Comprehensive Sexuality Education Interventions in Southeast Asia: A Narrative Literature Review

Written by: Ariana Mihan, MPH Candidate (Queen's University)

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Introduction

Comprehensive sexuality education (CSE) is defined as: “a curriculum-based process of teaching and learning about the cognitive, emotional, physical and social aspects of sexuality” (UNESCO et al., 2018). CSE has been shown to have beneficial effects not only in sexual and reproductive health, but also in knowledge, self-esteem, self-efficacy, attitudinal changes, gender and social norms (UNESCO, 2015). Eight key concepts have been outlined as being core components of CSE; 1) relationships; 2) values, rights, culture, sexuality, 3) understanding gender, 4) violence and safety, 5) skills for health and wellbeing, 6) the human body and development, 7) sexuality and sexual behaviour, and 8) sexual and reproductive health (UNESCO et al., 2018). Additionally, knowledge, attitudes and skill-building have been identified as key domains within CSE (UNESCO et al., 2018). The revised international technical guidance by UNESCO et al. (2018) has outlined content-specific recommendations within four age groups. The age range is 5 to 18+, with the eldest category recognizing that some content may be applied to older participants in tertiary institutions (UNESCO et al., 2018).

The HealthBridge Foundation of Canada aims to improve health and reduce health inequity through policy, research and action. One of their main program areas is the Sexual, Reproductive, Maternal and Child Health program, which aims to improve gender equality and improve reproductive, maternal, newborn and child health outcomes. HealthBridge collaborates with a local office based in Hanoi, Vietnam. As part of this program, HealthBridge has implemented Adolescent Reproductive Health (ARH) education events in two districts of Son La province, Vietnam over the course of eighteen months. This intervention, part of a larger maternal & child health project, encompassed 35 awareness-raising events at schools, and 126 events throughout local villages to ensure engagement with adolescents not in school. The programs and events reached over 10,000 students in schools and 3,897 adolescents within the community. One of the key recommendations drawn from the evaluation of the programs is to expand towards a CSE model in order to provide adolescents with the knowledge and skills needed to support their wellbeing, relationships and sexual and reproductive health.

This review aims to capture studies focused on the implementation and evaluation of CSE interventions and programs in Southeast Asia. The findings will inform future implementation of CSE interventions in HealthBridge’s working areas.
The key questions guiding this review are:

- What are the key components of effective CSE interventions?
- What are the different delivery models of CSE interventions?
- What is the impact and effectiveness of CSE interventions?

Methods

Search Strategy & Inclusion Criteria

The literature search was carried out on three databases: OVID Medline, Global Health and ERIC. Search terms focused on various ways of describing CSE, including terms such as “HIV education,” “life skills education,” or “reproductive health education.” These terms were combined with search terms about the geographic region of focus, which were countries in Southeast Asia. The search was limited to studies published since 2010. The search results were downloaded into the reference management software, EndNote, and duplicates were identified

and removed. These results were exported into Excel and abstracts and titles were screened for inclusion. Studies which were determined to be relevant or potentially relevant based on the abstract had their full-text articles retrieved and further reviewed for inclusion. Reference lists of the included studies were scanned to identify any further relevant studies. Additionally, the following NGO websites were examined for grey literature sources: UNFPA, UNESCO, and ARROW.

Studies were included if they were a primary study, published in or after 2010 in English, that focused on a CSE intervention or program which took place in Southeast Asia. Secondary sources, such as review articles, were not included. To meet inclusion, the studies needed to focus on a CSE intervention that went beyond simply providing education on contraception/STI prevention. Additionally, the objectives of the review were to gather specific information regarding the components and details of these interventions, papers which solely focused on perceptions or perspectives on the need for CSE were not included.

