widely acknowledged that spiritual care is a part of the nurse and midwives' (N/M) responsibility (International Council of Nursing, 2021), and is embedded in many nursing theories such as Henderson, Travelbee, Martinsen and Neuman (Alligood, 2018). Moreover, it is a part of the documentation system used in some healthcare systems (Giske et al., 2021). Some countries use the International Council of Nurses' International Classification for Nursing Practice (ICNP), while others utilise NANDA I (North American Nursing Diagnosis Association and NIC Nursing Interventions Classification) (Herdman & Kamitsuru, 2018) in their documentation systems. However, N/M continue to report that they are unsure about what spirituality is and that they are poorly prepared for spiritual care in clinical practice (Egan et al., 2017; McSherry & Jamieson, 2013).

Internationally, many researchers have published on spiritual care education, and multiple strategies have been suggested (Rykkje et al., 2021). These include development of spiritual care competencies (Attard et al., 2019a, 2019b; van Leeuwen & Cusveller, 2004; Van Leeuwen et al., 2009), creation of unique clinical experiences for students (Huehn et al., 2019), and efforts to justify a consistent inclusion across curricula (Cone & Giske, 2018; Giske & Cone, 2012; Lewinson et al., 2015). A prospective, longitudinal correlational study in eight European countries at 21 universities found that students' perceived competence increased significantly during their education, which they attributed to caring for patients, own life events, education at the university and reflecting on practice. Perceived competency was significantly correlated with the students' own spirituality and perception of spirituality/spiritual care (Ross et al., 2018). A study by Kuven and Giske (2019) underlined the importance of mandatory participation in spiritual care education because students found the subject to be private and personal, taboo. Studies around the world reveal the importance of intentional spiritual care education for professional's health care (Australia—Jones et al., 2020; China—Hu et al., 2019; Iran—Babamohamadi et al., 2018; Sweden—Henoch et al., 2013; Turkey—Yilmaz & Gurler, 2014; USA – Kincheloe et al., 2018) to benefit patients and/or their families (Denmark—Hvidt et al., 2018; USA—Koenig et al., 2017). A study from Iran (Yousefzadeh, 2017) points to the importance of self-assessment for continuous improvement in education in nursing and midwifery.

1.1 | Background

To contribute to a more common understanding of what knowledge, skills and attitudes in spiritual care N/M should acquire at their graduation, a group of European researchers and teachers

> **What does this paper contribute to the wider global clinical community?**
>
> - This paper presents a newly developed valid and reliable self-assessment tool that nursing and midwifery students can use to rate their competency in spiritual care.
> - The Tool, called the EPICC Spiritual Care Competency Self-Assessment Tool, is provided within the manuscript and reference for using it for own personal and professional development is provided.
> - The Tool is written in accessible language (English, Dutch, Norwegian) making it easy to use.

from 21 countries developed a consensus-based spiritual care education standard between 2016 and 2019. The 'EPICC Spiritual Care Education Standard' (McSherry et al., 2020; van Leeuwen et al., 2020; www.epicc-network.org) comprises four core spiritual care competencies for undergraduate nursing and midwifery students. The EPICC work builds upon earlier work of European researchers seeking to develop competency frameworks for nurses and midwives. van Leeuwen and Cusveller (2004) developed a literature-based competency framework of six spiritual care competences, which later was developed and validated into a tool to assess spiritual care competence (Van Leeuwen et al. (2009). Attard's PhD (Attard et al., 2019a, 2019b) build on this work providing a framework of 58 competences for nurses and midwives, and was used as a starting point for the consensus-based EPICC Spiritual Care Educational Standard/'EPICC Standard') (van Leeuwen et al., 2020). The EPICC Standard consists of four subscales (competences), each with 5–8 items (total 28 items) as shown in Table 1. The four subscales/competences are (a) intrapersonal spirituality, (b) interpersonal spirituality, (c) assessment and planning of spiritual care and (d) intervention and evaluation of spiritual care. The four subscales set out the knowledge, skills and attitudes relevant to each competency.

To provide context, the EPICC Standard also includes definitions of spirituality and spiritual care based upon the European Association for Palliative Care's (EAPC) (Nolan et al., 2011) and NHS Education for Scotland (2010) definitions, respectively (Van Leeuwen et al., 2020).

> Spirituality: *'The dynamic dimension of human life that relates to the way persons (individual and community) experience, express and/or seek meaning, purpose and transcendence and the way they connect*

TABLE 1 The four competences with knowledge, skills and attitudes of the EPICC Spiritual Care Education Standard

Competencies	Knowledge (cognitive)	Skills (functional)	Attitude (behavioural)
INTRAPERSONAL SPIRITUALITY Is aware of the importance of spirituality on health and well-being	- Understands the concept of spirituality - Can explain the impact of spirituality on a person's health and well-being across the lifespan for oneself and others - Understands the impact of one's own values and beliefs in providing spiritual care	- Reflects meaningfully upon one's own values and beliefs and recognises that these may be different from other persons' - Takes care of oneself	- Willing to explore one's own and individuals' personal, religious, and spiritual beliefs - Is open and respectful to persons' diverse expressions of spirituality
INTERPERSONAL SPIRITUALITY Engages with persons' spirituality, acknowledging their unique spiritual and cultural worldviews, beliefs and practices	- Understands the ways that persons' express their spirituality - Is aware of the different world/religious views and how these may impact upon persons' responses to key life events	- Recognises the uniqueness of persons' spirituality - Interacts with and responds sensitively to the person's spirituality	- Is trustworthy, approachable and respectful of persons' expressions of spirituality and different world/religious views
SPIRITUAL CARE: ASSESSMENT AND PLANNING Assesses spiritual needs and resources using appropriate formal or informal approaches, and plans spiritual care, maintaining confidentiality and obtaining informed consent	- Understands the concept of spiritual care - Is aware of different approaches to spiritual assessment - Understands other professionals' roles in providing spiritual care	- Conducts and documents a spiritual assessment to identify spiritual needs and resources - Collaborates with other professionals - Be able to appropriately contain and deal with emotions	- Is open, approachable and non-judgemental -Has a willingness to deal with emotions
SPIRITUAL CARE: INTERVENTION AND EVALUATION Responds to spiritual needs and resources within a caring, compassionate relationship	- Understands the concept of compassion and presence and its importance in spiritual care - Knows how to respond appropriately to identified spiritual needs and resources Knows how to evaluate whether spiritual needs have been met	- Recognises personal limitations in spiritual care giving and refers to others as appropriate - Evaluates and documents personal, professional and organisational aspects of spiritual care giving, and reassess appropriately	- Shows compassion and presence - Shows willingness to collaborate with and refer to others (professional/nonprofessional) - Is welcoming and accepting and shows empathy, openness, professional humility and trustworthiness in seeking additional spiritual support

to the moment, to self, to others, to nature, to the significant and/or the sacred. The spiritual field is multidimensional:

1. *Existential challenges (e.g. questions concerning identity, meaning, suffering and death, guilt and shame, reconciliation and forgiveness, freedom and responsibility, hope and despair, love and joy).*
2. *Value-based considerations and attitudes (e.g. what is most important for each person, such as relations to oneself, family, friends, work, aspects of nature, art and culture, ethics and morals, and life itself).*
3. *Religious considerations and foundations (e.g. faith, beliefs and practices, the relationship with God or the ultimate).'*

Spiritual care: *'Care which recognises and responds to the human spirit when faced with life-changing events (such as birth, trauma, ill health, loss) or sadness, and can include the need for meaning, for self-worth, to express oneself, for faith support, perhaps for rites or prayer or sacrament, or simply for a sensitive listener. Spiritual care begins with encouraging human contact in compassionate relationship and moves in whatever direction need requires'* (Van eeuwen et al., 2020).

