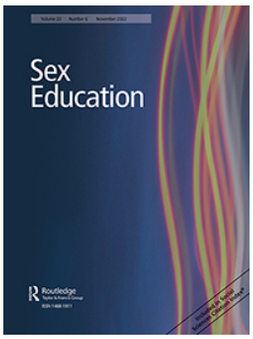

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Exploring the role of sexual attitude reassessment and restructuring (SAR) in current sexology education: for whom, how and why?

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ABSTRACT

As concerns about sexual and reproductive health and rights become integrated into public health policies, the demand for higher education in sexology rises. There is a need therefore to evaluate established pedagogical methods to ensure that they are relevant, efficient and lead to valuable competencies. This study explored the current evidence and pedagogical relevance for Sexual Attitude Reassessment and restructuring (SAR) as part of professional higher education in sexology. A systematic review was conducted with eleven included publications. Data were synthesised across studies and presented narratively. The publications were generally old and derive from a small pool of researchers geographically centred to the USA. Several studies were based on small numbers of participants, display a great variety in types of participants, use different evaluation instruments (mostly unvalidated), and a variety of methods to measure the results of SAR. Furthermore, long-term follow-up has been rare. Extensive, high-quality, and up-to-date research for SAR as an effective pedagogical method for use in sexology higher education for professionals today is lacking. Digital solutions focusing on broadening students sexological self-awareness appear more feasible than SAR, and suitable pedagogical and digital solutions need to be developed and evaluated to ensure high-quality teaching of sexology in higher education.

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Education; higher education; Nordic SAR/SSA; pedagogical relevance; SAR; sexologist: sexology; sexual attitude reassessment and restructuring

Background

To meet the demands for competence in today's world, it is essential to train reflexive and critical professionals within higher education in sexology. Developing reflective and critical competences is essential in higher education, as there is a need to continuously adapt to ever-evolving curricula, new technology and social context (Colomer et al. 2020). The continuous development of curricula can pose a challenge for the evaluation of pedagogical methods, as a detailed knowledge of the used pedagogy is needed to explore its effectiveness. If teaching time, mode or context are changed, changes in outcomes will possibly follow. Given the current

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situation associated with the COVID-19 pandemic, an increase in demand for, and evaluation of, digital sexology education is evident. Using digital opportunities and tools can provide a more equal access to education, possibly resulting in larger student cohorts. Studies conducted in higher education during the COVID-19 pandemic has shown that digital collaboration can support the establishment of national and international networks and peer groups, even when the participants are in different geographical areas (Øvreås et al. 2021). It has also been shown that although students in higher education feel they have missed face-to-face meetings, they also show an acceptance for and see benefits of an on-line regime (Gonçalves, José Sousa, and Santos Pereira 2020).

Traditional knowledge transmission from teacher to student differs from knowledge facilitation, where the aim is to challenge students' concepts and previous understandings, and help students construct their own understandings, focusing on insight, critical thinking and knowledge application (Michel, Cater, and Varela 2009; Vilppu et al. 2019). There has been a gradual shift towards pedagogical practices that increase student engagement, even if the effectiveness of these pedagogical practices concerning how students perceive them or what they learn needs further exploration.

Various frameworks can be used to assess the outcomes of educational interventions. One such four-level framework focuses on Reactions (how participants feel about the course or training), Learning (the knowledge, skills and attitudes acquired), Behaviours (to what extent participants behave or act, differently, because of their new knowledge) and Results (if and how the education led to changed behaviours) (Kirkpatrick 1996). Using this model requires the evaluation of pedagogical methods and learning outcomes at different levels, to ensure change in professional practice. Furthermore, for impact of a pedagogical method to be demonstrated, supporting evidence must be robust and credible. Another current framework uses seven domains to scrutinise Pedagogical clarity, Methodological transparency, Methodological congruence, Strength of evidence base, Accessibility of findings, Transferability and Impact of pedagogical research (Evans et al. 2020).

To summarise, there is a need to not only evaluate new pedagogical methods in higher sexology education, but also to evaluate the established pedagogical methods used before using them in current digital contexts to ensure that they are relevant, efficient and lead to valuable competencies.

Higher sexology education in the Nordic countries

In the Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden), sexology is not a licenced profession. Rather the title sexologist is used by professionals with an initial higher education qualification (e.g., midwifes, nurses, physicians, psychologists, social workers) who have conducted higher level studies in sexology (Fugl-Meyer and Giami 2006). A recent overview shows that in various higher education fields and disciplines in Sweden (law, midwifery, nursing, occupational therapy, physiotherapy, police work, psychology, social work, and undergraduate medicine), content relating to sexual and reproductive health and rights (SRHR) is rarely addressed (Areskoug-Josefsson et al. 2019). Current Nordic research suggests that the situation is similar in Denmark and Norway (Gerbild et al. 2021; Lunde, Bakke, and Areskoug-Josefsson 2020). Despite this,

higher education in sexology is offered in all Nordic countries, ranging from short courses to Masters programmes, and the Nordic Association for Clinical Sexology provides certification for sexologists (Nordic Association for Clinical Sexology 2021).

In recent times, national public health policies on sexual and reproductive health and rights (SRHR) and aligned to the recommendations of the Guttmacher Lancet Commission (Starrs et al. 2018) have been launched in Denmark, Norway, Finland and Sweden (Danish Health Authority 2018; Ministry of Health and Care Services 2017; Ministry of Social Affairs and Health 2014; Public Health Agency of Sweden 2020). In the current Icelandic Public Health strategy, sexual and reproductive rights are not mentioned (Government of Iceland 2019). As an example of recognition of the need for a greater focus on SRHR in higher education, the Swedish government decided in late 2020 that all teacher education students should receive mandatory training in how to conduct sex education as part of their future work (Government of Sweden 2020).

With a growing focus on SRHR and educational needs in this field, an increase is anticipated in demand for courses in sexology in the Nordic countries. It is therefore important to assess the contents given, and pedagogical methods used, in both on-line and off-line arenas. This is equally important for graduate students and professionals taking additional courses in sexology. Content in sexology education is important, and national strategies suggest what should be included in line with global guidelines (World Association for Sexual Health 2009). However, much less attention has been given to pedagogical methods. As a result, this paper focuses on one method used in the Nordic countries: namely Sexual Attitudes Reassessment and restructuring (SAR).

