

# The Italian validation of the Salford-Scott Nursing Values Questionnaire

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#### **Abstract**

**Background:** To properly direct nursing training and to improve the professional practice to become more effective, it is important to understand students' values. Literature review has shown that there have been changes in students' values in the last 20 years. In contemporary students, a general decrease in altruism has been observed, but also a larger appreciation for honesty toward patients has been declared. The analyzed literature did not find validated tools available in Italian that explore personal and professional values of nursing students.

Design of the study: This study was an Italian linguistic and cultural adaptation of a research tool.

**Purpose:** The authors aimed to validate, for the Italian context, the Salford-Scott Nursing Values Questionnaire, enhanced by Johnson to explore the nursing profession's values.

**Methods:** The Beaton Model was used as well as Valmi's. These models require five phases, with the goal of producing a pre-final version of the instrument for it to then be administered to a sample of the target and expert population.

**Ethical considerations:** The study was approved by the Council of the Nursing Degree University course of the Modena and Reggio Emilia University, Reggio Emilia site, and the identity of the subjects was protected at every moment of the testing.

**Results:** Face validation was achieved since the clarity percentile for each item was 100%. Content validity was also reached, measured from the content validity index and the scale validity index. The study has confirmed the reliability of the instrument's internal consistence with a value of Cronbach's alpha on 0.95 of total of items. The reliability of the test–retest confirms the stability of the instrument in time (r = 0.908; p = 0.01).

**Conclusion:** The study concludes that the instrument is ready to be administered to the target population, a sample group of nursing students.

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#### **Keywords**

Education, instrument, nursing, students, values

## Introduction

Altruism and honesty are important values for nursing practice which not only have a technical nature, but are also based on relationship development and education. Understanding and maintaining personal and professional values of nursing students is indispensable to direct the formation and to improve the effectiveness of the professional nursing practice. The term "altruism" (from Latin "alter," other) is defined as the moral characteristic of bestowing love to others. Altruism commonly means the disposition to take interest in others and their well-being and sacrificing oneself for this; a person is said to be altruistic if he or she unseeingly puts good as the meaning for all actions. Honesty (from Latin "honestas") indicates the human quality to act and communicate in a sincere manner, loyal and transparent, according to moral principles held as being universally valid. This requires abstaining from reprehensible actions in consideration of others, in both absolute ways, as well as in the relationship with oneself, to taking part in a profession and the environment in which one lives.<sup>1</sup>

## **Background**

Pillastrini et al.'s² study of an ethical model of reference for the training of health professionals in our country indicates five ethical values that are defined as "core." Through this model, one intends to evaluate values that students have, with the objective of highlighting fundamental values on which future behavior in practice will be based. The coordinators of the Baccalaureate degrees in health have classified these values, in order of importance, attributing the priority to "sense of obligation and integrity," followed by "excellence" and "empathy" (tied), "responsibility," and the last "dedication." "Dedication" is understood as the interest toward the needs of the patient being placed before one's own needs, and integrates the concept of altruism, whereas the "sense of obligation and integrity" is understood as respect of the rules and people, and can include the concept of honesty.

The ethical behavior of nursing students in an academic and clinical environment has been explored by numerous studies that predict the behavior of future professionals. McCrink<sup>3</sup> points out that when the students interviewed demonstrated a positive attitude toward ethical standards of the profession, they showed a higher ethical effort during helping activities. Lewenson et al.<sup>4</sup> claims that nursing educators must attain full awareness that students who cheat in the classroom can continue to do it even during clinical practice, with negative consequences for the patient. Even Gaberson<sup>5</sup> calls attention to the necessity to correct student dishonesty in the classroom, because it can create obstacles in gaining knowledge and capabilities necessary to offer a standard assistance in clinical environments and puts in jeopardy patients' safety.

On the other hand, Hilbert<sup>6</sup> has highlighted a high incidence of immoral clinical behavior among the students who had dishonest conduct in the classroom; these students had also demonstrated how they did not understand how dishonest behavior in the classroom could negatively influence assistance to patients. Rognstad et al.<sup>7</sup> cautions changes in behavior in nurses' professional values in the late modern society, so much so that altruism, a traditional Christian value, seems to have lost the importance it once had in the past. In fact, a relative ambiguity appears in the concept of altruism in which the attention for the good of others is combined with the interest toward self-realization. The bibliographical review relative to the factors that influence in a positive or negative manner the development of altruistic values and honesty in nursing students has showed two important general themes: these pertain to the motivations that support the choice of the profession and the personal and professional value orientation.

