

PSYCHOMETRICS

Psychometric Properties of the Danish Version of the Questionnaire Professionals' Attitudes towards Addressing Sexual Health (PA-SH-D)



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ABSTRACT

Background: Health professionals' attitudes towards addressing sexual health are important to promote patients' sexual health. Therefore, measurement of health professionals' attitudes towards addressing sexual health is essential.

Aim: This study aimed to adapt the questionnaire *Students' Attitudes towards Addressing Sexual Health* (SA-SH-D) to health professionals working with rehabilitation in Danish municipalities and evaluated psychometric properties of the adapted

questionnaire: *The Danish Version of the Professionals' Attitudes towards Addressing Sexual Health* (PA-SH-D).

Methods: The SA-SH-D was adapted to PA-SH-D and a face validity evaluation focusing on phrasing, functionality, perception and relevance was done. In a pilot study, the PA-SH-D was answered by health professionals and internal consistency reliability and floor and ceiling effects were evaluated.

Outcomes: Face validity included phrasing, functionality, perception and relevance of the items in PA-SH-D, internal consistency with Cronbach's alpha in the total scale and floor and ceiling effects.

Results: Face validity of the PA-SH-D was acceptable. The sample size was 52 health professionals working with rehabilitation, the internal consistency reliability (Cronbach's alpha: 0.89 [lower confidence interval {CI}: 0.85]) and floor and ceiling effects (0.0%–13.7%) of the PA-SH-D were acceptable.

Clinical translation: As sexual health is important in human quality of life, the validation of the PA-SH-D is highly valuable as it evaluates health professionals' attitudes towards addressing sexual health, and thereby is able to measure the need for education and training in sexual health and detect changes in attitudes following an educational intervention.

Strengths and limitations: Strengths were that the PA-SH-D measures both attitudes and competences and covered a need in clinical practice. The recruitment was broad and we used the work of others to orient this work. Limitations were that this study covered a preliminary psychometric evaluation and a thorough evaluation covering other aspects of psychometry should be done. We used both paper-based and online-based survey which possibly could cause bias. The study had a relatively small sample size. Comparing health professionals to students can be seen as both a limitation and a strength.

Conclusion: The results in face validity and internal consistency reliability indicate usefulness of the PA-SH-D to measure health professionals' attitudes towards addressing sexual health. Further evaluation of psychometric properties of the PA-SH-D is recommended. **Elnegaard CM, Christensen J, Thuesen J, et al. Psychometric Properties of the Danish Version of the Questionnaire Professionals' Attitudes towards Addressing Sexual Health (PA-SH-D). Sex Med 2022;XX:XXXXXX.**

Received January 19, 2022. Accepted April 11, 2022.

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<https://doi.org/10.1016/j.esxm.2022.100527>

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Key Words: Denmark; Health Professional; Psychometrics; Rehabilitation; Sexuality; Questionnaire

INTRODUCTION

Sexuality is an important aspect in human life and sexual health is associated with positive mental and physical health.¹ Sexual health is defined by the World Health Organization (WHO) as a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled.² Chronic diseases have negative effects on sexual health.^{3,4} Therefore, promotion of sexual health in patients with chronic diseases can improve health-related quality of life.^{3,5,6} For decades, sexual health training has been defined as a necessity of health professionals.⁷ In this study, health professionals are defined as nurses, physiotherapists, occupational therapists, social workers, dieticians and other health professionals who typically works with rehabilitation in Danish municipalities and who have an important role in promoting sexual health.^{3,8–11} Therefore, health professionals should be comfortable and competent when addressing sexual health.¹² However, many health professionals rarely address sexual health issues.^{13,14} Danish health professionals lack competences and education within the field of sexual health.¹¹ Discussing sexual problems with patients can be limited due to barriers such as lack of education,^{12,15–18} knowledge,^{12,15,16,19,20} training,^{16,17,20} communication skills,^{15,17} feelings of embarrassment among health professionals^{12,15,21} and health professionals questioning whether sexual health is part of their professional responsibility.^{12,16} Thus, health professionals' attitudes influences their competences to address sexual health in their professional interventions.¹² Other barriers can be lack of routine,^{15,17} time,^{12,17} priority,^{12,17} socio-cultural norms^{17,20} and organizational support.^{12,19} Lack of organizational policy and negative experiences of professional inadequacy can limit health professionals from integrating sexual health issues into rehabilitation.^{12,15,16} These barriers challenge health professionals' attitudes towards promoting sexual health in rehabilitation.^{17,22}

In educational interventions designed to improve orientation towards sexual health in rehabilitation care, it is important to be able to measure health professionals' attitudes and competences towards addressing sexual health. Therefore, a questionnaire measuring health professionals' attitudes, competences and readiness to address sexual health is important.