Sexual attitudes reassessment and restructuring

Knowledge of the pedagogical relevance of SAR to the Nordic situation is lacking. Nevertheless, SAR is one requirement for certification as a sexuality educator or sexual health promoter (Nordic Association for Clinical Sexology 2021). The same is true, for example, in the USA, where the American Association of Sexuality Educators, Counselors and Therapists requires a ´minimum of ten hours of structured group experience consisting of a process-oriented exploration of the applicant's own feelings, attitudes, values, and beliefs regarding human sexuality and sexual behaviour, [e.g., a *Sexuality Attitude Reassessment (SAR)*]' (American Association of Sexuality Educators, Counselors and Therapists 2021) as part of the certification process.

In a recent guide for sex therapists, sexuality educators and sexologists, SAR is described as experimental group-based training for professionals, a method that challenges sexual values, attitudes, and beliefs (Britton and Dunlop 2017). A SAR workshop is recommended to consist of 40% live speakers/panels, 40% media exposure, and 20% small group process/dyads. Engagement with sexually explicit material is a necessity in SAR (Britton and Dunlop 2017). Its inclusion is controversial since it can be psychologically challenging, depending on the individual's values and personal life history, but it has also been shown to be a valuable tool in adult sex education (Brewster and Wylie 2008; Rosser et al. 1995).

In the Nordic countries, a specific version of SAR is used called the Nordic SAR/SSA, where the SSA stands for 'sexual self-acknowledgement'. It is described as an updated version of the original SAR and aims for students to become comfortable and competent

to meet all expressions of human sexuality, cultures, sub-cultures, and individual variations (Giami and Janssen 2019). A key feature of the Nordic SAR/SSA is being 'confronted with expressions of sexuality that may provoke negative attitudes, ignorance, countertransference, and anxiety/fear' (p. 93). The content, delivery, context and recipients of the Nordic SAR/SSA vary: a 10 week curriculum containing explicit films, small group discussions, informational lectures, and an excursion to Amsterdam for professionals in Norway; a 25-hour workshop with focus on individual reactions to sexual themes and a 23-hour workshop with a focus on individual reactions to difficulties that may arise in sex-related conversations in clinical work for clinical sexologists in Sweden; a miniature version of SAR/SSA for undergraduate students in psychology in Iceland; a questionnaire which helps students to explore and face their own ideas about sexuality, gender and relationships followed by SAR modules for sexology students in Finland; and a mixture of presentations (primarily by people representing different sexual subcultures and/or practices), the viewing of relevant film material, group discussion, exercises and excursions for future clinical sexologists in Denmark (Giami and Janssen 2019). No published scientific evaluation of the Nordic SAR/SSA can be found.

Towards the end of the last decade, a lack of research providing evidence for the clinical value of SAR was noted (Barratt 2008; Sitron and Dyson 2009). Research referred to in the previously mentioned SAR guide consisted only of information provided by previous SAR-trained professionals and their experiences participating in SAR. Evaluation of this experience using Likert scales has been recommended, as a well-designed, psychometrically valid questionnaire is lacking (Britton and Dunlop 2017). Lack of valid evaluation tools makes comparisons between SAR interventions and their outcomes difficult to assess. Attempts to measure SAR effectiveness using several different instruments have yielded inconsistent and contradictory results (Barratt 2008; Sitron and Dyson 2009), and an up to date systematic review of the literature concerning SAR and its pedagogical value is lacking.

Aim

The aim of this study was to explore the current evidence and pedagogical relevance for the use of SAR in higher education professional training in sexology. In particular, our focus was on exploring for whom (for all students?), how (delivered how, and by whom?) and why (what results can be expected?) SAR might be relevant as part of higher sexology education.

Methods

Data collection

A systematic review was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) statement (Moher et al. 2009). Peer-reviewed articles and other relevant sources of information (i.e., doctoral dissertations) about SAR, written in English, Danish, Norwegian or Swedish, and retrievable on selected databases up until 6 November 2020 were included. No limits were set on publication date or study design.

The core database search strategy used was free text search with the string 'Sexual# Attitude# Reassessment and Restructuring' OR 'Sexual# Attitude# Reassessment' OR 'Sexual# Attitude# Restructuring'. The following six databases were consulted: *EBSCO* (including: Academic Search Elite, Cinahl, Education Research Complete, ERIC, MEDLINE, Open Dissertations, Teacher Reference Center), *NLM/NCBI* (including: PubMed), *ProQuest* (Including: PsycInfo, Sociological Abstracts, Social Services Abstracts), *Svemed+, Swepub* and the *Cochrane Library*. Svemed+, Swepub and the Cochrane Library generated no search hits. EBSCO, ProQuest and NLM/NCBI generated a total of 75 abstracts (duplicates removed).

Twelve abstracts (published between 1978 and 2012, the majority in the 1970s) regarding SAR with clients or patients were excluded as they were not within the scope of this study. Abstracts that were off topic (i.e. not about SAR) were also excluded, as were abstracts (published between 1978 and 2011) consisting of Letters to the Editor on the importance of SAR (from the 1970s), information on upcoming SAR courses (mainly from the 2000s), one SAR book review (from 2006), and one theoretical paper on SAR published

