

The Prevalence of Sexual and Gender Minority Youth in the Justice System: A Systematic
Review and Meta-Analysis

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Abstract

Theoretical models, such as the minority stress model, suggest that sexual and gender minority (SGM) youth may be overrepresented in the justice system. However, few studies have examined rates of SGM youth in the system, and even fewer have compared them with rates of these youth in the broader community. To obtain a more accurate estimate, we conducted a systematic review and meta-analysis of 31,258 youths and compared rates of SGM youth in the justice system to those in the community. Contrary to claims that SGM youth are overrepresented generally, this review suggests that sexual minority girls, specifically, are disproportionately involved in the justice system. Rates of involvement appeared to differ across ethnic subgroups of sexual minority youth, and evidence is inconclusive regarding the prevalence of gender minority youth in the system. Implications of these findings for researchers and justice system professionals are discussed.

Keywords: juvenile justice, gender, ethnicity, adolescence, youth, stress, stigma, meta-analysis

The Prevalence of Sexual and Gender Minority Youth in the Justice System: A Systematic
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Sexual and gender minorities (SGMs) have a sexual orientation, gender identity, and/or gender expression that deviates from societal norms (e.g., lesbian, gay, bisexual, transgender, queer, gender nonconforming). SGMs have an extensive history of inequality, and the field of psychology has regrettably been complicit in their marginalization. For instance, until 1973, homosexuality was listed as a mental illness in the Diagnostic and Statistical Manual of Mental Disorders (Herek, 2009). To help counteract the harm caused by pathologizing this population, the American Psychological Association (APA) has directed its members to be leaders in reducing SGM discrimination (Conger, 1975; Anton, 2009). As such, psychological researchers have a responsibility to help investigate the ways in which SGMs continue to be disadvantaged and, further, to help reduce the individual- and community-level violence that has contributed to such disadvantage.

One context in which SGMs may be disadvantaged is within the justice system. The minority stress model (Meyer, 2003), for example, proposes that SGMs are more vulnerable to adverse outcomes, such as victimization and substance abuse, due to their socially marginalized status. Supporting this model, meta-analyses indicate that, from an early age, SGM youth are more likely to report victimization and substance abuse than their heterosexual peers (Marshall et al., 2008; Toomey & Russell, 2016). More specifically, school bullying appears to mediate adverse outcomes in SGM youth including substance use and distress (Birkett, Russell, & Corliss, 2014; Reisner, Greytak, Parsons, & Ybarra, 2015). Given that victimization and substance use are risk factors for youthful offending generally, researchers have theorized that SGM youth may be overrepresented in the justice system (Poteat, Scheer, & Chong, 2016).

Despite these reasonable suppositions that SGM youth are overrepresented, few studies have examined rates of SGM youth in the justice system, and even fewer have compared them with rates of SGM youth in the broader community. Meanwhile, many youth justice professionals appear to underestimate the presence of SGM youth in their facilities (Irvine, 2010; Majd, Marksamer, & Reyes, 2009). To help address these gaps, this study systematically identified and synthesized research on rates of justice system involvement among SGM youth using a comprehensive systematic review and meta-analysis.

Conceptual Issues

Although establishing the prevalence of SGM youth in the justice system is an important step towards reducing potential disparities, researchers need to be cautious about the potential for misuse of findings related to sexual orientation and gender identity. As such, the APA (2012, 2015) has provided guidelines for disseminating such findings. These guidelines encourage researchers to highlight the complexities of gender identity and sexual orientation in their research and, further, to acknowledge subgroups of SGM people who may be excluded from research samples. To help understand which SGM youth were identified (and potentially misidentified or unidentified) by the studies included in this review, it is imperative to describe the constructs of gender identity and sexual orientation more thoroughly.

While sex and gender are often conflated, these terms have distinct meanings and do not always align within an individual (APA, 2015). Sex refers to the label an individual is ascribed at birth based on physical characteristics including sex chromosomes, hormones, and reproductive structures. In contrast, gender is a social construct based on one's roles, behaviors, interests, and appearances (APA, 2012). Gender can be further parsed into gender identity and gender expression. The former refers to a person's internal sense of who they are as a man, woman,

combination of both, or neither, while the latter denotes how a person communicates their gender, such as through the clothes they wear and the pronouns they use (APA, 2012). Cisgender people have a gender identity that is congruent with their sex assigned at birth, whereas transgender and gender nonconforming people have a gender identity that is not completely aligned with their sex assigned at birth (Bosse & Chiodo, 2016; Brabender & Mihura, 2016). Although this incongruence may or may not be apparent to external observers, it has a tangible influence on the people who experience it.

Like sex and gender, gender identity and sexual orientation are discrete, but related, constructs (APA, 2012, 2015). A person's sexual orientation is based on the gender of the people they are attracted to. While it is typically described categorically (e.g., heterosexual, homosexual, or bisexual), experts now recognize that sexuality is fluid and continuous, especially in adolescence (Bosse & Chiodo, 2016; Brabender & Mihura, 2016). For example, adolescents may endorse same-sex attraction in a baseline survey, but not report such attraction upon subsequent measurement (Himmelstein & Brückner, 2011). Research also indicates that, rather than being unidimensional, sexual orientation includes distinct components such as attraction, behavior, and self-labelling (Saewyc et al., 2004). Attraction refers to who a person is sexually or romantically drawn to, behavior refers to who a person becomes sexually or romantically intimate with, and self-labelling refers to how a person describes their sexual identity (Saewyc et al., 2004). It is not uncommon for an adolescent to report engaging in a same-sex relationship while identifying as completely heterosexual (Himmelstein & Brückner, 2011). These findings highlight the complexity and nuance of sexual orientation in adolescents.

Perhaps owing, in part, to the intricacies inherent in defining gender identity and sexual orientation, studies of justice-involved SGM youth differ in how they measure these constructs.

For example, some studies use self-labelling as the sole indicator of sexual minority (SM) status (e.g., Wilson et al., 2017), while others also use measures of behavior and/or attraction (e.g., Noell & Ochs, 2001). Furthermore, some provide an aggregate rate of justice-involved SM youth (i.e., not stratified by gender or ethnicity; e.g., Irvine & Rojas, 2007), while others provide separate rates for SM girls and boys, and/or across ethnic subgroups (e.g., Belknap, Holsinger, & Little, 2014). These inconsistencies make it difficult to compare rates reported in different studies. Across studies, aggregate rates of SM youth in the justice system have ranged from 6.5% (Wilson et al., 2017) to 19.6% (Hirschtritt, Dauria, Marshall, & Tolou-Shams, 2018).

