

Teen dating violence interventions for sexual minority youth: A scoping review

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Abstract

Background. Sexual minority youth (SMY) are disproportionately impacted by teen dating violence (TDV). However, current interventions do not address the distinct needs of SMY. Culturally safe and effective TDV prevention interventions targeted to SMY are needed. The purpose of this review is to (1) examine TDV interventions that are inclusive of SMY and (2) determine the effectiveness of the interventions in terms of both knowledge and behavioral changes.

Methods. A scoping review was conducted and includes studies that met the following inclusion criteria: (1) evaluated a TDV prevention program,

(2) included participants who identify as lesbian/gay, bisexual, unsure, or queer; (3) reported outcomes for SMY; and (4) were published in the English language. The Effective Public Health Project Quality Assessment Tool for Quantitative Studies and Garrard Matrix Method were employed to critically evaluate articles and synthesize findings.

Results. A comprehensive search was conducted using five electronic databases that revealed 878 articles. Three articles were included in this review. Findings revealed that culturally targeted interventions improved dating violence knowledge and decreased the acceptance of sexual violence from pre-post intervention. However, current interventions have limited impact on behavioral outcomes among SMY. Moreover, quality assessments revealed that existing interventions were either weak or moderate, highlighting the need for additional research and culturally targeted TDV interventions.

Discussion/Conclusion. Implications for future intervention development regarding measurement, recruiting and community partnership, institutional review board issues, improving behavioral outcomes, addressing unique risk factors, cultural targeting, intervention design, and methodological approaches are described.

Introduction

Sexual minority youth (SMY, i.e., lesbian, gay, and bisexual, and youth with non-heterosexual attractions or behaviors) are disproportionately impacted by teen dating violence (TDV), representing a significant public health crisis (Reuter & Whitton, 2018). This paper defines TDV as physically, emotionally, or psychologically aggressive behavior in adolescent romantic relationships (Basile et al., 2020). National surveillance systems found that SMY reported more physical (17%) and sexual TDV (16%) when compared to heterosexual youth (6%, 6% respectively; Johns et al., 2020; Underwood et al., 2020). These findings are consistent in local and regional samples of youth in the United States (Reuter & Whitton, 2018; Reidy et al., 2017). TDV has been linked to poor academic performance and dating violence in adulthood, along with adverse social, behavioral, and health outcomes that impact the life course of SMY (Adams et al., 2013; Whitton et al., 2019). To halt the cascade of negative health outcomes among SMY, TDV prevention interventions targeted to SMY lived experiences are needed.

Risk factors for teen dating violence

A range of factors has been identified that interfere with healthy interpersonal relationships among adolescents and young adults. For instance, youth exposed to violence within peer, family, or environmental contexts are more likely to replicate those behaviors within adolescent and adult relationships (Abajobir et al., 2017; Lu et al., 2019). This phenomenon is enhanced further given that more frequent exposure to violence has been associated with more acceptance of violence within romantic relationships (Karlsson et al., 2016). Personal perspectives surrounding the acceptance of dating violence behaviors and/or gender roles have been linked to increased strain with relationships of adolescents (Kerman & Ozturk, 2022).

Additionally, certain skills have been shown to mitigate negative dating behavior, such as effective communication and emotional regulation. Lack of interpersonal skills (i.e., conflict resolution, communication, and/or emotional regulation) has been linked to increased dating violence among youth and adults (Berke et al., 2019; Rueda et al., 2021). Moreover, behavioral factors such as alcohol and substance use have been shown to increase the risk for TDV. Engaging in substance use increases aggressive behavior and disrupts normal brain functioning that controls impulsive behavior. Moreover, studies have suggested that dating violence and alcohol use reinforce one another reducing relationship quality and satisfaction (Rothman et al., 2012; White et al., 2009).

In addition, SMY youth may struggle with the pressure to develop positive sexual identities within the context of a heterosexist environment, which can further complicate their establishment of healthy relationships and mental well-being (Meyer, 2001; Russel & Fish, 2016; Taliaferro et al., 2018). The minority stress theory is commonly used to understand LGBT health inequalities. It identifies proximal and distal risk factors that influence health outcomes among sexual minority individuals (Meyer, 2001). Proximal risk factors include identity concealment, internalized bi/homophobia, and expectations of rejection (Meyer, 2001).

Moreover, distal risk factors include experiences of discrimination, prejudice, and potential violence resulting from racism, homophobia/biphobia, transphobia, sexism, and heteronormativity (Meyer, 2001). So, in addition to experiencing changes biologically and interpersonally, SMY also experience proximal and distal risk factors related to their sexual orientation or gender identity (Burke et al., 2018; Exner-Cortens et al., 2013; Choi et al., 2017; Dank et al., 2014; Gillum, 2017). These youth may also struggle with the pressure to develop positive sexual identities within the context of a heterosexist environment, which can further complicate their establishment of healthy relationships and mental well-being (Meyer, 2001; Russel & Fish, 2016; Taliaferro et al., 2017).