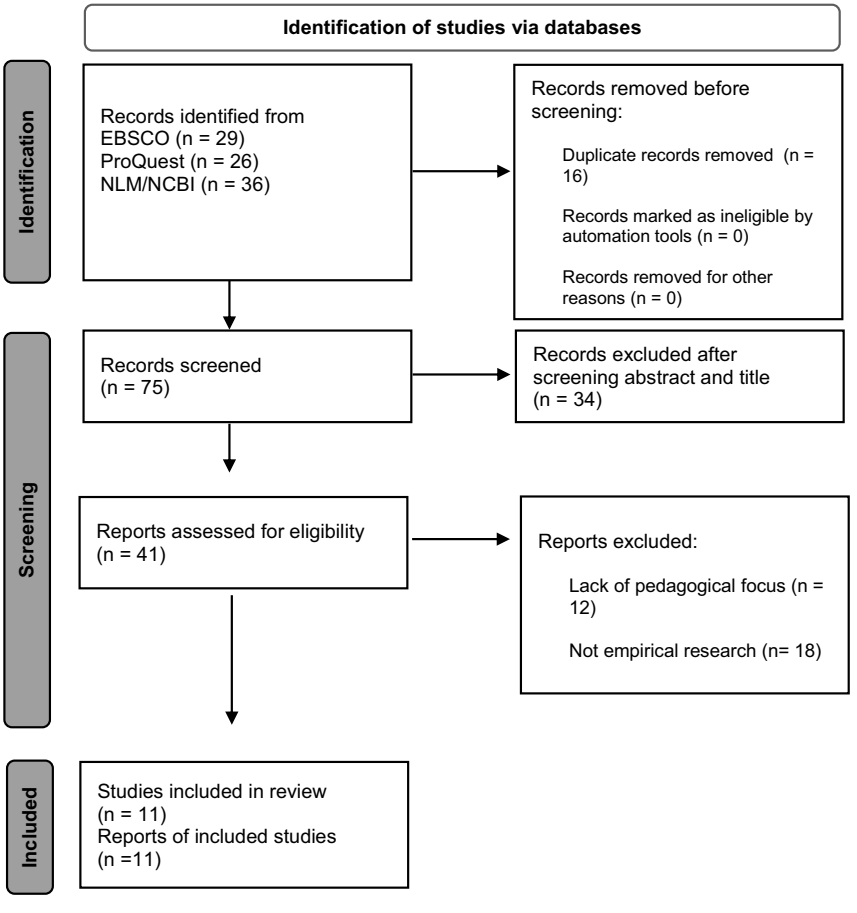

Figure 1. Flow chart detailing literature search.

Table 1. Study quality assessment according to the mixed methods appraisal tool, MMAT.

First Author (Year)	Methodological quality criteria assessment according to MMAT							Overall Study Quality
	Quantitative Randomised Controlled Trial							
	Clear RQ?	Collected data address RQ?	Appropriate randomisation?	Comparable groups at baseline?	Complete data outcome?	Outcome assessors blinded?	Participant adherence?	
Aja (1982)	Yes	Yes	Yes	Not clear	Yes	Not clear	Yes	Medium quality
Rodriguez-K (2002)	Yes	Yes	Not clear	Yes	Yes	Not clear	Yes	Low quality
	Quantitative Non-Randomised							
	Clear RQ?	Collected data address RQ?	Participants represent target population?	Relevant intervention & outcome measurements?	Complete data outcome?	Confounders accounted for?	Intervention administered as intended?	
Held et al. (1975)	Yes	Yes	Yes (not CG)	Not clear	No	Yes	Yes	Medium quality
Halstead et al. (1976)	Yes	Yes	Yes	Yes	Yes	Not clear	Yes	Medium quality
Graves (1979)	Yes	Yes	Yes	Yes	Yes	Not clear	Yes	Medium quality
Friend (1986)	Yes	Yes	Yes	Yes	Not clear	Not clear	Yes	Medium quality
	Quantitative Descriptive							
	Clear RQ?	Collected data address RQ?	Relevant sampling strategy?	Sample represent target population?	Measurements appropriate?	Low risk nonresponse bias?	Statistical analysis appropriate?	
Held et al. (1974)	No	Not clear	No	Yes	Not clear	Yes	Not clear	Low quality
Wollert (1978)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High quality
Halstead et al. (1983)	Yes	Not clear	Yes	Not clear	Not clear	Not clear	No	Low quality
	Mixed Methods							
	Clear RQ?	Collected data address RQ?	Adequate rationale for method?	Different components integrated?	Output adequately addressed?	Divergences between methods addressed?	Components adhere to relevant research tradition?	
Held et al. (1978)	Yes	Not clear	Yes	Not clear	Not clear	No	No	Low quality
Lin et al. (2018)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High quality

in 1998. A total of eleven empirical studies were included in the review. Both authors read the abstracts separately and thereafter agreed on the inclusion of the selected studies for full-text reading. See Figure 1.

Quality appraisal of included studies

The empirical studies were read and assessed using the Mixed Methods Appraisal Tool, MMAT, a critical appraisal tool used for the appraisal stage in a systematic mixed studies review (Hong et al. 2018). Assessments were conducted individually by the authors, and disagreement resolved in a consensus meeting. Disagreement existed for one study, which was subsequently assessed as being of low quality.

The assessment overall identified two quantitative randomised trials of medium (Aja 1982) and low quality (Rodriguez-Kitkowski 2002), four quantitative non-randomised studies of medium quality (Held et al. 1975; Halstead et al. 1976; Graves 1979; Friend 1986), three quantitative descriptive studies of low (Held et al. 1974; Halstead and Halstead 1983) and high quality (Wollert 1978), and two mixed methods studies of low (Held and Rosenberg 1978) and high quality (Lin and Lin 2018). See Table 1.

Data analysis

Due to substantial differences in study populations, intervention approaches, outcomes and measures, standard summary measures for intervention outcomes were deemed inappropriate, and data were synthesised across studies and presented narratively (Popay et al. 2006).

Findings

Findings from the narrative analysis are presented under four themes: context of publication; population size and participant characteristics; delivered SAR interventions and examined SAR aspects; outcome measures and main results. An overview of included studies is presented in Table 2.

Context of publication

As can be seen from Table 2, six of the eleven publications come from the 1970s, three are from the 1980s, one from the 2000s, and one from 2018. Ten studies are from the USA, and the latest of these (Rodriguez-Kitkowski 2002) is close to 20 years old. One study is from Taiwan, which is also the most recent publication (Lin and Lin 2018). Three publications include the same lead author (Held et al. 1974, 1975; Held and Rosenberg 1978), and two are from Halstead (Halstead et al. 1976; Halstead and Halstead 1983). Four of the publications are doctoral dissertations (Aja 1982; Friend 1986; Graves 1979; Rodriguez-Kitkowski 2002).

Table 2. Detailed description of studies included in the systematic review of SAR as a pedagogical tool for education in sexology.

