Translation, cross-cultural adaptation, and validation of the Swedish version of the female genital self-image scale

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ABSTRACT

Objective: The objective of the study was to translate and culturally adapt the Female Genital Self-Image Scale (FGSIS-7) into a valid and reliable Swedish version, and to test the instrument.

Methods: The instrument was translated into Swedish in a three-stage process of translation, back-translation and synthesis. The face validity of the pre-final translation was tested in a cognitive debriefing with a test group of eight women, while construct validity was tested in a group of six subject matter experts. Internal consistency, data completeness, score distributions, and floor and ceiling effects were measured using an online survey with a cross-sectional design.

Results: The Swedish version of the instrument (SWE-FGSIS-7) was perceived as a comprehensible, understandable and user-friendly instrument by the test group and the experts. The online survey included 147 respondents with 100 % data completeness and no floor or ceiling effects. The internal consistency was good (Cronbach’s Alpha coefficient 0.82). The total mean score was 22.44 (SD = 3.98).

Conclusion: SWE-FGSIS-7 is a user-friendly, understandable, valid and reliable instrument for estimating genital self-image, which can be used to initiate a dialogue that may contribute to increased knowledge about women’s own bodies and strengthen their reproductive and sexual health.

Introduction

Women’s sexual health affects sexual relations and sexual activities throughout life, and is a part of overall self-perceived health. Sexual health and a woman’s perception of herself as a sexual being are both related to her genital self-image [1-3].

There appears to be a lack of knowledge among adolescents and adults with female genitalia regarding normal anatomy of the vulva [4-6]. This is not unexpected, given that the topic is taboo [7]. This lack of knowledge should be considered by healthcare professionals since it implies a need for more effective communication in healthcare settings to reach the goal of understandable sexual and reproductive health information [7,8]. Dissatisfaction with genital appearance has been linked to lower levels of sexual satisfaction [9], less avoidance of sexual risk-taking behaviour [10] and an increase in genital cosmetic surgeries [11], while higher estimated genital satisfaction is linked to healthy sexual behaviours and seeking gynaecological healthcare [12,13]. Studies suggest that education and information about the diversity of normal female genital anatomy can potentially improve women’s genital self-image and thereby lead to improved sexual well-being [14-16].

Healthcare professionals such as midwives and obstetrician-gynaecologists play a role in meeting women and promoting their sexuality through all stages of life. They have opportunities to help women to improve their reproductive and sexual health by encouraging a conversation about normality and satisfaction in relation to women’s genitals. For example, this could be done before, during or after gynaecological examinations. A validated instrument could work as a supportive tool for conversation, and could help to shed light on women’s concerns about genital self-image and initiate this dialogue. Additionally, such an instrument could also enable scientific investigations and comparisons of genital self-image between countries, cultures and subgroups of women. It could also be used in evaluations of interventions, clinical routines and improvement work. To date, no such instrument has been translated into Swedish and adapted to the Swedish population.

The seven item Female Genital Self-Image Scale (FGSIS-7) is a user-friendly and comprehensible instrument for self-assessment of female genital self-image and thereby lead to improved sexual well-being [14-16].

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genital self-image [12,13]. The instrument can initiate and normalize conversations about – and the image of – female genitalia. Thus, the objective of the study was to translate and culturally adapt the Female Genital Self-Image Scale (FGSIS-7) into a valid and reliable Swedish version, and to test the instrument.

Materials and methods

The first part of the two-part study involved translating and culturally adapting FGSIS-7 into Swedish, and evaluating validity (face and construct validity). The second part was a cross-sectional online survey aiming to measure internal consistency, and to measure data completeness, score distributions, and floor and ceiling effects.

Permission to translate the FGSIS-7 instrument into a valid and reliable Swedish version was given by the developers, D. Herbenick and M. Reece, on 4 February 2020.

The FGSIS-7 self-assessment scale

The FGSIS consists of seven items assessing women’s feelings and beliefs about their own genitals using a 4-point Likert-type scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree), with higher scores indicating a more positive self-image. The total sum score ranges from 7 to 28 [13]. The items assess the self-perceived image of genital appearance, smell, and function, and feelings about interpersonal relationships. The validity and reliability of the original instrument were confirmed in the initial validation study performed on a large sample of female college students [17,18]. To this date, FGSIS has also been translated into Turkish [19] and Persian [20].