Intersectionality

Adding to this complexity, sexual orientation may affect a youth's risk for justice system involvement differently depending on their gender and ethnicity. Intersectionality theory suggests that multiple identities interact with one another and are experienced concurrently within an individual (Crenshaw, 1989). For example, an African American girl's experience of being bisexual is filtered through her experiences of being female and of being African American. Hence, rather than focusing on the independent influences of sexual orientation, gender, and ethnicity on youth's involvement in the justice system, it is important to examine the combined influence of these identities (Potter, 2015; Robinson, 2017).

Supporting the need to design research through an intersectional lens, research in school settings suggests that youth who identify as both an ethnic and sexual minority appear more likely to be bullied than those who report only SM status, which may increase their risk for justice system involvement (Kosciw, Greytak, & Diaz, 2009). Research also documents that ethnic minority youth are subject to differential treatment in both school and justice system settings, resulting in higher rates of sanctions (Piquero, 2008). This racial and ethnic bias could

conceivably interact with bias toward SGM youth to produce greater inequality in sanctions. Unfortunately, many studies fail to disaggregate ethnic subgroups of SGM youth.

Likewise, there may be differences in the extent to which SM boys and girls experience justice system disparities. Lesbian and bisexual girls appear more likely to engage in delinquent and/or violent behaviors (e.g., rowdiness and assault) than heterosexual girls, whereas gay boys appear less likely than bisexual and straight boys to engage in such behaviors (Beaver et al., 2016; Wilson et al., 2017). However, SM boys may be particularly vulnerable to school-based victimization (Toomey & Russell, 2016). Hence, SM girls and boys appear to have discrete risk factors for involvement with the justice system. Despite these potentially important differences, SM youth are often lumped together when researchers discuss their involvement in the justice system. Furthermore, relatively little is known about how gender minority (GM) status influences SM youth's prevalence in, and trajectories through, the justice system.

Divergent Perspectives among Justice System Professionals

Just as research is struggling to verify and explain the prevalence of SGM youth in the justice system, interviews with youth justice professionals indicate divergent perspectives about the number of these youth in their facilities. On one hand, many professionals appear to underestimate or discount the presence of these youth. For instance, one probation officer in an interview study stated, "I've worked in this system for twenty-five years and in all of that time I think we've had three of them" (Irvine, 2010, pp. 675-676). Likewise, in another study, a judge reported, "I don't really have anything to say about gay youth in my courtroom. I don't think there have been any that I am aware of" (Majd et al., 2009, p. 43). Interestingly, other staff from the same court reported that several SGM youth had been processed there in recent months. On the other hand, some professionals have reported seeing an increase in SGM youth in the justice

system in recent years. For example, in a third study, a residential staff member noted that “it was about five years ago that we started getting all these gay kids” (Holsinger & Hodge, 2016, p. 34). These qualitative findings illustrate that some professionals may be misinformed about the prevalence of SGM status among youth that they supervise and make decisions about.

The Present Study

In sum, although theoretical models suggest that SGM youth may be overrepresented in the justice system, studies on the prevalence rates of these youth are scarce, and there is an inconsistency in how rates are assessed. Methodological issues, such as how SGM status is measured and whether rates are disaggregated across gender and ethnicity, make it difficult to determine the prevalence and characteristics of justice-involved SGM youth. The aims of this study are twofold: (1) to integrate current research on rates of SGM youth in the justice system while considering potentially important distinctions across gender and ethnicity, and (2) to evaluate whether the prevalence of SGM youth in the justice system is disproportionately higher than the prevalence of these youth in the community.

Methods

Following guidelines outlined by the Joanna Briggs Institute (2014) Reviewers' Manual for the Systematic Review of Prevalence and Incidence Data, we conducted a systematic review and meta-analysis. We chose these methods—as opposed to a traditional literature review—to estimate SGM youth's prevalence rates more accurately and objectively. To synthesize our findings, we used a mixed-methods approach which incorporated a qualitative synthesis, as well as a quantitative synthesis (i.e., meta-analysis). These approaches complement and extend each other (Higgins & Green, 2011). Whereas the quantitative synthesis allowed us to statistically combine data from multiple studies to produce a more precise estimate of SGM youth in the

justice system, the qualitative synthesis provided a means of exploring findings and characteristics of individual studies in greater detail. Furthermore, some studies were not eligible for inclusion in the meta-analysis and, as such, the qualitative synthesis enabled us to capture more studies than if we had conducted a quantitative synthesis alone.

Our overall review process, from study identification to study inclusion, is summarized below and in a flow diagram in Figure 1. Our procedures for searching databases, screening abstracts, collecting data, and rating study quality apply to both the qualitative and quantitative components of this review, whereas our procedures for analysing study findings are detailed separately for the qualitative and quantitative syntheses.

Search Strategy

We used a broad search strategy to increase the likelihood of identifying both published and unpublished/grey literature (e.g., institutional reports). Specifically, we searched nine databases (e.g., PsycINFO, MEDLINE, Criminal Justice Abstracts, ProQuest Dissertations & Theses, Google Scholar; see Figure 1) using the following search terms: (lesbian OR bisexual OR gay OR asexual OR pansexual OR transgender OR transsexual OR "trans" OR "sexual minority" OR "gender minority" OR queer OR questioning OR LGBT OR GLBT OR "gender nonconforming" OR "gender fluid" OR "gender variant" OR genderqueer) AND (offend* OR incarcerat* OR "criminal justice" OR delinquent OR inmate OR custody OR detain* OR detention) AND (youth OR adolescen* OR juvenile). The search was not bound by publication date, publication type (e.g., book, refereed journal article, non-refereed report), or study location. For Google Scholar, we reviewed the first 100 search records, which is consistent with other systematic review research (Haddaway, Woodcock, Macura, & Collins, 2015). To broaden our search further, we also reviewed reference lists of relevant articles (e.g., articles cited in the

introduction of this paper) and contacted authors who had published more than one article that met inclusion criteria.

Screening and Eligibility

In total, our search yielded 674 abstracts. Each abstract was reviewed by one of two authors. Studies were screened in for full-text review if they (1) included a sample of SM (i.e., nonheterosexual) and/or GM (i.e., noncisgender) youth under the age of 18 who were currently or previously involved in the justice system (i.e., arrested, charged, adjudicated, diverted, incarcerated, or placed on probation), (2) included an outcome related to this study (i.e., rates of SGM youth in custody or rates of past incarceration among SGM youth in the community), (3) reported quantitative findings (i.e., not a commentary or purely qualitative study), and (4) were written in English. Studies were excluded if they did not meet all inclusion criteria, such as if they did not report quantitative findings, if they did not measure the sexual orientation of their participants, or if most of their participants were over 18 years old at the time of data collection. If two studies used the same sample and timeframe, we included only the one that was published in a peer-reviewed outlet (e.g., we included Wilson et al., 2017 rather than Beck, Cantor, Hartge, & Smith, 2013).