Year, Author(s), Country & Publication type	Participants	Study design	Intervention or *SAR aspect examined*	Outcome measures	Main results
1974 Held, Cournoyer, Held & Chilgren USA Scientific paper	93 physicians, 103 nurses, 178 medical students, 49 clergy	Quantitative descriptive	2, 3 and 7-day SAR, including small group discussions, large group discussions, explicit movies and slides	5-item questionnaire immediately post seminars (96% response rate) in 1973.	Overall positive responses on experiences of the SAR seminars.
1975 Held, Cole, Held, Anderson & Chilgren USA Scientific paper	53 professionals: 51% men, 49% women 68% were between 27 and 45 years old Control group: 18 first-year medical students 72% men, 28% women, 18 to 35 years old	Quantitative non-randomised	3 x 2-day SAR including small group discussions, large group discussions, explicit movies, music and slides	Intervention group: 14-item Sexual Attitudes Scales before the workshop, end of first two days, before and after third day, six weeks post workshop Control group: Pre workshop and post workshop	Intervention group: Significant changes in 9 of 14 items in the direction of increased comfort increased comfort in relation to self or others engaging in certain sexual activities. Control group: No significant changes
1976 Halstead, Halstead Salhoot, Stock & Sparks USA Scientific paper	508 participants: 55% women, 53% over 27 years 48% were healthcare professionals, 23% students, and 15% patients with physical disability	Quantitative non-randomised	2.5-day SAR workshop including films, tapes, slides, talks and small group discussion	Programme evaluation questionnaire post workshop, Minnesota Sexual Attitudes Scales immediately before and after workshop	In programme evaluation, 97% said the workshop was beneficial, 96% enjoyed the programme, 91% could now discuss sex more freely, 97% stated the workshop dispelled myths about sex, and 88% that SAR workshop should be part of professional training. Mean scores (206 respondents) for all 9 items of the Minnesota Sexual Attitudes Scales changed in a positive direction, 6 of 9 items showed significant changes

(*Continued*)

Table 2. (Continued).

Year, Author(s), Country & Publication type	Participants	Study design	Intervention or *SAR aspect examined*	Outcome measures	Main results
1978 Held & Rosenberg USA Scientific paper	200 SAR small group leaders	Mixed methods	*Describes recruitment, training, and evaluation of SAR small group leaders, based on authors' experience and on SAR participants' evaluation*	SAR small-group leaders were evaluated using a 1 to 5 scale including four elements (peer evaluation, participant evaluation, level of training in sexology and small group process, and experience)	No result from the numeric evaluation is presented, only reflections based on authors' experiences of being small-group leaders.
1978 Wollert USA Scientific paper	11 SAR directors	Quantitative descriptive	*Examines SAR directors*	37-item questionnaire concerning various aspects of SAR	SAR directors show both similarities (programme titles, sponsoring agencies, client populations, and goals) and differences (degree of control exercised by leaders, emphasis on attitude change, and participation pressure). They uniformly rated their programmes as effective and considered minimal negative psychological effects.
1979 Graves USA Doctoral dissertation	18 counsellors-in-training: 8 males, 10 females	Quantitative non-randomised	12-hour SAR workshop	Pre and post-test two weeks before and after with Sex Knowledge Attitude Test, Heterosexual Relations Scale, Sexual Myths Scale, and Autoeroticism Scale	No significant change in sexual attitudes or in sexual knowledge but in sexual counselling confidence.
1982 Aja USA Doctoral dissertation	45 nursing home staff (registered nurses, licenced practitioners, nurse's aides, administrators, and activities directors)	Quantitative randomised control trial	Randomly allocated to two experimental groups with 2-day SAR workshop for 1) low dogmatism group who received explicit sexual material SAR or 2) high dogmatism group who received implicit sexual material SAR or 3) control group.	Intervention group: Dogmatism Scale, Sexual Knowledge and Attitudes Scale, and Attitude Rating Scale pre- and 1-week post intervention. Control group: Same instruments pre workshop	Nursing home staff can change sexual attitudes after SAR workshop. Implicit and explicit film differentially affected staff attitudes about sexual behaviour

(*Continued*)

Table 2. (Continued).

Year, Author(s), Country & Publication type	Participants	Study design	Intervention or *SAR aspect examined*	Outcome measures	Main results
1983 Halstead & Halstead USA Scientific paper	398 participants in 10 consecutive 3-day SAR workshops	Quantitative descriptive	*SAR small group process*	A conceptual framework with six stages that occur during most SAR small-group experiences. Anonymous evaluations of 398 participants regarding various aspects of the small-group experience for groups facilitated by the authors and those facilitated by other staff members during ten consecutive SAR workshops.	Differences in how SAR participants rate their experiences between the groups facilitated by the authors (more satisfied) and by other facilitators (less satisfied)
1986 Friend USA Doctoral dissertation	48 subjects divided into SAR group with explicit film and SAR group without explicit film	Quantitative non-randomised	*The relationship between group cohesion and the development of pluralism in sexual attitudes as a function of the small-group component of SAR*	Change in self-acceptance measured with Sexual Opinion Scale pre- and post-SAR Change in acceptance of others measured with Sexual Attitudes Scale pre- and post-SAR	No significant differences between groups on the predicted relationships between cohesion and changes in self-acceptance and acceptance of others
2002 Rodriguez-Kitkowski USA Doctoral dissertation	23 counsellor students at master's level	Quantitative randomised control trial	Subjects randomly assigned to one of two treatment groups (moral development group or knowledge and attitude group) and attended two weekends with seminars (a human sexuality topics portion and a SAR portion) each weekend.	Pre-test and post-test after each weekend with Defining Issue test and Sexual Myths Attitudinal Score	No statistically significant differences in moral development, knowledge, or attitudes between groups
2018 Lin & Lin Taiwan Scientific paper	32 graduate students in human sexuality: 38.9% females and 61.1% males, 21 to 51+ years old	Mixed methods	A modified one-term SAR curriculum: in total, 32 hours for 16 weeks.	Pre-test and post-test with a customised sexual attitude scale Focus group interviews	Changes in students' attitudes, particularly for those who had more conservative or negative sexual attitudes. Thematic analysis of focus group interviews resulted in students changing their attitudes about sexuality due to the desensitisation, sensitisation and integration effects.