Translation and cultural adaptation of the Swedish version of FGSIS-7

The translation and cultural adaptation from English into Swedish was performed according to Wild et al. 2005 [21]. The initial translation from English into Swedish was performed independently by two translators. The translators were recruited with the criteria that the target language, Swedish, was their native tongue and that they spoke the source language, English, fluently. In addition, medical competence and medical linguistic competence were required. The two individual translations were reconciled into one version, which was back-translated into English and harmonized with previous translations.

Face validity

Face validity is a qualitative measure of an item’s suitability measured by the target population [21]. The face validity of the pre-final translation was ensured by cognitive debriefing with a test group of eight women aged 21 to 68, all of whom had Swedish as their native tongue. They had various educational levels and occupations. They were recruited via convenience sampling, were asked to participate verbally, and received oral and written information. They were given a link to the digital survey and were informed that their responses would not be taken into account, but were asked to evaluate the language and comprehensibility of the instrument by answering the following questions: Is the language understandable and easy to read? Are there any questions hard to understand? What do you think about the instructions for the instrument? Are there any questions that you find inappropriate or offensive? Do you have any other concerns regarding the wording or questions in the instrument? Their evaluations were expressed in written feedback. The test group was also asked to note how long it took to complete the instrument.

Content validity

Content validity refers to the ability of an instrument to measure the intended subject [22]. The content validity was assessed qualitatively by a group (n = 6) of subject matter experts including two midwives, one gynaecologist, one psychosexual behaviourist and two nurses experienced in gynaecology, representing a range of academic backgrounds from university graduate to associate professor.

Internal consistency, data completeness, score distributions, and floor and ceiling effects

In October 2020, participants were recruited through the social media platform Facebook, where two of the authors posted a link to an online survey version of the translated instrument, together with an information letter. The participants consented to participate in the study by clicking the link and continuing to the online survey. They were informed that they could discontinue their participation at any time by closing the form. Inclusion criteria were speaking and reading Swedish fluently, being 15 years of age or older, and having female genitalia. The Facebook post was shared 23 times. Collected data was transferred and processed in IBM SPSS Statistics for Windows Version 27. Cronbach’s α coefficient was used to evaluate internal consistency, and values >0.70 indicated satisfactory internal consistency [23]. The mean, standard deviations, median and quartile distance were calculated for each item and for the total score. Floor-ceiling effect was expected if more than 15 % of the population received the lowest score (7p) or the highest score (28p) [24].

Ethics statement

Research ethics principles for consent, information and confidentiality according to the Declaration of Helsinki have been taken into account during the work on the study [25]. The study was conducted in accordance with current laws on data protection [26]. Since no personal information was collected, no ethics committee approval is necessary according to Swedish law. The study was approved on 12 January 2021 by Linköping University’s advisory board for studies conducted within the framework of university education according to standard procedure.

Results

Translation and cultural adaptation of the Swedish version of FGSIS-7

No major changes were made to the questionnaire except for the item “I feel positively about my genitals”, which was translated and adapted to “Jag har en positiv syn på mitt konsorgan”, to fit the Swedish language image and culture. We called the Swedish version of the instrument SWE-FGSIS-7 (Table 1).

Face validity and content validity

It took three to five minutes for the test group participants to complete the form. The participants expressed that the language was clear, factual and informative. None of the participants perceived the language as offensive. The test group assessed the language of the translated instrument to be comprehensible, and the instrument to be easily understood and user-friendly.

The expert group found all items relevant and did not identify any discrepancies regarding the translation. The instrument was perceived to evaluate the purpose of the measurement, and the items were found to comprehensively reflect genital self-image and referred to relevant aspects.

Internal consistency, data completeness, score distributions, and floor and ceiling effects

A total of 147 persons answered the online survey. Most of them, 64 persons (24 %), were aged 26–35, 36 persons (24 %) were 15–25 years, 28 (19 %) persons were 36–45 years and 19 (13 %) were 46 years or
The objective of the study was to translate and culturally adapt the Female Genital Self-Image (FGSIS-7) instrument into a valid and reliable Swedish version, and to test the instrument. The instrument is usable in a clinical setting to initiate a dialogue with patients with female genitalia, facilitating adequate medical assessments and helping to promoting normality in practice. Additionally, it could be used in improvement work and research activities.

