The levels and factors associated with inconsistent condom use among young males with older, same-sex partners in South Africa

Nicole De Wet-Billings1* and Brendon K. Billings2

Abstract: Condom use among females with older, male sexual partners is well documented in South Africa. To a far lesser extent, condom use among males with older same-sex partners is known. However, the sexual health of young males is of pivotal importance to social and economic development. The purpose of this study is to determine the association between age of older same-sex partner and the likelihood of condom use among young males in South Africa. In this study, data from Fourth South African National HIV, Behaviour and Health Survey 2012 are used. A sample of 46,790 (N) young (15–24 years old) males with older same-sex partners is analysed to determine the level and sociodemographic factors associated with inconsistent condom use. Descriptive statistics and a binary logistic regression model are used. About 55.51% of you th with older (1–5 years) partners use condoms inconsistently. Further, only 36.08% of young males residing in urban areas with older (>1 year) partners use condoms every time they have sexual intercourse. Also, young males whose partners are 6–10 years (odds ratio: 0.47) and 11 or more years (odds ratio: 0.58) are less likely to use condoms consistently. Finally, the type of relationship with most recent same-sex partner shows that respondents who are in casual relationships (odds ratio: 0.08) are least likely to use condoms. Young males with older, same-sex partners do not use condoms consistently and are therefore at risk of contracting HIV and other STIs. However, HIV-positive youth and those with casual sexual partners are more likely to use condoms, proving that some positive and protective sexual behaviours are being exercised. With these findings in mind, further investigation into why some
protective behaviours are possible while others are not needed. In particular, the role of older-sexual partners needs to be investigated.

Subjects: Social Sciences; Behavioral Sciences; Health and Social Care

Keywords: HIV/AIDS; older same-sex relationships; inconsistent condom use; regression; South Africa; young males

1. Introduction
Not much is known about the condom use practices among young males in age-disparate relationships with same-sex partners in South Africa. Consistent condom use among sexually active youth (15–24 years old) in South Africa is low at 57.9% (Ntshiqa et al., 2018). One study of 741 sexually active adolescents (14–19 years old) from the Soweto township in South Africa found 54.6% of males and 54.2% of females do not use condoms (Closson et al., 2018). This appears higher than percentages reported in other countries, including Burkina Faso, Ghana, Uganda, and Malawi, where 34–57% of sexually active youth (aged 14–19 years) reported using condoms but is lower than countries such as Greece where 89% of youth reportedly use condoms (Koyama, Corliss, & Santelli, 2009). A study of youth (n = 4,853) who perceive their risk of contracting HIV as low, in Cape Town found that only 61% of males and 67% of females were using condoms consistently (Muchiri, Odimegwu, & De Wet, 2017). While it has also been identified that young females (16–24 years old) who are students (odds ratio: 1.65, CI: 1.2–2.3) and who have exposure to HIV communication programmes (odds ratio: 3.1, CI: 1.2–8.6) are more likely to use condoms (Ntshiqa et al., 2018). Research done in the USA also shows that youth who have knowledge of HIV and AIDS and are educated are more likely to use condoms (Gleton, Jahanfar, Inungu, & Latty, 2019; McNeill, George, & Glover, 2017). Other studies on youth globally and in South Africa have identified gender roles and norms, lower level of education and low socioeconomic status to be associated with lack of condom use (Bui et al., 2012; Eggers, Aare, Bos, Mathews, & de Vries, 2014; Fladseth, Gafos, Newell, & McGrath, 2015; Pinchoff, Boyer, Mutombo, Chowdhuri, & Ngo, 2017). And despite national programmes in the country such as “loveLife” and the Youth-Friendly Services promoting the consistent use of condoms to prevent HIV transmission, recent statistics show an incidence rate of 0.91% of new infections among adults (15+ years old) in 2017 with a youth prevalence rate of 4.64% for the same year (Beksinska, Pillay, Milford, & Smit, 2014; Statistics SA, 2018). From these statistics, however, the percentage distribution for same-sex versus heterosexual couples cannot be determined.