Studies do not always report coherent results. Therefore, for those that pertain to the motivation for the choice of the nursing profession, Eley et al., McLaughlin et al., and Miers et al. place emphasis on altruism, citing secondary factors including career progression, job security, job flexibility, opportunity for various specializations, job locations, working schedules, heightened social status, and the development of new and interesting knowledge and skills. Contrary to the results of the study of Rognstad and Aasland show that during the period of 2001–2003, in Norway, there was an increase in the importance attributed to elevated salaries and the safety of the workplace, meanwhile at the same time there was a shown decrease on the emphasis on human contact.

The most alarming data are regarding the decline of motivation of helping patients. Bell<sup>12</sup> reveals that during professional activity, there is a growing tendency among youth to place their own feelings and moods before the values of obligations and altruism. Such a discovery could probably explain why graduates attribute more importance to the values of job safety and salary that are an expression of individualism. The results of the studies that speak to the personal and professional value orientation among the students seem quite coherent between themselves. In fact, Thurston et al.<sup>13</sup> place individual values of personal achievement being life's main objective, meanwhile between instrumental values, that is, desired behaviors, taking care with love, honesty, and responsibility.

These results are in line with those of Thorpe and Loo, <sup>14</sup> where the profile of emerged values of nursing students is represented primarily from personal development and from altruism. Even in Lyckhage and Pilhammar's <sup>15</sup> study, the student's perception of an altruistic nurse, ability to feel empathy, and sincere interest for people, but also be autonomous and responsible, with a high social role and various work opportunities, emerged. Contrary to what has been supported until now, Rassin<sup>16</sup> has registered the regression of altruistic values and equity, supplanted from respect of human dignity and the prevention of suffering, right after those in order of importance—reliable and honesty—were classified in the relationships between healthcare workers and patients.

Moreover, Rognstad et al.<sup>7</sup> reveal a strong ambiguity connected to the concept of "altruism," because students exhibit the desire to be recognized by patients for their own professional activities. Students are constantly searching for positive feedback, which compensates for their actions, and this attitude is not coherent with the selfless commitment for the good of others, which connotes the true meaning of the term altruism. Rassin,<sup>17</sup> like other researchers, observed the depreciation of the value of altruism among the nursing students, when for many years it was considered the most important value of assistance. One finds changes in students' values in Johnson et al.'s<sup>18</sup> study that emphasized that in the last 20 years, in contemporary students, there has been a general decrease in altruism, but a better appreciation for honesty toward patients.

According to these authors, the changes are ascribed to various demographic characteristics of modern students, in particular, the average higher age with respect to the past and the cultural, social, and professional evolution.

Literature review did not reveal any studies that describe the value orientation among Italian nursing students. As indicated by Gaberson,<sup>5</sup> to structure a curriculum that fosters personal development and moral of students, it is important to understand whether for Italian students, the trend toward devaluation of altruism and toward the emergence of values related to individuality is comparable to that reported in the literature. It is therefore essential to use a tool designed to explore the framework of the values of the students.

In the analyzed literature, valid instruments in Italian were not found that explore the personal and professional values that nursing students have. The purpose of this study is the Italian validation of an instrument already used in other countries, having seen the importance of knowing the nursing students' value system and its relapse that this has on the effectiveness of assistance and to implement appropriate educational interventions to promote the ethical development of the profession.

|                          | Age  |    | Ge   | ender  |           |       |                         |
|--------------------------|------|----|------|--------|-----------|-------|-------------------------|
|                          | Mean | SD | Male | Female | Year c    | ourse | Qualification           |
| Students (40)            | 26   | 6  | 17   | 23     | l° = 2° = |       | _                       |
|                          |      |    |      |        | 3° =      |       | _                       |
| Expert panel (10 tutors) | 47   | 7  | I    | 9      | 13        | 8     | RN BSN = 6 $RN MSN = 4$ |

**Table 1.** Demographic characteristics of the sample.

BSN: Bachelors of Science in Nursing; MSN: Master of Science in Nursing; RN: registered nurse.

# **Purpose**

The purpose of this study was to complete the linguistic and cultural validation for the Italian context of the Salford-Scott Nursing Values Questionnaire in the integrated version written by Johnson et al.<sup>18</sup>

## **Methods**

# Design of the study

This study was designed as a validation and linguistic and cultural adaptation of a research instrument.

#### Instrument

The instrument has been developed on the basis of a questionnaire created by Scott<sup>19</sup> and successively changed by Robinson et al.<sup>20</sup> Johnson et al.<sup>18</sup> integrated the 20-item questionnaire, based on literature, drawing specific attention to the values of the nursing profession, in particular, to the values of altruism and honesty. The aim of the questionnaire is to measure the value direction of nursing contexts. The instrument is in English. The internal reliability data for the "nursing" items was tested using a Cronbach's alpha coefficient and the value of 0.83 was obtained.