Not conforming to heteronormative dating practices has contributed to SMY youth's experience of ostracism, teasing, and violence (Reuter et al., 2015). This rejection and victimization have also contributed to SMY being more likely to conceal their sexual identity from others which has detrimental effects of their mental health and self-image (Caba et al., 2022). Moreover, nonconformity to

heteronormative dating standards has also been linked to increased TDV perpetration, victimization, and poor relationship quality (Berg et al., 2016; Meyer, 2001; Reuter et al., 2015).

SMY youth may also have limited access to social support or resources relating to their dating experiences (Meyer et al., 2015; Van Lisdonk & Keuzenkamp, 2017). These experiences serve as barriers to accessing or utilizing the social or community resources that have been shown to buffer the negative consequences of TDV (Meyer et al., 2015; Van Lisdonk & Keuzenkamp, 2017). Interventions targeting proximal and distal minority stressors are needed to decrease TDV and resultant negative health outcomes among SMY. Such interventions may help facilitate a healthy transition into adulthood, prioritizing physical and mental health for SMY.

Current dating violence interventions

Various TDV interventions exist. Most are aimed at empowering bystanders to intervene upon witnessing acts of violence (Banyard, 2011; Storer et al., 2016; O'Brien et al., 2021; Palm Reed et al., 2015; Katz et al., 2011; Coker et al., 2015). Such interventions aim to equip youth with the knowledge and skills needed to reduce violence within their relationships (Melton & Belknap, 2003; De La Rue et al., 2017; Niolon et al., 2019; Reidy et al., 2017; Miller et al., 2015; Taylor et al., 2015; Foshee et al., 2004; Wolfe et al., 2009; Cissner & Ayoub, 2014). Despite aiming to reduce TDV, no studies have assessed how sexual orientation impacts TDV outcomes. TDV evidence-based interventions (EBI) have not included content that addresses risk factors commonly experienced within SMY romantic relationships (Cissner & Ayoub, 2014). This lack of SMY inclusive TDV interventions presents a gap in the literature for understanding how sexual orientation impacts TDV outcomes.

Previous systematic reviews reported that some TDV interventions positively affect knowledge and attitudes with no effect on behavior changes (De la Rue et al., 2017; Edwards & Hinsz, 2014; Ting, 2009). Other TDV interventions found no significant effects on knowledge, attitudes, behaviors, or skills (Fellmeth et al., 2015). Lee and Wong (2021) conducted a systematic review and meta-analysis examining the efficacy of TDV prevention programs among middle and high school youth and found that such programs positively impact knowledge, attitudes, and violence perpetrations but have no impact on victimization experiences or bystander behaviors. In sum, interventions to date are insufficiently attendant to the specificities of SMY. Current interventions also do not consider various ways SMY experience violence. For example., threatening to “out” a partner to family/friends is coercive, may leave a teen feeling powerless, and increase the potential for additional victimization (Reuter & Whitton, 2018). There is a critical need for preventive interventions that are effective and inclusive of SMY’s lived experiences.

To address gaps in previous literature, this scoping review will (1) examine TDV interventions that are inclusive of SMY and (2) determine the effectiveness of the interventions in terms of both knowledge and behavioral changes.

Method

Eligibility criteria

Articles were included with this review if they adhered to the following inclusion criteria:

(1) evaluated a TDV prevention program, (2) included participants who identify as lesbian/gay, bisexual, unsure, or queer; (3) reported outcomes for SMY; and (4) were published in the English language.

Information sources

A computerized and systematized search was conducted using five (electronic databases: CINAHL Plus, PubMed, LGBTQ+ Source, Embase, and Health Source (Nursing/Academic edition)). The following subject heading (Title/Abstract) terms (and Boolean terms and operators) were used in the initial strategy and were consistent with the aims of this study: ("dating violence" or "dating abuse" or "partner violence" or "partner abuse" or "intimate abuse" or "intimate violence" or "sexual abuse" or "physical abuse" or "sexual violence" or "physical violence") AND (intervention or program or training or curriculum or strategy) AND ("sexual minority" or gay or lesbian or bisexual or transgender or trans or bi or bi+ or queer or "sexual diverse" or "gender diverse"). To capture all interventions inclusive of SMY, there were no time- frame limitations placed on this search.

Search and selection of evidence

We included published peer-reviewed empirical studies addressing TDV programming among SMY. We used the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines to guide the review (Liberati et al., 2009). The PRISMA guidelines helped authors create inclusion criteria. Titles and abstracts of potential articles were screened independently to confirm eligibility. Additional sources were identified through reference tracking, grey literature sources, and referrals. All retrieved articles were exported into Microsoft Excel, where duplicate articles were identified and condensed. The authors conducted a complete preliminary screening of articles that potentially adhered to inclusion criteria. A second author verified the search and selection process for accuracy. Three relevant studies are included in this scoping review.

Data collection process

The Garrard Matrix Method (2017) was employed to evaluate articles critically, extract study components, and compare, contrast, and synthesize findings. The following information was extracted from each article: sample characteristics, research design, methodological quality, theoretical or conceptual framework used, intervention description, measurement approaches, and intervention outcomes. Data from each eligible article were appraised independently using Excel and reviewed by a second author. Disagreements were discussed until a consensus was reached.