The EPICC Standard has influenced nursing and midwifery education in over 26 universities across 16 countries (https://blogs.staffs.ac.uk/epicc/files/2021/01/Use-and-Value-of-the-EPICC-Outputs-final.pdf) to better prepare newly qualified nurses and midwives to

provide spiritual care in practice. Clinicians and educators from as far afield as Brazil, China, Venezuela, Canada, USA and Kenya have joined the EPICC Network (June 2020), and the Network has over 200 ResearchGate followers from Asia, Africa, North/South America and Australia, suggesting that the EPICC Standard may have utility beyond Europe (McSherry et al., 2020; van Leeuwen et al., 2020).

This article focuses on further development of the EPICC Standard (Table 1 and https://blogs.staffs.ac.uk/epicc/files/2020/08/EPICC-Spiritual-Care-Education-Standard.pdf) into a self-assessment tool (from now on referred to as the Tool) by members of the 'Spiritual Care and Practice Development' (SEP) project. This is a group of Norwegian and international researchers who obtained funding (from VID University Norway) for this purpose (https://www.vid.no/en/research/vids-fremragende-forskningsmiljoer/sep/).

2 | METHODS

2.1 | Aim

The aim of this study was to develop and then test and validate the psychometric properties of the Tool.

2.2 | Design

A cross-sectional, mixed methods research design was adopted, involving the collection of quantitative and qualitative data. Quantitative data enabled calculation of construct validity, cross-cultural validity, discriminant validity and reliability of the Tool. Qualitative data provided reflections from respondents on their perceived competence, offering an avenue for examining content validity of the Tool and providing feedback about its usefulness. The Strengthening the Report of Observational Studies in Epidemiology (STROBE) checklist was used for this project (STROBE, 2022, see Supplementary checklist).

2.3 | Sample/participants

A convenience sample of undergraduate nursing/midwifery students (n = 4479) from eight universities in five countries (California, USA; England, UK; Ghana; the Netherlands; Norway; Wales, UK) where the authors worked were invited to take part in the study. Four universities were secular and four were Christian (Table 2). Students received an email from their university explaining the project and inviting them to take part, and it contained an information sheet and the link to the Tool. Two or three reminders were sent in the weeks thereafter. Additionally, an open invitation to complete the Tool was placed on some students' university learning platforms.

For each country, we aimed to have a minimum of 60 fully completed Tools to achieve a minimum total of 300 fully completed. This was to enable data analysis per country as well as overall. Power analysis was based on literature: using the rule of a minimum ratio of 10 respondents to 1 item for scale development, we needed $10 \times 28 = 280$ respondents (Morgado et al., 2017), and using the sample size rules of thumb from Wilson VanVoorhis and Morgan (2007), we needed around 300 respondents for factor analysis.

2.4 | Development of the tool

The original EPICC Standard (Table 1) was changed to make it suitable for self-assessment. Self-assessment tools usually have statements with 'I', because people then can easily identify themselves with the content of the sentence. So, the 28 statements were rephrased to begin with 'I'… Next, a 4-point Likert scale was added to each statement to enable students to score themselves (range: 1 = 'not very' to 4 = 'very').

TABLE 2 Number of students (invited and responded) per country, course and year of study, plus KMO test

Country			Norway	California, USA	England, UK	Wales, UK	Ghana	The Netherlands	Total
Culture university			Secular (2) and Christian (1)	Christian	Secular	Secular	Christian	Christian	
Course	Nursing		65	33	36	32	72	56	294
	Midwifery		—	—	20	6	3	—	29
Year of study	1		—	—	8	12	3	5	28
	2		34	12	35	14	2	19	116
	3		31	7	13	12	14	15	92
	4		—	14	—	—	56	17	87
Total response			65	33	56	38	75	56	323
Total invited			1262	330	656	1400	131	700	4479
KMO			0.65	0.38	0.65	0.57	0.75	0.67	0.9

Abbreviation: KMO, Kaiser–Meyer–Olkin test for sampling adequacy.

Some questions about personal information were added to the start of the Tool: course of study (nursing or midwifery), country, year of study (range: 1 to 4). Age and gender were not requested, because previous research showed these characteristics were not significantly correlated with perceived spiritual care competency (Ross et al., 2018) and we aimed to keep the questionnaire as short as possible. Open response sections were added after each of the 4 competences so students could write their reflections relating to the following questions: (a) 'What is your strength?' and (b) 'Which areas do you need to develop?'. A final open response section was added enquiring about the usefulness of the Tool: (a) 'How useful was the Tool? In which ways?', (b) 'How clear was it?', (c) 'How likely is it that you will use it again?' and (d) 'How would you improve it?'.

2.4.1 | Translation of the tool

The Tool (originally in English) was translated by forward–backward translation into Norwegian and Dutch based on Martins et al. (2015) stepwise protocol:

- Step 1—Two separate translators familiar with both languages and the objectives of the Tool translate the Tool from English to the new language
- Step 2—Project Leader examines the translation
- Step 3—Two separate translators familiar with both languages but not with the Tool translate it back to English (two versions)
- Step 4—An Expert Panel examines both the translation and the original version to finalise the document in the new language. The Expert Panel is made up of 6 members, including nurses, researchers, educators, subject area experts and a tool validation expert.

In this study, we used English, Norwegian and Dutch versions of the Tool.

2.4.2 | Data collection

Between July and October 2020, university teachers or course administrators sent an email to students inviting them to complete the Tool. The invitation was also placed on some student online learning platforms during this time. By clicking on the link in the email or on the website, the students were directed to the online Tool on the Enalyzer platform which was used to build and administer the Tool and provided anonymity. Students in England, Wales, Ghana and the USA were sent the English version of the Tool; Norwegian students were sent the Norwegian version; and students from the Netherlands were sent the Dutch version. Following the completion deadline (30 October 2020), answers were downloaded from the website and saved per country. The Tools from individuals who did not rate *all* the statements were excluded. Qualitative data were saved per country (in Excel and Word) and sent to the relevant author/lead researcher in each country for separate analysis.

2.5 | Ethical considerations

Prior to the commencement of the study, ethical approval was obtained from *ethics committees within participating universities or countries as required by each country. Participation was voluntary, and no identifiable data were gathered, so anonymity and confidentiality were assured. No pressure was put on students to complete the Tool. The invitation stated that answering the questions implied consent.

2.6 | Data analysis

Only fully completed Tools were included in the analysis. These were merged into one database using IBM SPSS statistics version 27. Item names were abbreviated using the name of the subscale, a shorter version of 'knowledge', 'skills' and 'attitude' and a number (see Table S1).