# Sample

The sample of students is probabilistic: 40 students were chosen randomly from a list of all attending students (521) of the Nursing University Degree at the Modena and Reggio Emilia University (Reggio Emilia site).

The sample of experts is probabilistic: 10 tutors were chosen randomly from a list of all tutors (26) employed at Nursing University Degree at the Modena and Reggio Emilia University (Reggio Emilia site).

The demographic characteristics of the sample are shown in Table 1.

The randomization occurred by selecting subjects from the sample groups by randomly distributing a series of numbers supplied by a statistician.

## Method

To carry out the validation process and the linguistic-cultural adaptations, models of Beaton et al.<sup>21</sup> and Sousa and Rojjanasrirat<sup>22</sup> were used. Face and content validity, internal consistency reliability, and the stability of reliability were sought. The criteria validation was not sought because there are no specific gold

standard instruments that exist in the Italian context. The construct validity will be discussed in a future report.

The validation methodology predicts the following phases:

Phase I: The questionnaire was translated by two subjects who have the following characteristics, with the scope to gather, in a more precise manner, the nuances of language and cultural differences. One of the two translators is bilingual with respect to the destination language and speaks fluently the original language of the questionnaire (O) and the destination language (T). In addition, the translator in question also possesses profound knowledge of both cultures, as defined by Sousa and Rojjanasrirat. The other translator's a mother tongue is the language in which the instrument is written, and this translator is also bilingual, as defined by Beaton et al. One of the translators did not have the knowledge of the contents and the terminology of the instrument, but was familiar with colloquial phrases and common use of the destination language, whereas, the other translator had a relative knowledge of the questionnaire's contents as Sousa and Rojjanasrirat recommend. The translators worked individually and produced a written report in which they commented explicitly on the uncertainties and difficult phrases that had to be translated and the cognitive processes that directed their choices. This phase generated two versions of the questionnaire in the destination language (T1/T2).

Phase II: The two translations of the questionnaire have been integrated into one version, with both translators present, a supervisor and members of the research team. The group collaborated on the goal of confronting the relative dissimilarities of the meanings of the words and sentences between the original version and the two translations, and in the end to produce a single version of the instrument in the destination language (T12).

Phase III: A translation of the questionnaire was elaborated from Italian to the original language, which is English, as a control process of the validation of the instrument. The translation, based on the guidelines set by Beaton et al.<sup>21</sup> and Sousa and Rojjanasrirat,<sup>22</sup> was done by two subjects whose mother tongue was English and were blind to the original version of the questionnaire. The translators were different from those of the previous phases. One of the translators did not have knowledge of the contents nor the terminology of the instrument, but had familiarity with colloquial phrases and the common use of the original language, whereas the other translator had relative knowledge of the questionnaire. This phase produced two versions of the instrument in the original language (O1/O2).

Phase IV: The five versions of the instrument (O1-O2-T12-T1-T2) were evaluated by a multi-disciplinary expert team with the scope of reaching a trans-cultural equivalence and therefore the content validation. The composition of this committee included one statistical expert of validation methods, all members of the research team (a research nurse and two RN MSNs (registered nurses with Masters of Science in Nursing) who had been working for more than 10 years in the Nursing University Degree and that teaching ethics) and all translators involved in the process until this point. The members of the multidisciplinary committee of experts achieved consensus on all the versions of the questionnaire and developed the pre-final version for field testing. The committee elaborated the pre-final version of the instrument, verifying the semantic equivalence (same word significance), idiomatic equivalence (substitution of the colloquial expressions and ways of saying difficult-to-translate with equivalent expressions), experiential equivalence (substitution of expressions, that refer to non-achievable activities in the culture in which the test will be administered, with activity expressions equivalent for that culture), and conceptual equivalence (evaluation and revision of concept significances that can be different among various cultures).

Phase V: The pre-final version of the questionnaire was administered to a sample of subjects belonging to the target population, namely 40 nursing students and a group of 10 experts, to seek the face and content validation and the stability of reliability.