Population sizes and participant characteristics

The characteristics of participants in the included publications vary. In the seven studies examining various SAR interventions (Aja 1982; Graves 1979; Held et al. 1974, 1975; Halstead et al. 1976; Lin and Lin 2018; Rodriguez-Kitkowski 2002), a total of 1,102 participants (ranging from 18 to 508) were included. A mix of professionals (physicians, registered nurses, clergy, licenced practitioners, nurses' aides, administrators, and activities directors) and students (medical students, counsellor students, students in human sexuality) are described.

Participants´ sex and age are reported in four of the seven studies. When sex is reported, approximately as many women as men were included, and age varied between 18 and 51+ years (Held et al. 1975; Halstead et al. 1976; Graves 1979; Lin and Lin 2018). In the four studies examining specific aspects of SAR (Halstead and Halstead 1983; Friend 1986; Held and Rosenberg 1978; Wollert 1978), 657 participants (ranging from 11 to 398) took part, but no information about participants' age or sex is given. Participants are described as SAR small group leaders, SAR directors, SAR workshop participants and subjects.

In one study, 15% of participants were patients with physical disability (Halstead et al. 1976). It was included in the review, since most participants (85%) were professionals.

Delivered SAR interventions and SAR aspects examined

Delivered SAR interventions

Seven publications present various SAR interventions. In four of these, SAR is typically described as involving small group discussion, large group discussion, viewing explicit movies, and slides, for 2, 3 or 7 days (Held et al. 1974), three 2-day workshops (Held et al. 1975), for 2 and a half days (Halstead et al. 1976), and for 12 hours (Graves 1979).

In one study, participants were involved in a 2-day SAR workshop. Based on pre-test results, participants were assigned beforehand to a Low Dogmatism Group SAR (which received explicit sexual material), a High Dogmatism Group SAR (which received implicit sexual material), and a control group (Aja 1982). Another study delivered two weekends of seminars (including 'human sexuality topics' and a 'SAR portion') each weekend, with participants being randomly assigned to one of two treatment groups: the Moral Development Group and the Knowledge and Attitude Group (Rodriguez-Kitkowski 2002). One study delivered a modified one-term SAR curriculum, lasting for a total of 32 hours over a period of 16 weeks (Lin and Lin 2018).

Examined SAR aspects

Four publications focus on specific aspects of SAR: the first provides a description of the recruitment, training, and evaluation of SAR small group leaders (Held and Rosenberg 1978); the second focuses on the experiences of SAR directors (Wollert 1978); a third examines SAR small group experience (Halstead and Halstead 1983); and the fourth examines the relationship between group cohesion and the development of pluralism in sexual attitudes as a function of the SAR small group component (Friend 1986).

Outcome measures and main results

Outcome measures and main results in SAR intervention studies

Held et al. (1974) administered a 5-item questionnaire immediately post SAR and reported a 96% response rate, and overall positive responses to the experience of the SAR seminars. However, the validity/reliability of the questionnaire is not described, and there it is a lack of clarity concerning the response rate itself: the 96% response rate given is said to be based on 1,381 participants (physicians, nurses, medical students and clergy) which exceeds the number of participants (423 in the presented tables). Additionally, as results are presented in aggregate form, it is impossible to separate the number of participants in the 2, 3- and 7-day SAR workshops. Additional lack of clarity exists regarding a six-week follow-up on participants from other SAR seminars, which is briefly mentioned as a part of the results.

In 1975, Held and colleagues published the results from a SAR intervention group, as measured with the 14-item instrument Sexual Attitudes Scale before the workshop, at the end of first two days, before and after the third day, and sex weeks post workshop. The control group was assessed with the same scale pre and post workshop. The intervention group showed significant change in 9 of 14 items, in the direction of increased comfort in relation to the self or others engaging in certain sexual activities. The control group showed no significant changes (Held et al. 1975). However, the publication does not describe the participants' profession, nor does it detail the validity and reliability of the instrument used, and it is unclear what the control group workshop entailed.

Halstead et al. (1976) used a programme evaluation questionnaire post event, and the 9-item instrument Minnesota Sexual Attitudes Scales immediately before and after an SAR workshop for health care professionals and students, and for patients with physical disability. In the programme evaluation, 97% said the workshop was beneficial, 96% that they enjoyed the programme, 91% that they could now discuss sex more freely, 97% that the workshop dispelled myths about sex, and 88% that a SAR workshop should be part of professional training. The mean scores for all nine items of the Minnesota Sexual Attitudes Scales changed in a positive direction, with 6 of 9 items showing significant changes (Halstead et al. 1976). However, response rates are not clearly described, the response analysis per item is not given, and the validity and reliability of the instrument used is not described.

Graves (1979) used the Sex Knowledge Attitude Test, the Heterosexual Relations Scale, the Sexual Myths Scale and the Autoeroticism Scale two weeks before and two weeks after an SAR intervention for counsellors in training. No significant changes in sexual attitudes or sexual knowledge were found, but there was an increase in students sexual counselling confidence.

In 1982, Aja used the Dogmatism Scale, the Sexual Knowledge and Attitudes Scale, and the Attitude Rating Scale pre- and one week post-intervention with two (intervention and the control) groups of nursing home staff. Participants changed their sexual attitudes in a positive direction after SAR workshops, with exposure to implicit and explicit films as part of the SAR affecting staff attitudes towards sexual behaviour differently (Aja 1982). However, group allocation was unclear.

Rodriguez-Kitkowski (2002) administered the Defining Issue test and the Sexual Myths Attitudinal Score, before and after each of two weekends with SAR for counsellor students. No statistically significant differences in moral development, knowledge, or

attitudes between the two groups involved in the study (Moral Development Group or Knowledge and Attitude Group) were found (Rodriguez-Kitkowski 2002). The study did not specify the group allocation process.

In the most recent of the seven SAR intervention studies, Lin and Lin (2018) administered a customised sexual attitude scale before and after a 16-week SAR curriculum was delivered to graduate students in human sexuality, and conducted focus group interviews one week post intervention. Changes in a positive direction were found regarding students' attitudes as measured with the customised scale, especially for those who had more conservative or negative sexual attitudes. The content validity of the scale was evaluated by six experts, and showed high internal consistency. Thematic analysis of focus group interviews revealed that students saw their attitudes towards sexuality change. This was attributed to desensitisation (a positive environment made students less embarrassed, and less fearful or anxious when discussing sex) sensitisation (students were made aware of sexual issues, and to set aside bias), and integration (students developed sympathy for and understanding of the sexual needs of others) effects of the learning activities.

