

Exploring the content and delivery of relationship skills education programmes for adolescents: a systematic review

Astrid Janssens^{*a, b}, Sharon Blake^b, Matt Allwood^c, Jan Ewings^d and Anne Barlow^d

^a User Perspectives, Institute of Health Research, University of Southern Denmark, Denmark, ^b Child Health, University of Exeter Medical School, University of Exeter, UK; ^c Department of Psychiatry, University of Oxford, Oxford, UK; ^d School of Law, University of Exeter, UK

*Corresponding Author: Astrid Janssens, email: ajanssens@health.sdu.dk

Abstract

This paper reviews published research and grey literature on education programmes which aim to teach young people aged between 11 and 18 skills to develop and maintain healthy intimate relationships. Programmes focussing solely on sexual (risky) behaviour, HIV prevention or partner violence were not the focus of this review and thus excluded. Systematic searches were conducted and 76 English language programmes were reviewed, with 17 identified as meeting the inclusion criteria. Characteristics of the included programmes (aims, target audience, content and delivery method) are described. Most programmes were designed to be delivered in school by a teacher covering a broad age range (5 years or more) and focused on the intrapersonal and interpersonal dimensions of relationships reflecting adult therapeutic relationship educational models. Future research should focus on further developing and evaluating the content and delivery of relationship skills education programmes grounded in young people's social and cultural context within a framework of human rights.

Keywords: Relationship skills, Programmes, Relationships and Sex Education, systematic review, secondary school students

Introduction

'And they called it puppy love; Oh I guess they'll never know. How a young heart really feels [...] Just because we're seventeen.' (Anka 1960). There might have been more truth to these lyrics than 'just another pop song on the heartache of a teenage love story,' as developmentalists have made a case that adolescent romance carries developmental currency for the more serious relationships characteristic of adulthood (Meier and Allen 2008).

Relationships impact a vast array of outcomes (including educational attainment, parenting, crime and antisocial behaviour) and have been accepted as a core social determinant of health and wellbeing (Handley et al. 2015). A wellbeing survey in the UK found that overall satisfaction with life and personal relationships are related; those who reported a medium to high satisfaction with life, also reported medium to high satisfaction with their personal relationships (Oguz, Merad and Snape 2013). In addition, there is a growing evidence base showing relationship distress to be associated with key areas of public health such as alcohol misuse, obesity, depression, mental health issues and child poverty (Coleman, Glenn, and One Plus One 2009; Harold and Leve 2012; Levitt and Cooper 2010; Overbeek et al. 2006). People who live in distressed and troubled relationships are three times more likely to suffer from mood disorders, two and a half times more likely to suffer from anxiety disorders, and twice as likely to misuse substances (Hewison, Clulow, and Drake 2014).

However, it is only in recent years that the serious human and financial cost of relationship breakdown to individuals and society has drawn attention to how policies promote and sustain fulfilling intimate relationships (Handley et al. 2015). Rather than prioritising healthy relationships throughout the life course, relationship support tends only to be available for existing relationships which are already in difficulty. Early intervention may be more likely to improve relationship quality, normalise help-seeking behaviour and prevent relationship breakdown (Markman and Rhoades 2012; Rhoades and Stanley 2009; Walker 2012). This recognition has prompted a move from tertiary to primary intervention both in the USA, where \$75 million is provided to fund Healthy Marriage Relationship Education (HMRE) programmes each year (US Department of Health and Human Services 2018), and in England, where following the enactment of sections 34 and 35 of the Children and Social Work Act 2017, Relationships and Sex Education (RSE) becomes mandatory in secondary school curriculum from September 2020 (HM Government 2017).

Due to the existing organisational, social and communication structures and their reach of young people across the social spectrum, schools are in a unique position to provide primary intervention. From tackling obesity (Lloyd et al. 2018) to improving students' social skills (DiPerna et al. 2018) and preventing depression (Perry et al. 2017), the role of the school is widely implicated in recent initiatives with varying success. Incorporating relationship education into the school curriculum provides an opportunity to equip young people with the knowledge and skills required for a healthy intimate relationship. However, public health policies are often perceived as low priority in education policy and 'squeezed off the timetables in many schools' (Hayman 2014). As RSE can be particularly contentious with complex and contradictory norms regarding the expression of sexuality in contemporary society, decisions regarding what to teach in respect of relationship education can be challenging. While

the US HMRE and the UK RSE guidance includes indicators as to the characteristics of healthy relationships (for example communication, conflict resolution, parenting and financial management skills), both anticipate educators will select and adapt content to fit their local contexts (Pound et al. 2017; Hawkins and Ooms 2012; Department for Education 2019). Despite research showing that unless you get the delivery right, young people will disengage from RSE, little if no guidance is provided on how RSE should be taught (such as frequency, duration, class composition).

Numerous systematic reviews have been carried out looking at the delivery and effectiveness of sex education programmes (See for example: Cushman et al. 2014; Mason-Jones et al. 2016; Poobalan et al. 2009); the programmes reviewed primarily have an aim to delay sexual initiation, reduce STIs, unintended pregnancy or domestic violence. Studies have found that programmes which use interactive, participatory learning and skills-building strategies to promote 'rights-based content, positive, youth-centred messages are effective in empowering adolescents with knowledge and tools required for healthy sexual decision-making and behaviours' (Hall et al. 2016). A recent meta-analysis including sixteen studies looked at the efficacy of four US youth relationship curricula for 15-18 year olds (McElwain, McGill, and Savasuk-Luxton 2017). Wider recent systematic reviews of the content and delivery of programmes which aim to teach young people how to develop a positive, healthy intimate relationship are lacking. The current review aims to identify existing programmes which teach relationship skills for young people aged 11 to 18, exploring their content and delivery methods. Relationship education may be taught separately to sex education or on an integrated basis known as sexuality education or relationship and sex education (RSE). Reflecting an integrated position, throughout this paper we will refer to RSE.