A factor associated with inconsistent condom use is age-disparate relationships (Maughan-Brown, Evans, & George, 2016; Tosca, Cluver, Boyes, Pantelic, & Kuo, 2015). Globally, the levels of intergenerational or age-disparate relationships range between 13% and 14% (Harling et al., 2014). Studies have identified that younger partners are often unable to negotiate condom use in these relationships for fear of rejection and violence (Caldwell & Mathews, 2016; Rodger et al., 2016). A qualitative study done in the US found that younger partners experience more intimate partner violence in age-disparate relationships, when they request older partners to use condoms (Raj et al., 2007). While another study from India found that young brides are subject to violence from older grooms and are not able to negotiate condom use either (Santhya & Jejeebhoy, 2007). The consequences of this include the spread of sexually transmitted infections (STIs) including HIV and also unintended pregnancies (Ritchwood et al., 2016; Shisana et al., 2014; Zuma et al., 2016). In South Africa, research has shown that there is a higher likelihood that youth will become HIV positive (odds ratio: 1.53; CI: 0.92–2.54) if their sexual partner is five or more years older (Zuma et al., 2016). Additional research has revealed that poverty, unemployment and consumerism are contributing factors in age-disparate relationships (Kamndaya, Vearey, Thomas, Kabiru, & Kazembe, 2016; Schaefer et al., 2017). However, most of the published research focus on heterosexual couples, more specifically females with older male sexual partners and neglects young males who have older same-sex partners. Yet this is an important area of study because young males share similar environments and challenges including poverty,
unemployment, and under-education as females in South Africa and would, therefore, have similar rationales in terms of sexual partner selection (Graham & De Lennoy, 2016; Whitley, Gould, Wright, & Hayden, 2017). For this reason, the purpose of this study is to (1) estimate the level of condom use among young males who engage in age-disparate sexual relationships with same-sex partners and (2) to identify the factors associated with condom use within these relationships.

2. Methods

The study is a cross-sectional analysis of secondary data from the Fourth South African National HIV, Behaviour and Health Survey 2012. The survey is the fourth in the series of national HIV household surveys conducted by a consortium of scientists led by the Human Sciences Research Council (HSRC) (Shisana et al., 2014). The sampling procedure and full methodology carried out by the HSRC researchers and collaborators can be found in the South African National HIV Prevalence, Incidence and Behaviour Survey, 2012 report (Shisana et al., 2014). A subsequent survey was conducted in 2017 but has not yet been made available for analysis by the HSRC. The current dataset was obtained through a written request by the authors to the HSRC for consent to analyse the data for research purposes. The data that were then made available for download were completely anonymised with no identifying information about the participants included. The data used for this study are not the most recent in the series, but given that behavioural practices do not dramatically change over short periods of time, the study is still useful to better understand sexual behaviours among youth.

The nationally representative data collected 38,438 (52,387,332 weighted) respondent’s HIV status, demographic, socioeconomic and behavioural characteristics (Shisana et al., 2014). However, analysis in this study has been restricted to male youth between 15 and 24 years old with completed information on the age and sex of their most recent sexual partner. A weighted sample of 46,790 (1,747 unweighted) young males with older (>1 year), same-sex sexual partners is included in the study.

The main outcome variable of this study is “consistent condom use”. This variable is derived from the survey question: how often do you use a condom with your most recent sexual partner? With response categories of (1) every time; (2) almost every time; (3) sometimes; (4) never. Consistent condom use is considered as response categories (1) and (2). For the adjusted logistic regression model, a binary variable of consistent (1 and 2) and inconsistent (3 and 4) is used.

Age difference between the respondent and most recent same-sex partner has been identified through the survey questions: age of respondent (in single years) and what is the approximate age of the most recent partner with whom you have had sex? Through subtracting the age of their partner from the age of the respondent, the age difference was determined. Respondents with same-age or younger same-sex partners were dropped from the analysis (N = 1,179,754) as these would not be age-disparate relationships and therefore would not necessarily have the same power dynamics with regard to condom use. Partner age difference was categorised into “1–5 years older”; “6–10 years older” and “11+ years older”. The reason two five-year intervals were selected is based on literature which shows that partner age difference is often 1–5 years, 6–10 years and 11+ years older (Harling et al., 2014).

Demographic and socioeconomic control variables included in the study are age of the respondent (15–19 or 20–24); population group (African, White, Coloured, Indian/Asian); place of residence (urban or rural); employment status (employed, unemployed or student) and type of relationship (casual, husband, live-in partner, boyfriend, not living with). The population group classifications, despite being developed by the Apartheid government to strengthen their separatiest policies, are still used today by citizens and enumerators for various purposes. Of the groups, the most contentious naming is of the Coloured population which refers to persons of mixed race and/or Khoisan heritage (Quintana-Murci et al., 2010). This study uses the four dominant racial
groups that were based on the South African Census and posed to participants of this survey (Statistics SA, 2011).

Three sexual and reproductive health control variables have also been included and these survey questions are: Can AIDS be cured? (yes, no, don’t know responses); have you been circumcised? (yes or no); what is your HIV status? (positive or negative). Recent studies in less developed countries identified these variables as having a relationship to condom use (Fladseth et al., 2015; George et al., 2019; Leddy, Chakravarty, Dladla, de Bruyn, & Darbes, 2016). For this reason, these variables were adopted for the current study.

Cross-tabulations and a forward stepwise logistic regression model are used to determine the level and assess the relationship between age difference and inconsistent condom use among young males with older, same-sex partners in South Africa. For all analyses, statistical significance was set at a p-value of less than 0.05.