To seek face validation, we proceeded to the administration of the questionnaire asking students to evaluate the indications and the elements of the questionnaire using a dichotomous scale ("clear" or "not clear") and to give suggestions on the modality with which one could reformulate the instrument's elements to make them more understandable. Subsequently, we proceeded to verify the percent of the answers "clear" and "not clear" given for each item: if the item was identified as "not clear" for more than 20% of the students, it was reformulated and re-evaluated. The questionnaire was evaluated also by a group of 10 experts who knew the contents of the instrument, the characteristics of the target population, and whose mother tongue was the destination language. Experts estimated the clarity of elements of the questionnaire: if the item was identified as "not clear" by more than 20% of the experts, it was reformulated and re-evaluated. Subsequently, the group of experts evaluated each element of the questionnaire for content validity, using the following Likert scale: not significant = 1, little significance = 2, quite significant = 3, and very significant = 4. As per internal consistent reliability of the instrument, Cronbach's alpha was calculated. For the stability of reliability, the questionnaire was administered a second time (after 15 days) to the expert group, asking them to evaluate each element of the instrument using the following Likert scale: not significant = 1, little significant = 4.

## Data collection tool

The Italian pre-final version of Johnson et al.'s <sup>18</sup> Salford-Scott Nursing Values Questionnaire contains three sections. The first contains 37 items that describe general behaviors that could be adopted by any person. The second section is characterized by 20 items that inquire about the thoughts of professionals of the nursing profession. The third section is made up of 18 items dedicated to the collection of demographic data. Items in section 1 and 2 are numerically unchanged from the original version, while items in section 3 have gone from 12 in the original version, to 18 in this version. In section 3, some items have been added and substituted since they refer to activities or conditions that are not possible in Italy, where the test will be administered. The substitutions will use expressions of activities or conditions that are equivalent for our culture.

## Data collection

The administering of the questionnaires to the students and the expert panel to evaluate the clarity of the items was done two times since the threshold of 80% clarity was not reached for each item at the first administration. The first administration occurred from the 1–5 October 2012. The second administration occurred from the 15–19 October 2012. Subsequent to the evaluation of the clarity of each item, the questionnaire was administered to the expert panel for validation evaluation of content in the week from 22–26 October 2012

For the evaluation of the stability of reliability, the two administrations to the expert panel occurred 15 days from one another, in the week from 26 November 2012 to 1 December 2012, and during the week from the 17–22 December 2012.

The questionnaire is in an anonymous format and was handed out individually in a closed envelope by the tutors of the Nursing Degree University course at the Modena and Reggio Emilia University, Reggio Emilia site. Data were collected in pen-and-paper survey format.

## Data analysis

Calculations of frequency and percentage were used for face validation. For content validation, the index of content validity (I-CVI) was used, in which a panel of content experts was asked to rate each item on the scale in terms of its relevance to the underlying construct, and the index of the scale validity (S-CVI) was also used. There are three ways to calculate S-CVI. The method chosen for this study was the averages calculation (S-CVI/AVE). It was decided that an acceptable level of I-CVI was 0.8 and that for S-CVI was 0.9. The internal consistency reliability was evaluated using the statistical tool Cronbach's alpha. The stability and reliability were evaluated using the test–retest methodology, calculating the Pearson index (Pearson's r). Pearson index was calculated on the sample to ensure anonymity. The statistical analysis was completed using Excel 2007 Microsoft software and IBM's Statistical Program for the Social Sciences (PASW statistics 18).

## Ethical considerations

The study was approved by the Council of the Nursing Degree University course of the Modena and Reggio Emilia University, Reggio Emilia site. The identity of the subjects was protected at every moment of the testing. A container was used in which the tutors of the Nursing Degree course placed the completed questionnaires. This guaranteed the maintenance of anonymity. A complete instruction sheet was supplied to the interviewees that included an explanation of the research and its goal, what was expected by the respondent, a statement of anonymity, and the indication that returning the completed questionnaire would have had a value of informed consensus to the participation in the study.

## Results

To seek the face value, a first administration of the pre-final version of Johnsons et al.'s<sup>18</sup> Salford-Scott Nursing Values Questionnaire was given to the students and the expert panel, asking them to judge whether the items were clear or not clear and suggest corrections. The results from the first administration highlighted the items that had obtained points related to the superior clarity or equal to 80% and those that had obtained points less than 80%. The points given to each item in section 1, section 2, and section 3 are represented in Table 2.

According to Sousa and Rojjanasrirat<sup>22</sup> methodological approach, it was necessary to re-evaluate the items judged not clear, that had been modified by the multidisciplinary expert committee, taking into account the suggestions made by the sample. Subsequently, there was a second administration to the students and the expert panel. After the second administration, all of the items had received points above 80% in all the sections (Table 3).