Assessment of methodological quality

The methodological quality of each intervention was assessed with the Effective Public Health Project (EPHPP) Quality Assessment Tool for Quantitative Studies (Armijo-Olivo et al., 2012). The EPHPP has been employed to assess the quality of experimental and non-experimental studies. The tool assesses selection bias, study design, confounders, blinding, data collection methods, and withdrawal dropouts. Each component was guided by a standardized criteria and dictionary (<https://www.ehphp.ca/quality-assessment-tool-for-quantitative-studies/>) and rated on a three-point scale (1 = strong, 2 = moderate, 3 = weak). Next, studies were given an overall global quality rating with *strong* defining a study with no weak rating, *moderate* consisting of one weak rating and less than 4 strong ratings, and *weak* consisting of studies receiving two or more weak ratings across the six components. Two authors conducted the methodological assessments independently. Next, both authors reviewed all scores and resolved discrepancies through discussion of each EPHPP category for the study to determine the correct score. A final score was determined through unanimous agreement.

Synthesis of results

Evidence was summarized by intervention type, theoretical approach, methods, and outcomes. Results are presented in narrative and table outlines (see Table 1).

Results

Search outcomes

A total of 878 citations were identified from electronic databases and references of reviewed articles (see Figure 1). After removing duplicates, 676 articles were screened by title and abstract, and 87 underwent full-text review. Two full-text articles and one master's thesis were considered eligible for this review, sorted by the primary author, and reviewed with attention to research design, intervention structure, content specific to SMY, and primary outcomes specific to SMY. Eighty-four articles were excluded for the following reasons: non-intervention studies or did not report outcomes specific to sexual minority youth.

Characteristics of sources of evidence

Descriptions of each teen dating violence intervention inclusive of SMY are included in Table 1. There were no studies conducted prior to 2017, highlighting the paucity of this research area. All included studies were published between 2017 – 2021. One study was conducted on a college campus in Canada (Rudzinski, 2019). Two studies took place at American high schools, one in Wisconsin (Wesche et al., 2021) and one in Kentucky (Coker et al., 2020). Research designs included two pilot tests with a pre-post design (Rudzinski et al., 2019; Wesche et al., 2021) and a randomized control trial (Coker et al., 2020). Sample sizes in each study included 111 students (Rudzinski et al., 2019), 156 youth in the community (Wesche et al., 2021), and 16,503 students evaluated over five years (Coker et al., 2020).

Synthesis of results

Sample characteristics.

Age. The sample age range varied significantly within and between studies. Studies assessed youth and young adults in high schools and community organizations throughout the United States and a Canadian college. Coker and colleagues did not report individual characteristics. However, youth in grades 9-12 were included throughout each wave ($N = 16,503$ students). Wesche and colleagues assessed youth in local high schools and community organizations with a mean age of 15 years ($N = 156$). The age range was not reported. Whereas Rudzinski (2019) employed a slightly older college sample with 18-25 years older students with a mean age of 20 years old.

Race/ethnicity. Two out of the three studies reported information on race/ethnicity. Racial minority youth comprised 40% (Rudzinski et al., 2019) and 79% (Wesche et al., 2021) of the total sample. Coker and colleagues conducted a school-level intervention, and individual race/ethnic information was not included in the manuscript. However, a previously published paper reported that the sample included predominantly white (84.8%) high school youth (Coker et al., 2017), whereas Rudzinski and Wesche's samples (Rudzinski et al., 2019; Wesche et al., 2021) included more racial/ethnically diversity. In the Canadian pilot study employed amongst college students (Rudzinski, 2019), approximately half of the sample identified as White (i.e., White Canadian, White European), and nearly one-third identified as Asian (i.e., South Asian, East Asian, Southeast Asian). Just under half of the sample identified as being treated as a person of color ($n = 49$; Rudzinski, 2019). Similarly, 79% of Wesche's pilot student participants were non-White, with 26% Black, 24% Hispanic/Latino, 7% American Indian/Native Alaskan, and 5% Asian/Pacific Islander.

Sexual Orientation. The proportion of SMY included in studies was 9.8%, 13.4%, and 35% (Rudzinski et al., 2019; Coker et al. 2020; Wesche et al., 2021, respectively). However, sexual minority status was operationalized differently within each study. Coker and colleagues (2020) did not assess self-reported sexual identity but operationalized four different sexual orientation categories (i.e., sexual minority males or females; sexual majority males or females based on self-reported sexual attraction (i.e., attracted only to females, attracted mostly to females, etc.). On the other hand, Wesche (2021) specifically asked participants, "*Which of the following best describes your sexual orientation,*" with the following response options: Heterosexual, gay/lesbian, bisexual, queer, not sure, or self-identify. Similarly, Rudzinski (2019) asked, "*How do you currently identify*" with ten different response options. Reported responses included: straight/heterosexual, bisexual, unsure/questioning, lesbian/gay, or asexual.