This process yielded 30 articles for full-text review, whereby the first author reviewed the entire study to determine whether it met the above inclusion criteria. In total, 11 studies met inclusion criteria for the qualitative synthesis. Seven of those studies reported rates of SM and/or GM youth who were involved in the justice system at the time of the study (i.e., cross-sectional studies), whereas four compared rates of past justice system involvement between heterosexual and non-heterosexual youth who were in school or homeless at the time of the study (i.e., comparison studies).

Data Collection

Two independent coders (i.e., the first two authors) extracted information about SGM youth in the justice system using a 20-item data extraction form that was adapted from a form used in prior research (Viljoen, Cochrane, & Jonnson, 2018). Items were divided into three sections relating to sample demographics, study design, and outcome data. We coded outcome data for SM and GM youth separately.

For SM youth, coders produced a summary outcome rating for each study (i.e., overrepresented, underrepresented, or neither). We used two methods to code the summary outcome rating. For comparison studies, we considered SM youth to be overrepresented if the effect sizes and/or significance testing reported in the original study revealed that they were more likely than non-SM youth to have been previously involved in the justice system. Although none of the cross-sectional studies included a comparison group, some compared rates of SM youth in their custodial sample with community estimates reported in other studies (e.g., Wilson et al., 2017; Belknap et al., 2014). Likewise, we compared rates reported in cross-sectional studies with recent, nationally-representative estimates of American SM youth in the community (Kann et al., 2016). Given that past studies did not operationalize the criteria they used to determine whether SM youth were overrepresented in the justice system, we settled on a conservative approach and considered SM youth to be overrepresented if they were at least 1.5 times more prevalent in the justice sample than the community sample. We provided separate outcome ratings for SM girls, SM boys, and combined samples when such rates were reported.

We did not produce summary outcome ratings for GM youth for two reasons. First, only three studies measured the gender identities of their participants beyond the binary categories of ‘boy’ and ‘girl’. Second, these studies either used national American data or did not specify

which state their sample was from. Although some state-level samples of middle- and high-school students estimate that 1.0 to 2.7% identify as transgender or gender nonconforming (Day, Fish, Perez-Brumer, Hatzenbuehler, & Russell, 2017; Eisenberg et al., 2017; Shields et al., 2013), most national health risk surveys of American adolescents do not assess gender identity (Connolly, Zervos, Barone, Johnson, & Joseph, 2016). So, given the limited number of studies that reported rates of GM youth, as well as the problems inherent with comparing national estimates with state estimates, we could not deduce the extent to which GM youth were overrepresented in the justice system.

Interrater agreement was examined for key variables of interest. Specifically, we compared codes for sample size, gender (i.e., all girls, all boys, all another gender, or mixed), sample type (i.e., correctional, homeless, or school sample), study design (i.e., cross-sectional or comparison), and summary outcome rating (i.e., overrepresented, underrepresented, or neither). Coders achieved perfect agreement on all of these variables.

Critical Appraisal of Study Quality

Coders appraised the methodological quality of cross-sectional studies (i.e., studies that reported the prevalence of SGM youth in the justice system) using relevant criteria selected from extant tools, such as the Prevalence Critical Appraisal Tool (Joanne Briggs Institute, 2014; Munn, Moola, Riitano, & Lisy, 2014) and the Quality Assessment Tool for Systematic reviews of Observational studies (QATSO; Wong, Cheung, & Hart, 2008). Criteria were related to sample representativeness (e.g., response rate), adequacy of data collection procedures (e.g., assurance of confidentiality), and validity of outcome measurement (e.g., number of indicators used to measure sexual orientation). For comparison studies (i.e., studies that compared rates of prior justice system involvement between SGM and non-SGM youth), an extra criterion was

added relating to the appropriateness of the comparison group (e.g., use of propensity score matching to control for potential confounds). Coders gave studies a numerical rating on each criterion that ranged from 0 (*appears inadequate or not reported*) to 2 (*appears adequate*).

An overall quality rating was generated by dividing the sum of the criterion scores by the maximum score achievable. The overall quality was rated as ‘low’ if the total score was equal to or less than 50%, ‘medium’ if the total score was 51-79%, and ‘high’ if the total score was equal to or more than 81%. After independently coding the quality of all 11 studies, the coders met and compared their overall appraisal ratings. For studies in which the overall quality rating was discrepant between coders ($k = 5$), ratings for each criterion were discussed and rationales were compared. Based on this discussion, the coders made a consensus rating.

Synthesis and Analysis of Research Findings

Qualitative synthesis. The main goal of the qualitative synthesis was to highlight themes and patterns of findings across the 11 included studies. To accomplish this goal, we provided a narrative and tabular summary of study characteristics (e.g., methodologies, sample types, limitations) and results. This summary highlighted the range of findings across studies, as well as relationships between the studies’ sample types and their findings. We used examples from the data to help describe themes and variations in results. We also tallied the number of studies that found an overrepresentation of SM youth in the justice system. Since most studies based their identification of SM status on self-labelling alone (i.e., not behavior or attraction), our synthesis focuses on rates of self-identified SM status (but readers are encouraged to consult the following studies for rates based on broader definitions of SM status: Himmelstein & Brückner, 2011; Hirschtritt et al., 2018; Irvine, 2010; Noell & Ochs, 2001). Finally, we examined patterns of results for GM youth and for SM youth across different races or ethnicities.

Quantitative synthesis. Although basing decisions on a quantitative synthesis of even two studies can be preferable to using results from a single study, it is recommended that combined studies be sufficiently similar in their characteristics (Valentine, Pigott, & Rothstein, 2010). Given that only four studies reported relative ratios of past justice system involvement (i.e., comparison studies) and statistical methods differed across studies (e.g., only one used propensity-score matching), it was not possible to meaningfully combine those results in a meta-analysis. Therefore, our quantitative synthesis focused on studies reporting prevalence rates of SM youth in the justice system (i.e., cross-sectional studies).

We pooled the cross-sectional study results into a meta-analysis using a step-by-step guide developed specifically for descriptive data analysis, since most meta-analytic software is designed to analyze traditional effect sizes and is limited in its ability to analyze and depict descriptive data such as prevalence rates (Neyeloff, Fuchs, & Moreira, 2012). Statistics Q and I^2 were used to assess heterogeneity among the studies, and a forest plot was generated to graphically display the results. We used random effects models because we anticipated that the ‘true’ prevalence of SM youth in the justice system may vary across studies (e.g., depending on sample characteristics) and because we wanted to avoid exaggerating the degree of precision in our estimates (for more details about random and fixed effects models, see Borenstein, Hedges, Higgins, & Rothstein, 2010 and Slaney, Tafreshi, & Hohn, 2018). Nevertheless, for interested readers, we also reported results from the fixed effects models.