2.6.1 | Quantitative analyses

Descriptives
First, descriptive analyses of the student characteristics were performed. After that, we analysed range, mean, standard deviation, skewness (measure of asymmetry; should be below 1), kurtosis (description of tailedness; should be below 1) and item-total correlation per item of the Tool. Skewness and kurtosis were analysed to see whether the answers were according to a normal distribution. Item-total correlation was analysed to check inconsistency: items with a correlation value less than 0.3 are inconsistent with the average behaviour of the other items. The score of the subscales for the Tool as a whole is the sum of all scores on the statements divided by the number of statements in the subscale or total Tool (so, it is the mean score).

Validity
To test *discriminant validity* of the Tool, to see whether the Tool could be used to detect differences between groups, all student and school characteristics (course of study, year of study, country, culture of school) were used. The mean score for the Tool as a whole was calculated by the sum of all scores on the statements divided by the number of statements in the total Tool. Scores from subgroups from the student and school characteristics were tested by one-way ANOVA (for differences between more than two groups) or the independent samples *t* test (for differences between two groups). After a significant ANOVA, *t* tests were performed to check which group had an extraordinary score.

The Kaiser–Meyer–Olkin (KMO) sampling adequacy test was performed to establish whether underlying factors may explain the variance in scale responses. A KMO value equal to or more than 0.6 was considered just significant (Anthoine et al., 2014); however, >0.8 is more typical. It was calculated for the database as a whole and per country. To find out whether there was *cross-cultural validity*, exploratory factor analysis was executed for all countries with a KMO value >0.8, to verify if the same statements loaded on the first factor in the different countries.

To check the *construct validity* and uncover an underlying structure of this set of variables, Bartlett's sphericity test for factor analysis compatibility was performed (if significant, than factor analysis is compatible) and an exploratory factor analysis was executed (with and without items with an item-total correlation below 0.3). The next setting was used: extraction of principal components, based on Eigenvalue greater than 1 and no rotation matrix. Evidence that the items could be aggregated into a single scale score was tested by examining whether the test indicated a unifactorial solution and whether items loaded significantly (>0.35) on the first factor (Streiner, 1994). If items load on one factor, they are related to the same latent variable, concept or construct, despite apparent differences in content. Factors should have at least three items with a loading greater than 0.4 (Streiner, 1994). To confirm the construct validity, confirmatory factor analysis was performed with IBM SPSS AMOS 26 graphics (with and without items with an item-total correlation below 0.3). Standardised estimates/regression weights were calculated (have to be >0.7) next to (default) model fit: CMIN/df (have to be below 5), chi-squared test (CMIN have to be non-significant, otherwise poor fit [or a big sample size]), comparative fit index (CFI has to be >0.95), root mean square error of approximation (RMSEA <0.08 is acceptable, <0.06 is better) (Hu & Bentler, 1999).

Reliability

To check *reliability* with the internal consistency, Cronbach's *alpha* coefficient was calculated for the Tool as a whole and for the 4 subscales. A value over 0.7 was considered acceptable, over 0.8 good or fair, and over 0.9 excellent (DeVellis, 2012). For Cronbach's *alpha* coefficients >0.9 inter-item correlations were analysed, to identify potential redundancies among the items. This may be the case if a correlation between two items is >0.8.

Qualitative analysis

Thematic analysis (Braun & Clarke, 2006) was used for qualitative responses to the following questions: (a) 'How useful was the Tool? In which ways?', (b) 'How clear was it?', (c) 'How likely is it that you will use it again?' and (d) 'How would you improve it?'. Researchers from each country analysed their own data by open coding and searched for themes. They met virtually to present, compare and discuss the initial themes. After that each country continued to analyse their data before we met again to discuss the main- and sub-themes until consensus was reached and we could write up our findings together.

3 | RESULTS

3.1 | Respondents

A total of 4479 students were invited to take part in the study; 866 students started to fill in the Tool, and 323 completed it fully. Two hundred and fourteen ($n = 214$) students stopped answering the questions after the first competency, another 211 stopped after the second competency, and a further 118 after competency 3. There were no differences in mean scores between the students who fully and partially completed the Tool. The response rate was 7% of all invited and 37% of those who started to fill in the Tool. Table 2 shows the number of students who fully completed the Tool per course, country and year of study. We were aiming for 60 completions per country, which was achieved for Norway and Ghana but not for the other countries, England and the Netherlands had just below 60, and USA (California) and Wales between 30–40 responses.

3.2 | Validity of the tool

3.2.1 | Descriptive analyses of items

For most items, the whole range of scores was used (1–4), only for two items just 2–4 were used. The lowest mean score of the items was 2.23 and the highest 3.80. There are quite a few items with a high skewness and kurtosis (9 items), which means that the answers of these items are skewed (mostly negative, seeing the minus before the 1) and too peaked (value above +1). Two items had an item-total correlation value below 0.3 (IntraSkil1 and IntraSkil2), which means that they are inconsistent with the average behaviour of the other items. However, the other ones were acceptable (For all numbers see Table S2).

3.2.2 | Discriminant validity

There is a significant difference in mean scores between the years of study of the students (year 1: mean 3.0, year 2–4: mean 3.2 or 3.3), between countries (California, USA, has a mean score of 3.5, while the other countries have scores of 3.1 to 3.3) and between secular (mean score 3.1) or Christian schools (mean score 3.3). There is no statistically significant difference between nursing and midwifery students (both had a score of 3.2). This means that the Tool has discriminant validity (for all number see Table S3.)

3.2.3 | *Cross-cultural validity*

The KMO sampling adequacy test was performed for each country separately (last row Table 2). The KMO test for the whole database was 0.90, but the KMOs per countries were below 0.8, so we only performed analyses with the whole dataset (This means that the cross-cultural validity analysis was not possible).

TABLE 3 Exploratory factor analysis

Item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
IntraKnow1	0.621	−0.264	−0.156	−0.104	0.424
IntraKnow2	0.653	−0.264	−0.284	−0.042	0.338
IntraKnow3	0.571	−0.031	−0.434	0.007	0.271
IntraSkil1	0.327	0.149	−0.371	0.394	0.126
IntraSkil2	0.216	0.034	0.092	0.606	0.250
IntraAttid1	0.476	0.352	−0.126	0.208	0.035
IntraAttid2	0.409	0.504	0.016	0.130	−0.131
InterKnow1	0.607	−0.142	−0.389	0.076	−0.136
InterKnow2	0.511	−0.077	−0.342	0.265	−0.243
InterSkil1	0.512	0.211	−0.435	−0.109	−0.184
InterSkil2	0.602	0.218	−0.155	−0.095	−0.262
InterAttid1	0.442	0.545	0.108	0.156	−0.186
AssPlKnow1	0.726	−0.310	−0.040	−0.093	0.081
AssPlKnow2	0.642	−0.415	0.097	0.060	−0.189
AssPlKnow3	0.584	−0.322	0.109	−0.123	−0.214
AssPlSkil1	0.613	−0.327	0.297	0.126	−0.252
AssPlSkil2	0.482	−0.102	0.362	0.200	−0.251
AssPlSkil3	0.472	0.148	0.468	0.083	0.366
AssPlAttid1	0.370	0.506	0.151	0.082	−0.107
AssPlAttid2	0.440	0.477	0.303	−0.016	0.343
IntEvalKnow1	0.593	0.084	−0.053	−0.424	−0.040
IntEvalKnow2	0.678	−0.241	0.112	0.060	0.071
IntEvalKnow3	0.664	−0.412	0.192	0.015	0.008
IntEvalSkil1	0.627	−0.090	0.130	−0.365	0.016
IntEvalSkil2	0.649	−0.333	0.258	0.140	−0.069
IntEvalAttid1	0.528	0.427	0.143	−0.166	0.162
IntEvalAttid2	0.486	0.446	0.055	−0.344	−0.008
IntEvalAttid3	0.470	0.531	−0.050	−0.002	−0.115
Eigenvalue	8.38	2.97	1.69	1.30	1.21
% of Total variance explained	30	11	6	5	4
Cumulative. %	30	41	47	51	55