Findings

Seven studies were determined to be relevant for this review. Studies reported on interventions and programs which took place in Thailand (Boonmongkon et al., 2019; Chokephaibulkit et al., 2015; Seangpraw, Somrongthong, Choowanthanapakorn, & Kumar, 2017; Sommart & Sota, 2013; Tipwareerom, Powwattana, Lapvongwatana, & Crosby, 2011), Malaysia (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019) and Singapore (Wong et al., 2017). The majority of studies evaluated CSE interventions implemented by researchers, while a few examined the implementation of school-based CSE in practice. Many studies did not refer to the programs specifically as CSE, however interventions included components which aligned with the key concepts of CSE. Interventions and programs took place in a variety of settings, including schools, universities, and community settings such as clinics. They focused on adolescent participants with ages ranging from 10 to 21. The youngest study age-range was 10-13 (Tipwareerom et al., 2011), and the oldest was 18-21 (Seangpraw et al., 2017). The delivery strategies, content, development and impacts are examined and discussed.

Intervention Delivery

CSE interventions implemented by researchers were often delivered in a series of sessions spanning several weeks. For example, a sex education life-skills model was delivered in six weekly 90-minute sessions (Seangpraw et al., 2017). A similar time-frame was followed in a risky sexual behaviour prevention program for boys, with weekly 1-hour sessions taking place over 5 weeks (Tipwareerom et al., 2011). This study also incorporated the parents of the participants within the intervention. Separate interactive group sessions were held for the parents, which took place in two 3-hour sessions across 2-weeks (Tipwareerom et al., 2011). An intervention for adolescents living with HIV was delivered during routine clinic visits (Chokephaibulkit et al., 2015). The intervention encompassed two 60-90 minute group sessions, each followed by individual sessions (Chokephaibulkit et al., 2015). These interventions took place in out-of-school settings. An in-school intervention allocated 50 minutes for each classroom topic and completed the program across seven weeks (Sommart & Sota, 2013). Boonmongkon et al. (2019) examined the implementation of CSE in six Thailand schools and

found that time allocated towards CSE varied across the type of school. Interviews with students and teachers found that vocational schools offered CSE as a distinct subject through 18-20 sessions lasting 45-55 minutes, per term (Boonmongkon et al., 2019). In general secondary and extended opportunity schools (defined as primary schools offering lower secondary grade classes), the session lengths were similar at 40-55 minutes, however, they were delivered as part of health education and only 2-4 sessions out of 18 were allocated to CSE per term (Boonmongkon et al., 2019). In a report evaluating the implementation of CSE in Malaysian schools, the findings from teacher focus groups found that sexual education was often integrated into other subjects, such as health education, science, moral/Islamic education, and that only 10% to 20% of the syllabus was designated for sexual education in a year (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019).

A variety of different CSE delivery methods were reported, with interventions often making use of multiple strategies. Overall, participatory learning appeared to be prevalent among interventions, with role-playing being a frequently used strategy (Boonmongkon et al., 2019; Seangpraw et al., 2017; Sommart & Sota, 2013; Tipwareerom et al., 2011; Wong et al., 2017). Sommart and Sota (2013) reported using a participatory learning process within the school-based sexual health education program. The program was delivered by the researcher and health personnel facilitators and included a group discussion, case study, demonstrations and role play (Sommart & Sota, 2013). A similar participatory approach was undertaken in a life-skills sex education intervention for university students (Seangpraw et al., 2017). The intervention involved lectures, group discussions, game simulations, role-playing, brainstorming sessions, naming experiences and life skills training sessions (Seangpraw et al., 2017). An education program for boys was delivered through a series of interactive group sessions, with activities including lectures, discussions, card games, demonstration and practice for condom use and role-playing to practice learned skills (Tipwareerom et al., 2011). While group-based learning was a common element among studies, a behavioural intervention conducted in a Singapore clinic was delivered on an individual basis (Wong et al., 2017). This intervention used interactive flipcharts and videos to confer education on STIs and HIV, as well as motivational interviewing to facilitate goal setting by participants (Wong et al., 2017). Self-reflection, discussions and role-playing also took place. This intervention also involved peers, who provided practical tips on abstaining and assertively declining sex (Wong et al., 2017). An intervention for adolescents living with HIV encompassed both group and individual sessions, with group sessions including game-based activities relating to the content strategies of the intervention, and individual sessions including follow-up discussions tailored to the needs of the participant (Chokephaibulkit et al., 2015).