Results

Qualitative Synthesis

Findings from the qualitative synthesis are summarized in Table 1. Collectively, these studies included 31,258 youths (11,581 girls, 19,662 boys, and 15 youths who identified as

something other than a boy or girl). Notably, only three studies inquired about participants' gender identity beyond the binary categories of 'girl' and 'boy', so the 15 youths who identified as another gender were from those three studies only. The remaining studies likely miscategorised GM youth in their samples as boys or girls based on their sex assigned at birth, or they may have excluded GM youth entirely. Seven of these studies reported rates of involvement for SM boys and girls separately, while the rest reported either aggregate results only ($k = 3$) or results for girls only ($k = 1$). Finally, only five studies examined disparities in justice-system involvement across ethnicity.

Regarding study characteristics, seven were cross-sectional studies of SM and/or GM youth currently involved in the justice system, whereas four were comparison studies of SM and non-SM students ($k = 3$) or homeless youth ($k = 1$) who reported on past involvement with the justice system. All studies ($k = 11$) used either a survey or interview method to collect their data. Most ($k = 10$) involved samples from the United States, while one involved a sample from Canada. While there were too few studies to reliably detect reporting bias, results from the two unpublished studies (i.e., Belknap et al., 2014; Smith, Cox, Poon, Stewart, & McCreary Centre Society, 2013) were relatively consistent with those from the published studies.

Study quality and limitations. Most studies were appraised as having a moderate level of limitations ($k = 6$), four were rated as having few limitations, and one was rated as having many limitations. Common limitations included a failure to discuss missing data and reliance on a crude measure of sexual orientation. For example, most studies ($k = 6$) used a single categorical question to assess SM status. In addition, only two of the comparison studies attempted to control for confounding variables; one used propensity score matching to control for variables such as age, race/ethnicity, and school grades (Poteat et al., 2016), while the other used

multivariate regression analyses to control for age, race, socioeconomic status, and self-reported misbehavior (i.e., to test whether higher levels of delinquency could account for higher rates of justice system involvement; Himmelstein & Brückner, 2011).

Combined rates of SM youth. Of the studies reporting aggregate rates ($k = 10$), four provided evidence that SM youth are overrepresented in the justice system and six revealed comparable rates across justice and community settings. However, patterns of overrepresentation differed by sample type. SM youth, as a group, had disproportionate justice system involvement in all of the student samples ($k = 3$). For example, Himmelstein and Brückner (2011) reported that SM students were more likely than their straight counterparts to report past conviction in a juvenile court, even after controlling for delinquent behaviors (OR = 1.90, $p = .02$).

In contrast, only one of the six justice system samples reported disparate rates of SM identity at the aggregate level. Namely, Hirschtritt et al. (2018) reported that 19.6% of court-involved, nonincarcerated youth identified as nonheterosexual. The other five studies involved incarcerated youth and reported aggregate rates of SM identity that were comparable to, or lower than, rates reported in the community. Specifically, rates ranged from 6.5 to 15.0% in custodial samples compared to 11.2% in the community comparison sample (Kann et al., 2016). Notably, however, Wilson et al. (2017) reported that SM youth in their sample were more likely to have been in custody for at least one year than were heterosexual youth (girls: OR = 2.72, CI[1.33-5.56]; boys: OR = 2.11, CI[1.39-3.18]).

The one study that involved homeless youth reported no significant differences in self-reported lifetime arrest or detention rates between SM and heterosexual youth (Noell & Ochs, 2001). SM status was, however, associated with a higher likelihood of having spent time in a secure mental health facility within the past three months (OR = 2.84, CI[1.06-7.64]) and a lower

likelihood of having been arrested within the past three months (OR = 0.58, CI[0.37-0.92]).

SM Girls. Eight studies reported rates of justice system involvement for SM girls (i.e., those categorized dichotomously as girls in the original studies, typically based on sex assigned at birth). Of these studies, most indicated disproportionate involvement in the justice system ($k = 7$). The one study that deviated from this pattern was the study of homeless youth that also did not find disparate rates of involvement overall (Noell & Ochs, 2001). In that study, 44.9% of females identified as nonheterosexual, which the authors note is relatively high compared to other studies of adolescents. In the studies that indicated an overrepresentation, rates of SM girls in the justice system were 1.55 to 2.54 times higher than those in the community. Specifically, rates ranged from 24.0 to 39.4% in justice system samples compared to 15.5% in the community comparison sample (Kann et al., 2016). In the only study that assessed past justice system involvement reported by female students, SM identity was moderately associated with higher odds of having had a juvenile conviction (OR = 3.05, $p = .02$; Himmelstein & Brückner, 2011).

SM Boys. Conversely, of the seven studies that reported prevalence rates for boys (as categorized by the original studies), none provided evidence of overrepresentation. Rates ranged from 3.2 to 8.0% in justice system samples compared to 6.9% in the community comparison sample (Kann et al., 2016). One study showed that same-sex attraction and same-sex relationships, but not SM identification, were associated with higher odds of boys being stopped by police; however, 16 out of the 18 models tested in this study showed no significant differences in sanctions for boys (Himmelstein & Brückner, 2011).

Gender identity. Two of the studies that assessed gender identity provided rates of GM youth in national, custodial samples (Irvine, 2010; Irvine & Canfield, 2016). These studies reported that 0.3% (Irvine, 2010) to 0.6% (Irvine & Canfield, 2016) of youth in their samples

identified as something other than a boy or girl (e.g., transgender). When they broadened their subgroup of GM youth to include those who reported a nonnormative gender *expression* (i.e., those who communicated their gender in a way that deviates from societal norms), their prevalence rates rose to 6.0% and 12.3%, respectively. The other study that assessed gender identity provided rates of first-time offending, court-involved, non-incarcerated GM youth from a Northeastern American family court system (Hirschtritt et al., 2018). This study reported that 0.5% of youth in their sample identified as something other than a boy or girl.