Aim and Objectives

The aim of this review was to answer the research question: What English language educational programmes are available to teach young people aged 11 to 18 skills required for healthy intimate relationships? More specific objectives were to:

- Identify educational tools aimed at young people aged between 11 and 18 years old that teach skills to develop and/or nurture intimate relationships.
- Describe the aim and target audience of the identified programme, the skills taught & method of delivery.
- Explore patterns and any gaps in content and delivery of identified RSE programmes.

Method

This systematic review was carried out following the general principles published by the UK National Health Service Centre for Reviews and Dissemination (Centre for Reviews and Dissemination 2008) and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Liberati et al. 2009).

Search Strategies

A search strategy was designed using a combination of MeSH and free-text terms for the PsychINFO database, which was then adapted for other databases. Search terms were grouped (terms for young people, terms for relationships and generic names for programmes), combined with a Boolean OR command and then searched in combination using a Boolean AND command. An example of the search strategy (for MEDLINE) is shown in online Appendix A. Ten electronic databases were searched during March 2017, and updated in March 2018, with the search limited to English language records published from 1997. The search was date restricted as it was agreed that due to social changes, programmes delivered prior to this date are likely to have little relevance today. The databases searched were:

- ASSIA (ProQuest)
- Australia Education Index (ProQuest)
- British Education Index (EBSCO)
- CINAHL (EBSCO)
- The Cochrane Library
- Education Research Complete (EBSCO)
- Educational Resource Information Centre (ERIC) (EBSCO)
- MEDline (OvidSP)
- PsychINFO (OvidSP)
- Web of Science

An Internet search via the Google search engine was also undertaken independently by two researchers using the following terms 'relationship' AND 'skills' AND 'school' OR 'young people' OR 'child*'. Citations were followed where the records retrieved referred to relationship education programmes but did not describe the programmes therein.

Inclusion and Exclusion Criteria

Inclusion/exclusion criteria were specified and documented in advance in a protocol for the review as per Table 1. We utilised a broad definition of RSE; programmes were included in the review if they were offered as relationship education (RE), as well as those offered as RSE (including focused content on both RE topics and sexuality/sexual intimacy). Programmes that only had a small component of relationship skills in their curriculum were excluded.

[Table 1 about here]

Programme Selection

After duplicates had been removed, the results of the database search were divided into equal groups alphabetically by the first author of the record in an Endnote library. Two groups of reviewers (SB and MA, AJ and TR/ET) independently screened all titles and abstracts to identify records in which potentially eligible programmes were cited. To check screening consistency, a reviewer from Group 1 (SB) then screened 10% of the records screened by Group 2 and vice versa (TR/ET). Discrepancies were discussed

and resolved within the team with the arbitration of the project lead (AJ) where necessary. Programmes identified from the Internet search were considered by three of the review team and exclusion/inclusion agreed by consensus (AJ, SB, MA).

Where a record mentioned a programme that met the inclusion criteria, or it was unclear from title and abstract whether it met the criteria, the full journal article text was retrieved. These full texts were then split into two groups alphabetically by first author and two reviewers (MA, SB) independently screened the records against the inclusion/exclusion criteria. A third reviewer (AJ) then double-screened 10% of the records of each of these groups to check for consistency and any queries were discussed and resolved.

Identified programmes were investigated further via an Internet search and checking of programme deliverer's website to collect details about the programme. Data about the programmes was extracted from the identified records to enable a narrative synthesis presented below.

Theoretical Framework guiding data extraction and synthesis

This review aims to provide information about existing programmes offering relationship education. Following United Nations Educational, Scientific and Cultural Organization's (UNESCO) advice, which advocates for education as a human right, we discuss the identified programmes through a humanistic lens (Bartholomew Eldridge et al. 2016). UNESCO articulate a unifying vision for education that leaves room for cultural diversity in contrast to the pragmatic "one size fits all" models exemplified by Education for All (EFA) and the Organisation for Economic Co-operation and Development's (OECD) performance surveys that dominate some of the global education discourse (Sobhi and UNESCO Education Sector 2015). A humanistic lens to education is based on the foundation of an integrated approach to knowledge, learning and development which recognises the diversity of knowledge systems, worldviews and conceptions of well-being as a source of wealth (Gage and Berliner 1991; DeCarvalho 1991).

Data extraction was also guided by Pound et al (2017) and Poobalan et al. (2009); whose work identified key characteristics which make relationship and sex education programmes effective, acceptable, sustainable and capable of faithful implementation. These key characteristics of good practice are largely congruent with a humanistic model of education: adaptable; appropriate to participants' age, cultural and sexual experience; uses a spiral curriculum (repeated throughout the school-curriculum) with age-appropriate stages; of sufficient duration and intensity; interactive and engaging; and delivered in a safe and confidential setting.

Inductive thematic coding enabled us to identify and categorise these similar concepts such that we could record the presence or absence of a skill for each programme. This work was undertaken by one researcher (SB) and audited by two other researchers (AJ, MA). The data extraction form was developed by one reviewer (AJ) and then revised after applying it to a small number of programmes and by discussion with the group. The extracted data were presented using the following headings: programme aims, target audience, relationship skills taught, programme delivery method and setting, duration and materials used.

Results

The PRISMA flowchart in Figure 1 shows the search and selection process. The electronic database search yielded 7026 unique records and from this, 76 programmes were initially identified as potentially eligible. Further review of these programmes via citation chasing and web searches resulted in the identification of 10 programmes which met the inclusion criteria. The Internet search identified 14 webpages describing a relationship skill education programme and 1 non-peer reviewed systematic review of relationship programmes (Scott et al. 2012). The programmes described within the Scott et al. (2012) review and the webpages were screened and a total of 10 programmes from the Internet search were identified as meeting the inclusion criteria. Three of these had also been identified by the database search, meaning that a total of 17 programmes aimed at young people aged between 11 and 18 years old that teach skills to develop and/or nurture intimate relationships were found.

[Figure 1 about here]

Table 2 summarises the characteristic of the included programmes. Access to information and the comprehensiveness of detail about the programme varied, the results therefore are based on the information available at the time via the source detailed in Table 2.