To the authors' knowledge there were no Danish questionnaires measuring health professionals' attitudes, competences, and

readiness to address sexual health. The questionnaires Sex Knowledge and Attitude Test (SKAT)²³ and The Sexual Health Education Professionals Scale (SHEPS)²⁴ have respectively 149 and 100 items. Both the SKAT and SHEPS are developed in the USA, which is a culture differing from the Danish culture, in addition the questionnaires are not available in Danish. Questionnaire translation and cross culture adaptation are time consuming. Therefore, it is valuable if existing Scandinavian questionnaires are available, that can be useful for nearby target groups such as transferring a questionnaire from health care students to health professionals. A Swedish questionnaire *Students' Attitudes towards Addressing Sexual Health* (SA-SH) is intended to measure the need for education and training within the field of sexual health as it measures both attitudes and competences towards addressing sexual health. The SA-SH is thoroughly evaluated and has shown good psychometric qualities in health care students according to classical test theory, latent class analysis and Rasch analysis.^{25–27} Internal consistency reliability measured by Cronbach's Alpha was 0.61–0.71 in test and retest.²⁵ Psychometric evaluation of the translated *Danish Version of the Students' Attitudes towards Addressing Sexual Health* (SA-SH-D) has been carried out in 2 studies.^{28,29} The first study showed valid and reliable results in multitrait/multi-items correlation matrix, face validity, content validity index (CVI), internal consistency reliability (Cronbach's Alpha 0.674 with variance 0.614–0.714), and floor and ceiling effects.²⁸ In addition, SA-SH-D was easy to complete (22 items).²⁸ The second study added to prior validation work and found acceptable face validity, good internal consistency (Cronbach's Alpha 0.84) and acceptable test-retest reliability.²⁹

As mentioned, health professionals can experience different kinds of barriers in addressing sexual health issues with patients. Therefore, a questionnaire measuring health professionals' attitudes towards addressing sexual health, that points to the need for education and training in sexual health and can detect changes in attitudes following an educational intervention is highly valuable. Adopting an existing questionnaire, such as the SA-SH-D, is time efficient; however, the adaptation process to health professionals needs to be performed with rigour.³⁰ Evaluating the psychometric properties of the newly adapted questionnaire is essential to ensure value and usefulness, when using a questionnaire for a new target group.³¹ Hobart et al stated that a sample size of ≥ 40 in psychometric evaluations is considered to give robust results in 75% of prior research examples.³²

The aim of this study was to adapt the SA-SH-D to health professionals, that is, creating the *Danish Version of*

the Professionals' Attitudes towards Addressing Sexual Health (PA-SH-D), evaluate face validity and then in a pilot study, to evaluate internal consistency reliability and floor and ceiling effects of the PA-SH-D.

MATERIALS AND METHODS

This study started with an adaptation process of the SA-SH-D to the PA-SH-D, then face validity of the PA-SH-D was evaluated pragmatically. Lastly, based on a cross-sectional pilot study, the internal consistency reliability and floor and ceiling effects of the PA-SH-D was evaluated in a group of health professionals working with rehabilitation in Danish municipalities. The reporting of this study has been guided by the COnsensus-based Standards for the selection of health status Measurement INstruments (COSMIN) group definitions and taxonomy of measurement properties.³³

The Adaption Process

In the adaptation process, it was essential to ensure that phrasing of the items in the questionnaire suited the intended population to ensure correct interpretation. Ensuring the relevance of included dimensions was also important.^{30,34,35} A group of four health professionals and researchers with different health-related educational backgrounds and competences within sexual counseling, sexual health, occupational therapy, physiotherapy, rehabilitation and public health, adapted the questionnaire. The adaption from SA-SH-D to PA-SH-D was completed in the following steps:

- (1) The wording was changed from “students” to “professionals” in the introduction and the items.
- (2) The wording “future” related to profession was changed to “present.”
- (3) Reflections and discussions on relevance of each item in relation to health professionals was done.
- (4) Descriptive questions used in SA-SH-D were kept (gender, age, profession).
- (5) An online version and an identical paper-based version of the PA-SH-D were created.