3.2.4 | Construct validity

Bartlett's test of sphericity for factor analysis compatibility was significant ($X^2 = 3630.304$, df = 378, p-value = .000). Table 3 shows which items loaded significantly on the first five factors in exploratory factor analysis. All items, except two (the skills statements of the first competency: IntraSkil1 and IntraSkil2), loaded (>0.35) on factor 1, so these items are related to the same latent variable, concept or construct (*spirituality*). On the second factor, all items with respect to attitude loaded, so these items are related to the same concept (*attitude*). On Factors 3 to 5, there were only one or two items with a loading factor over 0.4. If we leave out the two items with a low item-total correlation (IntraSkil1 and IntraSkil2) and run the exploratory factor analysis again, the result is quite the same: all items load on the first factor and the attitude items load on the

second factor (see Table S4) (Barlett's test of sphericity significant, $X^2 = 3508.527$, df = 325, p-value = 0.000). The items in the first 2 factors accounted for 41% of the variance.

Figure 1 shows the result of the confirmatory factor analysis of the whole Tool, with all items. Not all standardised estimates/regression weights (the numbers in the figure) are below 0.7, which means that the correlations of these items with the latent factor are not that high. The correlations between the competencies/subscales are acceptable (>0.7). This confirmatory factor analysis shows the same as the exploratory factor analysis: the items IntraSkil1 and IntraSkil2 have a low estimate/correlation with the subscale and the items with respect to attitude also have a relative low estimate/correlation with the subscales (below 0.5): which shows: they are different from the other ones. Just as seen in in the exploratory factor analysis: IntraSkil1 and 2 are extraordinary and loaded together on Factor 4
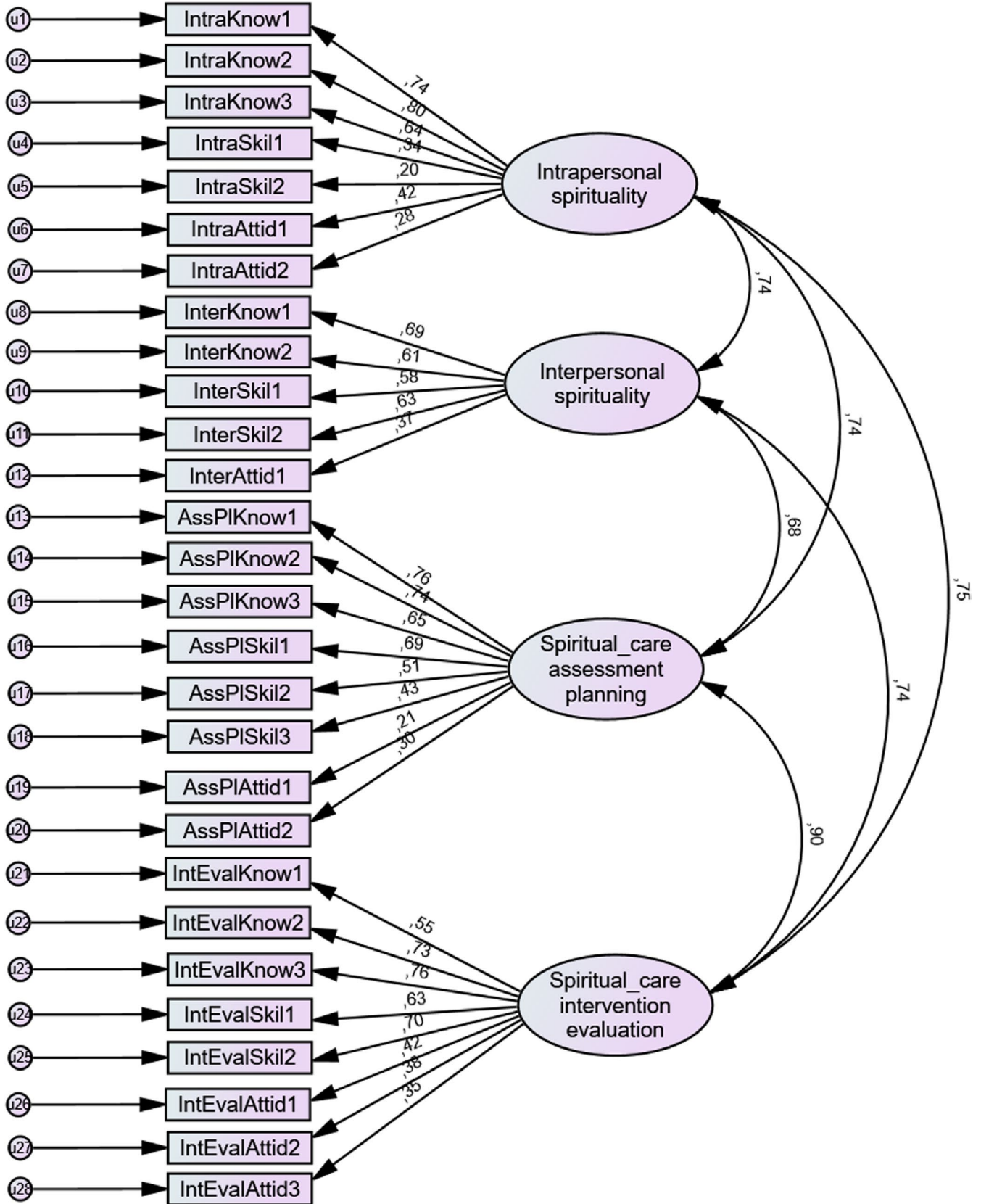
FIGURE 1 Confirmatory factor analysis

and the items with respect to attitude were loading on the second factor (next to on the first).

The fit indices for the model were not below or above the thresholds, except: CMIN/df = 4.09 [below 5 was ok]. Other indices: *p*-value CMIN = 0.000 [is significant instead of non-significant; but this can be caused by the sample size], CFI =0.688 [is not above 0.9], RMSEA = 0.098 [is not below 0.08]. Each item (except one (IntraSkil2)) loaded significantly onto its corresponding first-order factor. If the model is run without the two items IntraSkil1 and IntraSkil2 (see Figure S1), the standardised estimates and the fit indices for the model do not change in the right direction (CMIN/df = 4.47 [not lower (=better fit), but higher], *p*-value CMIN = 0.000 [still significant], CFI = 0.694 [still not above 0.9], RMSEA = 0.104 [still not below 0.08])).