The content validity was evaluated with the administration of the questionnaire to the expert panel by inserting a Likert scale that asked to estimate each item as not significant = 1, little significant = 2, quite significant = 3, and very significant = 4. Following the administration of the content validity, each item had not reached an I-CVI equal to or superior to 0.8; so these items were eliminated as supported by Polit and Tatano Beck.<sup>23</sup> The data of I-CVI to establish content validity are demonstrated in Table 4. The items of the section 1 have been reduced from 37 to 33 because elements 13-15-22-31 have been eliminated. The items from section 2 have been reduced from 20 to 19, because item 19 has been removed. The items from section 3 have been reduced from 18 to 17, because item 18 has been removed. The results from the calculation of I-CVI and S-CVI divided by sections in relation to the content validity are presented in Table 5. Internal consistency reliability of the questionnaire of 0.95, for the section 1 was 0.87, for the section 2 was 0.91, and for section 3 was 0.94.

| Table 2. Points in percentile attributed to items of the three sections of the questionnaire relative to "clear"/"not clear" |  |
|--|--|
| at the first administration.   |  |

|         | ı I—item ev<br>ot clear Firs | `       | ,    |             |          | m evaluated<br>rst administ | ` '  | Section 3—item evaluated clear/not clear First administ          |     |           |  |
|---------|------------------------------|---------|------|-------------|----------|-----------------------------|------|--|-----|-----------|--|
| N admi  | inistered qu                 | estions | 37   | N administe | ered que | estions                     | 20   | N administered questions N clear questions N not-clear questions |     | 18        |  |
| N clear | questions                    |         | 20   | N clear que | stions   |                             | 10   |  |     | 18        |  |
| N not-  | clear questio                | ons     | 17   | N not-clear | questic  | ons                         | 10   |  |     | 0         |  |
| (       | Clear                        | Not c   | lear | Clear       | -        | Not c                       | lear | Clear  |     | Not clear |  |
| sct04   | 90                           | sct01   | 70   | mar-02      | 90       | mar-01                      | 60   | ı  | 100 |           |  |
| sct05   | 100                          | sct02   | 70   | mar-03      | 80       | mar-05                      | 40   | 2  | 90  |           |  |
| sct06   | 90                           | sct03   | 70   | mar-04      | 90       | mar-06                      | 70   | 3  | 80  |           |  |
| sct09   | 80                           | sct07   | 70   | mar-10      | 90       | mar-07                      | 60   | 4  | 100 |           |  |
| sct10   | 80                           | sct08   | 60   | mar-11      | 80       | mar-08                      | 70   | 5  | 90  |           |  |
| sct12   | 80                           | sctll   | 70   | mar-12      | 90       | mar-09                      | 70   | 6  | 100 |           |  |
| sct13   | 90                           | sct14   | 70   | mar-13      | 90       | mar-14                      | 70   | 7  | 100 |           |  |
| sct15   | 90                           | sct16   | 60   | mar-15      | 90       | mar-16                      | 70   | 8  | 100 |           |  |
| sct17   | 90                           | sct20   | 60   | mar-17      | 90       | mar-18                      | 70   | 9  | 100 |           |  |
| sct18   | 90                           | sct22   | 70   | mar-20      | 90       | mar-19                      | 70   | 10   | 100 |           |  |
| sct19   | 100                          | sct23   | 70   |             |          |                             |      | 11   | 100 |           |  |
| sct21   | 80                           | sct25   | 70   |             |          |                             |      | 12   | 90  |           |  |
| sct24   | 90                           | sct27   | 70   |             |          |                             |      | 13   | 100 |           |  |
| sct26   | 100                          | sct29   | 70   |             |          |                             |      | 14   | 100 |           |  |
| sct28   | 80                           | sct30   | 70   |             |          |                             |      | 15   | 100 |           |  |
| sct3 l  | 80                           | sct34   | 70   |             |          |                             |      | 16   | 100 |           |  |
| sct32   | 90                           | sct35   | 70   |             |          |                             |      | 17   | 100 |           |  |
| sct33   | 100                          |         |      |             |          |                             |      | 18   | 100 |           |  |
| sct36   | 90                           |         |      |             |          |                             |      |  |     |           |  |
| sct37   | 90                           |         |      |             |          |                             |      |  |     |           |  |

Seeking stability of reliability, the questionnaire was administered a second time, after 5 days to the expert panel. The correlation coefficient expressed through Pearson's r resulted in 0.908 (p = 0.01).

## **Discussion**

The process of validation developed through the translation of the questionnaire from the original language to that of destination. This produced the pre-final version of the instrument.