Steps 1–3 were to ensure that the phrasing of the items and the format of the PA-SH-D were suitable for health professionals.^{30,35}

Pragmatic Face Validity Evaluation

A pragmatic face validity evaluation^{36,37} of the online version of the PA-SH-D was carried out in a face validity group including 12 persons of which eight were health professionals employed in rehabilitation and four were health professionals in management and research. The face validity group received the online version of PA-SH-D and reflected on phrasing, functionality, perception and relevance of each item. The adaptation group received the reflections and consensus agreement was sought for the final version of the PA-SH-D.

The Danish Version of the Professional's Attitudes towards Addressing Sexual Health (PA-SH-D)

Like the SA-SH-D,²⁸ the PA-SH-D consists of 22 items and four theoretical domains; *feelings of comfortableness* (item 1–9), *fear of negative influence on patient relations* (item 10–15), *working environment* (item 16–18) and *educational needs* (item 19–22). The 22 items are measured using a 5-step Likert scale; strongly agree, agree, partly agree, partly disagree, disagree. The responses “strongly agree” and “agree” are considered positive for positively loaded items, and for negatively loaded items the responses “partly disagree” and “disagree” are considered as showing a positive attitude. The response option “partly agree” is considered neutral. Items 9–14 and 16–18 are reversed for analysis as these items were phrased in a negative way compared to all other items.^{11,27}

A Pilot Study for Investigating Internal Consistency Reliability and Floor and Ceiling Effects of the PA-SH-D

In a cross-sectional pilot study data was collected to evaluate internal consistency reliability and floor and ceiling effects of the PA-SH-D in a group of health professionals working with rehabilitation in Danish municipalities. The health professionals were educated nurses, occupational therapists, physiotherapists, dieticians or social workers currently working with rehabilitation for patients with chronic diseases. The health professionals were recruited from three different Danish municipal rehabilitation centers to reach ≥ 40 respondents. The centers were all participating in two similar competence development courses in sexual health. The centers were a cardiac rehabilitation center, a diabetes rehabilitation center, and a cancer rehabilitation center. The health professionals at the cancer and diabetes centers participated in the same competence development course, whereas the health professionals at the cardiac rehabilitation center participated in another, but similar, competence development course. All health professionals at the three centers shared similar rehabilitation work responsibilities within the three different diagnostic areas.

Data Collection

The health professionals responded to PA-SH-D prior to the teaching given at the competence development course. In the diabetes and cancer rehabilitation centers, the online version of PA-SH-D was used using SurveyXact (Ramboll Management Consulting, Aarhus, Denmark). In the cardiac rehabilitation center, the identical paper-based version of the PA-SH-D was used due to pragmatic reasons. Data from all three centers represented the study population and data were pooled for analysis.

Statistical Analysis

Descriptive statistics were used in order to present data on demographics, that is, gender, age, and profession. To evaluate

floor and ceiling effects of the PA-SH-D each item was tabulated as response frequencies. Floor and ceiling effects were considered present if >15% scored an item as 1 (lowest possible score) or 5 (highest possible score).³⁸ Internal consistency reliability was measured using Cronbach's alpha in the total scale to evaluate interrelatedness. Cronbach's alpha is presented with a lower confidence interval (CI). In accordance to Terwee et al Cronbach's alpha coefficients of 0.70 or higher is acceptable.³⁸ According to Tavakol & Dennick, a Cronbach's Alpha level above 0.70 means the tool can be used for group-level evaluations and above 0.90 the use extends to person-level evaluations.³⁹ All analyses were performed using STATA 16 (StataCorp LLC, Stata Statistical Software: Release 16. College Station, Texas).

Ethics

All participants gave written informed consent to participate in the study prior to responding to the PA-SH-D. Information about the study, volunteering and anonymity and participants' consent were given prior to their responding the PA-SH-D. The study complied with ethical principles for medical research as described in the Helsinki Declaration and with the practices of the Danish National Committee on Health Research Ethics.⁴⁰ The data sources from the online version of the PA-SH-D were approved by the Regional Health Research Authorities in the Region of Southern Denmark (2012-58-0018 "Health research within the Region of Southern Denmark" (Journal Number 19/21708)). The paper-based data sources were approved by the UCL University College Data Protection Agency (Journal Number: UCL-2015-57-0016-040).