3.3 | Reliability and internal consistency of the tool

Cronbach's *alpha* coefficient of the Tool as a whole was 0.91. The value above 0.7 indicates that it is excellent. The Tool is highly reliable. If the two items (IntraSkil1 and IntraSkil2) are excluded, Cronbach's *alpha* is the same: 0.91. Cronbach's *alpha* for the subscales/competencies was between 0.7–0.8. Cronbach's *alpha* for all items with respect to attitude was 0.8, for all items with respect to skills 0.7 and for all items with respect to knowledge 0.9. Therefore, the internal consistency of the subscales is also acceptable.

Because of the high Cronbach's *alpha* coefficient, inter-item correlations are analysed, to identify potential redundancies among the items: there were not correlations >0.8 (See Table S5).

3.4 | Student reflections on the usefulness of the tool

Students reflected on the usefulness of the Tool by answering an open question. They reflected on awareness of spirituality and spiritual care, on insight gained into their personal learning process and on the content and the structure of the Tool. Reflections ranged from 'very useful' to 'difficulty in usefulness', though the majority indicated it was useful. Students also offered suggestions for improving the Tool. Table 4 provides an overview of the outcomes that were derived from the open comments of students from the participating countries. Most of the students found the Tool very useful for gaining insight on the concept of spirituality and for gaining insight on their personal growth and learning process. The Tool generated (new) insights in spirituality and spiritual care and helped to identify elements of spiritual care competences for self-improvement.

Some students reported difficulty in using of the Tool, regarding lack of conceptual clarity about spirituality and spiritual care, seemingly due to lack of education and/or because of their missed experiences from healthcare practice. This seemed especially relevant for students in the early stage of their education. Students who were close to graduation commented that the Tool did not add much to their competence development. Most of the students were positive about the content and structure of the Tool, in terms of clear item description and the method of scoring and manageability of the Tool. Some students had difficulty understanding some items in the Tool, and some felt the instructions could have been clearer. Students at the start of their education seemed to require more clarification and explanation. Almost all students commented that it was unnecessary to have reflective questions after

TABLE 4 Student reflections on the usefulness of the tool

	Usefulness	Difficulties	Suggestions for improvement
Insight in spirituality and spiritual care	Reflection on different aspects of spirituality and spiritual care promotes gaining new insights Identification of gaps in patient care	Lack of teaching Unclear what spiritual care means Difficult to connect with personal competence	Use tool together with teaching Add insight on the goals of spiritual care
Insight in personal learning processes	Assessment of knowledge, skills and attitude for self-improvement Highlight and reminder of strengths and limitations in spiritual care	Little (or no) experience in healthcare practice Insufficient insight in self Experience no added value to learning process	Repeated assessment during education Add question about experience as point of reference Add more specific questions to improve answers
Content of the tool	Clear, coherent, and easy to use Confirms awareness	Difficult to understand Some repetitive or similar questions	Formulate clear, concise questions Add introduction and instruction Add examples or cases
Structure of the tool	Ticking questions are clear Numbering scores 1–4 with explanation Subdivision in competences	Confusing, unclear structure Takes too much time to complete Missing overview of the tool because of questions on different pages	Technical improvements by online measurement Likert scale with introduction Only one open reflection at the end

TABLE 5 Final version of the EPICC Spiritual Care Competency Self-Assessment Tool

This self-assessment tool allows you to evaluate your level of knowledge, skills, and attitudes in four key areas of competencies for spiritual care. Spirituality and spiritual care are understood as:

Spirituality: The dynamic dimension of human life that relates to the way persons (individual and community) experience, express and/or seek meaning, purpose and transcendence, and the way they connect to the moment, to self, to others, to nature, to the significant and/or the sacred

The spiritual field is multidimensional:

Existential challenges (e.g., questions concerning identity, meaning, suffering and death, guilt and shame, reconciliation and forgiveness, freedom, and responsibility, hope and despair, love and joy)

Value-based considerations and attitudes (e.g., what is most important for each person, such as relations to oneself, family, friends, work, aspects of nature, art and culture, ethics and morals, and life itself)

Religious considerations and foundations (e.g., faith, beliefs and practices, the relationship with God or the ultimate)

EAPC (n.d.). *EAPC Task Force on Spiritual Care in Palliative Care*. Retrieved from: https://www.eapcnet.eu/eapc-groups/task-forces/spiritual-care. Last accessed 18/02/19

Spiritual care: Care which recognises and responds to the human spirit when faced with life-changing events (such as birth, trauma, ill health, loss) or sadness, and can include the need for meaning, for self-worth, to express oneself, for faith support, perhaps for rites or prayer or sacrament, or simply for a sensitive listener. Spiritual care begins with encouraging human contact in compassionate relationship and moves in whatever direction need requires

van Leeuwen, R., Attard, J., Ross, L., Boughey, A., Giske, T., Kleiven, T., & McSherry, W. (2020). The development of a consensus-based spiritual care education standard for undergraduate nursing and midwifery students: An educational mixed methods study. *Journal of Advanced Nursing*. 00, 1-14. https://doi.org/10.1111/jan.14613

Please score yourself from 1 – 5 on each of the competencies, where 1 = Completely disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Completely agree

Please write a short reflection at the end about your own competence in spiritual care

Competency 1. INTRApersonal (*within you*) spirituality

Knowledge	I understand the concept of spirituality	1	2	3	4	5
	I can explain the impact of spirituality on a person's health and well-being across the lifespan for myself and others	1	2	3	4	5
	I understand the impact of my own values and beliefs in providing spiritual care	1	2	3	4	5
Skills	I reflect meaningfully upon my own values and beliefs and recognise that these may be different from other *people's* values and beliefs	1	2	3	4	5
	I take care of my *own well-being*	1	2	3	4	5
Attitude	I am willing to explore my own personal, religious, and spiritual beliefs	1	2	3	4	5
	I am open and respectful to *people's* diverse expressions of spirituality	1	2	3	4	5

Competency 2. INTERpersonal (*related to others*) spirituality

Knowledge	I understand the ways that *people* express their spirituality	1	2	3	4	5
	I am aware of the different world/religious views and how these may impact upon *people's* responses to key life events	1	2	3	4	5
Skills	I recognise the uniqueness of *people's* spirituality	1	2	3	4	5
	I interact with, and respond sensitively to *people's* spirituality	1	2	3	4	5
Attitude	I am trustworthy, approachable, and respectful of *people's* expressions of spirituality and different world/religious views	1	2	3	4	5

Competency 3. Spiritual care: assessment and planning

Knowledge	I understand the concept of spiritual care	1	2	3	4	5
	I am aware of different approaches to spiritual assessment	1	2	3	4	5
	I understand other professionals' roles in providing spiritual care	1	2	3	4	5
Skills	I can conduct and document a spiritual assessment to identify spiritual needs and resources	1	2	3	4	5
	I can collaborate with other professionals *in the provision of spiritual care*	1	2	3	4	5
	I *can* appropriately contain and deal with emotions	1	2	3	4	5
Attitude	I am open, approachable, and non-judgmental	1	2	3	4	5
	I *am willing* to deal with emotions	1	2	3	4	5

Competency 4. Spiritual care: intervention and evaluation

Knowledge	I understand the concept of compassion and presence and its importance in spiritual care	1	2	3	4	5
	I know how to respond appropriately to identified spiritual needs and resources	1	2	3	4	5
	I know how to evaluate whether spiritual needs have been met	1	2	3	4	5

TABLE 5 (Continued)

Skills	I recognise my personal limitations in spiritual care giving and refer to others as appropriate	1	2	3	4	5
	I evaluate and document personal, professional, and organisational aspects of spiritual care, and reassess appropriately	1	2	3	4	5
Attitude	I show compassion and presence	1	2	3	4	5
	I am willing to collaborate with and refer to others (professional/non-professional) *in providing spiritual care*	1	2	3	4	5
	I am welcoming and accepting and show empathy, openness, professional humility, and trustworthiness in seeking additional spiritual support	1	2	3	4	5

This section is for you to reflect on your own competencies in spiritual care
A. What are your strengths? B. Which areas do you need to develop further? C. How might you do that?
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This self-assessment tool was developed from the EPICC Spiritual Care Education Standard which you can find on the EPICC Network website www.epicc-network.org

each competency, suggesting that it would be better to include these only at the end.