Ethnicity. Regarding interactions between SM status and ethnicity, three studies found differences in rates of SM status across ethnicity, while two did not. Of the studies finding differences, one found that SM girls (as categorized in the original study) with a history of detention were more likely to identify as Latina than White (OR = 2.16, 95% CI [1.28, 3.63]), while SM boys (as categorized in the original study) with a history of detention were less likely to identify as Black (OR = 0.22, 95% CI [0.14, 0.34]) or Hispanic (OR = 0.54, 95% CI [0.34, 0.76]) compared to White (Wilson et al., 2017). Another found higher rates of SGM status in incarcerated youth who reported Native American or multiple ethnic identities; specifically, 24% of youth with Native American identities and 18% of those with multiple ethnic identities disclosed SGM status, compared to 10% of youth identifying as White, Latino, or African American and 12% of those identifying as Asian (Irvine, 2010). Although they did not examine ethnic disparities explicitly, Smith et al. (2013) reported that 9% of Aboriginal youth identified as being Two Spirit (a term used by SGM individuals in some North American Indigenous cultures), which was slightly higher than the proportion who identified as a sexual minority in the total sample (7%).

In contrast to the above findings, Hirschtritt et al. (2018) found no significant differences

in race across SM and non-SM youth who were court-involved but not incarcerated. Likewise, Irvine and Canfield (2016) found that the same proportion of SGM and non-SGM youth in custody identified as youth of colour (85% of each group).

Quantitative Synthesis

Our quantitative synthesis focused on the seven cross-sectional studies reporting prevalence rates of SM youth in the justice system. Collectively, these studies included 13,390 youths (2,252 girls, 11,123 boys, and 15 youths of another gender). Both Q and I_2 statistics indicated high heterogeneity for studies reporting aggregate rates of SM youth ($I_2 = 95.3\%$), rates of SM girls ($I_2 = 82.4\%$), and rates of SM boys ($I_2 = 92.4\%$). We used random effects models for our analyses, although both random and fixed effects are provided in Table 2.

The quantitative synthesis produced a pooled prevalence of 11.5% of SM youth in custody (95% CI [8.0, 15.0]). The prevalence of SM youth in the community comparison sample (11.2%; Kann et al., 2016) is contained within the confidence interval of the pooled prevalence of SM youth in custody, which suggests that the rates are comparable. The high level of heterogeneity across studies ($I_2 = 95.3\%$) may be explained, in part, by the higher prevalence of SM status in justice-involved girls than boys. Consistent with the qualitative synthesis, the pooled prevalence of SM girls in custody (30.6%; 95% CI [24.8, 36.3]) greatly exceeded community estimates (15.5%; Kann et al., 2016), while the pooled prevalence of SM boys in custody (5.6%; 95% CI [3.7, 7.6]) was comparable to community rates (i.e., 6.9%; Kann et al., 2016). These results are presented graphically in Figure 2.

Discussion

Overrepresentation Appears Specific to Sexual Minority Girls

Overall, 11.5% of youth in the justice system identified as a sexual minority. When

compared to the 11.2% of youth in the community who identify as a sexual minority (Kann et al., 2016), this finding does not indicate disproportionate involvement of SM youth overall.

However, results differed substantially between SM boys and girls (recall that gender was categorized dichotomously in most of the included studies). Contrary to claims that SM youth are overrepresented in the justice system generally, this review suggests that SM girls, specifically, are at a greater risk than heterosexual girls for justice system involvement (30.6% in custody vs. 15.5% in the community). In contrast, the rate of involvement for SM boys (5.6%) appears comparable to that of heterosexual boys (6.9%).

Although we did not directly examine mechanisms for this overrepresentation, one study included in this review examined two potential explanations for SM youth's involvement in the justice system, both based on the minority stress model (Poteat et al., 2016). The differential behavior explanation proposes that stressors such as school victimization make SM youth more likely to engage in criminalized behaviors which, in turn, places them at a greater risk for justice system involvement (Piquero, 2008; Poteat et al., 2016). For example, SM youth may engage in substance use, school truancy, or retaliation in response to victimization, resulting in disciplinary sanctions by school and justice systems (Majd et al., 2009; Poteat et al., 2016). Consistent with this framework, research has found that girls who identify as bisexual or lesbian report engaging in significantly more delinquency than girls who identify as heterosexual (Beaver et al., 2016), which may increase their likelihood of incurring sanctions.

Conversely, the differential processing explanation asserts that school and justice authorities handle transgressions by SM youth more harshly than those by heterosexual youth (Piquero, 2008; Poteat et al., 2016). From this perspective, SM girls may be treated more harshly than heterosexual girls for similar offenses, perhaps as a way of policing gender (i.e., punishing

untraditional behaviors in girls; Buist & Stone, 2014; Wilson et al., 2017). Supporting this view, Himmelstein and Brückner (2011; included in this review) showed that SM youth, overall, were more likely than heterosexual youth to experience institutional sanctions, even after controlling for transgressive acts. Another study found that biased and ineffective responses from school staff partially explained the relationship between victimization and justice system involvement in their sample of SGM youth (Palmer & Greytak, 2017).

To our knowledge, only two studies have systematically tested the differential behavior and differential processing frameworks against one another; one study found greater support for the differential processing perspective (Poteat et al., 2016), while the other found support for both models by showing that both student and staff responses to victimization can exacerbate school discipline and legal outcomes (Palmer & Greytak, 2017). Hence, more studies are needed to confirm whether one theory has greater explanatory power than the other, or whether both operate simultaneously to increase SM girls' susceptibility to justice system involvement. Moreover, these explanations have been discussed largely through a unidimensional lens (i.e., heterosexual vs. nonheterosexual youth), so future work should consider how these frameworks might apply to SM girls specifically.

Prevalence Rates Differed Across Sample Type

Interestingly, student samples were more likely to find disparate justice system involvement for SM youth than justice system samples. The most parsimonious explanation for this discrepancy is that boys constitute the vast bulk of youth in the justice system, while boys and girls are more evenly represented in the community. As such, aggregate rates of SM youth in the system are likely skewed toward SM boys' rates, who do not appear to be overrepresented in the justice system. In the community, SM girls' disparate involvement in the justice system

likely has a greater impact on estimates of SM youth's involvement overall because girls represent a greater proportion of the total sample.

This review also indicates that SM status may be less relevant to justice system involvement for girls who are homeless, as the only study that did not find SM girls to be overrepresented involved a sample of street-entrenched youth (Noell & Ochs, 2001). Notably, 44.9% of female participants in that study identified as nonheterosexual, suggesting that SM girls were already overrepresented in the sample. This finding is not surprising given that past evidence documents disproportionate rates of family rejection and homelessness among SM youth (Majd et al., 2009). Importantly, the differential behavior and processing factors that are proposed to increase SM girls' risk for receiving criminal sanctions may also make homeless youth more vulnerable. For example, homeless youth may be more likely to engage in survival crimes (e.g., prostitution, shoplifting) than housed youth and may experience discrimination from legal decision-makers (e.g., due to lack of parental support/advocacy; Irvine, 2010; McCandless, 2017; Omura, Wood, Nguyen, Kerr, & DeBeck, 2014). As such, it seems likely that housing instability mediates the relationship between girls' SM status and their justice system involvement. Therefore, future studies should control for factors like housing stability and parental support to help clarify whether SM status is uniquely implicated in girls' contact with the justice system.