The methodological journey includes seven passages overall, with this study the first five passages were addressed. The sixth passage is qualified as optional by the authors and consists of the administration of the scale to a sample of bilingual subjects. The seventh passage expects psychometric tests to test the characteristics of the questionnaire on one sample target of the population; this will be the subject of a further study. Presently, the instrument is ready to be administered to the target population, or rather, a sample of nursing students.

The trans-cultural validation of the research instrument is characterized by methodological criticism, in particular, to the quality of the translation and the comparability of the results between various cultural and ethnical groups. It was for this reason that it is not sufficient to just translate the questionnaire literally, but it is necessary to adapt it in a way that its results are understandable and its contents are culturally relevant.

**Table 3.** Points in percentile attributed to items of the three sections of the questionnaire relative to "clear"/"not clear" at the second administration.

| Section I—item evaluated (%) clear/<br>not clear Second administration |    | Section 2—item evaluated (S | ,  | Section 3—item evaluated (%) clear/<br>not clear Second administration |    |  |
|--|----|-----------------------------|----|--|----|--|
| N administered questions   | 37 | N administered questions    | 20 | N administered questions   | 18 |  |
| N clear questions  | 37 | N clear questions           | 20 | N clear questions  | 18 |  |
| N not-clear questions  | 0  | N not-clear questions       | 0  | N not-clear questions  | 0  |  |

| N not-clear questions |       | 0         | N not-clear o | ot-clear questions |           | N not-cle | N not-clear questions |           |
|-----------------------|-------|-----------|---------------|--------------------|-----------|-----------|-----------------------|-----------|
|                       | Clear | Not clear | Clea          | r                  | Not clear | С         | lear                  | Not clear |
| sct01                 | 90    |           | mar-01        | 90                 |           | ı         | 100                   |           |
| sct02                 | 100   |           | mar-02        | 80                 |           | 2         | 90                    |           |
| sct03                 | 90    |           | mar-03        | 90                 |           | 3         | 90                    |           |
| sct04                 | 100   |           | mar-04        | 100                |           | 4         | 100                   |           |
| sct05                 | 100   |           | mar-05        | 90                 |           | 5         | 100                   |           |
| sct06                 | 100   |           | mar-06        | 90                 |           | 6         | 100                   |           |
| sct07                 | 90    |           | mar-07        | 90                 |           | 7         | 100                   |           |
| sct08                 | 80    |           | mar-08        | 100                |           | 8         | 90                    |           |
| sct09                 | 100   |           | mar-09        | 90                 |           | 9         | 100                   |           |
| sct10                 | 90    |           | mar-10        | 90                 |           | 10        | 100                   |           |
| sctll                 | 90    |           | mar-11        | 100                |           | 11        | 100                   |           |
| sct12                 | 90    |           | mar-12        | 100                |           | 12        | 100                   |           |
| sct13                 | 90    |           | mar-13        | 100                |           | 13        | 100                   |           |
| sct14                 | 90    |           | mar-14        | 90                 |           | 14        | 100                   |           |
| sct   5               | 100   |           | mar-15        | 90                 |           | 15        | 90                    |           |
| sct16                 | 90    |           | mar-16        | 90                 |           | 16        | 100                   |           |
| sct l 7               | 100   |           | mar-17        | 100                |           | 17        | 90                    |           |
| sct18                 | 90    |           | mar-18        | 90                 |           | 18        | 100                   |           |
| sct19                 | 100   |           | mar-19        | 90                 |           |           |                       |           |
| sct20                 | 90    |           | mar-20        | 90                 |           |           |                       |           |
| sct21                 | 100   |           |               |                    |           |           |                       |           |
| sct22                 | 90    |           |               |                    |           |           |                       |           |
| sct23                 | 100   |           |               |                    |           |           |                       |           |
| sct24                 | 90    |           |               |                    |           |           |                       |           |
| sct25                 | 90    |           |               |                    |           |           |                       |           |
| sct26                 | 100   |           |               |                    |           |           |                       |           |
| sct27                 | 90    |           |               |                    |           |           |                       |           |
| sct28                 | 90    |           |               |                    |           |           |                       |           |
| sct29                 | 100   |           |               |                    |           |           |                       |           |
| sct30                 | 90    |           |               |                    |           |           |                       |           |
| sct3 l                | 90    |           |               |                    |           |           |                       |           |
| sct32                 | 100   |           |               |                    |           |           |                       |           |
| sct33                 | 90    |           |               |                    |           |           |                       |           |
| sct34                 | 100   |           |               |                    |           |           |                       |           |
| sct35                 | 100   |           |               |                    |           |           |                       |           |
| sct36                 | 100   |           |               |                    |           |           |                       |           |
| sct37                 | 90    |           |               |                    |           |           |                       |           |
|                       |       |           |               |                    |           |           |                       |           |