3.5 | The final version of the tool

After reviewing the statistics and the open comments from students, we made some changes to the Tool (highlighted in italics in Table 5). The preamble from the EPICC Standard (van Leeuwen et al., 2020) was added, providing definitions of spirituality and spiritual care, to give the student some background and reference. We adjusted two points concerning the text: a further explanation of 'intrapersonal' and 'interpersonal' was provided by adding '(within you)' and '(related to others)', respectively, to headings of Competences 1 and 2, and 'person' was changed to 'people'. The 4-point Likert scale was changed to a 5-point Likert scale, as used by Leeuwen et al. (2009) and to reduce skewness and kurtosis.

Because the students said the reflective questions were too repetitive, they were removed from the end of each competency. The only reflective section was at the very end of the Tool where the wording was changed to: 'A What are your strengths? B. Which areas do you need to develop further? And C. How might you do that?'. Table 5 shows the final version of the Tool.

4 | DISCUSSION

The aim of this study was to develop and test the psychometrics of the EPICC Spiritual Care Self-Assessment Tool, which we did through statistical and qualitative analysis of the students' feedback. We assume that the students who took part in this study gave honest answers since it was an anonymous online survey. By using open questions for reflections and an invitation to provide feedback on the tool at the end, respondents were not forced in a particular direction; they could fill in what they felt was important to them. We therefore consider the students' responses as valid and reliable. We also consider the reliability of the analysis of the open questions as strong because we first analysed them country by country, then discussed them in the whole group and the final analysis was conducted by two researchers (RvL, JL-S) working together.

Overall, the statistical findings of the Tool reveal that it is a valid tool for self-assessment and that for almost all items the item-total correlation is within acceptable limits, and discriminant validity is shown. Next to this, all but two items load on one factor, next to that all attitude items load on another factor, and Cronbach's *alpha* are high. This is not surprising since we built the Tool from the already established EPICC Spiritual Care Educational Standard, developed by educators and researchers from 21 European countries over three years. The rigour with which the original researchers developed the four competencies of the EPICC Standard (van Leeuwen et al., 2020) created a smooth pathway for the development of this self-assessment Tool. Why the confirmatory factor analysis did not fully confirm this, require further investigations.

The statement with the lowest item-total correlation and loading lowest on the first factor in the exploratory factor analysis (IntraSkil2) was revised, as can often be the case in tool development. It may be that this factor is not seen as a skill and needs to be stated in a different way to be clearly related to the concept/construct in the Tool. In nursing, self-care is often taught to patients and their families, but nurses may neglect self-care of themselves. Some nurses may feel that it is selfish or self-centred to focus on self-care and their own well-being. However, Schwartz et al. (2021) remind us that nurses are vulnerable to stress overload and need to develop good networks, identify resources to stay healthy and practice healthy self-care by managing of stress and utilising healthy coping strategies. This is something that needs to be explored further.

The EPICC Standard was developed within Europe, which is diverse in relation to languages and how history has shaped cultures and life views in the various countries. The Tool was translated into Dutch and Norwegian and was thus tested in three languages. In addition, we worked with researchers from California and Ghana, which provided us with the opportunity to test the Tool in two other continents outside of Europe. The nursing school in California is a private Christian University where integration of the Christian faith is embedded in all courses across the university. This might be the reason why the students from California scored on average higher

than the other students. In Ghana, they do not teach spiritual care as part of their nursing education since spiritual care is seen as a way of life rather than a nursing procedure. The testing of the Tool has thus been conducted in different countries to ensure that concepts and constructs are understood by people from different cultures, and we hope to continue that effort and invite scholars around the world to further test the newly developed Tool. In the future, it is particularly important to determine how the key concepts used in the Tool are understood outside the Judeo-Christian world view.

It is interesting to note that there were no statistically significant differences in overall findings across the languages used in this study. The evidence of acceptable reliability and validity found in all three languages is reassuring as the SEP team considers ongoing work of translation into other languages. Moreover, the qualitative data paralleled the quantitative results, which reinforces the strength and quality of the Tool.

4.1 | Understanding of spirituality and spiritual care

One of the areas some students commented on was that they were unclear what spirituality and spiritual care meant because the terms were not defined in the Tool. Some students commented that they had not had any teaching or training about the subject. Uncertainty related to how to understand spirituality and thus spiritual care is a well-known challenge within nursing (McSherry et al., 2020; Weathers et al., 2016). This was also something we worked on in the EPICC project (van Leeuwen et al., 2020) and where we, through a consensus process, agreed on the EACP's definition of spirituality (Nolan et al., 2011) and the revised definition about spiritual care from NHS Education for Scotland (van Leeuwen et al., 2020). These are definitions that hold a broad view of spirituality and spiritual care, which is found to correlate with higher self-reported spiritual care competences in the only longitudinal-, multinational- and large-scale study conducted in the area of spiritual care education with N/M students (Ross et al., 2018). Therefore, we added the definitions of spirituality and spiritual care from the EPICC Standard to the new Tool to bring clarity for students.

What this research also showed, was that knowledge and skills are connected and differ from attitude. All items with respect to attitude loaded on the second factor in exploratory factor analysis, and all those items also had a low correlation in confirmatory factor analysis. So, attitude in spiritual care is different from knowledge and skills in spiritual care and is unique. This was also seen in the higher scores for attitude items, as also shown in our previous study (Ross et al., 2018).

4.2 | Importance of reflection

Self-reflection is widely used in healthcare education because it is seen as an important pedagogical tool to develop and integrate professional knowledge into practice (Balgopal & Montplaisir, 2011; Kuven & Giske, 2019; Ross et al., 2018). The Tool provides students with an opportunity to assess themselves on the four spiritual care competences considered as core to undergraduate nursing/midwifery education in Europe. The final Tool has 28 items for self-assessment using a 5-point Likert scale and just one final question inviting students to write a reflection about their strengths, areas for development with actions. In this way, we make it less time consuming to use the Tool, but still invite the student to complete a summary reflection.