Sex and Gender Identity. Two of the three studies assessed gender identity. Approximately 56% of Wesche's sample included cisgender females, and 39% included cisgender males, with 5% of participants identifying as transgender ($n = 2$ transgender females, $n = 2$ transgender males). Approximately 54% of Coker and colleagues' sample self-identified as female; however, gender identity was not assessed. Rudzinski asked participants, "Which of the following represents your present gender identity? (Please check all that apply). This item included 15 response options—however, 79% of the sample identified as a girl or woman. Rudzinski asked, "Which of the following represents your present gender identity? (Please check all that apply)." One participant identified as a transgender woman. See Supplemental Table 1 for demographic characteristics.

Intervention Design and Approaches

Three interventions were identified and consisted of two bystander self-efficacy interventions (Bringing in the Bystander; Rudzinski et al., 2019; and Green Dot Program; Coker et al., 2020) and one victimization/perpetration prevention primary intervention (Wesche et al., 2021). These studies consisted of two pilot studies and one randomized control trial; See Table 1. Each of the three interventions was adapted from previously implemented evidence-based programs. Two of these programs were adapted from bystander interventions (Rudzinski, 2019; Coker et al., 2020) – Green Dot Presentations (Mennicke et al., 2021) and Bringing in the Bystander (Eckstein et al., 2013). One intervention that targeted the perpetrator or victim was adapted from the Safe Dates program (Foshee et al., 2013). Two studies adapted previously existing interventions to include content specific to the needs and experiences of SMY (Rudzinski et al., 2019; Wesche et al., 2021), whereas one intervention reported on original content and compared outcomes among sexual majority and minority youth (Coker et al., 2020).

For each study, trained staff administered the intervention and included employees from a rape crises center (Coker et al., 2020), staff from sexual and gender minority youth-serving organizations (Wesche et al., 2021), and a research team at Laurier University (Rudzinski et al., 2019). Intervention lengths varied tremendously and included: one 3-hour session (Rudzinski et al., 2019), a two-part curriculum administered over a four-day program (Coker et al., 2020), and ten 50-minute sessions (Wesche et al., 2021). Interactive discussions were a core component in each of the three studies. Only one study had a comparison group (Coker et al., 2020).

The EPHPP Quality Assessment Tool for Quantitative Studies (Armijo-Olivo et al., 2012) was employed to assess study efficacy. Results from the EPHPP (Armijo-Olivo et al., 2012) revealed that the two pilot studies (Rudzinski et al., 2019, Wesche et al., 2021) received a score of 3 (weak) due to potential selection bias, study design issues, or attrition. Coker and colleagues (2020) received a score of 2 (moderate) due to a lack of blinding yielding potential social desirability bias (see Supplemental Table 2).

Cognitive and Behavioral Outcomes

Cognitive Outcomes. included measures of knowledge, acceptance, and intent. Studies assessed readiness to change, rape myth acceptance, rape empathy, dating violence knowledge, and sexual violence acceptance. Rape myth acceptance is a set of cultural beliefs that support and perpetuate male sexual violence against women (Payne et al., 1999). Rape empathy, on the other hand, is the ability to understand the perspective of a rape victim or perpetrator (Smith & Frieze, 2003). No changes in rape myth acceptance were found, yet rape empathy for survivors increased from pre to post-intervention (Rudzinski, 2019).

Studies found increases in dating violence knowledge and decreases in the acceptance of sexual violence from pre-post intervention (Wesche et al., 2021; Coker et al., 2020). Coker and colleagues, however, did not see any changes in sexual violence acceptance among sexual minority male youth (see Table 2).

Behavioral Outcomes. Two studies assessed behavioral outcomes related to TDV interventions. Coker and colleagues (2020) assessed multiple forms of dating violence perpetration and victimization with sexual minority youth experiences and found that the intervention correlated to reduced stalking. There were no changes, however, in physical or sexual TDV. Rudzinski (2019) assessed readiness to change and efficacy for intervening in the role of the bystander. There were no increases in bystander efficacy or readiness to change among participants (see Table 2).

Cultural Targeting

Only two studies culturally targeted content to meet the needs of SMY. Wesche used Barrera's approach to cultural adaptation (Barrera et al., 2013) of behavioral health intervention to adapt the *Safe Dates* curriculum to be inclusive of sexual minority, cisgender, and heterosexual youth. This approach includes five stages: information gathering, preliminary design, preliminary testing, refinement, and final trial (Barrera et al., 2013). The content within the curriculum was adapted to address needs specific to SMY, such as signs of abuse (e.g., threatening to out partner) and barriers to accessing help (e.g., no SMY-friendly resources). Knowledge increased from pre-posttests highlighting the benefit of employing specific SMY content (Wesche et al., 2020).