Findings on Gender Minority Youth Were Inconclusive

Only three studies assessed gender identity beyond the binary, mutually exclusive categories of 'boy' and 'girl' (Hirschtritt et al., 2018; Irvine, 2010; Irvine & Canfield, 2016). Consequently, it is too early to synthesize rates of GM youth in the justice system. In the three studies that assessed their prevalence, rates appeared relatively low (i.e., rates ranged from 0.3 to

0.6%). Notably, the complex, multistage process of transitioning to one's authentic gender makes it difficult to assess GM status in adolescence, as some GM youth may have had insufficient time to consolidate their gender identities (Morgan & Stevens, 2012; Hirschtritt et al., 2018). Indeed, two of the studies in this review found that when criteria for GM status were broadened to include nonnormative gender expression, rates increased substantially. Hence, although literature has established that transgender adults are overrepresented in the criminal justice system (Buist & Stone, 2014), rates of GM identity may be lower in the juvenile justice system. More research is needed to clarify whether GM youth are overrepresented in the system, as their experiences may be distinct from those of SM youth and GM adults.

Findings on Ethnic Minority Youth Were Mixed

Studies assessing the interaction between SM identity and ethnicity were mixed; three found that justice-involved SM youth were more likely to be ethnic minorities (Irvine, 2010; Smith et al., 2013; Wilson et al., 2017), while two found no differences in ethnicity (Hirschtritt et al., 2018; Irvine & Canfield, 2016). Notably, only one study analyzed the interaction between ethnicity and sexual orientation across gender; it found that SM girls in the system were most likely to identify as Latina, while SM boys were most likely to identify as White (Wilson et al., 2017). Considering the finding of the present review that SM girls and boys experience distinct patterns of involvement in the justice system, future studies should continue to consider interactions between ethnicity and sexual orientation in girls and boys separately.

Although present findings are inconclusive, youth who are both sexual and ethnic minorities may experience a particularly large disadvantage due to the potential of double discrimination (Majd et al., 2009). Specifically, the simultaneous impacts of sexism, racism, and homophobia may exacerbate certain youth's risk for justice system involvement. As such, it is

critical that more research consider intersectionality to obtain a clearer understanding of the unique realities faced by ethnic, sexual, and gender minority youth in the justice system.

Limitations

The present study is not without limitations. First, our search strategy was limited to studies disseminated in English. Although work in other fields has found that the exclusive reliance on English-language studies does not introduce bias in systematic reviews and meta-analyses (e.g., Morrison et al., 2012), it nevertheless remains possible that the scope of our study was limited by these conditions. Second, our summary outcome ratings and study quality appraisals have a degree of inherent subjectivity; although we attempted to overcome this limitation by operationally defining our rating categories and conducting both a qualitative and quantitative synthesis, it should be considered when interpreting the qualitative results.

A third limitation relates to the explanatory power of our review. Our results suggest disparate justice system involvement for SM girls, but the design of the original studies precluded an aggregate test of potential mechanisms by which this might happen. Recent work has started to examine mediators between sexual orientation and justice system involvement for SM youth more generally (Poteat et al., 2016), but our findings suggest a greater need to examine how pathways might differ for SM girls and boys. Finally, it remains possible that estimates of SM youth involvement differ based on study characteristics, such as the quality of the work. Although we coded such variables in the qualitative synthesis, there were too few studies to conduct formal moderation analyses. Where possible by available data, performing such analyses will be important for future meta-analytic reviews.

Future Directions

Despite its limitations, this review provides the first systematic and quantitative synthesis

of rates of SGM youth in the justice system. Consequently, it allows us to take stock of available evidence and identify gaps in our knowledge. One such gap, noted by several studies included in this review, is the exclusion of GM youth from research in this area (e.g., Belknap et al., 2014; Poteat et al., 2016; Wilson et al., 2017). Additionally, most studies included in this review relied on self-labelling as their sole indicator of SM status, which is problematic given that many SM youth are unidentified when only one indicator is used (Hirschtritt et al., 2018). To help capture as many SGM youth as possible, future research should include more comprehensive questions about gender identity and use a multidimensional approach to assessing sexual orientation (i.e., including attraction, behavior, and identity).

Studies identified by this review were also limited in their generalizability. While, collectively, they provide good coverage of youth in the United States, only one study involved youth in Canada, and none involved youth outside of North America. Consequently, current findings may not generalize to youth from other parts of the world. In addition, data used in three studies were outdated (e.g., collected prior to 2000; Belknap et al., 2014; Himmelstein & Brückner, 2011; Noell & Ochs, 2001), although notably, rates reported in those studies were relatively consistent with rates reported from more recent samples. Finally, the scarcity of studies examining ethnicity in this review support the need for greater attention to intersecting identities when examining rates of justice system involvement.

Implications for Practice and Policy

Although this review did not indicate disparate involvement of SM youth in the justice system overall, it is problematic that many youth justice professionals are unaware that they are working with SGM youth (Irvine, 2010; Majd et al., 2009). This ignorance may be due, in part, to the invisibility of some SGM youth. For instance, given that most SM youth are gender

conforming (i.e., their appearance, behavior, and self-concept are consistent with their sex ascribed at birth), many of them may appear indistinguishable from their heterosexual counterparts and may, therefore, remain undetected in the system (Irvine, 2010; Garnette, Irvine, Reyes, & Wilber, 2011).

Invisibility may also arise from the reluctance of SGM youth to disclose their identities while in custody due to fear of discrimination (Majd et al., 2009). Indeed, SGM youth report higher rates of harassment and abuse by staff and other inmates than non-SGM youth (Holsinger & Hodge, 2016; Majd et al., 2009; Mountz, 2016). For instance, in the 2012 National Survey of Youth in Custody, SM youth were significantly more likely to report sexual victimization by another youth (10.3%) and by facility staff (14.3%) than were heterosexual youth (1.5% and 8.9%, respectively; Beck, Cantor, et al., 2013). SM youth may also experience other differential treatment by staff, such as being placed into more restrictive settings (e.g., solitary confinement) under the guise of protection (Feinstein, Grennblatt, Hass, Kohn, & Rana, 2001; Garnette et al., 2011; Majd et al., 2009). As such, incarcerated SGM youth may feel unsafe disclosing their sexual orientation or gender identity to peers or staff. Regardless of why juvenile justice staff are unaware of SGM youth in their care, it seems pertinent to address this issue. Training may help correct misconceptions about the prevalence of SGM youth in the system and educate staff about why SGM youth might conceal their identities. Training may help reduce potential biases toward SM girls (e.g., that might contribute to harsher sanctions or unjust treatment) and may improve the effectiveness of interventions for all SGM youth.