RESULTS

The Pragmatic Face Validity Evaluation

The face validity group assured the relevance of the PA-SH-D items for health professionals working with rehabilitation in Danish municipalities. The face validity group considered the PA-SH-D relevant for measuring health professionals' attitudes towards addressing sexual health. The PA-SH-D was described as easy to use, clear and highly functional. The items were easy to understand and seen as relevant and important. The word "discuss" in items 4–8 was reflected upon by one evaluator who instead suggested the word "dialogue." After discussions in the adaptation group, consensus was reached on keeping the phrasing "discuss." The face validity evaluation led to minor revisions concerning spelling, grammar and layout of the questionnaire. Therefore, the PA-SH-D was considered solid, the items were kept and no additional items were added.

The Pilot Reliability Study

A sample size of 52 health professionals were included in the pilot study. The paper-based version of PA-SH-D was completed by 14 responders and the online version by 38 responders. Participant characteristics are presented in Table 1.

Table 1. Participant characteristics (n = 52)

Age, mean [SD]	47.2 [10.0]
Gender, n [%]	
Male	9 [17.3]
Female	42 [80.8]
Other	1 [1.9]
Profession, n [%]	
Nurse	14 [26.9]
Physiotherapist	29 [55.9]
Occupational therapist	1 [1.9]
Social worker	1 [1.9]
Dietician	5 [9.6]
Other	2 [3.8]

The internal consistency reliability evaluation showed a Cronbach's alpha of 0.89 (lower CI: 0.85) for the total PA-SH-D scale. In item 1–18 and item 20–22 floor and ceiling effects were between 0.0% and 13.7%, which is <15%. In item 19 there was a floor effect at 41.2% (Table 2).

DISCUSSION

This is the first Danish questionnaire to measure health professionals' attitudes towards addressing sexual health. The results of this study evaluating face validity, internal consistency reliability, and floor and ceiling effects of the PA-SH-D, indicate acceptable psychometric properties of the PA-SH-D and usefulness for measuring health professionals' attitudes towards addressing sexual health in rehabilitation.

The face validity group found the PA-SH-D well adapted, functional, and relevant. However, the phrasing "discuss" in some items was reflected upon and further validity studies must look into whether this wording is the most appropriate in a Danish context. Based on this study, face validity of the PA-SH-D is considered acceptable. This is comparable to studies of the original Swedish version in health care students (SA-SH)²⁵ and the Danish version (SA-SH-D),^{28,29} where students acknowledged the importance and relevance of the theme and found the questionnaire easy to understand and complete.

The internal consistency reliability with Cronbach's alpha was evaluated in the total scale. This is because PA-SH-D as the original SA-SH has domains and not subscales.²⁵ Instead, the whole scale is used when analyzing response patterns.²⁶ The SA-SH has been evaluated thoroughly with factor analysis, which shows that the factors do not coincide with the defined domains.²⁵ This speaks against interpreting the domains as subscales and Rasch analysis supports this finding.²⁷

The internal consistency reliability indicates an acceptable Cronbach's alpha coefficient at 0.89 (lower CI: 0.85),³⁸ which is also interpreted as *good* internal consistency (alpha level of 0.8–0.9) by Sharma.⁴¹ The lower CI of 0.85 indicating a 95% security that Cronbach's alpha is higher than 0.85, still showing at

Table 2. Internal consistency reliability, floor and ceiling effects of the PA-SH-D* (n = 52)