Rudzinski and colleagues (2019) adapted the *Bringing in the Bystander Intervention* (Eckstein et al., 2013) using a two-phase, intersectional approach. They employed constituent-involving strategies (Krueter, 2003) in which they conducted focus groups with diverse groups of students (multiple race/ethnicities, sexual orientations, and gender identities) to understand their lived experiences. Results from these focus groups were used to develop various scenarios within the adapted, *Bringing in the Bystander* curriculum the adapted intervention resulted in increases in readiness to change and empathy for survivors. Coker and colleagues (2020) did not culturally adapt the *Green Dot* intervention.

Recruitment and Retention

Wesche (2021) recruited youth from 11 schools and organizations in Wisconsin. While Wesche (2021) did not report retention rates, the primary reasons stated for attrition were non-attendance and lack of consent to complete the post-test survey. Coker and colleagues recruited from 26 high schools over 5 years, and response rates declined from 92.6% at baseline to 76.6% at year 4; no differences in response rates were observed by condition (intervention (84.4%) and control (83.4%)) overall or within a year. Rudzinski recruited youth from four student organizations (The Association for Black Students, the Muslim Students Association, the Centre for Women and Trans Students, and the Rainbow Centre) at Laurier University and had a retention rate of 63%, with 70 of the 111 participants completing both the pre-and post-survey.

Theoretical Underpinnings

Considering Wesche (2021) adapted the Safe Dates curriculum, a framework of cultural adaption was employed to guide the adaption and implementation processes. However, the original curriculum focuses

on community and school intervention based on the Safe Dates theoretical model. The Safe Dates model suggests that adapting social dating violence attitudes and norms and improving prosocial skills will be primary prevention tools. Moreover, changing gender stereotypes and improving conflict management skills may empower youth in abusive relationships to leave or reduce violence (Foshee et al., 1996). On the contrary, the Theory of Change (Foster-Fisherman et al., 2007) and Theory of Intersectionality (Crenshaw, 1991) were employed by Rudzinski and colleagues to determine the effectiveness of an intersectional approach to the bystander program. Lastly, the Green Dot program is unique given that it was based on bystander psychology and the Diffusion of Innovation Theory (Rogers, 2003). Bystander psychology posits that an individual's likelihood to intervene decreases if passive bystanders are present.

Moreover, the diffusion of innovation theory (Rogers, 2003) describes the gradual adoption of a new idea or thought process by a specific population or social system. This theory has been employed successfully within and outside the sexual minority community to promote public health initiatives. These theories guided the Green Dot program to empower high school youth to pinpoint dating violence behaviors or attitudes and intervene. Although each of these programs has shown benefits in improving relationships among youth in general, none of the theories supporting these programs target the unique needs of sexual and gender minority youth.

Discussion

Despite researchers acknowledging how elevated rates of TDV among SMY present a need for targeted interventions (Underwood et al., 2020), few TDV initiatives have considered the specific needs of SMY (Mennicke et al., 2021). This review aimed to identify the content, determine the effectiveness, and describe TDV interventions inclusive of SMY. Our findings revealed, to date, that only three existing TDV interventions include SMY or sexual orientation- specific content, and only one intervention focused on TDV perpetrators or victims (Wesche et al., 2021). The three interventions rated poor to moderately on the EPHPP Quality Assessment Tool for Quantitative Studies due to potential bias, high or undisclosed rates of attritions, and low methodological rigor due to the nature of pilot studies (Armijo -Olivo et al., 2012). All three interventions achieved positive outcomes in reducing acceptance of violence and increasing knowledge and empathy. However, the only behavioral change among SMY reported across all studies was a reduction in stalking. Moreover, no implementation of a skill-building component to avoid or reduce risky behavior with SMY relationships was discussed, highlighting a critical area for future development. These results highlight a crucial gap in the science regarding TDV intervention development and evaluation for SMY. Future research is needed to establish effective prevention and intervention approaches for this population.

Recommendations And Implications For Future Intervention Development

Research in underserved populations requires additional skill sets and methodological considerations to improve the quality and cultural safety of the research conducted. There are eight implications for future

intervention development regarding measurement, recruitment and community partnership, institutional review board issues, improving behavioral outcomes, addressing unique risk factors, cultural targeting, intervention design, and methodological approaches. These implications can be used to move science forward and ultimately reduce dating violence among SMY.

Measurement. Future studies examining TDV outcomes among youth should include sexual orientation and gender identity measures. Established measures exist in the measurement of sexual orientation and gender identity (Reisner et al., 2015; Kann et al., 2018). The National Youth Risk Behavior Surveillance has assessed sexual orientation consistently for the past seven years with limited refusals or missing data (Johns et al., 2020; Underwood et al., 2020). The National Youth Risk Behavior Surveillance survey revealed that approximately 16% of youth identify as lesbian, gay, bisexual, or unsure of their sexual orientation (Underwood et al., 2020). Assessing sexual identity has led to groundbreaking discoveries of health disparities experienced by SMY and the need for additional research and interventions (Pollit et al., 2021; Johns et al., 2020). However, more local, regional, and national studies examining community-level factors influencing health disparities among sexual and gender minority youth are needed. Moreover, additional research is required to determine whether predictors or outcomes differ by sexual orientation (i.e., lesbian vs. bisexual vs. other identities) or gender identity. These findings will inform culturally and geographically tailored interventions for diverse samples of SMY.