We see the self-assessment Tool as a valuable trigger for students to reflect on their level of knowledge and skills, together with the core attitudes outlined in the Tool. The score from 1–5 provides a visual pattern of their knowledge, skills and attitudes scored across the four competences at a certain point in time. The visual pattern can challenge students to reflect around questions, such as if their attitudes score higher than their skills and knowledge, and what it means for their clinical practice if their scores are higher for Competency 1 (Intrapersonal spirituality) than Competency 4 (Spiritual care: intervention and evaluation). However, as much as self-reflection through self-assessment can be very helpful for students in their learning process, we acknowledge the limitation it can have and the importance of external assessment of students' spiritual care competences in clinical placements.

4.3 | Limitations

The response rate was probably not that high in this study because of the special circumstances due to the COVID-19 pandemic. Students were busy with providing care and/or with managing education at home, causing extra stress. With so much online education, an additional request to complete a survey with reflective questions may have been too much for them. Additionally, the invitation was only announced online, without an explanation from a teacher, so students might not have felt the solidarity with their school or with their teachers, making them less inclined to take part. Many students started to fill in the questionnaire but did not finish it. Students may have been put off by the repetitive reflective questions after each competence or there may have been too many items. However, when all data were combined, there were enough responses to analyse and validate the self-assessment Tool with statistical significance. Therefore, the results of this study may be generalisable to nursing and midwifery students in Europe and beyond, but it is not clear if this applies to qualified nurses and midwives.

The students who participated may be more interested in spirituality and spiritual care than those who did not; however, that did not influence the results of this validation study. Unfortunately, the number of completed questionnaires per country was not enough to conduct exploratory factor analyses per country or to establish cross-cultural validity. In our future work, we aim to add more countries to improve the generalisability of the tool and to explore whether spirituality as defined in the Tool is a global concept.

4.4 | Considerations for ongoing development

Spiritual issues touch what is deeply important to people, so it is best whether these phenomena are addressed in your mother (native) tongue. That is why the students from Norway received the tool in Norwegian and those from the Netherlands read it in Dutch. To minimise conceptual differences during translation, a standardised protocol was used (Martins et al., 2015). However, challenges in translation of spirituality and spiritual care materials into different languages and cultures require more than word-for-word translation to develop concepts and language that is meaningful to students within their nursing/midwifery tradition.

It is important to use local experts not only in language but also in culture and in the subjects of nursing/midwifery and spirituality, so that the end product becomes culturally sensitive. Translation teams will need to be formed with various experts who are fluent in both English and the new language. Being familiar with the language and culture and knowing nursing and midwifery practice in a specific country will ensure that the spiritual concepts and constructs are understood in the new language and/or culture. Every time the Tool is translated into another language, researchers must test it using the same protocol presented by Martins et al. (2015) to ensure it is true to the original Tool while demonstrating relevance in the new language and/or culture. We welcome people to translate the EPICC Standard and the EPICC Tool; however, it should only be done with written permission from the EPICC Steering group.

5 | CONCLUSION

While tools exist for assessment of patient spirituality and spiritual needs, few self-evaluation tools are available for N/M students in this area. Therefore, an instrument for self-assessment was needed to increase awareness and knowledge and to improve skills and attitudes in the domain of spirituality and spiritual care. This EPICC Spiritual Care Self-Assessment Tool is a valid and reliable tool that N/M students can use to evaluate their own competences.

Students who responded to the call to test the new self-assessment Tool found it beneficial with some minor changes. The tool has good psychometrics in three languages, so it may be useful across many areas of the world. Moreover, qualitative data reinforced the quantitative findings and statistical analyses.

6 | RELEVANCE TO CLINICAL PRACTICE

Students noted that they have few role models in clinical practice, and we think the use of the Tool in continued education for working nurses and midwives will enhance their ability to act as role models in spiritual care for students.

This newly developed Tool can be used by students and working professionals in nursing and midwifery. It could also be useful in clinical practice to evaluate the effectiveness of teaching and learning strategies designed to enhance healthcare professional's development in knowledge, skills and attitudes about spirituality and spiritual care. Globally, nurses report that they do not have adequate preparation and training for spiritual care in their bachelors' education programmes. We recommend the use of the EPICC Spiritual Care Education Standard along with the newly developed EPICC Spiritual Care Self-Assessment Tool to raise awareness of the spiritual domain and to provide opportunities for personal and professional growth in this area for both N/M students and healthcare professionals.

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REFERENCES

Alligood, M. R. (Ed.). (2018). *Nursing theorists and their work*, 9th ed. Elsevier.

Anthoine, E., Moret, L., Regnault, A., Sebille, V., & Hardouin, J. B. (2014). Sample size used to validate a scale: A review of publications on newly developed patient reported outcomes measures. *Health and Quality of Life Outcomes*, *2014*(12), 176. https://doi.org/10.1186/s12955-014-0176-2

Attard, J., Ross, L., & Weeks, K. W. (2019a). Design and development of a spiritual care competency framework for pre-registration nurses and midwives: a modified Delphi study. *Nurse Education in Practice*, *39*, 96–104. https://doi.org/10.1016/j.nepr.2019.08.003

Attard, J., Ross, L., & Weeks, K. W. (2019b). Developing a spiritual care competency framework for pre-registration nurses and midwives. *Nurse Education in Practice*, *40*, 102604. https://doi.org/10.1016/j.nepr.2019.07.010

Babamohamadi, H., Ahmadpanah, M. S., & Ghorbani, R. (2018). Attitudes toward spirituality and spiritual care among Iranian nurses and nursing students: A cross-sectional study. *Journal of Religion and Health*, *57*(4), 1304–1314. https://doi.org/10.1007/s10943-017-0485-y

Balgopal, M. M., & Montplaisir, L. M. (2011). Meaning making: What reflective essays reveal about biology students' conceptions about natural selection. *Instructional Science*, *39*(2), 137–169. https://doi.org/10.1007/s11251-009-9120-y

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Cone, P. H., & Giske, T. (2018). Integrating spiritual care into nursing education and practice: Strategies utilizing Open Journey Theory. *Nurse Education Today*, *71*, 22–25. https://doi.org/10.1016/j.nedt.2018.08.015

DeVellis, R. F. (2012). *Scale development: Theory and applications* (pp. 109–110). Sage.

Egan, R., Llewellyn, R., Cox, B., MacLeod, R., McSherry, W., & Austin, P. (2017). New Zealand nurses' perceptions of spirituality and spiritual care: Qualitative findings from a national survey. *Religions*, *8*(5), 79. https://doi.org/10.3390/rel8050079

Giske, T., & Cone, P. H. (2012). Opening up to learning spiritual care of patients: A grounded theory study of nursing students. *Journal of Clinical Nursing*, *21*(13–14), 2006–2011. https://doi.org/10.1111/j.1365-2702.2011.04054.x

Giske, T., Damsma-Bakker, A., Caldeira, S., González-Romero, G. M., de Abreu, W. C., & Timmins, F. (2021). Competence 4: Spiritual care, intervention and evaluation. In W. McSherry, A. Boughey, & J. Attard (Eds.), *Enhancing nurses' and midwives' competence in providing spiritual care through innovative education and compassionate care* (pp. 131–149). Springer.