The major part of instruments had to be translated from English, and therefore, the problem of ethnocentricity (defined as cultural hegemony in international research) may arise. The methodology chosen for linguistic-cultural validation is among the most complex if compared to, for example, that

**Table 4.** I-CVI for each item of the pre-final version of the questionnaire.

| Section I I-CVI |   |       |               | Section 3 I-CVI                         |          |         |               |   |             |    |                           |  |
|-----------------|---|-------|---------------|---|----------|---------|---------------|---|-------------|----|---------------------------|--|
| N signific      | istered questi<br>cant questi<br>gnificant qu | ons   | 37<br>33<br>4 | N administ<br>N significa<br>N not-sign | nt quest | ions    | 20<br>19<br>1 | N administered questions<br>N significant questions<br>N not-significant question |             |    | 18<br>17<br>1             |  |
|                 | e/very  | Not/l |               | Quite/v                                 |          | Not/lit |               | Quite/very  |             |    | Not/little<br>significant |  |
| sıgr            | nificant                                      | signi | ficant        | Signifi                                 | cant     | signifi | icant         | sigr  | significant |    |                           |  |
| sct01           | 0.9   | sct13 | 0.7           | mar-01                                  | 1.0      | mar-19  | 0.7           | 1   | 1.0         | 18 | 0.7                       |  |
| sct02           | 0.9   | sct15 | 0.7           | mar-02                                  | 1.0      |         |               | 2   | 0.9         |    |                           |  |
| sct03           | 1.0   | sct22 | 0.7           | mar-03                                  | 1.0      |         |               | 3   | 0.9         |    |                           |  |
| sct04           | 0.9   | sct31 | 0.6           | mar-04                                  | 1.0      |         |               | 4   | 0.9         |    |                           |  |
| sct05           | 8.0   |       |               | mar-05                                  | 8.0      |         |               | 5   | 0.9         |    |                           |  |
| sct06           | 1.0   |       |               | mar-06                                  | 1.0      |         |               | 6   | 8.0         |    |                           |  |
| sct07           | 8.0   |       |               | mar-07                                  | 1.0      |         |               | 7   | 8.0         |    |                           |  |
| sct08           | 1.0   |       |               | mar-08                                  | 8.0      |         |               | 8   | 8.0         |    |                           |  |
| sct09           | 0.8   |       |               | mar-09                                  | 0.9      |         |               | 9   | 8.0         |    |                           |  |
| sct10           | 1.0   |       |               | mar-10                                  | 1.0      |         |               | 10  | 8.0         |    |                           |  |
| sctll           | 0.9   |       |               | mar-II                                  | 0.9      |         |               | 11  | 0.9         |    |                           |  |
| sct12           | 1.0   |       |               | mar-12                                  | 1.0      |         |               | 12  | 0.9         |    |                           |  |
| sct14           | 1.0   |       |               | mar-13                                  | 1.0      |         |               | 13  | 1.0         |    |                           |  |
| sct16           | 1.0   |       |               | mar-14                                  | 0.9      |         |               | 14  | 0.9         |    |                           |  |
| sct17           | 0.9   |       |               | mar-15                                  | 1.0      |         |               | 15  | 0.9         |    |                           |  |
| sct18           | 1.0   |       |               | mar-16                                  | 8.0      |         |               | 16  | 0.9         |    |                           |  |
| sct19           | 0.9   |       |               | mar-17                                  | 0.9      |         |               | 17  | 0.9         |    |                           |  |
| sct20           | 0.9   |       |               | mar-18                                  | 0.9      |         |               |   |             |    |                           |  |
| sct21           | 1.0   |       |               | mar-20                                  | 1.0      |         |               |   |             |    |                           |  |
| sct23           | 0.8   |       |               |   |          |         |               |   |             |    |                           |  |
| sct24           | 0.9   |       |               |   |          |         |               |   |             |    |                           |  |
| sct25           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct26           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct27           | 8.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct28           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct29           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct30           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct32           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct33           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct34           | 0.9   |       |               |   |          |         |               |   |             |    |                           |  |
| sct35           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct36           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |
| sct37           | 1.0   |       |               |   |          |         |               |   |             |    |                           |  |

I-CVI: index of content validity.

described by Sperber<sup>24</sup> in which the pre-final version of the questionnaire was administered to a sample of subjects belonging to the target population to seek face validity. Sperber's<sup>24</sup> proposal does not seem to be as rigorous as the methodological approach that was chosen for this study in describing the modality of translation and the characteristics of the translators. To validate the translation, it is possible to hypothesize about various methods: an expert group that is bilingual to evaluate the

|                     | ,         |       |
|---------------------|-----------|-------|
| Sections            | Sum I-CVI | S-CVI |
| Section I (item 33) | 31.1      | 0.9   |
| Section 2 (item 19) | 17.9      | 0.9   |

15

64

0.9

0.9

Table 5. Results of the I-CVI and S-CVI relative to content validity.