[Table 2 about here]

The Table in online Appendix B provides information about the 59 programmes which were excluded. Twenty-nine programmes were excluded due to focus on sexual health, 17 due to focus on relationship violence, 8 for not teaching relationship skills, 4 for not targeting a broad 11 to 18 age-range and 1 described a programme of work rather than an individual programme.

Included Programme Characteristics

Eleven of the included programmes were developed in the USA, two in the UK, two in Australia and one in Austria. 'It's All One Curriculum' from the Population Council was the result of an international collaboration and has been translated into Spanish, French, Bangla, Chinese and Arabic with requests for the programme coming from over 150 countries and every state of the USA (Haberland et al. 2009).

From looking at the dates of publication, programmes appear to vary in how established they are. 'Connections: Relationships and Marriage' had a publication published about the programme in 2003, while the webpages providing information for two programmes ('Growing Respect' and 'Positive Choices') suggest they are still at design-stage.

Programme Aims

Eight of the seventeen programmes aim to generally promote healthy relationships. 'Teen Choices', 'Positive Choices', 'DO' and 'It's All One Curriculum' are centred more around making healthy sexual choices while also outlining skills of healthy

relationships. Reflecting the adolescent targeted audience, some of the programmes focus more on initiating relationships, with one of the programmes promoting abstinence ('Choosing the Best'). Five of the programmes pay particular attention to long-term relationships ('Choosing the Best', 'Connections: Relationships & Marriage', 'PICK', 'The Art of Loving Well' and 'What's Real'). Most of the programmes are careful to describe a variety of different long-term committed relationship forms rather than singularly promote marriage. 'PICK' has an optional bible study element and describes itself as harmonious with Christian principles.

From the information reviewed, only two of the included programmes describe the theoretical underpinning of the design of the intervention. 'Connections: Dating & Emotions' is described as being based on Erikson's Stages of Psychosocial Development (<https://www.dibbleinstitute.org/connections-dating-and-emotions-details/>). 'Teen Choices' is described as being based on Transtheoretical Model of behaviour change (Levesque et al. 2016).

Target Audience

Fifteen of the seventeen included programmes are designed to be delivered to ages 11 to 18. Two programmes target a slightly older age-group: 'Connections: Relationships and Marriage' for age 16 to 21 and 'What's Real' for age 13 to 21. Two programmes provide different versions for age ranges within the inclusion criteria: 'Growing Respect' has a version for 10 to 13 year olds and a version for 15 to 16 year olds, 'Choosing the Best' has a version for 14 to 16 year olds and 16 to 18 year olds. While 'Healthy Choices, Healthy Relationships' acknowledges developmental differences and differences in social messages for girls and boys, from the information reviewed, none of the included programmes separate activities by gender or include specific activities focused on lesbian, gay, bisexual, transgender (LGBT) relationships.

Relationship Skills Taught

A wide variety of skills were extracted; the most popular skills that the included programmes sought to teach young people were how to recognise healthy relationship patterns (and the converse unhealthy relationship patterns), communication and understanding yourself/goal setting (identifying personal values and aspirations). Most of the programmes included information to improve knowledge of appropriate relationship progression, including how sex affects relationship dynamics and how to notice predecessors to abusive behaviour. In addition, six relationship programmes specifically explored the effect of media on relationship expectations.

More than half of the programmes included content to build inner resources (such as resilience and self-confidence), interpersonal attributes (such as respect, trust and empathy) and life-skills. In relation to life-skills, the most popular was decision-making/critical thinking skills (featured in eight programmes). Only a few programmes looked at other life skills such as problem-solving or negotiation, and only one programme ('Connections: Relationships and Marriage') included content on everyday practical skills, in this instance financial management, which can be a source of conflict in a relationship. In relation to conflict in relationships, more programmes appeared to focus on skills to resolve rather than prevent or reduce conflict.

Two programmes ('DO', 'It's All One Curriculum') look at sexuality and along with 'Love U2: Relationship Smart' promote the use of inclusive sexual orientation examples of relationships in their resources. While, these same two programmes, plus 'I Like, Like You', also looked at the effect of gender stereotypes on behaviour.

Programme Delivery and Setting

The interventions varied widely in their complexity, with educational and behavioural components delivered by a range of activities from games to audio-visual aids. All the included programmes can be delivered to classes within schools with most of the programmes employing classroom-based instruction as their main approach. Most of the programmes involve multiple instructional strategies, often a combination of direct methods such as role-play and discussion, technology-based methods such as PowerPoint slides and films and student diaries to complete during the sessions and to take home. Three of the programmes describe single lesson plans ('Friend Flips', 'Love House' and 'Relationship Building Blocks'). 'Teen Choices' is the only programme delivered solely online so can be run anywhere with internet access. However, like all the included programmes, it is primarily implemented within schools.

Some of the activities described within the programmes suggest that teachers/facilitators split the group into smaller groups of four/five young people. However, none of the programmes appear to specify a recommended group size for the programme.

Most of the programmes are designed to require minimal preparation with lesson plans and instruction manuals provided. A trained teacher is commonly described as the facilitator although programme handbooks can be utilised by youth leaders, community groups and in one case, 'PICK' can be used within youth prisons. Two programmes provided facilitator training, and one other signposted to training: 'PICK' and 'Choosing the Best' require the facilitator to be trained and certified to deliver the programme; 'DO' has self-reflection exercises for the programme facilitator and provides links to sources of further training for relationship educators. Only one programme, 'I Like, Like You', is delivered by a trained facilitator who works with the class teacher.

'Positive Choices' is the only programme that has a student-led optional element; none of the other programmes include a peer-to-peer component.

The 'PICK' and 'Love U2: Relationship Smart' programmes provide resources for parents to follow-up on relevant discussions at home. 'Choosing the Best' provides a handbook for parents to deliver the course to young people at home.