Outcome measures and main results in studies examining specific SAR aspects

In Held and Rosenberg's (1978) evaluation of SAR small group leaders, the evaluation was based on four elements (peer evaluation, participant evaluation, level of training and experience) measured on a 1 to 5 scale. These results are not presented in the paper. Instead, the results are based on the authors' own experiences of being small group leaders.

In a study of eleven SAR directors, Wollert (1978) administered a 37-item questionnaire concerning various aspects of SAR (not specified), participants uniformly rated their programmes as effective with minimal negative psychological effects. However, the results are based on a small sample, and no information on instrument reliability and validity is provided.

In 1983, Halstead and Halstead developed a conceptual framework detailing six stages they claimed to occur during SAR small group experiences. In addition, they retrieved and analysed anonymous evaluations from 398 SAR participants in groups facilitated by the authors and in groups facilitated by others. Participants were asked to rate their experiences of the total group experience, the effectiveness of the group leaders, and participants' own contribution to the group experience on a scale of 1 to 5. Differences were found between how SAR participants rated their experience with groups facilitated by the authors (more satisfied) and by other facilitators (less satisfied). However, again data on instrument reliability and validity are not presented, it is not specified whether the differences found were statistically significant or not, and the possible influence of the authors themselves on participants' responses is not discussed.

Finally, Friend (1986) measured changes in self-acceptance using the Sexual Opinion Scale, and in acceptance of others measured with Sexual Attitudes Scale pre- and post SAR workshops, or SAR-like workshops (control). No significant differences were found between groups on predicted relationships between group cohesion and changes in self-acceptance and acceptance of others. Additionally, the background of participants in the study is not specified and the publication is available only as an extended abstract.

Discussion

Lack of current evidence

This systematic review of eleven empirical studies on SAR shows that the publications are old, most coming from the 1970s. Additionally, publications derive from a small pool of researchers, geographically located in the USA. To date, it appears that SAR has not been evaluated in a Nordic context.

Many of the existing studies involve small numbers of participants with a wide variety in types of professionals and students being included. The seven publications delivering SAR interventions used different instruments, mostly unvalidated, and a variety of methods to measure the results. Long-term follow-up rarely occurred. Only two studies were rated as being of good quality (Lin and Lin 2018; Wollert 1978). The four publications focusing on specific aspects of SAR measured change in various ways, and none of the studies were of good quality. Overall, current evidence on the pedagogical relevance of SAR as a key part of higher education training in sexology is lacking.

There are important similarities in publication years between the eleven reviewed publications and the twelve publications of SAR for patients that were excluded (eight of the latter came from the 1970s, two from the 1980s, one from the 1990s, and the latest from 2012. This suggests that with respect to a range of groups evaluation research on SAR is rare. Summarising, despite a wide and generous search strategy, lack of evaluative evidence, as previously described by Wollert (1978), Barratt (2008), and Sitron and Dyson (2009), remains present today.

A relevant pedagogical method in the 2020s?

The variations of SAR found in this review are similar to variations in Nordic SAR/SSA (Giami and Janssen 2019). This plethora of adaptations of an original idea is in line with findings in a scoping review on motivational interviewing (MI) as a sexual risk reduction intervention targeting young people. Results there showed a wide range of study designs and evaluation procedures, MI conceptualisations, modes of MI delivery, and sub-populations of youth and sexual risk behaviours targeted (Bahner and Stenqvist 2020). Like others, we are not in favour of standardised, linear, inflexible, and thereby easily quantifiable ´educational packages', as it is important to consider students´ various learning styles (Marton, Hounsell, and Entwistle 1984). However, sexology needs to be a scientifically based subject and discipline, which includes teaching sexology using pedagogically sound methods.

The requirement of SAR to become a certified sexologist in the Nordic countries stems from the practical needs of sexology, not the scientific. However, research and evaluation need to be central parts of teaching (Evans et al. 2020). Consequently, we suggest, regardless of original SAR or Nordic SAR/SSA is used, that fellow sexological scholars and clinical experts evaluate and publish their work and allow it to be scrutinised and reproduced according to current standards.

Excellence in pedagogy is rooted in a specific time and place (Evans et al. 2020). Most of the reviewed studies come from the 1970s, suggesting the excellence of the work undertaken may be deficient when judged by modern standards. Today the Internet provides

opportunities to locate sexually explicit material relevant to all areas in sexology, which is a major societal and technological change compared to the 1970s (Brewster and Wylie 2008; Rosser et al. 1995). This makes discussion of potentially provoking sexually explicit material easier.

Considering education in this digital era, and at a time when education has been forced online due to the COVID-19 pandemic, the delivery of SAR may need to change. To aid this endeavour, the methods employed in digital sexology education can be used (Green, Hamarman, and McKee 2015). However, we propose that it is unnecessary to frame these evolving educational methods as SAR. Instead, based on our findings, we agree with Sitron and Dyson (2009) who argue that that present and future pedagogical methods should be 'connected to developing self-awareness in sexologists of their sexological worldview and broadening its scope, rather than [attempting] to change their specific attitudes' (p. 172.).

Strengths and limitations

To the best of our knowledge this is the first systematic review of SAR. However, like all reviews, it has its limitations. Although we used a comprehensive search strategy, we may have overlooked some studies, especially those published in languages other than English, Norwegian, Danish or Swedish. Moreover, only information detailed in the reviewed publications was assessed, and key details were lacking in several publications. The stepwise process of combining individual and paired assessments during the inclusion and analysis process is a strength of the study, as was the authors experience teaching and researching sexology in higher education in Sweden, Norway and Denmark. The decision to only use the search string Sexual Attitudes and Reassessment and/or restructuring may have resulted in that studies with SAR-like approaches were missed. The inclusion of student theses and dissertations on the other hand decreased the risk of publication bias, which might have been the case if only articles from peer reviewed journals had been reviewed. As it turned out, theses and dissertations constituted one-third of the results.