Recruitment and community partnership. There are barriers to recruiting SMY in health disparities research that need to be accounted for when developing future studies. Community engagement is a critical component of intervention research to reduce health inequalities. Employing a community-engaged approach has been shown to help establish rapport by considering historical feelings of mistrust toward researchers and medical institutions and assisting in implementing cultural humility (Bauermeister et al., 2017). Moreover, partnering with SMY-serving organizations will enable researchers to identify critical factors influencing health disparities more effectively among these groups and potential solutions from a stakeholder perspective (Hergenrather et al., 2013). Additionally, youth Advisory Boards have effectively supported the design of adolescent research representative of their health concerns, respecting youth's ability to provide informed assent for research and providing health benefits for youth throughout the process (Orellana et al., 2021). These youth-centered advisory boards have also been shown to garner greater buy-in with the target population by increasing engagement and trust with the research team – thus improving interest and enrollment (Orellana et al., 2021)

Institutional Review Board issues. The Society for Adolescent Health and Medicine emphasizes the need for research to focus on the health outcomes of sexual minority youth (i.e., lesbian, gay, bisexual, transgender, queer). However, SMY are often less willing to participate in research studies where parental consent is required due to potential victimization and discrimination (Smith & Schwartz, 2019). Moreover, federal regulations created to protect the well-being of human research participants have unintended long-term consequences of depriving youth of opportunities to develop skills that may assist with a healthy transition to adulthood (Mustanski & Fisher, 2016). This is a significant concern given that more research is needed to understand the health needs of this population, especially in terms of TDV

prevention and intervention development. Many researchers opt for waivers of parental consent to protect youth from harm that may accompany disclosing their sexual orientation and interest in specific research studies to parents (Macapagal et al., 2017). However, such waivers are generally granted only in cases where risk is judged to be minimal – meaning that therapeutic intervention studies, which may have the potential for iatrogenic effects, may not be approved without parental consent (Mustanski & Fisher, 2016). As a result, SMY may be precluded from participating in research studies, such as interventions to help them disclose their sexual minority status to their parents if parental consent cannot be waived (Newcomb et al., 2016). Additionally, youth may be unable to participate in prevention programs, if waivers of parental consent are not accepted by school districts or community partners that support these youth (Newcomb et al., 2016). More work is needed at the policy level to help maintain the privacy and confidentiality of SMY without preventing them from accessing programs meant to improve their relationship qualities and overall well-being.

Improving behavioral outcomes. Current interventions have improved knowledge regarding TDV but have not been effective in reducing behaviors. Previous systematic reviews reported that some TDV interventions positively affect knowledge and attitudes without affecting behavior changes (De la Rue et al., 2017; Edwards & Hinsz, 2014; Ting, 2009). Other TDV interventions found no significant effects on knowledge, attitudes, behaviors, or skills (Fellmeth et al., 2018). There is a critical need for preventive interventions that are effective and inclusive of SMY's lived experiences. Future interventions should focus on increasing participant self-efficacy to develop and maintain a skillset to advocate for themselves or others in risky situations.

Self-efficacy refers to one's belief in their capacity to exert control of their situation (Bandura, 2001) and has been shown to influence youth help-seeking behavior following exposure to dating violence events (Van Camp et al., 2014; Davis et al., 2019). Our findings align with previous research highlighting how TDV interventions have not effectively reduced dating violence experiences among SMY (De La Rue et al., 2017). Moreover, previous research highlights the necessity of 'skill-building components' within interventions to expand youth's capacity to navigate conflict within their relationships and seek help from trusted sources (Joseph & Kuperminc, 2020). The Behavioral Theory for Violence (Bell & Naugle, 2008; Shorey et al., 2008) provides several domains relevant for knowledge, attitudes, and violence-reducing skills and may help guide the development of future interventions targeting behavioral changes.

Address unique factors. The minority stress (Meyer, 2001) provides a lens to address the unique experiences of SMY that accounts for the multifaceted experiences of their sexual orientation and gender identity. Given that each proximal stressor influences one's interpersonal relationships and mental health (Smith et al., 2022; Bostwick et al., 2021), it is critical for future interventions to clearly define concepts of identity concealment, expectations of rejection, internalized homophobia, internalized biphobia, or internalized transphobia, and intersectionality (Smith, Reidy, Norris, 2020; Smith & Reidy, 2021). A clear definition will enable youth to better understand their lived experiences and identify effective ways of communicating and help-seeking. Further, social determinants of health have been shown to differentially impact the experiences and outcomes of sexual and gender minority individuals, including

youth. Future interventions should also include content specific to systematic stressors and equip youth with emotional regulation, coping, and help-seeking skills to improve their well-being and relationship quality. Interventions should be iteratively adapted with community members to enhance the likelihood of sustainability (Salimi et al., 2012). These interventions will enable you to identify their current experiences and feelings better, improve their ability to cope with each form of stress, and empower youth to utilize skills to navigate these stressors in a realistic situation.