The test group and the expert group gave positive feedback on the translated version. This is encouraging, as to the best of our knowledge no other Swedish instrument has been designed and validated for measuring women’s genital self-image.

Our Cronbach’s Alpha coefficient of 0.82 is comparable with previous studies for translations and validations of FGSIS-7 (0.82 [19] and 0.86 [20]), and indicates good internal consistency [23]. In the original study and the validation of FGSIS-7, Cronbach’s Alpha coefficient was 0.88 [13].

The fact that the online survey resulted in 100 % data completeness indicates that SWE-FGSIS-7 is a user-friendly and understandable instrument for measuring female genital self-image, which strengthens clinical implications of the instrument.

Table 1
The items of FGSIS-7 and SWE-FGSIS-7 and the statistical properties for SWE-FGSIS-7.

<table>
<thead>
<tr>
<th>English</th>
<th>Swedish</th>
<th>Median (Q3-Q1)</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel positively about my genitals</td>
<td>Jag har en positiv syn på mitt könsorgan</td>
<td>3 (1)</td>
<td>3.27 (±0.74)</td>
</tr>
<tr>
<td>2. I am satisfied with the appearance of my genitals</td>
<td>Jag är nöjd med mitt könsorgan utsände</td>
<td>3 (1)</td>
<td>3.10 (±0.91)</td>
</tr>
<tr>
<td>3. I would feel comfortable letting a sexual partner look at my genitals</td>
<td>Jag skulle känna mig bekväm med att låta en sexuell partner titta på mitt könsorgan</td>
<td>3 (1)</td>
<td>3.24 (±0.92)</td>
</tr>
<tr>
<td>4. I think my genitals smell fine</td>
<td>Jag tycker att mitt könsorgan har en bra doft</td>
<td>3 (2)</td>
<td>2.97 (±0.78)</td>
</tr>
<tr>
<td>5. I think my genitals work the way they are supposed to work</td>
<td>Jag tycker att mitt könsorgan fungerar som det är tänkt att fungera</td>
<td>3 (1)</td>
<td>3.33 (±0.75)</td>
</tr>
<tr>
<td>6. I feel comfortable letting a healthcare provider examine my genitals</td>
<td>Jag känner mig trygg med att låta vårdpersonal undersöka mitt könsorgan</td>
<td>3 (1)</td>
<td>3.29 (±0.85)</td>
</tr>
<tr>
<td>7. I am not embarrassed about my genitals</td>
<td>Jag ska inte för mitt könsorgan</td>
<td>3 (1)</td>
<td>3.23 (±0.83)</td>
</tr>
<tr>
<td>Total SWE-FGSIS-7 score:</td>
<td></td>
<td>23 (6)</td>
<td>22.44 (±3.98)</td>
</tr>
</tbody>
</table>

Q3-Q1 = quartile distance; SD = standard deviation.

There were some limitations of this study. First, 71 % reported having higher education, compared with a figure of 44 % for all women in Sweden (aged 25–64) [29]. Second, the employment rate was not representative of the unemployed and jobseekers, as only 3 % stated that they were unemployed/jobseekers compared with the national rate of 10 % [29]. These limitations can be explained by the fact that the participants in the online survey were recruited via an open social media announcement. The population’s higher level of education may have affected the understanding of the conceptual context of the issues, and may also have affected the average value of the total score. The fact that the sample does not fully reflect the Swedish population limits the generalizability of the study. Although socio-economic factors affect the self-perceived image of health in general [30], earlier studies have not been able to demonstrate that employment or level of education have any significant impact on female genital self-image [18–20].

The chosen method proposed by Wild et al. entailed guidelines with an established basic standard [21]. All steps of the translation and cultural adaptation have been carried out without deviating from the chosen method, which is a strength of the study. However, the questionnaire needs further psychometric testing in a larger population.

Conclusion and clinical implications

SWE-FGSIS-7 is a user-friendly, understandable, valid and reliable instrument for measuring women’s genital self-image, which strengthens clinical implications of the instrument.
instrument for estimating genital self-image. Healthcare professionals such as midwives and gynaecologists, who often perform gynaecological examinations in different settings and at different stages of women’s lives, could use SWE-FGSIS-7 to initiate a dialogue that may contribute to increased knowledge about women’s own bodies and strengthen their reproductive and sexual health.

Declaration of Competing Interest

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

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Disclosure statement

All authors have no conflict of interest to report.

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References