Conclusion

Extensive, high-quality, up-to-date research on SAR as an effective pedagogical method is needed. Digital solutions focusing on broadening students sexological self-awareness appear to be more feasible than SAR workshops, and suitable pedagogical and digital solutions need to be developed and evaluated to ensure the high-quality teaching of sexology in higher education.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

* An asterisk denotes each of the eleven studies included in the review

*Aja, A. M. C. 1982. "Alternate Methods of Changing Nursing Home Staff Attitudes toward Sexual Behavior in the Aged." EdD diss., College of William and Mary in Virginia.

American Association of Sexuality Educators, Counselors and Therapists. 2021. Accessed 11 August 2021. https://www.aasect.org/aasect-requirements-sex-therapist-certification

Areskoug-Josefsson, K., A. C. Schindele, C. Deogan, and M. Lindroth. 2019. "Education or Sexual and Reproductive Health and Rights (SRHR): A Mapping of the SRHR-related Content in Higher Education in Health Care, Police, Law and Social Work in Sweden." *Sex Education* 19 (6): 720–729. doi:10.1080/14681811.2019.1572501.

Bahner, J., and K. Stenqvist. 2020. "Motivational Interviewing as Evidence-based Practice? An Example from Sexual Risk Reduction Interventions Targeting Adolescents and Young Adults." *Sexuality Research & Social Policy* 17: 301–313. doi:10.1007/s13178-019-00388-y.

Barratt, B. B. 2008. "Evaluating Brief Group Interventions in Sexuality Education and Enhancement: Do Workshops Really Work?" *American Journal of Sexuality Education* 3 (4): 323–343. doi:10.1080/15546120802371992.

Brewster, M., and K. R. Wylie. 2008. "The Use of Sexually Explicit Material in Clinical, Educational and Research Settings in the United Kingdom and Its Relation to the Development of Psychosexual Therapy and Sex Education." *Sex Education* 8 (4): 381–398. doi:10.1080/14681810802433903.

Britton, P., and R. E. Dunlop. 2017. *Designing and Leading A Successful SAR. A Guide for Sex Therapists, Sexuality Educators and Sexologists*. New York: Routledge.

Colomer, J., T. Serra, D. Canabate, and R. Bubnys. 2020. "Reflective Learning in Higher Education: Active Methodologies for Transformative Practices." *Sustainability* 12 (9): 3827. doi:10.3390/su12093827.

Danish Health Authority. 2018. *Forebyggelsepakke. Sexsuel Sundhet [Prevention Package. Sexual Health]*. Accessed 24 May 2021. from https://www.sst.dk/-/media/Udgivelser/2018/Forebyggelsespakker/Seksuel-sundhed.ashx?la=da&hash=12F5E5DC142446B0647C6B0559656C6C59F38753

Evans, C., C. Kandiko Howson, A. Forsythe, and C. Edwards. 2020. "What Constitutes High Quality in Higher Education Pedagogical Research?" *Assessment & Evaluation in Higher Education* 46 (4): 525–546. doi:10.1080/02602938.2020.1790500.

*Friend, R. A. 1986. "The Relationship between Group Cohesion and the Development of Pluralism in Sexual Attitudes as a Function of the Small Group Component of SAR Seminars." PhD diss., University of Pennsylvania.

Fugl-Meyer, K. S., and A. Giami. 2006. "Swedish Clinical Sexologists. Who are They? Who Do They Treat?" *Sexologies* 15 (1): 14–21. doi:10.1016/j.sexol.2005.11.003.

Gerbild, H., C. M. Larsen, T. Junge, B. S. Laursen, and K. Areskoug-Josefsson. 2021. "Danish Health Professional Students' Attitudes toward Addressing Sexual Health: A Cross-sectional Survey." *Sexual Medicine* 9 (2): 100323. doi:10.1016/j.esxm.2021.100323.

Giami, A., and E. Janssen. 2019. "Abstracts for the 24th Congress of the World Association for Sexual Health (WAS)." *International Journal of Sexual Health* 31 (sup1): 1–627. doi:10.1080/19317611.2019.1661941.

Gonçalves, S. P., M. José Sousa, and F. Santos Pereira. 2020. "Distance Learning Perceptions from Higher Education Students—The Case of Portugal." *Education Sciences* 10 (12): 374. doi:10.3390/educsci10120374.

Government of Iceland. 2019. "Health Policy - A Policy for Iceland's Health Services until 2030." Accessed 24 May 2021. https://www.government.is/lisalib/getfile.aspx?itemid=f6bf2a32-c28d-11e9-9446-005056bc530c

Government of Sweden. 2020. "Bättre Sexualundervisning För Unga [Better Sex Education for Young People]." Accessed 21 April 2021. https://www.regeringen.se/pressmeddelanden/2020/09/battre-sexualundervisning-for-unga/