I-CVI: index of content validity; S-CVI: index of the scale validity.

Section 3 (item 17)

Questionnaire (item 69)

translation, a focus group with subjects that represent the target population, or an expert group of evaluators that does not include translators who are independent from the researchers.

The process of translating the instrument requires ability, knowledge, and experience. The colloquial phrases and those characterized by emotional suggestions can be particularly difficult to handle. Furthermore, the translation could be formally similar to the original language, but some items could be irrelevant for the destination culture, and therefore will need to be reformulated or eliminated. The methodological approach used should avoid the problems described by Sperber<sup>24</sup> and Hilton and Skrutkowski;<sup>25</sup> in particular, it should remedy the criticism represented by the exclusive use of bilingual translators. From a literary analysis emerges the fact that bilingual translators could have adopted values and attitudes of the culture of the second language and given different interpretations from those of a mono-language translator. On the contrary, it can also happen that the bilingual translator who must translate an instrument in a different language from that of the original language is so stimulated by the challenge that the translator acquires the knowledge of the original ethnicity, and consequently offers ethnocentric interpretations.

Analyzing the issue of academic dishonesty among nursing students is important because of its potential negative influence on future professional practice. In fact, as argued by Hoyer et al.,<sup>26</sup> the dishonesty in the clinical setting may result in adverse effects on patients and, at the same time, even dishonesty in the classroom is potentially capable of causing adverse effects on the patients, because it reduces the student's possibilities to learn the knowledge and the skills necessary to operate safely in the clinical area.

That is why Gaberson<sup>5</sup> considers promotion of academic integrity essential; it must be realized in the curriculum of the Nursing Degree through the prevention of dishonest behavior in the classroom, in the laboratory, in the clinic, and through the moral development of nursing students. The structuring of a curriculum that fosters personal and moral development begins with the assessment of level of moral development of students, at the time of their admission to the graduate program, and continues with the assessment of their progress during the course of study. The use of a validated instrument that measures the value orientations of nursing students may be the first step toward the identification of educational strategies that favor moral and personal development.

## **Conclusion**

The effective value of nursing consists in the orientation of professional action to the true need of the patient. The nature of the profession has three components: the collaboration with other professionals for the management of the disease, the relief of symptoms that accompany the disease, and the taking care of the ill patient, with a holistic vision, that is to say, to be interested in the satisfaction of the patients human needs, conditioned by uniqueness of each human being. Therefore, the exclusive development of scientific knowledge and technical ability, in the inside of the nursing profession do not have any value if one loses the focus on the recipient of professional action, that is, man and what he represents: true goodness. "Taking care of" performed by nurses occurs frequently in the action of curing, which requires knowledge and

technical capabilities to undertake clinical/assistance decisions that are most appropriate for the patient. In a relationship with a person, the "taking care of" gives necessary conditions for the promotion of a trusting relationship and effective caring.<sup>27</sup>

The analysis of values of the nursing students, shown in the literary review, has highlighted the modification of personal and professional values of nursing students, particularly the depreciation of the altruistic value and the prevalence of values such as honesty toward the patient. Furthermore, for nursing students, it seems that they integrate themselves with the main values of the profession, including the importance attributed to personal development and self-realization, values to which a positive connotation can be attributed.

Even in our country, nursing training should use instruments, like the one validated in this study, which permit the understanding of a system of personal and professional values for nursing students. It would be interesting to conduct some research to compare the system of professional values between students, newly graduated nurses, and nurses who have been in the profession for a while, all with the goal to understand, as it has been done in other countries, whether time constitutes a factor of modifying professional values. Furthermore, another area in which the validated questionnaire (from this study) could be used in comparing value systems of nursing students with those of students is in non-health faculties. From this, it is interesting to hypothesize, as research shows, that primary values that support the choice of a nursing profession in Italy are prevalently oriented to the goodness of the patient, hence altruism, and respect to the values oriented to personal realization, which are at the base of the choice of other non-health professions.

#### **Conflict of interest**

The authors declare that they have no conflicts of interest.

## **Funding**

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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