A study evaluating CSE implementation in six Thai schools highlighted that while a wide range of delivery strategies were reported, lecturing was the primary strategy used, with approaches such as role-playing being employed less frequently (Boonmongkon et al., 2019). The study also found that teachers were more likely to report using a wide-range of delivery methods, in comparison to what students reported as being used. This was further reflected by the drawings of students, which often demonstrated classroom settings, with a smaller amount of drawings showing condom or anatomy demonstrations (Boonmongkon et al., 2019). Similarly, the qualitative findings of a report evaluating CSE implementation in Malaysian schools identified that the delivery of CSE was primarily classroom-style (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019). Teachers described the delivery of material as being primarily classroom-style due to insufficient resources, as well as hesitation in using other

delivery methods, such as videos, out of fear of being misinterpreted (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019).

Intervention Content

There were varying levels of coverage of different CSE related-topics and content within CSE interventions. In Thai schools, the topics reported to be most highly covered were "sexual development, health and behaviour" and "identity and relationships" (Boonmongkon et al., 2019). The study found that a focus was placed on biology and the negative repercussions of sex. For example, the consequences of having an abortion were reported to be significantly stressed, while topics such as sexual rights and citizenship, and gender diversity were reported to be insufficiently covered (Boonmongkon et al., 2019). The qualitative findings of a report in Malaysia discussed that CSE was referred to as PEERS, and was described to be an abstinence-based curriculum (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019). Students described topics covered included the reproductive system and organs, pregnancy, relationships and "good and bad touch" (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019). Teachers also identified these as covered topics, as well as contraceptive methods and safe and unsafe sex. Teachers further reported that the curriculum entails a fear-based approach to sex education in order to discourage adolescents from in premarital unprotected sex (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019). This was also highlighted by students, who identified that they were primarily taught about abstinence and the risks of pre-marital sex. Students highlighted the emphasis on science-based topics, and overall had poor recall of the topics covered, particularly regarding life skills and healthy relationships (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019).

Several interventions integrated skill-building components into the content of their programs, encompassing skills related to coping, negotiation, decision-making and refusal (Chokephaibulkit et al., 2015; Seangpraw et al., 2017; Sommart & Sota, 2013; Tipwareerom et al., 2011; Wong et al., 2017). A 2017 study in Thailand used a life-skills model to confer sex education on HIV and STI prevention (Seangpraw et al., 2017). The program included topics such as communication, relationships, decision-making surrounding safe sex, risk reduction and planning for the future (Seangpraw et al., 2017). Students were also taught about self-efficacy, negotiation skills and condom use. A program for adolescents living with HIV was based on four strategies; health knowledge, coping skills, reducing sexual risk and the promotion of positive life goals (Chokephaibulkit et al., 2015). Through these strategies, topics covered included; knowledge regarding HIV and health in general; self-esteem and stress management; reproductive health, sex and sexual risk; and life skills, high-risk behaviours and life responsibilities (Chokephaibulkit et al., 2015). A sexual behaviour prevention program for boys encompassed the delivery of knowledge on STIs, self-efficacy in delaying sexual intercourse, condom use, decision-making and refusal skills, and communication with parents(Tipwareerom et al., 2011). This program additionally included sessions for parents, which covered parent monitoring, prevention of STIs, birth control, and practicing communicating with sons about sex. Negotiation skills were part of a school-based intervention in Thailand, where the program was composed of five main topics; adolescent development; inappropriate sexual behaviour and prevention; STIs and prevention, teen pregnancy and prevention; and methods of contraception (Sommart & Sota, 2013). The impact of premarital sex STIs and condom use were also part of a

behavioural intervention by Wong et al. (2017), in addition to risk behaviours, HIV, love, sex, respect, sexual abstinence, faithfulness, condom use and distraction strategies.