Henoch, I., Danielson, E., Strang, S., Browall, M., & Melin-Johansson, C. (2013). Training intervention for health care staff in the provision of existential support to patients with cancer: A randomized, controlled study. *Journal of Pain and Symptom Management*, *46*(6), 785–794. https://doi.org/10.1016/j.jpainsymman.2013.01.013

Herdman, T. H., & Kamitsuru, S. (Eds.) (2018). *Nursing diagnoses: Definitions & classification.*, 2018–2020, 11th ed. Thieme.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118

Hu, Y., Jiao, M., & Li, F. (2019). Effectiveness of spiritual care training to enhance spiritual health and spiritual care competency among oncology nurses. *BMC Palliative Care*, *18*(1), 1–8. https://doi.org/10.1186/s12904-019-0489-3

Huehn, S. L., Kuehn, M. B., & Fick, K. E. (2019). Integrating spiritual care during interprofessional simulation for baccalaureate nursing students. *Journal of Holistic Nursing*, *37*(1), 94–99. https://doi.org/10.1177/0898010119835616

Hvidt, E. A., Ammentorp, J., Søndergaard, J., Timmermann, C., Hansen, D. G., & Hvidt, N. C. (2018). Developing and evaluating a course programme to enhance existential communication with cancer patients in general practice. *Scandinavian Journal of Primary Health Care*, *36*(2), 142–151. https://doi.org/10.1080/02813432.2018.1459235

International Council of Nursing (2021). The ICN Code of Ethics for Nurses. https://www.icn.ch/system/files/2021-10/ICN_Code-of-Ethics_EN_Web_0.pdf

Jones, K. F., Pryor, J., Care-Unger, C., & Simpson, G. K. (2020). Rehabilitation health professionals' perceptions of spirituality and spiritual care: The results of an online survey. *NeuroRehabilitation*, *46*(1), 17–30. https://doi.org/10.3233/NRE-192857

Kincheloe, D. D., Stallings Welden, L. M., & White, A. (2018). A Spiritual Care Toolkit: An evidence-based solution to meet spiritual needs. *Journal of Clinical Nursing*, *27*(7–8), 1612–1620. https://doi.org/10.1111/jocn.14265

Koenig, H. G., Perno, K., Erkanli, A., & Hamilton, T. (2017). Effects of a 12-month educational intervention on clinicians' attitudes/practices regarding the screening spiritual history. *Southern Medical Journal*, *110*(6), 412–418. https://doi.org/10.14423/smj.0000000000000657

Kuven, B., & Giske, T. (2019). Talking about spiritual matters: First years nursing students' experiences of an assignment on spiritual care conversation. *Nurse Education Today*, *75*, 53–57. https://doi.org/10.1016/j.nedt.2019.01.012

Lewinson, L. P., McSherry, W., & Kevern, P. (2015). Spirituality in pre-registration nurse education and practice: A review of the literature. *Nurse Education Today*, *35*(6), 806–814. https://doi.org/10.1016/j.nedt.2015.01.011

Martins, A. R., Pinto, S., Caldeira, S., & Pimentel, F. (2015). Translation and adaptation of the spirituality and spiritual care rating scale in Portuguese palliative care nurses. *Journal of Nursing Reference [revista De Enfermagem Referência]*, *4*, 89–97. https://doi.org/10.12707/RIII13129

McSherry, W., & Jamieson, S. (2013). The qualitative findings from an online survey investigating nurses' perceptions of spirituality and spiritual care. *Journal of Clinical Nursing*, *22*(21–22), 3170–3182. https://doi.org/10.1111/jocn.12411

McSherry, W., Ross, L., Attard, J., van Leeuwen, R., Giske, T., Kleiven, T., Boughey, A., & the EPICC Network. (2020). Preparing undergraduate nurses and midwives for spiritual care: Some developments in European education over the last decade. *Journal of the Study of Spirituality*, *10*(1), 55–71. https://doi.org/10.1080/20440243.2020.1726053

Morgado, F. F. R., Meireles, J. F. F., Neves, C. M., Amaral, A. C. S., & Ferreira, M. E. C. (2017). Scale development: Ten main limitations and recommendations to improve future research practices. *Psychology: Research and Review*, *30*, 3. https://doi.org/10.1186/s41155-016-0057-1

Nolan, S., Saltmarsh, P., & Leget, C. (2011). Spiritual care in palliative care: Working towards an EAPC Task Force. *European Journal of Palliative Care*, *18*, 86–89.

Ross, L., McSherry, W., Giske, T., van Leeuwen, R., Schep-Akkerman, A., Koslander, T., Hall, J., Steenfeldt, V. Ø., & Jarvis, P. (2018). Nursing and midwifery students' perceptions of spirituality, spiritual care, and spiritual care competency: A prospective, longitudinal, correlational European study. *Nurse Education Today*, https://doi.org/10.1016/j.nedt.2018.05.002

Rykkje, L., Søvik, M. B., Ross, L., McSherry, W., Cone, P., & Giske, T. (2021). Educational interventions and strategies for spiritual care in nursing and healthcare students and staff: A scoping review. *Journal of Clinical Nursing*(pp. 1-25) https://doi.org/10.1111/jocn.16067. Online ahead of print.

Schwartz, A., Baume, S. A., Patel, J., Genders, N., & Ali, G. (2021). Self-care (pp 77–93). In W. McSherry, A. Boughey, & J. Attard (Eds.), *Enhancing Nurses' and Midwives' Competence in Providing Spiritual Care Through Innovative Education and Compassionate Care*. Springer.

Streiner, D. L. (1994). Figuring out factors: The use and misuse of factor analysis. *The Canadian Journal of Psychiatry/La Revue Canadienne De Psychiatrie*, *39*(3), 135–140. https://doi.org/10.1177/070674379403900303

STROBE. (2022). STROBE checklists. https://www.strobe-statement.org/checklists/

Van Leeuwen, R., Attard, J., Ross, L., Boughey, A., Giske, T., Kleiven, T., & McSherry, T. (2020). The development of a consensus-based Spiritual Care Education Standard for undergraduate nursing and midwifery students: An educational mixed methods study. *Journal of Advanced Nursing*, *77*, 1–14. https://doi.org/10.1111/jan.14613

Van Leeuwen, R., & Cusveller, B. (2004). Nursing competencies for spiritual care. *Journal of Advanced Nursing*, *48*(3), 234–246. https://doi.org/10.1111/j.1365-2648.2004.03192.x

Van Leeuwen, R., Tiesinga, L., Middel, B., Post, D., & Jochemsen, H. (2009). The validity and reliability of an instrument to assess nursing competencies in spiritual care. *Journal of Clinical Nursing*, *18*, 2857–2869. https://doi.org/10.1111/j.1365-2702.2008.02594.x

Weathers, E., McCarthy, G., & Coffey, A. (2016). Concept analysis of spirituality: An evolutionary approach. *Nursing Forum*, *51*(2), 79–96. https://doi.org/10.1111/nuf.12128

Wilson VanVoorhis, C. R., & Morgan, B. L. (2007). Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology*, *3*(2), 43–50. https://doi.org/10.20982/tqmp.03.2.p043

Yilmaz, M., & Gurler, H. (2014). The efficacy of integrating spirituality into undergraduate nursing curricula. *Nursing Ethics*, *21*(8), 929–945. https://doi.org/10.1177/0969733014521096

Yousefzadeh, C. M. (2017). The assessment of nursery and midwifery graduate student self evaluation. *Education Strategies in Medical Sciences*, *10*(2), 133–140.

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