Items	Internal consistency, Cronbach's alpha (lower CI)				
	0.89 (0.85)				
	Response label, frequencies, and floor and ceiling effects per item				
	Disagree, n [%]	Partly disagree, n	Partly agree, n	Agree, n	Strongly agree, n [%]
Q1: I feel comfortable about informing patients about sexual health	0 [0.0]	11	21	16	4 [7.7]
Q2: I feel comfortable about initiating a conversation regarding sexual health with patients	1 [1.9]	12	24	12	3 [5.8]
Q3: I feel comfortable about discussing sexual health with patients	2 [3.9]	9	23	16	2 [3.9]
Q4: I feel comfortable about discussing sexual health issues with patients regardless of their sex	0 [0.0]	9	26	15	2 [3.9]
Q5: I feel comfortable about discussing sexual health issues with patients regardless of their age	2 [3.9]	12	25	12	1 [1.9]
Q6: I feel comfortable about discussing sexual health issues with patients regardless of their cultural background	3 [5.8]	17	26	6	0 [0.0]
Q7: I feel comfortable about discussing sexual health issues with patients regardless of their sexual orientation	2 [3.9]	11	27	10	2 [3.9]
Q8: I feel comfortable about discussing specific sexual activities with patients	4 [7.7]	22	20	5	1 [1.9]
Q9: I am unprepared to talk about sexual health with patients [†]	2 [3.9]	6	25	18	1 [1.9]
Q10: I believe that I might feel embarrassed if patients talk about sexual issues [†]	0 [0.0]	1	12	37	2 [3.9]
Q11: I believe that patients might feel embarrassed if I bring up sexual issues [†]	0 [0.0]	4	33	15	0 [0.0]
Q12: I am afraid that patients might feel uneasy if I talk about sexual issues [†]	0 [0.0]	3	27	22	0 [0.0]
Q13: I am afraid that conversations regarding sexual health might create a distance between me and the patients [†]	0 [0.0]	0	13	38	1 [1.9]
Q14: I believe that I will have too much to do in my profession to have time to handle sexual issues [†]	1 [1.9]	3	14	31	3 [5.8]
Q15: I will take time to deal with patients' sexual issues in my profession	5 [9.6]	9	24	13	1 [1.9]
Q16: I am afraid that my colleagues would feel uneasy if I brought up sexual issues with patients [†]	1 [1.9]	1	4	40	6 [11.5]
Q17: I am afraid that my colleagues would feel uncomfortable in dealing with questions regarding patients' sexual health [†]	1 [1.9]	4	12	34	1 [1.9]
Q18: I believe that my colleagues will be reluctant to talk about sexual issues [†]	0 [0.0]	2	14	35	1 [1.9]
Q19: In my education, I have been educated about sexual health [§]	21 [41.2] [‡]	14	13	2	1 [2.0]
Q20: I think that I as a professional need to get basic knowledge about sexual health in my education [§]	7 [13.7]	8	19	11	6 [11.8]
Q21: I have sufficient competence to talk about sexual health with my patients [§]	5 [9.8]	13	27	5	1 [2.0]
Q22: I think that I need to be trained to talk about sexual health in my education [§]	4 [7.8]	4	15	22	6 [11.8]

*The items 1–22 is translated to English but are not a validated English version of the PA-SH-D.

[†]Items 9-14 and 16-18 were reversed for analysis as these items were phrased in a negative way compared to all other items.

[‡]Floor and ceiling effects were considered present if >15%.

[§]One respondent did not fully answer the PA-SH-D, with missing answers in item 19-22, limiting n to 51 in these four items.

least *acceptable* internal consistency.³⁸ In comparison, the Cronbach's Alpha in this pilot study was higher compared to the SA-SH-D (0.674²⁸ and 0.84²⁹) and original SA-SH (0.61–0.71).²⁵

A Cronbach's Alpha of 0.90 has been suggested as cut-off for using scales on an individual level.³⁹ In this context, the PA-SH-D should not be used on an individual level, however it cannot be ruled out that future studies conducted in other samples or groups or contexts could potentially suggest otherwise. Nevertheless, the results of this study indicate that the PA-SH-D can be used on group level.³⁹

Floor and ceiling effects of the PA-SH-D were generally between 0.0% and 13.7%, which was below the maximum acceptable limit of 15%.³⁸ In general, the PA-SH-D fitted well for the categories in the Likert-scale. Item 19 clustered towards the low end (floor effect). This floor effect was also found in the Danish SA-SH-D for item 19.^{28,29} Item 19 is *"In my education, I have been educated about sexual health"* and it is expectable that there could be a tendency toward floor effect in this item since studies show that health professional programs does not include education in the field of sexual health.^{12,21} Floor effects indicate a possibility of too few response options in the lower end of the scale. However, there is reason to believe that the floor effects in item 19 could be due to dichotomous attitudes towards this item; either you have been educated in sexual health or not. Areskoug-Josefsson & Rolander performed a Rasch analysis of the SA-SH and also found item 19 extreme to the low end of the scale with poor distribution and observed points deviated significantly from the slope with a skew location.²⁷ However, the item is important for the questionnaire as a whole, because education has a great influence on health professionals' attitudes towards addressing sexual health.^{12,21}

According to the COSMIN guidelines a sample size between 50 and 99 provide good methodological quality.^{33,42} To achieve excellent methodological quality in future studies, additional evaluation of psychometric properties is recommended in a larger sample (≥ 100).^{33,42} However, the results of this study indicate that the PA-SH-D can be used to measure health professionals' attitudes towards addressing sexual health in Danish municipal rehabilitation. This enables future comparisons between students and professionals in this field since the SA-SH-D and the PA-SH-D cover similar items.