Intervention development

Studies reported using theories as part of the development of their interventions. Two studies described using self-efficacy and social cognitive theories by Bandura (Seangpraw et al., 2017; Wong et al., 2017). The Information-Motivation-Behavioral skills model and Green's PRECEDE PROCEED Framework were other theories underlying interventions (Tipwareerom et al., 2011; Wong et al., 2017). Consulting relevant literature was also reported to assist in informing interventions (Chokephaibulkit et al., 2015; Wong et al., 2017). In addition to using theories and literature, consultations and discussions with stakeholders often occurred in the development of interventions. Wong et al. (2017) reported consulting with social workers, psychologists, youth workers and religious leaders. Sommart & Sota (2013) described collaborating with school administrators, teachers, parent, community and student representatives in the development of the intervention, with a meeting taking place to discuss content and logistical aspects of the intervention. Importantly, the authors reported brainstorming with student representatives to develop the program activities (Sommart & Sota, 2013). Engaging with the target population was also seen in a study by Chokephaibulkit (2015), where focus groups with youth living with HIV and their caretakers were held as part of the intervention development. This study also held team meetings to discuss intervention activities and conducted pilot testing (Chokephaibulkit et al., 2015). Tipwareerom et al. (2011) described using a group meeting and brainstorming strategies with boys, parents and stakeholders such as community leaders and health teachers. This study reported a four-stage model development which encompassed; "developing participant readiness; organizing the prevention program; re-planning the prevention program; and forming a network for the prevention program" (Tipwareerom et al., 2011).

Training

A few studies described the training and preparation for the delivery of CSE interventions. In a program reported by Sommart & Sota (2013), facilitators spent two days prior to the implementation of the program practicing the delivery techniques and content of the program. Before the implementation of intervention reported by Chokephaibulkit (2015), personnel delivering the sessions were provided with training. Additionally, manuals and tools for the sessions were developed prior to the intervention (Chokephaibulkit et al., 2015). Similarly, counsellors who delivered a safer sex intervention were provided with training on motivational interviewing and behavioural strategies by the lead researcher (Wong et al., 2017). These counsellors were also given a training manual with a protocol for every session. In practice, the provision of training for school-based CSE has been reported to be inadequate. In Malaysian schools, teachers reported insufficient training for PEERS, and often had to seek out resources on their own (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019). While the Ministry of Education stated that teachers received sufficient training, the National Union of the Teaching Profession Malaysia (NUTP) reported that teachers did not receive sufficient training, and that training became "diluted upon reaching district the level." Similarly, 49.1% of teachers in Thai schools reported not receiving training, and only 50.9%% of those who received it reported it to be sufficient (Boonmongkon et al., 2019). Overall, 82.2% of teachers reported

having a teaching manual and 70.7% reported having instruction materials. 56.8% reported having a written syllabus (Boonmongkon et al., 2019). However, these proportion differed among school types, where fewer teachers from extended opportunity schools reporting having these materials (Boonmongkon et al., 2019).

Impact

Interventions were primarily assessed through questionnaires. Only a few studies reported on the validity of the tools used to measure their outcomes. Seangrpaw et al. (2017) reported that the content validity of the questionnaire was evaluated by experts, and that a pilot study was conducted to test the reliability of each item's summary index (Seangpraw et al., 2017). The tool was modified following the pilot study (Seangpraw et al., 2017). Chokephaibulkit et al. (2015) reported evaluating one of their self-esteem tools with 1039 secondary school students, yielding high-reliability coefficients and test-retest coefficients and strong correlation with Rosenberg's self-esteem survey. Tipwareerom et al. (2011) indicated that their tool was based on the Information-Motivation-Behavioral skills model and literature surrounding adolescent sexual behaviour.