Duration

Thirteen of the included programmes were designed to have sessions lasting around an hour. 'Teen Choices' is the only programme to specify shorter 25 to 30-minute sessions. The number of sessions ranged from one one-off session ('Friend Flips') to eighteen one-hour sessions ('Connections: Relationships and Marriage'). Four of the programmes do not provide a specific time frame, with duration depending on student progression or as in the case of 'Positive Choices' to be ongoing over a period of one to two years.

Materials

The majority of included programmes provide an instructor handbook which outlines lesson content, activities and required materials so they can be delivered by various facilitators in different settings. Almost all programmes require the use of standard classroom materials such as flip chart paper, coloured pens and in some cases interactive whiteboards. The instructor handbooks sometimes include a training DVD or CD which also may have electronic versions of student materials and/or visual aids to be used in the session. The range of materials provided to use within the sessions to stimulate discussion and develop skills range from journals for the student to work through, flip cards, games, case studies, film-clips, physical blocks to stack and song lyrics. The 'Teen Choices' programme is the only web-based multimedia learning platform programme which is solely completed using a computer.

Discussion

This review aimed to provide an overview of programmes focusing on skills that would allow young people aged 11 to 18 to develop and sustain a healthy intimate relationship. Our search revealed that most programmes focus on the prevention of unplanned or teenage pregnancy, transmission of HIV or sexually transmitted infections or violent relationships (see Table with excluded programmes). The finding is not surprising in the light of a recent review of reviews of school-based sexual-health and relationship education programmes (Denford et al. 2017). The review categorised evaluated interventions into five types; three of the five categories were abstinence-only or pregnancy or HIV prevention programmes. A fourth category, dealing with comprehensive interventions, included programmes that 'aim to prevent, stop, or decrease sexual activity, but also promote condom use and other safer-sex strategies as alternatives for sexually active participants' (Denford et al. 2017) again showing a narrow focus on sexual-risk prevention.

This is the first review to present a list of available programmes which promote healthy relationships or healthy sexual choices while also outlining skills for healthy relationships. We identified 17 programmes and described these according to evidence-based characteristics of successful implementation using a humanist approach to education. Perhaps reflecting different governance requirements in different countries, some of the included programmes took an integrated RSE approach whilst others aimed to address relationship skills separate to sex education.

Age appropriateness and class composition

Only two programmes provided different versions for different age ranges between 11 and 18 years, suggesting gaps in current RSE resources which target smaller sections of this broad age range. Research indicates that gender-focused programmes are more effective than gender-blind programmes at achieving health outcomes such as reducing rates of unintended pregnancy (UNESCO 2018). None of the included programmes split any activities by gender and future research is needed to explore gender-based delivery of RSE.

Delivery method, setting and duration

The selected programmes perform slightly better with regards to delivery; most programmes use a combination of educational strategies. Passive instruction through mainstream lecture-type teaching or the use of films was a feature of many of the included programmes. Yet, the majority used multiple instructional strategies including interactive methods such as group discussion or role-play, educational strategies that are associated with more effective interventions (Poobalan et al. 2009; Pound et al. 2017; Robin et al. 2004).

Although evidence for effective programmes is weighted towards population interventions (Saunders and Smith 2016) and the school is a logical place for universal programmes, it is striking that all are primarily designed to be delivered in school and few of these programmes target a different learning environment. The duration and intensity of these programmes varied from a single session to eighteen one-hour sessions, often with no rationale for the duration. Best practice suggests spiral curriculums where groups return to the same topics to reinforce learning and give time to practice skills, plus special events, multiple teaching methods and external experts to facilitate RSE (Pound et al. 2017). Only one programme continued over a period of two years.

Despite research showing that many young people dislike having their teachers deliver relationship and sex education due to an imbalance of power, lack of confidentiality and awkwardness (Pound, Langford, and Campbell 2016), all but one of the programmes recommended a trained teacher as facilitator. While there is mixed evidence for the effectiveness of peer-led or peer-supported school-based interventions (Chin et al. 2012; Sebire et al. 2016), a peer-delivery system is often welcomed by young people (White et al. 2017). However, only one programme had a student-led optional element. Many teachers may not feel skilled to deliver RSE (Pound et al. 2017). Adequate training of personnel delivering interventions has been identified as important facilitators of effectiveness (Poobalan et al. 2009). Of seventeen programmes, three provided or signposted to facilitator training and only one provided their own facilitator. Often, lack of resources will prevent schools engaging an external educator and even if an outside speaker is brought in, a teacher will often need to remain with the group. However, tasking teachers with the delivery of RSE can compromise their role which is constructed as desexualised. Outsourcing the delivery will protect the setting and protect student confidentiality and create a safe environment to discuss and share personal experiences.

The World Health Organisation (WHO) Health Promoting School framework advocates school-based interventions which promotes links with families and communities (Langford et al. 2014). Despite growing evidence of parental involvement as a key element of effective interventions, (Langford et al. 2014; Lloyd et al. 2017; Weare and Nind 2011) only two programmes provide resources for parents to contribute to the programme delivery.

Content (skills)

In respect of relationship skills, most of the programmes focus on the intrapersonal and interpersonal dimensions of relationships. A wide variety of skills were extracted,

the most popular 'recognising healthy relationship patterns', 'communication' and 'understanding yourself'. This reflects therapeutic interventions for couple relationship which usually address: common relationship pitfalls, conflict management, active listening, problem-solving, shared relationship expectations, positive relationship activities, acceptance, empathy and individual self-regulation (Whitton and Buzzella 2012).

In line with the expressed concern for young people growing up in an increasing complex and digital world (Department for Education 2017), many of the relationship programmes explore the effect of media on relationship expectations, encouraging young people to critically reflect on their understanding of what constitutes a healthy relationship. However, the wide range of interconnected social factors including gender norms and inequities, poverty, exclusion and legal frameworks which influence relationships is lacking in these programmes (Pound, Langford, and Campbell 2016). Young people have observed that RSE is gendered and heterosexist (Pound, Langford, and Campbell 2016) and have advocated for an inclusive approach (Coll, O'Sullivan, and Enright 2018). Our findings indicate support for the general trend in RSE for LGBT-related information about healthy relationships to be largely excluded (e.g. Department for Education 2019).