The health professionals in this study were working in the field of rehabilitation for patients with chronic diseases, that is, cancer, heart disease, or diabetes. As sexual health is often affected for these patients,^{43–45} it is highly recommended that the health professionals in these fields address sexual health. Therefore, this group of health professionals were appropriate for evaluating the PA-SH-D questionnaire. The health professionals were representative for health professionals working in municipal rehabilitation in general as all employees working at the three municipal rehabilitation centers were obligatorily participating in the competence development course, as it was recommended for all health professionals to be able to address sexual health. Sexual health is often

neglected or insufficiently covered in rehabilitation, therefore the ability to perform baseline investigations and follow-ups, and evaluate health professionals' need for competence development interventions in the field of sexual health is valuable. PA-SH-D can probably be used by other health professionals outside rehabilitation as the PA-SH-D broadly address sexual health and not only sexual health in rehabilitation. Furthermore, the SA-SH has been translated to Norwegian and extended for Social Educator Students working with people with intellectual disabilities (27 items),^{46,47} implying that PA-SH-D potentially can be expanded to other professionals in social care as well.

Strengths and Limitations

The PA-SH-D covers a need in rehabilitation in general¹² and it is a strength that the questionnaire measures both attitudes and competences to address sexual health. Another strength was that the health professionals were recruited broadly from municipal rehabilitation centers, increasing generalizability of the PA-SH-D. An additional strength was that we used the work of others to orient this work, that is, the previous analyses and findings of SA-SH and SA-SH-D. This study reflects a first step psychometric evaluation of the PA-SH-D and evaluation of other psychometric properties (as defined in the COSMIN guidelines)³³ is deemed. This study used data from both the online-based and the paper-based version of the PA-SH-D. Different data collection methods can cause possible bias, however Gwaltney et al showed that computer-based and paper-based measures produce equivalent scores.⁴⁸ Differences between the two data sources was not evaluated, as the sample size was too small to analyze subgroups. The small sample size is a limitation to this study, bringing insecurity to the results.

This study does not include a follow-up, which limited the possibility of for example evaluating test-retest reliability. Another limitation is that results of the PA-SH-D are compared with results in health professional students (SA-SH-D/SA-SH), thus comparing professionals with students in which there can be differences. However, this comparison can also be seen as a strength as it increases the usefulness of the questionnaire. Using comparative questionnaires in students and professionals means a more generic use of the questionnaires. Seeing SA-SH/SA-SH-D and PA-SH-D as comparative, it is possible to evaluate the readiness to address sexual health in both health care students (SA-SH/SA-SH-D) and health professionals (PA-SH-D), and the possibility to track changes in readiness to address sexual health from student-life to professional work-life. No other studies using PA-SH-D are available, making a comparison with other PA-SH-D results impossible.

Future Research

This study was done with health professionals working with rehabilitation in patients with chronic diseases in Danish municipalities. The PA-SH-D should be evaluated in other groups of health professionals as well, for example health professionals working in hospitals. In addition, future research should focus

on evaluating other psychometric properties of the PA-SH-D in a larger sample of health professionals. Thus, future evaluation of structures of the scale, factor analysis, test-retest, responsiveness and interpretability, etc., as well as other aspects of validity will provide a greater insight into the psychometric properties and the applicability of the PA-SH-D.

CONCLUSION

This study, reflecting a first-step psychometric evaluation of the PA-SH-D, shows acceptable psychometric properties within face validity, internal consistency reliability and floor and ceiling effects. These results indicate value and usefulness of the PA-SH-D, that is, the questionnaire can be used to measure health professionals' attitudes toward addressing sexual health in rehabilitation care. Also, the PA-SH-D can be used as follow-up in competence development interventions as it measures both attitudes and competences, which are important aspects in competence development. Further evaluation of psychometric properties, based on a larger sample size, should be made to strengthen the insights in psychometric qualities of the PA-SH-D.

ACKNOWLEDGMENTS

The authors would like to acknowledge and thank all participants who took part in this study.

COMPLIANCE WITH ETHICAL STANDARDS

This study was performed in line with the principles of the Declaration of Helsinki. Approvals were granted by the Regional Health Research Authorities in the Region of Southern Denmark (journal number 19/21708) and by the UCL University College Data Protection Agency (Journal Number: UCL-2015-57-0016-040). All participants gave informed consent to participate and for publication of the data prior to completing the PA-SH-D questionnaire.

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Conflict of Interest: All authors declare that they have no commercial and/or future commercial interest in the outcome measure.

Funding: No external funding was obtained for this project.

STATEMENT OF AUTHORSHIP

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