Several studies evaluated the impact on CSE interventions on the knowledge and skills of participants. A quasi-experimental study in Thailand assessed the effectiveness of a life skills model for sex education in comparison to the normal teaching curriculum for university students (Seangpraw et al., 2017). The findings showed that after the implementation of the intervention and at three months follow up, the knowledge, self-awareness, self-esteem, decision-making skill, communication skill and preventative behaviour scores of the average intervention group were significantly higher compared to the control group (Seangpraw et al., 2017). Positive results were also seen by in an evaluation by Tipwareerom et al. (2011), where a significant increase was seen in mean scores for talking about sex, self-efficacy and condom use skills in comparison to baseline scores. However, a significant decrease in STI knowledge and decision-making skills was also seen (Tipwareerom et al., 2011). Chokephaibulkit et al. (2015) reported that their program increased knowledge and attitude scores when compared to baseline, however, no improvements were seen in practice scores. Similarly, Sommart and Sota (2013) demonstrated that the mean scores for sexual knowledge and attitudes towards sexuality were increased in the intervention group at post-test in comparison to pre-test, and that the intervention group had higher scores when compared to the control group. In terms of sexual behaviours, a randomized controlled trial by Wong et al. (2017) found that secondary abstinence was two times more likely in young men in the intervention group compared to the control group. Moreover, young women in the intervention group were more likely to keep to one sexual partner compared to the control group (Wong et al., 2017). However, the intervention did not result in any impacts on consistent condom use.

Discussion

This review sought to gather specific, actionable insights into the implementation of CSE interventions and programs. The findings show that no intervention fully covered all eight of the CSE core concepts recommended by UNESCO et al. (2018). Of the core concepts, the interventions most commonly addressed topics which pertained to sexual and reproductive health, sexuality and sexual behaviour, and skills for health and wellbeing. Violence and safety

did not appear to be sufficiently addressed, and all programs and interventions, whether they were led by researchers or were already implemented in practice, appeared to have insufficient coverage of gender and human rights topics. This is consistent with the findings of a 2015 global review of CSE, where gender and human rights were reported to be consistently lacking in the curriculums of all regions examined (UNESCO, 2015). A recent review has expressed how variability exists of what defines a truly comprehensive CSE program, and sought to examine this (Miedema, Le Mat, & Hague, 2020). In their review of CSE guidelines and academic material, they identified the following as four interrelated core components; positive sexualities and respectful relationships; young people's rights, participation and agency; gender equality and power relations; and sexual and reproductive health-related concerns and practices (Miedema et al., 2020). Thus, despite the variations in defining a truly comprehensive CSE, it is clear that rights and gender topics are two critical components of CSE which must not be overlooked during implementation. In terms of gender as a core concept, UNESCO et al. (2018) has recommended the following topics be covered: the social constructs of gender and gender norms, gender equality, stereotypes and bias; and gender-based violence. Human rights fall under the "values, culture, rights and sexuality" core concept where the recommended topics encompass values, human rights, culture, society and how they all relate to sexuality (UNESCO et al., 2018).

Interventions implemented by researchers often used a participatory approach and made use of multiple learning and delivery strategies. Students are described to learn most effectively when they have the opportunities to synthesize, reflect, and develop their own comprehension of the material (UNESCO et al., 2018). As such, UNESCO et al. (2018) encourages a learner-centred approach to CSE, which enables students to actively and collaboratively engage in the learning process. In this review, interventions incorporated active approaches to learning such as role-playing, game-based activities, group discussions and motivational interviewing. One study noted how the participatory activities used in their intervention were well-received by students and likely contributed to the positive effects of the intervention (Seangpraw et al., 2017) In contrast to the intervention-based studies, a study which assessed CSE implemented in Thai schools highlighted the emphasis on insufficient use of student-centred learning methods (Boonmongkon et al., 2019). Thus, the use of participatory methods likely fills a gap and need in CSE delivery. Additionally, content which often delivers well through such participatory approaches include skill building (UNESCO et al., 2018), which was a common component among interventions. UNESCO et al. (2018) has identified life skills, such as negotiation skills and risk assessment, as being pertinent to the health and wellbeing of young people. Several interventions incorporated opportunities for students to learn about and practice skills. This included negotiation, coping, refusal and decision-making skills. Addressing life skills has been defined by UNESCO et al. (2018) as characteristic of effective CSE curriculum development, with "Skills for Health and Wellbeing" being a key concept in CSE content. This reflects a strength across many of the interventions.