3. Results
Among 15–19-year olds, 75.93% had a sexual partner 11 or more years older (Table 1). Compared to 20–24-year olds where the majority (62.84%) had a same-sex partner who is 6–10 years older. By population group, 37.23% of African youth had a same-sex partner who is 6–10 years older and 98.13% of White youth had a partner 1–5 years older. More than half of Coloured youth (51.8%) also have a same-sex partner who is between 1 and 5 years older while 68.61% of Indian/Asian young males have a sexual partner who is 11 or more years older. With regards to the place of residence, the majority (68.6%) of youth living in urban areas had a partner 1–5 years older. Among youth in rural areas, 39.67% had a partner 6–10 years older while 49.02% had a partner 11 and more years older. For employment status, more than half (52.28%) of employed youth had a partner 1–5 years older. The percentage of unemployed youth who had a partner 11 and more years older was 32.76% and 18.25% among employed youth. The sexual and reproductive health characteristics of youth showed that 70.81% of youth who said AIDS can be cured had a partner 1–5 years older while 29.19% had a partner 6–10 years older. More than half (59.34%) of youth who have not undergone circumcision had a partner 1–5 years older while 40.23% had a partner 6–10 years older. With regards to HIV status, 35.82% of youth who reported being HIV negative had a partner 1–5 years older, 33.17% had a partner 6–10 years older and 31.01% had a partner 11 and more years older. Among those that reported being HIV positive, more than half (60.01%) had a partner 1–5 years older while 39.99% had a partner 11 and more years older.

Figure 1 shows that among young men who were in casual relationships, all (100%) had a partner 1–5 years older. Among those with husbands, more than 90% of the husbands are 11+ years older and among those with a live-in partner about 50% of the partners were 6–10 years old and just less than half were 11+ years old. For those with boyfriends who are not cohabiting, over 60% of the partners were 6–10 years older than the respondents.

Compared to 20–24-year olds (39.98%), 92.38% of 15–19-year olds said they never or sometimes (inconsistent) use a condom (Table 2). By race, more than half (55.31%) of Africans said they use a condom consistently while the percentage of those that use a condom inconsistently was 44.69%. The majority (87.21%) of the Coloured population group use condoms inconsistently, and 12.79% reported using a condom consistently. With regards to the place of residence, 63.33% of youth living in urban areas said they never or sometimes (inconsistent) use a condom compared to 41.15% among youth in rural areas. The frequency of consistent condom use was 58.85% among adults in rural areas compared to 36.67% in urban areas. By employment status, 85.72% of employed adults and 94.48% of unemployed adults, respectively, report inconsistent condom use. The majority (96.16%) of those that reported using a condom consistently were students compared to 14.28% among youth who are employed and 5.52% among unemployed youth. All youth (100%) that said AIDS can be cured use a condom consistently. More than half (53.03%) of youth who said AIDS cannot be cured use a condom consistently while 46.97% use a condom...
Table 1. Percentage distribution of the characteristics of young males by age difference of most recent same-sex partner

| Characteristics                  | Male Partner | 1–5 yrs (N = 8,859) | 6–10 yrs (N = 25,497) | 11+ yrs (N = 12,012) |
|----------------------------------|--------------|---------------------|-----------------------|----------------------|
| Demographic and socioeconomic   | N            | %                   | N                     | %                    | N                     | %                     |
| Age group*                       |              |                     |                       |                      |                       |                       |
| 15–19                            | 915,304      | 19.74               | 200,773               | 4.33                 | 3,520,722             | 75.93                 |
| 20–24                            | 907,422      | 19.57               | 2,913,765             | 62.84                | 815,149               | 17.58                 |
| Population group*                |              |                     |                       |                      |                       |                       |
| African                          | 1,669,248    | 36                  | 1,726,281             | 37.23                | 1,241,271             | 26.77                 |
| White                            | 4,550,092    | 98.13               | 37,094                | 0.8                  | 50,077                | 1.08                  |
| Coloured                         | 2,401,862    | 51.8                | 2,234,938             | 48.2                 | 0**                   | 0                     |
| Indian/Asian                     | 1,455,492    | 31.39               | 0**                   | 0                    | 3,181,308             | 68.61                 |
| Place of residence*              |              |                     |                       |                      |                       |                       |
| Urban                            | 3,183,627    | 68.66               | 1,376,202             | 29.68                | 76,971                | 1.66                  |
| Rural                            | 524,886      | 11.32               | 1,839,419             | 39.67                | 2,272,959             | 49.02                 |
| Employment status*               |              |                     |                       |                      |                       |                       |
| Employed                         | 2,424,119    | 52.28               | 693,665               | 14.96                | 1,519,016             | 32.76                 |
| Unemployed                        | 1,862,139    | 40.16               | 1,928,445             | 41.59                | 846,216               | 18.25                 |
| Student                          | 253,169      | 5.46                | 4,383,631             | 94.54                | 0**                   | 0                     |
| Sexual and reproductive health   |              |                     |                       |                      |                       |                       |
| AIDS can be cured*               |              |                     |                       |                      |                       |                       |
| Yes                              | 3,283,318    | 70.81               | 1,353,482             | 29.19                | 0**                   | 0                     |
| No                               | 1,791,660    | 38.64               | 1,487,949             | 32.09                | 1,357,191             | 29.27                 |
| Don’t know                       | 982,538      | 21.19               | 3,117,784             | 67.24                | 536,478               | 11.57                 |
| Circumcision status*             |              |                     |                       |                      |                       |                       |
| Yes                              | 4,073,892    | 87.86               | 562,908               | 12.14                | 0**                   | 0                     |
| No                               | 2,751,477    | 59.34               | 1,865,385             | 40.23                | 19,938                | 0.43                  |
| HIV status*                      |              |                     |                       |                      |                       |                       |
| Negative                         | 1,660,902    | 35.82               | 1,538,027             | 33.17                | 1,437,872             | 31.01                 |
| Positive                         | 2,782,544    | 60.01               | 0**                   | 0                    | 1,854,256             | 39.99                 |