*Graves, N. D. 1979. "The Effects of a Sexual Attitude Reassessment Workshop on the Sexual Attitudes, Knowledge And/or Counselling Confidence of Counsellors-in-training." EdD Diss., Indiana university.
Green, E. R., A. Hamarman, and R. W. McKee. 2015. "Online Sexuality Education Pedagogy: Translating Five In-person Teaching Methods to Online Learning Environments." *Sex Education* 15 (1): 19–30. doi:10.1080/14681811.2014.942033.
*Halstead, L. S., and K. Halstead. 1983. "Disability SARs and the Small Group Experience: A Conceptual Framework." *Sexuality and Disability* 6 (3–4): 183–196. doi:10.1007/BF01136076.
*Halstead, L. S., M. M. Halstead, J. T. Salhoot, D. D. Stock, and R. W. Sparks. 1976. "Human Sexuality: An Interdisciplinary Program for Health Care Professionals and the Physically Diabled." *Southern Medical Journal* 69 (10): 1352–1355. doi:10.1097/00007611-197610000-00029.
*Held, J. P., T. M. Cole, C. A. Held, C. Anderson, and R. A. Chilgren. 1975. "Sexual Attitude Reassessment Workshops: Effect on Spinal Cord Injured Adults, Their Partners and Rehabilitation Professionals." *Archives of Physical Medicine and Rehabilitation* 56 (1): 14–18.
*Held, J. P., C. R. Cournoyer, C. A. Held, and R. A. Chilgren. 1974. "Sexual Attitude Reassessment. A Training Seminar for Health Professionals." *Minnesota Medicine* 57 (11): 925–928.
*Held, J. P., and P. P. Rosenberg. 1978. "The Care and Feeding of Small-group Leaders of Sex Discussion Groups." *Journal of Sex & Marital Therapy* 4 (4): 292–297. doi:10.1080/00926237808403028.
Hong, Q. N., S. Fàbregues, G. Bartlett, F. Boardman, M. Cargo, P. Dagenais, M. P. Gagnon, et al. 2018. "The Mixed Methods Appraisal Tool (MMAT) Version 2018 for Information Professionals and Researchers." *Education for Information* 34 (4): 285–291. doi:10.3233/EFI-180221.
Kirkpatrick, D. 1996. "Great Ideas Revisited: Revisiting Kirkpatrick's Four-Level Model." *Training and Development* 50: 54–59.
*Lin, Y. L., and Y. C. Lin. 2018. "Effectiveness of the Sexual Attitude Restructuring Curriculum Amongst Taiwanese Graduate Students." *Sex Education* 18 (2): 140–156. doi:10.1080/14681811.2017.1410698.
Lunde, G. H., A. Bakke, and K. Areskoug-Josefsson. 2020. "Piloting A Research-oriented Teaching Model in A Bachelor Program for Social Educators – A Way to Increase Competence in Research Methodology and Sexual Health?" *Uniped* 43 (3): 260–274. doi:10.18261/.1893-8981-2020-03-08.
Marton, F., D. Hounsell, and N. Entwistle. 1984. *The Experience of Learning*. Edinburgh: Scottish Academic Press.
Michel, N., J. J. Cater, and O. Varela. 2009. "Active versus Passive Teaching Styles: An Empirical Study of Student Learning Outcomes." *Human Resource Development Quarterly* 20 (4): 397–418. doi:10.1002/hrdq.20025.
Ministry of Health and Care Services. 2017. "Snakk Om Det! Strategi for Seksuell Helse 2017-2022 [Talk about It! Strategy for Sexual Health 2017-2022]." Accessed 24 May 2021. https://www.regjeringen.no/contentassets/284e09615fd04338a817e1160f4b10a7/strategi_seksuell_helse.pdf
Ministry of Social Affairs and Health. 2014. "Edistä, Ehkäise, Vaikuta - Seksuaali- Ja Lisääntymisterveyden Toimintaohjelma 2014–2020 [Promote, Prevent, Influence - Sexual and Reproductive Health Action Plan 2014–2020]." Accessed 24 May 2021. http://urn.fi/URN
Moher, D., A. Liberati, J. Tetzlaff, and D. G. Altman; The PRISMA Group. 2009. "Preferred Reporting Items for Systematic Reviews and Meta-analyses: The PRISMA Statement." *BMJ* 339: b2535. doi:10.1136/bmj.b2535.
Nordic Association for Clinical Sexology. 2021. Accessed 8 December 2021. https://www.nacs.eu/
Øvreås, S., S. Kittilsen, E. E. Foyn-Bruun, and A. L. Bjerknes. 2021. ""'jeg Ble Langt Mer Skjerpet' – Erfaringer Med Digitalt Samarbeid Om Undervisningspraksis" [" 'I Became More Focused' – experiences of Digital Cooperation regarding Educational Practises. "]." *Uniped* 44 (2): 104–116. doi:10.18261/.1893-8981-2021-02-03.
Popay, J., H. Roberts, A. Sowden, M. Petticrew, L. Arai, M. Rodgers, N. Britten, et al. 2006. *Guidance on the Conduct of Narrative Synthesis in Systematic Reviews: Final Report*. Swindon: ESRC.

Public Health Agency of Sweden. 2020. "National Strategy for Sexual and Reproductive Health and Rights (SRHR) [Nationell Strategi För Sexuell Och Reproduktiv Hälsa Och Rättigheter (SRHR)]." Accessed 24 May 2021 https://www.folkhalsomyndigheten.se/contentassets/0d489b0821164e949c03e6e2a3a7e6cc/nationell-strategi-sexuell-reproduktiv-halsa-rattigheter.pdf

*Rodriguez-Kitkowski, L. L. 2002. "The Effects of a Human Sexuality Seminar on the Knowledge, Attitude, and Moral Development of Counseling Professionals." PhD diss., Wayne State University Detroit.

Rosser, B. R. S., S. M. Dwyer, E. Coleman, M. Miner, M. Metz, B. E. Robinson, and W. O. Bockting. 1995. "Using Sexually Explicit Material in Adult Sex Education: An Eighteen Year Comparative Analysis." *Journal of Sex Education and Therapy* 21 (2): 117–128. doi:10.1080/01614576.1995.11074142.

Sitron, J. A., and D. A. Dyson. 2009. "Sexuality Attitudes Reassessment (SAR): Historical and New Considerations for Measuring Its Effectiveness." *American Journal of Sexuality Education* 4 (2): 158–177. doi:10.1080/15546120903001407.

Starrs, A. M., A. C. Ezeh, G. Barker, A. Basu, J. T. Bertrand, R. Blum, A. M. Coll-Seck, et al. 2018. "Accelerate Progress—sexual and Reproductive Health and Rights for All: Report of the Guttmacher–lancet Commission." *The Lancet* 391 (10140): 2642–2692. DOI:10.1016/S0140-6736(18)30293-9.

Vilppu, H., I. Södervik, L. Postareff, and M. Murtonen. 2019. "The Effect of Short Online Pedagogical Training on University Teachers' Interpretations of Teaching–learning Situations." *Instructional Science* 47 (6): 679–709. doi:10.1007/s11251-019-09496-z.

*Wollert, R. W. 1978. "A Survey of Sexual Attitude Reassessment and Restructuring Seminars." *The Journal of Sex Research* 14 (4): 250–259. doi:10.1080/00224497809551012.

World Association for Sexual Health. 2009. "International Standards of Practice for Sexuality Educators and Sexual Health Promotion." Accessed 24 May 2021. 176.32.230.27/worldsexology.org/wp-content/uploads/2013/08/standards-of-sexual-education.pdf