When developing interventions, processes identified as contributing to the success of interventions included collaborating with the target population and relevant stakeholders, and grounding the intervention in the needs of the population. For example, Wong et al. (2017) reported that the positive results of their study may have been attributed to the use of a theoretical framework along with the results of the local needs assessment. These processes align with the recommendation made by UNESCO for developing an effective CSE curriculum (UNESCO et al., 2018). In addition to a collaborative and inclusive intervention development

process, the attitudes, skills and motivations of teachers are recognized as being highly important in effective CSE delivery (Vanwesenbeeck, Westeneng, de Boer, Reinders, & van Zorge, 2016). Most of the interventions in this review were often delivered in out-of-school settings and were thus not led by teachers, however, those facilitating the intervention often received training. In addition to training prior to the intervention, some interventions provided facilitators with resources to use throughout the intervention. One intervention, which was conducted in a hospital setting, identified the use of manuals, training and readily accessible tools as being enablers in the successful delivery of the intervention (Chokephaibulkit et al., 2015). While this intervention was integrated into routine clinics and delivered by healthcare providers, the strategies used may be transferrable to a school-setting and delivered by teachers, or a community setting delivered by community or peer leaders.

Despite some interventions providing training to the facilitators, these interventions only spanned a series of weeks and did not go in-depth into the details of the training. Moreover, the studies evaluating CSE in schools showed that teachers often received insufficient training. Importantly, Malaysian teachers reported that a lack of training resulted in their discomfort in teaching some subjects (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019). Thus, to ensure the effectiveness and sustainability of long-term interventions, more rigorous and lengthy training for facilitators may be needed. Given that Malaysian teachers reported hesitation in using methods aside from traditional classroom style teaching due to a fear of being misinterpreted (Federation of Reproductive Health Associations Malaysia (FRHAM), 2019), it is also possible that increased training may also cultivate more comfort in using different teaching methods. This may be achieved through programs such as the one developed by Thammaraska et al. (2014), where teachers participated in a Culturally Sensitive Sex Education Skill Development program (Thammaraksa, Powwattana, Lagampan, & Thaingtham, 2014). This 6-week program took place in Thailand and focused on improving attitude and communication surrounding sex education as well as strategies to mitigate cultural barriers (Thammaraksa et al., 2014). Ensuring that those delivering the CSE interventions are well-prepared will foster a safe and effective space for CSE learning

Studies assessing CSE programs already implemented in schools evaluated program components such as content coverage, teacher training and delivery methods, whereas interventions implemented by researchers were often assessed through outcome measures such as knowledge, skills, attitudes and behaviours/practices. Most studies compared results from baseline to one or more time points following the intervention, with some studies also making comparisons to control groups. In terms of tools used to assess outcome measures, some studies reported efforts taken to validate their instruments, however, it does not appear that a standard validated tool was consistently used across studies. The UNFPA has provided examples of validated tools which may be used to assess outcome measures such as knowledge, practices and attitudes (Appendix A) (UNFPA, 2014). Moving forward, it may be helpful to assess the outcomes of CSE interventions using consistent and validated tools.

Recommendations

This review was conducted to inform the implementation of the HealthBridge Foundation's future projects in their working regions. It highlighted the key components of CSE interventions and programs in Southeast Asia. Many of the intervention strengths align with the best practices and recommendations made by UNESCO et al. (2018), and this review thus