*p-value <0.05; **no responses from participants.

Figure 1. Percentage distribution of type of relationship by partner age difference among young males with older, same-sex partners in South Africa.
Inconsistently. Among circumcised youth, 100% use a condom consistently. The majority (95.83%) of youth who never use a condom were those that were not circumcised. With regards to HIV status, more than half (54.97%) of HIV-negative youth use a condom consistently compared to 42.30% among HIV-positive youth. The percentage of HIV-positive youth who use condoms inconsistently was 57.70% compared to 45.03% among HIV-negative youth.

More than two-thirds (79.08%) of youth with a partner 6–10 years older reported that they use a condom consistently. Among youth with a partner 1–5 years older, 44.49%, and those with a partner 11 or more years older reported 7.17% consistent condom use. Among youth with a partner 1–5 years older, 55.51% said they use a condom inconsistently. Finally, 20.92% of youth with a partner 6–10 years reported that they use condoms inconsistently compared to 92.83% of youth with a partner 11 or more years older.
| Characteristics                                      | Odds Ratio | 95% Conf. Interval | Interval |
|------------------------------------------------------|------------|--------------------|----------|
| Partner Age difference                               |            |                    |          |
| 1–5 years                                            | RC         |                    |          |
| 6–10 years                                           | 0.47       | 0.4589             | 0.6120   |
| 11 + years                                           | 0.58       | 0.5535             | 0.6982   |
| Demographic and socioeconomic                       |            |                    |          |
| Age group                                            |            |                    |          |
| 15–19                                                | RC         |                    |          |
| 20–24                                                | 1.57       | 1.5389             | 1.6072   |
| Race                                                 |            |                    |          |
| African                                              | RC         |                    |          |
| White                                                | 7.09       | 6.8351             | 7.3542   |
| Coloured                                             | 2.14       | 2.0748             | 2.2022   |
| Indian/Asian                                         | 1.52       | 1.4235             | 1.6325   |
| Place of residence                                   |            |                    |          |
| Urban                                                | RC         |                    |          |
| Rural                                                | 1.48       | 1.4502             | 1.5073   |
| Employment status                                    |            |                    |          |
| Employed                                             | RC         |                    |          |
| Unemployed                                           | 1.61       | 1.5713             | 1.6502   |
| Student                                              | 1.24       | 1.2122             | 1.2781   |
| Relationship with most recent same-sex partner       |            |                    |          |
| Husband                                              | RC         |                    |          |
| Live-in partner                                      | 0.26       | 0.2352             | 0.2808   |
| Boyfriend not living with                            | 0.15       | 0.1357             | 0.1592   |
| Casual partner                                       | 0.08       | 0.0722             | 0.0853   |
| Sexual and Reproductive Health                       |            |                    |          |
| AIDS can be cured                                    |            |                    |          |
| Yes                                                  | RC         |                    |          |
| No                                                   | 2.52       | 2.4449             | 2.5918   |
| Circumcision status                                  |            |                    |          |
| Yes                                                  | RC         |                    |          |
| No                                                   | 2.67       | 2.6205             | 2.7248   |
| HIV status                                           |            |                    |          |
| Negative                                             | RC         |                    |          |
| Positive                                             | 7.11       | 6.8054             | 7.4202   |

Table 3 shows the results of the adjusted logistic regression model showing odds ratios. Young men with same-sex partners who are 6–10 years older (OR = 0.47) and 11 or more years older (OR = 0.58) are less likely to use a condom consistently. Youth aged 20–24 years were 1.57 times more likely to use a condom compared to those aged 15–19 years [CI: 1.53–1.60]. Compared to Africans, youth of all other races were more likely to use a condom. White people were 7.09 times more likely to use a condom [CI: 6.83–7.35], coloured people 2.14 times more likely [CI: 2.07–2.20] and Indian/Asians 1.52 times more likely to use a condom [CI: 1.42–1.63]. By employment status, unemployed youth were 1.61 [CI: 1.57–1.65] and students 1.24 [CI: 1.24–1.27] times more likely to use a condom compared to employed youth. Youth who were living with their sex partner were
Youth, whose sex partner was a boyfriend they were not living with, were also less likely (OR: 0.15, CI: 0.1357-0.1592) to use a condom compared to those who were married with a husband (CI: 0.13-0.15). Youth who had a casual sex partner were 0.08 times less likely to use a condom compared to youth who had a husband (CI: 0.07-0.08). Compared to youth who believe that AIDS can be cured, those that thought AIDS has no cure were 2.52 times more likely to use a condom (CI: 2.44-2.59). Circumcised youth were 2.67 times more likely to use a condom compared to youth who were not circumcised (CI: 2.62-2.72). Youth who were living with HIV were 7.11 times more likely to use a condom compared to HIV-negative youth (CI: 6.80-7.42).