Cultural targeting. Cultural targeting shows promise for improving interventions for minority populations. Cultural targeting considers characteristics and experiences shared by members within a specific group and incorporates content and materials that match their value systems (Alden et al., 2014). These adaptations have enhanced health promotion interventions' appropriateness, effectiveness, and relevance (Fernandez et al., 2019; Wilson, 2009; Steinka-Fry et al., 2017). For example, Wilson (Wilson, 2009) found the most successful obesity interventions for African American youth had incorporated culturally specific content to make materials more relevant to the targeted population. Moreover, meta-analyses have found that culturally adapted substance use interventions yield more efficacious reductions in post-treatment usage compared to interventions lacking culturally specific content (Fernandez et al., 2019; Seo & Sa, 2010; Steinka-Fry et al., 2017). There is a critical need to culturally target TDV interventions given the unique nature of sexual minority relationships and the disproportionate prevalence of TDV among SMY. Cultural targeting TDV interventions will enhance their appropriateness and effectiveness by introducing content specific to the nature of SMY's lived experiences.

Intervention design. Many SMY experience stigma and discrimination and have limited access to appropriate resources or social support during adversity (Meyer, 2001; Berg et al., 2016;). Digital interventions could serve as accessible vehicles to teach SMY skills to maintain healthy peer relationships by engaging them in a safe, virtual environment where they can make mistakes and learn while minimizing stigma (Bowen et al., 2016). The virtual environment could help facilitate the development of skills to avoid risky situations, make youth aware of negative cognitive processes and their impact on their romantic relationships, and equip them with skills to cope with rejection. SMY are more likely to use online resources to find information relating to their sexual identity and health and establish a sense of community (Craig & McInroy, 2014). Future studies should focus on developing and evaluating digital interventions for reducing dating violence and investigate their impact on the well-being of sexual minority youth. For example, future dating violence interventions should consider digital or serious learning game-based approaches to increase skill-building and self-efficacy among SMY youth (Lucassen et al., 2018).

Evidence suggests that 'serious learning games' may effectively reduce adverse mental health and substance use (Vogel et al., 2019; Schwinn et al., 2015) outcomes (Martin, 2019; Lucassen et al., 2015) among SMY. 'Serious games' are interactive digital applications designed to improve skills, knowledge, attitudes, and behaviors through a virtual and interactive gaming experience (de Freitas, 2006). This approach has been used successfully in medicine, surgery, and public health to improve participant

outcomes (Primack et al., 2012; Birk & Mandryk, 2019; Plerhoples et al., 2011). Serious learning games increase the impact of interventions by (1) extending the reach of online programs to individuals with limited access (Patricia Aguilera- Hermida, 2020), (2) improving engagement by making activities enjoyable, thus reducing attrition, and (3) creating a safe and reactive environment for participants to practice new skills to encourage behavior change (Hartmann & Gommer, 2019; Fleming et al., 2017). Moreover, there is evidence suggesting that digital health interventions are effective in improving the mental health of SMY (Strauss et al., 2020; Lucassen et al., 2018) and reducing mental, physical, and sexual-health related concerns as well (Gilbey et al., 2020).

Methodological approach. Additionally, employing an intersectional perspective is imperative in developing interventions targeted to the unique needs of racial, gender, a sexually diverse youth. Rudzinski and colleagues (2019) intentionally partnered with the Diversity Equity Office to ensure a racially/ethnically diverse sample which served as a significant strength within their pilot study. SMY from diverse racial/ethnic backgrounds must become cognitively aware of the source of stressors and develop skills to navigate stress associated with racism, sexism, and homophobia/biphobia/transphobia individually and in combination. Stress resulting from one's intersectional identity often shames and silences SMY who experience TDV and contributes to their lack of help-seeking behaviors. Employing intersectional perspectives requires engaging members of diverse backgrounds within each step of the intervention process to limit bias and ensure the content is reflective of the lived experiences of the desired population and strategies from implementation are appropriate. Future studies should conduct focus groups with SMY to explore risk factors for TDV. The Behavioral Theory for Dating Violence (Bell & Naugle, 2008) outline six categories of risk that could be considered. Findings from these focus groups will assist investigators in developing TDV prevention interventions that address the specific needs of SMY.

Lastly, it is essential to employ a double-blind approach to reduce socially desirable and other forms of bias in study results to improve the efficacy of future trials. This is classified as a 'good' section bias score according to the EPHPP methodology (Armijo-Olivo et al., 2012).

Additionally, randomized control trials and clinical control trials offered the most effective methodological approaches and received the highest efficacy scores according to the EPHPP metric. Future studies should create a thorough recruitment plan and establish partnerships with organizations serving their desired population to ensure an 80% participation rate in study activities. Lastly, sample size calculations must be conducted before implementing future studies to account for attrition.

Limitations

This scoping review included three studies. The statistical power and generalizability of study findings are limited due to the small number of studies, with only one study consisting of a randomized control trial. Additionally, measures were not consistent across studies limiting comparability.