While a core set of components may be appropriate for heterosexual and homosexual relationship education, the presentation of these components may require modification to remove heterosexual bias (Whitton and Buzzella 2012). International guidance on sexuality education promotes delivery within a framework of human rights and gender equality to support students to question social and cultural norms (European Expert Group on Sexuality Education 2016; UNESCO 2018). From an examination of US programme curricula (Bay-Cheng 2003), it was suggested that US RSE 'reifies narrow definitions of normal teen sex as heterosexual and coital...[and] fails to address the interplay among gender, race, class and sexuality'. Aside from 'It's all one curriculum', this still does not currently seem to be addressed in the RSE programmes reviewed.

Adolescents are a heterogeneous group in terms of development and the social context in which they live and it is challenging to consider the normative messages behind educational content in pluralist societies. This and the adoption of a medical model paradigm which emphasises individual autonomy and responsibility in respect of healthy intimate relationships may explain why most of the programmes focused only on intrapersonal and interpersonal dimensions (Ballonoff Suleiman and Brindis 2014). Perpetuating the therapeutic aims of couple counselling within RSE programmes for youth ignores how social factors including cohabitation, legal rights myths, poverty and forced marriage influence relationship decisions and outcomes. Expecting individual teachers to have enough understanding of different cultural traditions in relation to relationships in order to tailor interventions and resources may be an ask too far. The programmes that did include content on social aspects of relationships often were those that took a clear position such as the promotion of marriage and/or abstinence. As RSE can provoke substantial resistance from groups who do not feel it represents their values, it is arguably important to provide further guidance to educators on what to deliver and how.

This review aimed to synthesise available educational relationship tools to inform discussion of the content and delivery method of RSE programmes and future

design of resources. The next step will be to find out what young people want to know and learn prior to engaging in an intimate relationship and what is the most effective way of delivering these skills?

Strengths and limitations

While the search for programmes was wide, it was limited to English-language publications. As just over half of the included programmes were found outside of the database search via unpublished sources, it is possible that other programmes have been missed. Brands remarketing over time may also mean that some of the programmes listed may be known by another commercial name and / or better presented as one programme. In most cases, to gain a broad overview, descriptions of programme content and delivery were used as sources of information rather than detailed programme manuals. The excluded programmes are listed in online Appendix B, so that readers can see what other programmes were found and the reason given for exclusion.

A number of challenges were associated with selecting and synthesising programmes for this review which highlight issues for further consideration in programme development namely sustainability and consistency. It was not always clear whether programmes were still in use or not. This indicates a lack of consistent funding and the importance of evidencing impact to improve programme sustainability. Few programmes described theoretical rationales behind the design or delivery of their programmes. This and the lack of consistent definitions of instructional strategies and skills/components taught made it challenging to make comparisons.

Conclusion

This systematic review is a first attempt to close the knowledge gap around RSE programmes by identifying existing programmes focusing on developing and establishing healthy intimate relationships. By bringing these together, this review assists in exploring what content and delivery methods are currently promoted.

While the programmes reviewed use a range of activities to teach RSE, they are typically designed for teachers to facilitate, with a lack of resources for targeted ages or spiralling curriculums. The programme content characteristically reflects adult therapeutic relationship educational models, which may be the skills that are needed for a healthy intimate relationship but do not frame the experience within the young person's social and cultural context.

RSE programmes have the capacity to improve young people's skills to build and sustain future strong and stable relationships, and thereby improve their mental and physical health and well-being. Building on the programmes reviewed within, educators, programme-developers, policymakers and researchers can together work towards further developing and evaluating the content and delivery of relationship skills education programmes.

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The authors declare that there are no further conflicts of interests to declare.

Data availability statement

The authors confirm that the data supporting the findings of this study are available within the article and associated online supplementary material.

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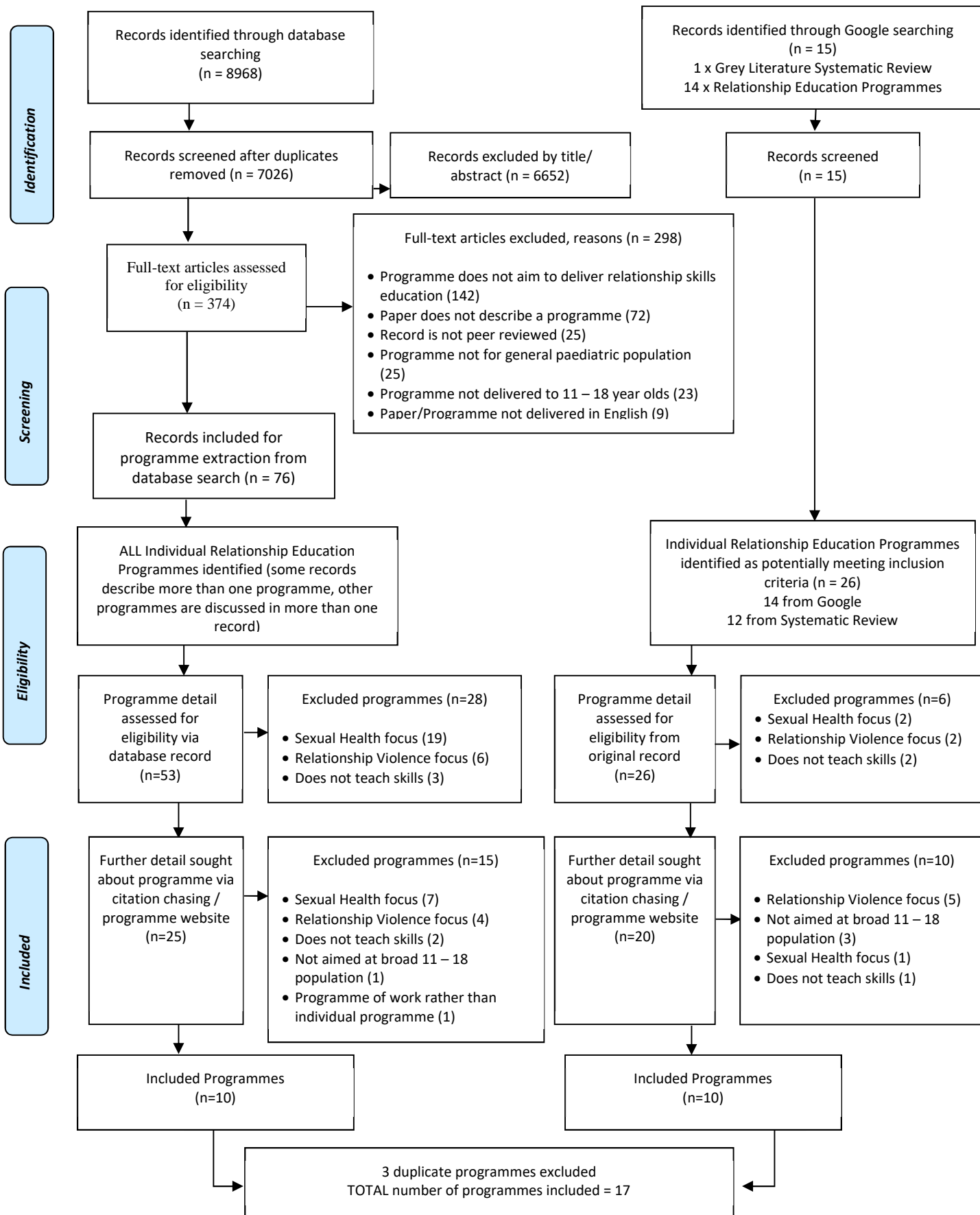
Table 1: Inclusion / exclusion criteria