4. Discussion

The aim of this study was to identify the factors associated with inconsistent condom use among young males with older, same-sex partners in South Africa. Inconsistent condom use is a risk factor for the transmission of HIV and other STIs (Madiba & Ngwenya, 2017). Youth, compared to older age groups, are more vulnerable to infection because their use of condoms is more inconsistent (Protogerou, Johnson & Hagger, 2017; Protogerou, Johnson, & Hagger, 2018). This study addresses two apparent gaps in existing literature. First, there is a scarcity of nationally representative research on condom use in same-sex partnerships in South Africa. Second, while research on condom use in age-disparate relationships has been done in the country, these studies have predominantly focused on the plight of younger females with older male partners.

It is not likely that young males will use condoms with older same-sex partners. This result is similar to a number of studies on youth in age-disparate relationships where power dynamics favour the older partner (Newcomb, Ryan, Garofalo, & Mustanski, 2014; Pascoe et al., 2015). In one study, it was found that young females were at a higher risk of HIV infection with partners six or more years older and that the use of condoms was low (Pascoe et al., 2015). A second study on young males in age-disparate relationships with male partners in the US showed that having an older partner was positively associated with total no condom use which is for both insertive and penetrative sex (Newcomb et al., 2014). These studies, among others, suggest that younger partners in sexual relationships, regardless of the sex of the partner, are less likely to practice safe sex. Among the reasons offered to explain this phenomenon is the financial dependence of younger persons on older partners, particularly if the younger person is an adolescent (15–19 years old) (Boyer et al., 2017; Mabaso et al., 2018; Toska, Pantelic, Cluver, Meinck, & Keck, 2015). Other reasons include power dynamics whereby older persons purposefully select youth for their inability to question the authority of their older partners (Antfolk et al., 2015; Longfield, Glick, Waithaka, & Berman, 2004).

Youth reportedly using a condom every time is high but so is the reporting of never using a condom. This polarised approach to condom use is problematic because condom use should not be an “always or never” situation. Sexually active youth should, ideally, be using condoms consistently which is at all or almost all sexual encounters. However, even those who use condoms “sometimes” are more protected from HIV and other STIs compared to those who “never” use condoms. A possible reason for this dichotomy could be related to whether or not the partners are in a monogamous, stable relationship. The research which supports this possibility found that youth who report having casual relationships are more likely to use condoms than those who are in “steady”, cohabiting or married relationships (Bauman & Berman, 2005; Rutakumwa, Mbyone, Kiwanuka, Bagiire, & Seeley, 2015). The use of condoms in these contexts, therefore, is related to how long and well partners know each other and the level of trust within these relationships.

Moreover, this study also found some of the protective or positive sexual behaviours practiced by youth with older, same-sex partners. Young males in the study who are HIV positive are more likely to use condoms consistently. This shows that HIV-positive youth are not careless with regard to
spreading the disease to their sexual partners. This is also similar to the results of a study done in the Eastern Cape province of South Africa, where it was found that HIV-positive youth who were able to disclose their status to partners were more likely to practice safe-sex (Toska, Cluver, Hodes, & Kidia, 2015). In addition, youth who believe there is no cure for AIDS are also more likely to use condoms consistently. That is, youth who have knowledge of the disease are practicing protective behaviours. Research from the US has also found that youth with accurate knowledge of HIV and AIDS do attempt to practice safe-sex (Dariotis & Johnson, 2015). However, there is also literature which contends that knowledge does not directly translate into safe behavioural practices (Davis, Campbell, Hildon, Hobbs, & Michie, 2015; Kelly & Barker, 2016; Sniehotta, Presseau, & Araújo-Soares, 2014). Results from this study show that an association between AIDS knowledge and protective behaviour does exist; however, causality could not be determined and confounders were not identified.