While SM boys appeared to be proportionately represented in the justice system, boys represent a much larger percentage of offenders overall; hence, 5.6% of incarcerated boys represents a substantially larger number of youth than 30.6% of incarcerated girls. Moreover,

research with incarcerated adults indicates that sexual victimization by staff is reported twice as often by SM male victims than SM female victims (Beck, Berzofsky, Cspar, & Krebs, 2013). As such, training should also include education about SM boys. Furthermore, considering that some research suggests that gay boys participate in less delinquent behavior than straight boys (Beaver et al., 2016), comparable rates of incarceration may still represent a systemic bias towards gay boys (Wilson et al., 2017).

Conclusion

SGMs have a lamentable history of inequality and oppression in our society, and they continue to face a variety of complex challenges today. This has prompted calls for more attention to such disparities by the APA (2012, 2015) and other organizations (e.g., National Institute on Minority Health and Health Disparities, 2016). While responding to these calls may seem daunting, this review highlights justice system involvement as one area in which researchers, professionals, and policy-makers may be able to improve outcomes for SGM youth. Hirschtritt et al. (2018) note that “quantifying the prevalence and characteristics of [justice-involved SGM] adolescents are essential precursors to designing cost-effective and tailored interventions” (p. 422). By synthesizing current research on justice-involved SGM youth, this review provides a starting point that we hope can be used to improve research, services, and training programs related to SGM youth in the justice system. Progress in these areas may help reduce disparities within the justice system and improve outcomes for SGM youth overall.

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Table 1

Summary of Qualitative Synthesis

Author(s), Year (Country)	Sample	Results	Study Quality	Summary of Results		
				Total	Girls	Boys
Studies on Youth in the Justice System						
Belknap et al., 2014 (USA)	404 youths in custody	13.4% of youth reported a sexual minority status (27% of girls and 5.2% of boys).	Medium	∅	+	∅
Buttar et al., 2013 (USA)	305 justice- involved girls	27.1% of girls identified as lesbian or bisexual.	Medium		+	
Hirschtritt et al., 2018 (USA)	423 court- involved, nonincarcerated youths	19.6% of youth identified as lesbian, gay, queer, bisexual, questioning, or other (33.7% of girls and 5.7% of boys). 0.5% identified as something other than a boy or a girl.	High	+	+	∅
Irvine, 2010 (USA)	1,959 youths in custody	15% of youth were categorized as having a non-normative sexual orientation (24% of girls and 8% of boys). 0.3% identified as something other than a boy or a girl.	High	∅	+	∅
Irvine & Canfield, 2016 (USA)	1,400 youths in custody	12.5% of youth identified as lesbian, gay, bisexual, or questioning (32.1% of girls and 6.3% of boys). 0.6% identified as something other than a boy or a girl.	Medium	∅	+	∅
Smith et al., 2013 (CAN)	114 youths in custody	7% of youth identified as bisexual and 0% identified as lesbian or gay.	Medium	∅		
Wilson et al., 2017 (USA)	8,785 youths in custody	6.5% of youth identified as a sexual minority (39.4% of girls and 3.2% of boys).	Medium	∅	+	∅

Studies on Students

Himmelstein & Brückner, 2011 (USA)	15,170 students (grades 7-12)	LGB youth were more likely than straight youth to have been convicted, even after controlling for transgressive behaviors (OR = 1.90, $p = .02$). This difference remained significant for girls (OR = 3.05, $p = .02$), but not boys. ^a	High	+	+	∅
Irvine & Rojas, 2007 (USA)	428 high school students (grades n.r.)	LGBQ youth were twice as likely to have been detained due to drinking or drug use compared to all youth surveyed (18% vs. 8%).	Low	+		
Poteat et al. 2016 (USA)	1,738 students (grades 9-12)	LGBQ youth were more likely to have been in juvenile corrections/prison than heterosexual youth (OR = 9.21, 95% CI [6.89, 12.31]).	High	+		

Studies on Homeless Youth

Noell & Ochs, 2001 (USA)	532 homeless youths	Rates of lifetime youth detention did not significantly differ between LGB and heterosexual youth for the total sample, girls, or boys. ^a	Medium	∅	∅	∅
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Note: Study quality was rated as ‘Low’ if the study had many limitations (i.e., $\leq 50\%$ on the study appraisal form), ‘Medium’ if it had moderate limitations (i.e., 51-79% on the study appraisal form), or ‘High’ if it had few limitations (i.e., $\geq 81\%$ on the study appraisal form). Results were summarized as ‘+’ if the study provided evidence of overrepresentation (i.e., sexual minority youth were at least 1.5 times more prevalent in the justice sample than community sample, or they were significantly more likely than heterosexual youth to have had past justice system involvement) or ‘∅’ if the study did not provide evidence of overrepresentation. CAN = Canada; CI = confidence interval; LGB = lesbian, gay, or bisexual; LGBQ = lesbian, gay, bisexual, or questioning; n.r. = not reported; OR = odds ratio; USA = United States of America.

^aThese studies analyzed more justice system outcomes than the ones reported here (e.g., arrest rates), but we focused on lifetime juvenile conviction or detention rates to be consistent with the other studies included in this review. We focused on self-identified sexual minorities, rather than youth reporting same-sex attraction or relationships, for the same reason. Interested readers are encouraged to consult individual studies for more information.

Table 2

Summary of Quantitative Synthesis

	<i>k</i>	Random-Effects Models		Fixed-Effects Models		Heterogeneity	
		Prevalence (%)	95% CI	Prevalence (%)	95% CI	<i>Q</i>	<i>I</i> ²
SM youth combined ^a	6	11.50	[8.03, 14.97]	7.67	[7.19, 8.14]	105.73	95.27
SM girls only ^b	6	30.55	[24.80, 36.31]	31.27	[28.95, 33.59]	28.40	82.39
SM boys only ^c	5	5.62	[3.66, 7.58]	3.75	[3.39, 4.12]	52.90	92.44

Note. *k* = number of effect sizes that were aggregated. CI = confidence interval.

^aBelknap et al., 2014, Hirschtritt et al., 2018, Irvine, 2010, Irvine & Canfield, 2016, Smith et al., 2013, Wilson et al., 2017. ^bBelknap et al., 2014, Buttar et al., 2013, Hirschtritt et al., 2018, Irvine, 2010, Irvine & Canfield, 2016, Wilson et al., 2017. ^cBelknap et al., 2014, Hirschtritt et al., 2018, Irvine, 2010, Irvine & Canfield, 2016, Wilson et al., 2017.