	Inclusion criteria	Exclusion criteria
Population	Age: 11 to 18 years old. Sub-groups of children within this age-group are eligible. The programmes' targeted population should include young people < 18 years old. Lower age boundary needs to include 11 and 12. Upper age boundary needs to include 17 and 18.	Any programme that has not been developed to be used in a general population of young people (<18 years) e.g. autism/learning disabilities/refugees.
Programmes	Generic and or skill-specific intimate relationship skill programmes used in the English language, regardless of current use; group and individual programmes are eligible, school-based programmes and or programmes using another setting/method for delivery. Programmes aimed at one gender are included.	Any programme where the aim does not refer specifically to relationship skills for intimate relationship (e.g. aim is to prevent HIV or pregnancy).
Study design	Any type of study design	
Date	1996 onwards	
Language	English language	Any programme for which an English language version has not been developed.

Table 2: Characteristics of programmes included in the review

Programme name / [Developer]	Programme Aim	Target Audience	Country of Origin	Delivery (materials, duration, setting)	Source
Choosing the Best (Grades 9-10 & 11-12) [Bruce E. Cook]	Help Young People Build Skills Needed for Healthful Decision-Making	Ages 14 to 16 or 16 - 18	USA	Eight 50 min sessions delivered by trained teacher/facilitator or parent in school or home. Leader Guides, Student Manuals, posters & videos.	http://www.choosingthebest.com/curricula
					Commitment
					Communication
					Conflict Reduction/Dealing with Differences in Personal Expectations
					Conflict Resolution/Repairing Relationships after Conflict
					Critical Thinking/Decision Making
					Empathy
					Ending Relationships
					Finance Management in a Relationship
					Negotiation/Prioritising
					Partner Selection
					Problem Solving/Crisis Management
					Recognising Healthy Relationship Patterns
					Recognising Unhealthy Relationship Patterns
					Resilience/Healthy Coping strategies/Self-regulation
					Respect
					Self-Confidence/Assertiveness
					Setting Sexual Limits/Refusal Skills/Responsibility
					Trust
					Understanding own Personal Values/Goal Setting
					Understanding Sexuality
					Understanding the Effects of Gender Stereotypes on Behaviour
					Understanding the Effects of the Media on Expectations

Figure 1: PRISMA Flow Diagram, based on Moher, Liberati, Tetzlaff, and Altman, 2009



*It was decided not to pursue these papers as the programmes they each referred to in their abstracts were discussed in other included records.

Supplementary Table 3: Search string as used for OVID MEDLINE

Database	Ovid MEDLINE® Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Ovid MEDLINE® without Revisions 1996 to daily update	
Date Search Run	8th March 2017 (incl related terms)	
Search line	Search term	Results
#1	Adolescent/	243970
#2	Young Adult/	273791
#3	adolescen*.ti,ab	69148
#4	young adult*.ti,ab	23687
#5	((student*or pupil*) adj3 school).ti,ab.	0
#6	Youth.ti,ab	19123
#7	teen*.ti,ab	
#8	Juvenile.ti,ab	14404
#9	young people.ti,ab	6791
#10	girlfriend.ti,ab	78
#11	boyfriend.ti,ab	96
#12	high schools.ti,ab	1455
#13	high school education.ti,ab	692
#14	secondary education.ti,ab	677
#15	((secondary or high) adj school*).ti,ab	10786
#16	Schools/	6319
#17	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16	441080
#18	interpersonal relations/	9957
#19	courtship/	428
#20	love/	387
#21	marriage/	1450

#22	(relationship* adj skill).ti,ab	55
#23	((romantic or intimate or sexual) adj partner*).ti,ab	6160
#24	((romantic or intimate or sexual) adj couple*).ti,ab	49
#25	((romantic or intimate or sexual) adj relationship*).ti,ab	2157
#26	Sex Education/	505
#27	((Sex* or relationship*) adj3 education).ti,ab	3963
#28	PSHE.ti,ab	9
#29	Personal social health education.ti,ab	0
#30	interpersonal attraction.ti,ab	24
#31	interpersonal compatibility.ti,ab	1
#32	sexual attitudes.ti,ab	200
#33	social dating.ti,ab	1
#34	romance.ti,ab	143
#35	intimacy.ti,ab	1003
#36	cohabitation.ti,ab	584
#37	18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36	23952