5. Limitations, recommendations and strengths

The current study is subject to a few limitations. First, we could not determine the accessibility of condoms for youth who never used condoms. A study which addresses the availability of condom use is recommended to better explain a possible reason for inconsistent condom use. Second, the study data are not the most recent. A similar study using the subsequent dataset in the series is suggested, when these data are made available, to examine if there has been any change to condom use behaviours more recently. Third, due to the cross-sectional nature of the data, confounding between the HIV knowledge questions in the survey could not be controlled for. A longitudinal study of a cohort of young males with older, same-sex partners would be ideal to determine this and other confounders, and to determine causality. Also, this study did not address the older, same-sex partners. Future research should include a qualitative study with the older-sexual partners to investigate their role or contribution to the inconsistent condom use. That is, research which pinpoints the locus of sexual power is needed since it could not be determined in this study. Also, more research on the characteristics of older same-sex partners and of the couples’ characteristics is needed to include older partners in youth programmes. Since age-disparate partnerships are common, making the couple, that is, both partners, the target of intervention would prove more useful in reducing unsafe sexual practices than the inclusion of only the younger partner. Finally, while same-sex unions are legal in South Africa, these relationships are not entirely socially acceptable, as a result, there is a possibility that the respondents are subject to social desirability bias in their responses.

There are also several strengths to the study. First, young males with same-sex partners are an under-researched population in developing countries. In African countries, in particular, where same-sex partnerships remain highly discriminated against, this population remains highly vulnerable to various sexual and reproductive health concerns including inability to access health care and information as well as the risk of contracting HIV and other STIs. This study, therefore, assists in addressing the sexual health needs of young males in same-sex partnerships in South Africa. Second, the study is nationally representative with a large study sample which enabled the use of inferential statistical methods to better understand the condom use of young males in the country. This is in comparison to the few qualitative studies that were found which use fewer males and are not representative of the country (Lesch, Brits, & Naidoo, 2017; Scott, 2018).

6. Conclusion

Condom use among young males with older, same-sex partners is not consistent. This is important because the sexual health of young males (and females) will determine the levels of HIV incidence in the population and is an indicator of expected adult health outcomes. The distorted power dynamics of having an older-sexual partner explains why safe-sex negotiations could be difficult for younger partners. However, the protective behaviours among HIV-positive youth and those whose most recent partner was casual shows that independent of age-disparate relationship dynamics, young males do exhibit some agency in sexual behaviour decision-making. Policies such as the Adolescent and Youth Health Policy 2016–2020, which aims to reduce the burden of
diseases, including HIV and other STIs in young people, should be cognisant of these results because young men who have sex with men are a sub-population of youth who are at risk of unsafe sexual practices. Programmes including the Youth-Friendly Services within the public healthcare system should incorporate sexual-preference sensitivity programmes to cater specifically for the needs of young males with older, same-sex partners in the country.

**Funding**
This work was supported by the South African National Research Foundation [N/A].

**Author details**
Nicole De Wet-Billings
E-mail: nicole.devet@wits.ac.za

Brendon K. Billings
E-mail: brendon.billings@wits.ac.za

1 Demography and Population Studies, Schools of Social Sciences and Public Health, University of the Witwatersrand, Johannesburg, South Africa.

2 Anatomical Sciences, School of Anatomical Sciences, University of the Witwatersrand, Johannesburg, South Africa.

**Citation information**
Cite this article as: The levels and factors associated with inconsistent condom use among young men with older, same-sex partners in South Africa, Nicole De Wet-Billings & Brendon K. Billings, Cogent Social Sciences (2020), 6: 1733245.

**References**

Aftab, J., Salo, B., Alanko, K., Bergen, E., Corander, J., Sandnabba, N. K., & Santtila, P. (2015). Women’s and men’s sexual preferences and activities with respect to the partner’s age: Evidence for female choice. *Evolution and Human Behavior*, 36(1), 73–79. doi:10.1016/j.evolhumbehav.2014.09.003

Bauman, L. J., & Berman, R. (2005). Adolescent relationships and condom use: Trust, love and commitment. *AIDS and Behavior*, 9(2), 211–222. doi:10.1007/s10461-005-3902-2

Bekinsinska, M. E., Pillay, L., Milford, C., & Smit, J. A. (2014). The sexual and reproductive health needs of youth in South Africa–history in context. *South African Medical Journal*, 104(10), 676–678. doi:10.7196/SAMJ.8809

Boyer, C. B., Greenberg, L., Chutuape, K., Walker, B., Monte, D., Kirk, J., … Network, A. M. T. (2017). Exchange of sex for drugs or money in adolescents and young adults: An examination of sociodemographic factors, HIV-related risk, and community context. *Journal of Community Health*, 42(1), 90–100.

Bui, T. C., Markham, C. M., Ross, M. W., Williams, M. L., Beasley, R. P., Tran, L. T., … Le, T. N. (2012). Perceived gender inequality, sexual communication self-efficacy, and sexual behaviour among female undergraduate students in the Mekong Delta of Vietnam. *Sexual Health*, 9(4), 314–322. doi:10.1071/SH11067

Coldwell, K., & Mathews, A. (2016). The role of relationship type, risk perception, and condom use in middle socioeconomic status black women’s HIV-prevention strategies. *Journal of Black Sexuality and Relationships*, 2(2), 91–120. doi:10.1353/jsr.2016.0002