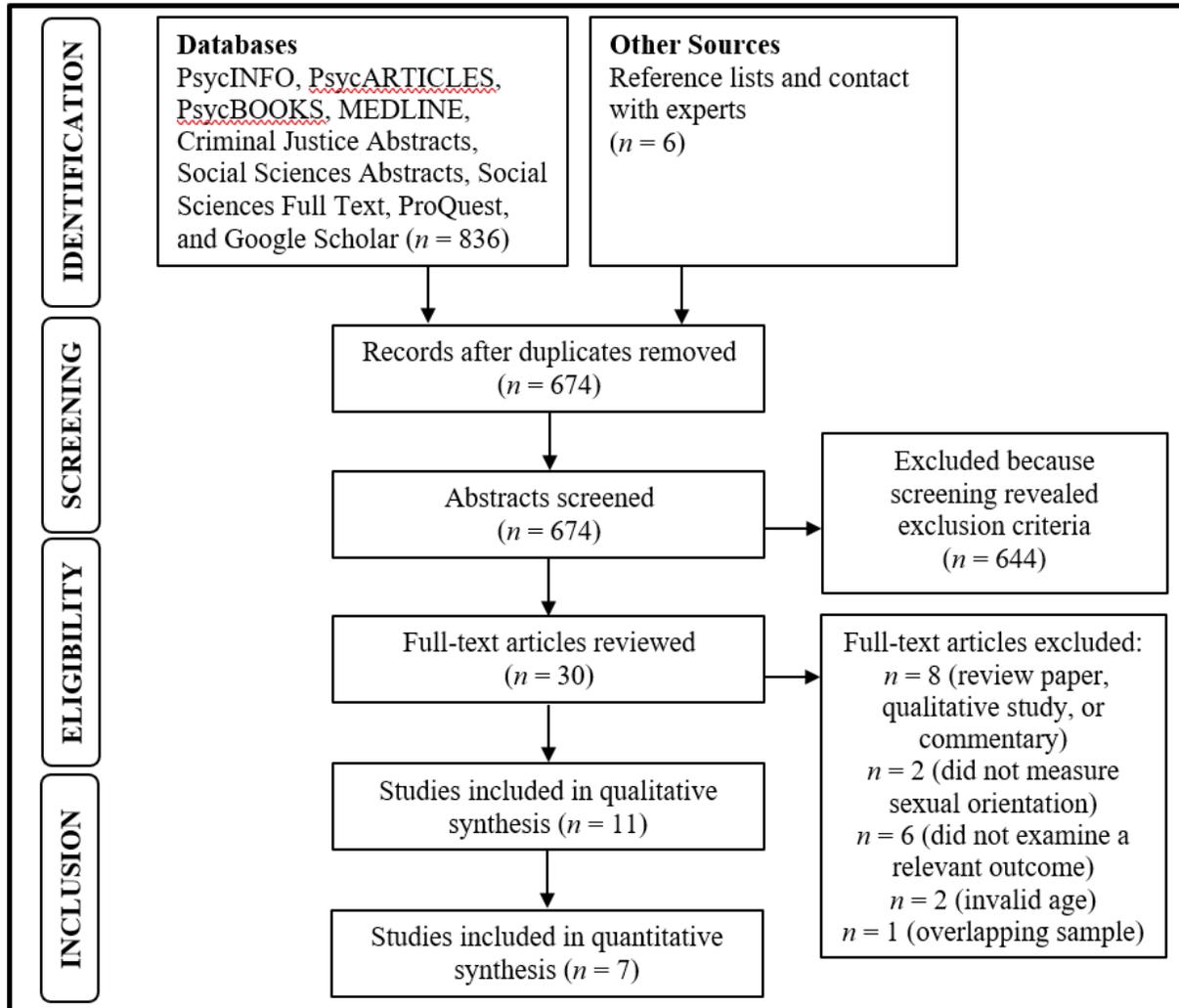


Figure 1. Flow diagram depicting the overall review process

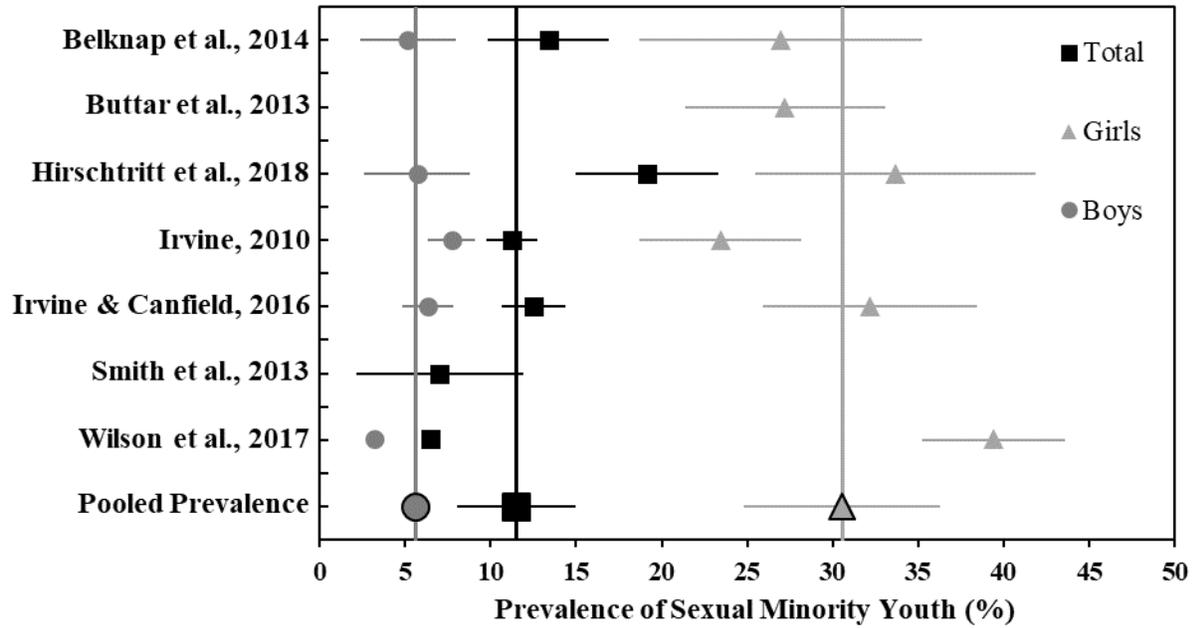


Figure 2. Forest plot displaying the pooled prevalence of sexual minority youth in the justice system based on the random effects models