#38	Teaching/	4511
#39	Program Development/	4121
#40	Program Evaluation/	9976
#41	Curriculum/	8968
#42	School health services/	1919
#43	social skills/	600
#44	Guidance.ti,ab	31224
#45	Training.ti,ab	101686
#46	((online or web-based or school* or teach* or education*) adj2 (model* or method* or material* or plan* or resource* or intervention*).ti,ab	19336
#47	((curriculum or syllabus or program) adj2 (develop* or evaluat* or instruct* or educat*).ti,ab	11271

#48	lesson plan.ti,ab	23
#49	(course adj (content or evaluat* or develop* or aim* or objective*)).ti,ab	758
#50	education program planning.ti,ab	7
#51	programmed instruction.ti,ab	10
#52	school-based intervention.ti,ab	282
#53	course evaluation.ti,ab	139
#54	educational objectives.ti,ab	220
#55	38 or 39 or 40 or 41 or 42 or 43 or 45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54	171960
#56	55 and 37 and 17	811

Supplementary Table 2: Excluded Programmes with Reason for Exclusion

Programme Name	Target Audience	Programme Aim	Country of Origin	Source	Reason for Exclusion
A PAUSE programme—Adding Power And Understanding in Sex Education	Ages 13 - 14	Sex Education	UK	(Mellanby et al. 1995; Mellanby, Phelps, and Tripp 1996)	Sexual Health focus
About Us	Not specified	Promote healthy relationship behaviours & increase contraceptive use	USA	(Coyle, Anderson, and Administration for Children and Families 2018)	Sexual Health focus
Best Friends	Ages 11 - 18	Character Education	USA	(Best Friends Foundation 2018)	Does not teach relationship skills
Chesterfield Relate	Ages 14 - 18	Reduce Domestic Violence	USA	(McLeod, Jones, and Cramer 2015)	Relationship Violence focus
Choosing, Noticing, Responding, Ending and Bouncing Back	Ages 13 - 16 Female only	Reduce Chronic Partner Violence	Australia	(Murphy 2011)	Relationship Violence focus
Dating and Sexual Responsibility	Ages 15 - 16	Prevent Coercive Sexual Behaviour	USA	(Pacifi, Stoolmiller, and Nelson 2001)	Relationship Violence focus

Dating Matters	Ages 13 - 15	Reduce domestic violence	USA	(Tharp et al. 2011; Centers for Disease Control and Prevention n.d.)	Relationship Violence focus
Expect Respect	Ages 13 - 18	Promote healthy relationship behaviours	UK	(Women's Aid 2015)	Relationship Violence focus
Expressive and group technique	Ages 14 - 18 Children of Divorce only	Promote healthy relationship behaviours	USA	(Whitten and Burt 2015)	Does not teach relationship skills
Fourth R: Skills for Youth Relationships	Ages 14 - 15	Reduce adolescent dating violence	Canada	(Wolfe et al. 2009)	Relationship Violence focus
FreeUp (Living Respectfully) [Renamed: Respect100]	Ages 11 - 19 Male only	Promote critical analysis of gender stereotypes & reduce domestic violence	UK	(A call to men UK 2019)	Relationship Violence focus
Girl Time	Ages 12 - 14 Female only	Encourage safer sexual practices	Canada	(Brunk et al. 2008)	Sexual Health focus
Health Education for Youth (hey)	Ages 13 - 17	Sex Education	USA	(Stevens et al. 2013)	Sexual Health focus
It's Your Game (IYG) -Tech	Ages 13 - 14	Reduce HIV/STI and pregnancy	USA	(Peskin et al. 2015)	Sexual Health focus

Katie Brown Educational Program	Ages 10 - 18	Reduce dating violence	USA	(Joppa et al. 2016)	Relationship Violence focus
Life Planning education	Ages 12 - 18	Prepare for work and promote healthy relationship behaviours	USA	(Advocates for Youth 1995)	Does not teach relationship skills
Life Skills and HIV/AIDS Education: Learning Program for Grades 8-12	Ages 12 - 18	Reduce & promote coping strategies for HIV/AIDS	South Africa	(Magnani et al. 2005)	Sexual Health focus
love is respect	Ages 14 - 18	Reduce domestic violence	USA	(Love is respect dot org 2017)	Relationship Violence focus
loves-me-not	Ages 16 - 18	Promote healthy relationship behaviours	New Zealand	(New Zealand Police 2018)	Relationship Violence focus
Love Notes v2.1	Ages 15 - 24 At risk of pregnancy	Help Young People make wise relationship & sexual choices	USA	(Scott et al. 2012)	Not aimed at broad 11 - 18 population
Making Smart Choices (MSC)	Ages 12 - 16	Sex Education	Hong Kong	(Alvin et al. 2015)	Sexual Health focus
matesanddates	Ages 13 - 17	Reduce domestic violence	New Zealand	(Accident Compensation Corporation n.d.)	Relationship Violence focus

Media Aware Relationships	Ages 18+	Promote critical analysis of media messages about sexual behaviour	USA	(Scull, Malik, and Kupersmidt 2014)	Not aimed at broad 11 - 18 population
Media Relate Project	Ages 12 - 15	Promote critical analysis of media messages about sexual behaviour	UK	(Bragg 2006)	Does not teach relationship skills
Mpondombili	Ages 14 - 17	Reduce HIV/AIDS and unintended pregnancy	South Africa	(Mantell et al. 2006)	Sexual Health focus
Pono Choices Curriculum	Ages 11 - 14 Hawaiian population only	Sex Education	USA	(Manaseri, Uehara, and Roberts 2014)	Sexual Health focus
Positive Prevention Plus	Ages 14 - 18	Reduce HIV/STI and pregnancy	USA	(LaChausse, Clark, and Chapple 2014)	Sexual Health focus
PREPARE	Ages 12 - 14	Reduce HIV and domestic violence	South Africa	(Mathews et al. 2015)	Sexual Health focus
Queer Sex Ed	Ages 16 - 20 LGBT only	Sex Education	USA	(Mustanski et al. 2015)	Sexual Health focus
Reducing the risk	Ages 14 - 19	Delay sexual initiation and promote safe sex practices	USA	(Kelsey and Layzer 2014)	Sexual Health focus