Closson, K., Dietrich, J. J., Lachowsky, N. J., Nikola, B., Palmer, A., Cui, Z., … Miller, C. L. (2018). Gender, sexual self-efficacy and consistent condom use among adolescents living in the HIV hyper-endemic setting of Soweto, South Africa. *AIDS and Behavior*, 22(2), 671–680. doi:10.1007/s10461-017-1950-2

Dariotis, J. K., & Johnson, M. W. (2015). Sexual discounting among high-risk youth ages 18–24: Implications for sexual and substance use risk behaviors. *Experimental and Clinical Psychopharmacology*, 23(1), 49. doi:10.1037/00083899

Davis, R., Campbell, R., Hildon, Z., Hobbs, L., & Michie, S. (2015). Theories of behaviour and behaviour change across the social and behavioural sciences: A scoping review. *Health Psychology Review*, 9(3), 323–344. doi:10.1080/17437179.2014.941722

Eggers, S. M., Aara, L. E., Bos, A. E., Mathews, C., & de Vries, H. (2014). Predicting condom use in South Africa: A test of two integrative models. *AIDS and Behavior*, 18(1), 135–145. doi:10.1007/s10461-013-0423-2

Flodseth, A., Aasen, M., Newell, M. L., & McIlwaine, N. (2015). The impact of gender norms on condom use among HIV-positive adults in KwaZulu-Natal, South Africa. *PloS One*, 10(4), e0122671. doi:10.1371/journal.pone.0122671

George, G., Maughan-Brown, B., Becket, S., Evans, M., Cowood, C., Khanyile, D., … Kharsany, A. B. (2019). Coital frequency and condom use in age-disparate partnerships involving women aged 15 to 24: Evidence from a cross-sectional study in KwaZulu-Natal, South Africa. *BMJ Open*, 9(3), e024362. doi:10.1136/bmjopen-2018-024362

Gleton, B., Johanfar, S., Inungu, J., & Latty, C. (2019). Factors associated with condom use among African American and Hispanic/Latino youth. *European Journal of Environment and Public Health*, 4(1), p emo033.

Graham, L., & De Lennoy, A. (2016). Youth unemployment: What can we do in the short run. Retrieved February, 3(9), 2017.

Harling, G., Newell, M.-L., Tanser, F., Kawachi, I., Subramanian, S., & Båmghausen, T. (2014). Do age-disparate relationships drive HIV incidence in young women? Evidence from a population cohort in rural KwaZulu-Natal, South Africa. *Journal of Acquired Immune Deficiency Syndromes* (1999), 66 (4), 443. doi:10.1097/QAI.0000000000000198

Kamndaya, M., Vearrey, J., Thomas, L., Kabiru, C. W., & Kazembe, L. N. (2016). The role of material deprivation and consumerism in the decisions to engage in transactional sex among young people in the urban slums of Blantyre, Malawi. *Global Public Health*, 11(3), 295–308. doi:10.1080/17441692.2015.1014393

Kelly, M. P., & Barker, M. (2016). Why is changing health-related behaviour so difficult? *Public Health*, 136, 109–116. doi:10.1016/j.puhe.2016.03.030

Koyama, A., Corliss, M. L., & Santelli, J. (2006). Global lessons on healthy adolescent sexual development. *Current Opinion in Pediatrics*, 21(4), 444–449. doi:10.1097/MOP.0b013e328323db8ee

Leddy, A., Chakravorty, D., Dladla, S., de Bruyn, G., & Darbes, L. (2016). Sexual communication self-efficacy, hegemonic masculine norms and condom use among heterosexual couples in South Africa. *AIDS Care*, 28(2), 228–233. doi:10.1080/09540121.2015.1080792

Lesch, E., Brits, S., & Naidoo, N. (2017). ‘Walking on eggshells to not offend people’: Experiences of same-sex students in a South African university. *South African Journal of Higher Education*, 31(4), 127–149. doi:10.20853/31-4-893
Longfield, K., Glick, A., Waithaka, M., & Berman, J. (2004). Relationships between older men and younger women: Implications for STIs/HIV in Kenya. Studies in Family Planning, 35(2), 125–134. doi:10.1111/j.1728-4465.2004.00014.x

Mabaso, M., Sokhele, Z., Mohlabane, N., Chibi, B., Zuma, K., & Simbayi, L. (2018). Determinants of HIV infection among adolescent girls and young women aged 15–24 years in South Africa: A 2012 population-based national household survey. BMC Public Health, 18(1), 183. doi:10.1186/s12889-018-5051-3

Madillo, S., & Ngwenyu, N. (2017). Cultural practices, gender inequality and inconsistent condom use increase vulnerability to HIV infection: Narratives from married and cohabiting women in rural communities in Mpumalanga province, South Africa. Global Health Action, 10(sup2), p 1341597. doi:10.1080/16549716.2017.1341597

Maughan-Brown, B., Evans, M., & George, G. (2016). Sexual behaviour of men and women within age-disparate partnerships in South Africa: Implications for young women’s HIV risk. PLoS One, 11(8), e0159162. doi:10.1371/journal.pone.0159162