provides insight into actionable and evidence-based interventions which can inform HealthBridge's future interventions. Several key recommendations can be drawn from the findings. First, developing the intervention should be a collaborative process, involving the target population and relevant stakeholders, such as community leaders, parents and educators. Studies demonstrated that this may be feasibly accomplished through brainstorming sessions or focus groups. Second, sufficient training should be provided to the facilitators of the intervention, with ongoing support and resources such as manuals or protocols to ensure sustainability. Third, careful attention should be paid to ensure that the intervention covers all the essential core topics of CSE. While a strength of many interventions in this review was a focus on life skills, a weakness was the lack of emphasis on topics surrounding human rights and gender equality. Fourth, CSE intervention should be delivered using participatory methods. Such methods may include role-playing, which was commonly used among interventions, or other interactive learning activities. Finally, it is important to evaluate the intervention, using standard, validated measurement tools. This was a gap in some studies, which may be addressed by leveraging tools highlighted by the UNFPA (Appendix A). This will allow for robust evaluation and improvement of future CSE interventions.

Appendix A

Examples of validated scales to measure changes in knowledge, attitudes and practices, identified by the UNFPA (UNFPA, 2014).

Indicator	**Scale**	**Source**
Self esteem	Rosenberg self-esteem scale	www.yorku.ca/rokada/psyctest/rosenbrg.pdf Rosenberg, Morris, Society and the Adolescent Self-Image, Princeton University Press, Princeton, New Jersey, 1965
Self-efficacy	General self-efficacy scale Couple communication on sex scale	http://userpage.fu-berlin.de/health/selfscal.htm Leon, F., R. Lundgren and C. Vasquez, "Couple Communication on Sex Scale", Draft manuscript, Institute for Reproductive Health, Georgetown University, in Nanda, Geeta, 2011, *Compendium of Gender Scales*, Washington, DC: FHI/360/C-Change.
Correct condom-use self-efficacy	Correct condom-use self-efficacy scale	Fisher, Terri D., and others, *Handbook of Sexuality-Related Measures*, 3rd ed., Routledge, London, 2010. *For more information see*: http://cw.routledge.com/textbooks/9780415801751.
Connectedness	Hemingway Measure of Adolescent Connectedness	http://adolescentconnectedness.com.
Parent-adolescent communication	Parent-adolescent communication scale	Fisher, Terri D., and others, *Handbook of Sexuality-Related Measures*, 3rd ed., Routledge, London, 2010. *For more information see*: http://cw.routledge.com/textbooks/9780415801751.

Sexual and relationship power	Sexual relationship power scale	Pulerwitz, Julie, Steven L. Gortmaker and William DeJong, "Measuring Sexual Relationship Power in HIV/STD Research", *Sex Roles*, vol. 42, no. 7-8, April 2000, pp. 637-660.
Gender equitable attitudes	Gender equitable men (GEM) scale	Pulerwitz, Julie, and Gary Barker, "Measuring Attitudes toward Gender Norms among Young Men in Brazil: Development and Psychometric Evaluation of the GEM Scale", *Men and Masculinities*, vol. 10, no. 3, April 2008, pp. 322-338.
Gender relations	Gender relations scale	Stephenson, Rob, Doris Bartel and Marcie Rubardt, "Constructs of Power and Equity and their Association with Contraceptive Use among Men and Women in Rural Ethiopia and Kenya", *Global Public Health*, 2012, vol. 7, no. 6, 2012, pp. 618-634.
Women's empowerment	Women's empowerment scale	Schuler, Sidney Ruth, Syed Mesbahuddin Hashemi and Ann P. Riley, "The Influence of Changing Roles and Status in Bangladesh's Fertility Transition: Evidence from a Study of Credit Programs and Contraceptive Use", *World Development*, vol. 25, no. 4, January 1997, pp. 563-575.
Sexual assertiveness	Intimate relationships questionnaire	Yesmont, Georgia A., "The Relationship of Assertiveness to College Students' Safer Sex Behaviors", *Adolescence*, vol. 27, no. 106, June 1992, pp. 253-272.
Sexual harassment	The index of sexual harassment The sexual harassment attitudes questionnaire	Fisher, Terri D., and others, *Handbook of Sexuality-Related Measures*, 3rd ed., Routledge, London, 2010. *For more information see*: http://cw.routledge.com/textbooks/9780415801751

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