RELATE (Relationship Education Leading Adolescents Towards Empowerment)	Not specified	Reduce Domestic Violence	USA	(McLeod, Jones, and Cramer 2015)	Relationship Violence focus
Relationship Intelligence (Lovesmart/freeteens/Teen Smart About Sex)	Ages 11 - 18	Promote healthy relationship behaviours	USA	(NJ Wise2Wait 2019)	Does not teach relationship skills
Responsible Sexuality Program	Ages 14 - 18	Sex Education	USA	(Kassirer and Griffiths 1997)	Sexual Health focus
Safe Dates	Ages 13 - 15	Reduce domestic violence	USA	(Jouriles, Platt, and McDonald 2009)	Relationship Violence focus
School Health Center Healthy Adolescent Relationships Program (SHARP)	Ages 14 - 18	Reduce domestic violence	USA	(Miller, Goldstein, et al. 2015)	Relationship Violence focus
Sex Can Wait	Ages 10 - 12	Delay sexual initiation	USA	(Spear, Young, and Denny 1997)	Does not teach relationship skills
Sexual health and relationships education (SHARE)/ The SHARE intervention	Ages 13 - 15	Reduce unwanted pregnancy and promote safe sexual practices	Scotland	(Wight and Dixon 2004)	Sexual Health focus
Sexual health education program	Ages 14 - 15	Reduce HIV/STI, pregnancy & promote healthy relationship behaviours	Canada	(Smylie, Maticka-Tyndale, and Boyd 2008)	Sexual Health focus

Sexunzipped	Ages 16 - 20	Sex Education	UK	(McCarthy et al. 2012)	Sexual Health focus
Start Strong: Building Healthy Teen Relationships/Teen dating violence prevention program	Ages 11 - 14	Reduce domestic violence & promote healthy relationship behaviours	USA	(Miller, Williams, et al. 2015)	Programme of work not individual program
Teen Outreach Program	Ages 14 - 18	Improve adolescent's aspirations and reduce teen pregnancy	USA	(Schmidt, Wandersman, and Hills 2015)	Sexual Health focus
TeensTalkHealth	Ages 14 - 18	Encourage safer sexual practices	USA	(Brady et al. 2015)	Sexual Health focus
Tender's Healthy Relationships Project	Ages 13 - 18	Promote healthy relationship behaviours	UK	(Tender n.d.)	Relationship Violence focus
The 2 HYPE Abstinence Club	Ages 12 - 18	Reduce premarital sexual activity and underage pregnancy	USA	(Akintobi et al. 2011)	Sexual Health focus
The 5 Love Languages	Ages 18+	Improve communication of affection	USA	(The 5 Love Languages® n.d.)	Not aimed at broad 11 - 18 population
The Candy Game exercise	Ages 13 - 17	Improve understanding of sexuality	USA	(Ott 2016)	Does not teach relationship skills

The Human Development Programme	Ages 12 - 14	Sex Education	Turkey	(Cok and Gray 2007)	Sexual Health focus
The Peer Led Sex Education Intervention (RIPPLE)	Ages 13 - 14	Sex Education	UK	(Stephenson et al. 2004)	Sexual Health focus
The Safe Relationships program	Ages 14 - 18	Reduce domestic violence, sexual abuse and teen pregnancy	USA	(Lowe, Jones, and Banks 2007)	Relationship Violence focus
The Sexuality Education Initiative (SEI)	Ages 14 - 15	Reduce HIV/STI and pregnancy and promote safe sexual practices	USA	(Marques and Ressa 2013)	Sexual Health focus
The World Starts with Me	Ages 12 - 19	Sex Education	Uganda	(Rijsdijk et al. 2011)	Sexual Health focus
The Youth Relationships Project (YRP)	Ages 14 - 17	Reduce domestic violence	USA	(Jouriles, Platt, and McDonald 2009)	Relationship Violence focus
True Love Waits	Not specified	Abstinence pledge education programme	USA	(Silliman 2003)	Does not teach relationship skills
Ur Choice	Ages 14 - 16	Sex Education	UK	(McIver 2010)	Sexual Health focus

WAIT (Why Am I Tempted?) Training	Ages 11 - 18	Sex and Pregnancy Prevention	USA	(Scott et al. 2012)	Sexual Health focus
Wise Guys	Ages 11 - 17 Male only	Promote male responsibility and reduce teen pregnancy	USA	(Herrman, Moore, and Rahmer 2016)	Sexual Health focus
Within My Reach	Ages 18+	Promote healthy relationship behaviours	USA	(Scott et al. 2012)	Not aimed at broad 11 - 18 population
Would you Rather (WYR), with a Sexual Health Twist!	Ages 14 - 18	Encourage safer sexual practices	USA	(Rosen, McNeill, and Wilson 2014)	Sexual Health focus
You-Me-US	Not specified	Reduce sexual risk taking behaviours	USA	(Scott et al. 2012)	Sexual Health focus

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Exploring the content and delivery of relationship skills education programmes for adolescents: a systematic review

Astrid Janssens^{*a, b}, Sharon Blake^b, Matt Allwood^c, Jan Ewings^d, Anne Barlow^d

^a User Perspectives, Institute of Health Research, University of Southern Denmark, Denmark, ^b Child Health, University of Exeter Medical School, University of Exeter, UK; ^c Department of Psychiatry, University of Oxford, Oxford, UK; ^d School of Law, University of Exeter, UK

*Corresponding Author: Astrid Janssens, Associate Professor, User Perspectives, Institute of Health Research, University of Southern Denmark; Honorary Associate Professor, Child Health, University of Exeter Medical School.

J. B. Winsløws Vej 9B, 1. Sal, 5000 Odense C, DENMARK, Tel: +45 65503069
AJanssens@health.sdu.dk Twitter: [@avajanssens](https://twitter.com/avajanssens) ORCID: [0000-0001-8419-0937](https://orcid.org/0000-0001-8419-0937)

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