Conclusion

Historically, the TDV prevention needs of SMY have been ignored. The growing number of youth identifying as non-heterosexual however suggests that ignoring this population has led to significant disparities where sexual minority youth experience higher rates of TDV than their heterosexual counterparts. Limited interventions exist that address this disparity. Furthermore, there is a dearth of data to support SMY – inclusive TDV interventions. This lack of data has created a gap causing program developers and policymakers to be uninformed about how to best serve youth who are most impacted by TDV and have decreased access to tailored services. To address the existing gap in SMY inclusive TDV prevention interventions, community-engaged research is needed. Including SMY in the development, implementation, and evaluation of TDV prevention interventions paves the way for programming that is sustainable, effective, and supported by a community. Implications for future participatory research exist to inform effective, sustainable, and targeted interventions to reduce TDV among SMY by directly addressing the needs of the community.

Abbreviations

TDV = teen dating violence

SMY = sexual minority youth

Declarations

We have no conflicts of interest to report.

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Tables

Tables 1 and 2 are available in the Supplementary Files section

Figures

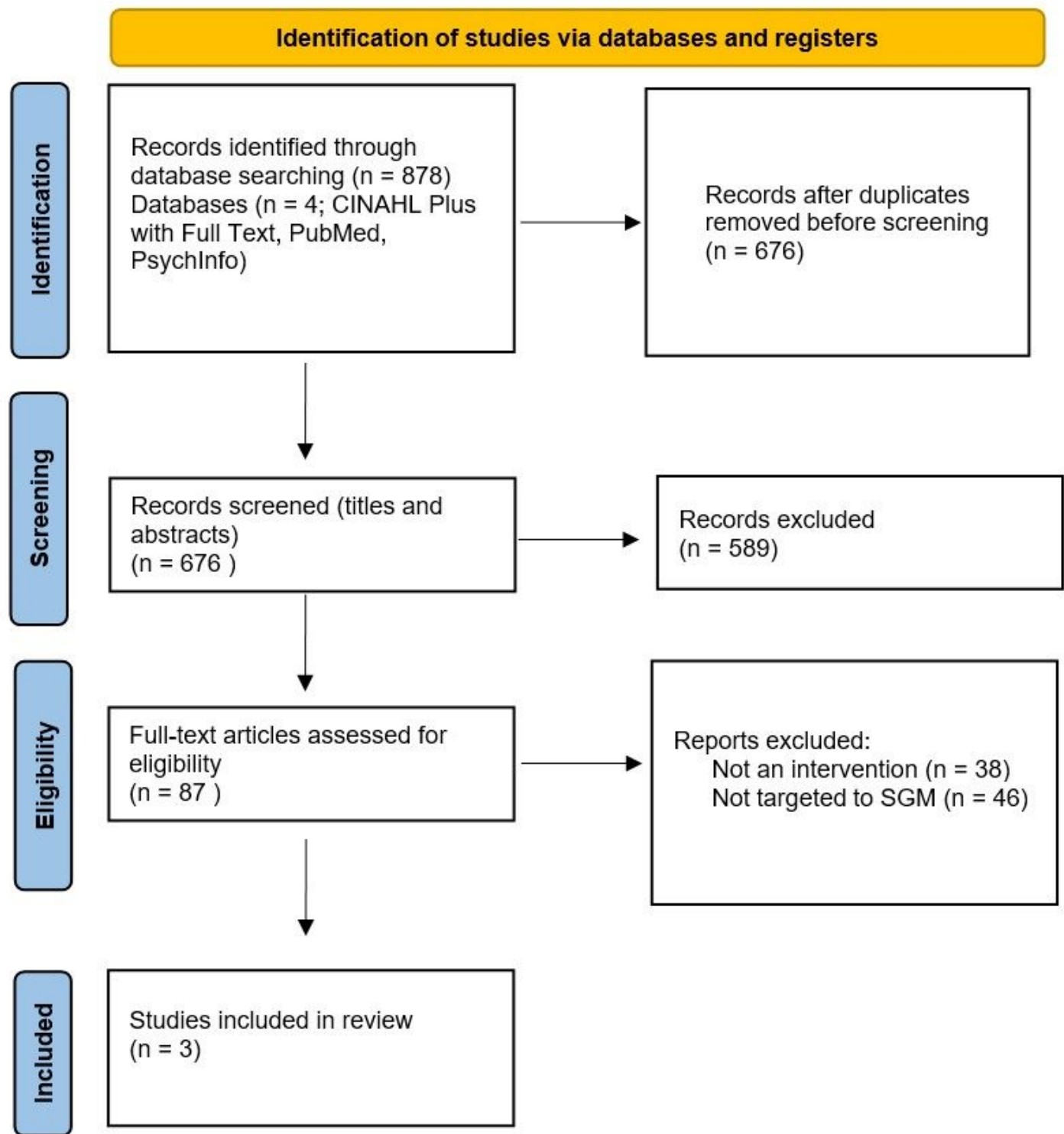


Figure 1

Prisma Diagram

*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

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