McNeill, C., George, N., & Glover, R. (2017). An evaluation of sisters informing healing living empowering: Increasing HIV knowledge among African American adolescent females using an evidence-based HIV prevention intervention. Journal of Doctoral Nursing Practice, 10(1), 4–10. doi:10.1891/2380-9418.10.1.4

Muchiri, E., Odimegwu, C., & De Wet, N. (2017). HIV risk perception and consistency in condom use among adolescent girls and young adults in urban Cape Town, South Africa: A cumulative risk analysis. Southern African Journal of Infectious Diseases, 32(3), 310–315. doi:10.1080/23120053.2017.1332800

Newcomb, M. E., Ryan, D. T., Garofalo, R., & Mustanski, B. (2014). The effects of sexual partnership and relationship characteristics on three sexual risk variables in young men who have sex with men. Archives of Sexual Behavior, 43(1), 61–72. doi:10.1007/s10508-013-0207-9

Ndhlovu, T., Musekiwa, A., Mlotshwa, M., Mangold, K., Reddy, C., & Williams, S. (2018). Predictors of male condom use among sexually active heterosexual young women in South Africa, 2012. BMC Public Health, 18(1), 1137. doi:10.1186/s12889-018-6039-8

Pascoe, S. J., Longhaug, L. F., Mavhu, W., Margreaves, J., Jaffar, S., Hayes, R., & Cowan, F. M. (2015). Poverty, food insufficiency and HIV infection and sexual behaviour among young rural Zimbabwean women. PLoS One, 10(1), e0115290. doi:10.1371/journal.pone.0115290

Pinchoff, J., Boyer, C. B., Mutombo, N., Chowdhuri, R. N., & Ngao, T. D. (2017). Why don’t urban youth in Zambia use condoms? The influence of ‘sugar daddies’ to ‘sugar babies’: Exploring a pathway among age-disparate sexual relationships, condom use and adolescent pregnancy in South Africa. Sexual Health, 12(1), 59–66. doi:10.1071/SH14089

Proctorgerou, C., Johnson, B. T., & Hagger, M. S. (2017). An integrated theory of condom use for young people in Sub-Saharan Africa: A meta-analysis. Health Psychology, 37(6), S86.

Proctorgerou, C., Johnson, B. T., & Hagger, M. S. (2018). An integrated model of condom use in Sub-Saharan African youth: A meta-analysis. Health Psychology, 37(6), S86. doi:10.1037/hea0000604

Quinlan-Murci, L., Harmont, V., Quach, H., Balanovsky, O., Zaporozhchenko, V., Bormans, C., & Behr, D. M. (2010). Strong maternal Khoisan contribution to the South African coloured population: A case of gender-biased admixture. The American Journal of Human Genetics, 86(4), 611–620. doi:10.1016/j.ajhg.2010.02.014

Raj, A., Reed, E., Miller, E., Decker, M. R., Rothman, E. F., & Silverman, J. G. (2007). Contexts of condom use and non-condom use among young adolescent male perpetrators of dating violence. AIDS Care, 19(8), 970–973. doi:10.1080/09540120701335246

Ritchwood, T. D., Hughes, J. P., Jennings, L., MacPhail, C., Williamson, B., Selin, A., Pettifor, A. (2016). Characteristics of age-discordant partnerships associated with HIV risk among young South African women (HPTN 068). Journal of Acquired Immune Deficiency Syndromes (1999), 72(4), 423–429. doi:10.1097/QAI.0000000000000988

Rodger, A. J., Cambiano, V., Bruun, T., Vernazza, P., Collins, S., Van Lunzen, J., ... Beloukas, A. (2016). Sexual activity without condoms and risk of HIV transmission from ‘sugar-daddies’ to the HIV-positive partner: Using suppressive antiretroviral therapy. Jama, 316(2), 171–181. doi:10.1001/jama.2016.5148

Rutakumwa, R., Mbonye, M., Kiwanuka, T., Bagirie, D., & Seeley, J. (2015). Why do men often not use condoms in relationships with casual sexual partners in Uganda? Culture, Health & Sexuality, 17(10), 1237–1250. doi:10.1080/13691058.2015.1053413

Santhya, K., & Jeejeebhoy, S. J. (2007). Early marriage and HIV/AIDS: Risk factors among young women in India. Economic and Political Weekly, 1291–1297.

Scheer, R., Gregson, S., Eaton, J. W., Mugurungi, O., Rheod, R., Takaruzo, A., ... Nyamukapa, C. (2017). Age-disparate relationships and HIV incidence in adolescent girls and young women: Evidence from Zimbabwe. AIDS (London, England), 31(10), 1461. doi:10.1097/QAD.0000000000001506

Scott, L. (2018). Simultaneous assimilation and innovation in the construction of queer families: Married same-sex couples in Cape Town, South Africa. In Queer families and relationships after marriage equality (pp. 100–112). Routledge.

Shisana, O., Rehle, T., Simbayi, L., Zuma, K., Jooste, S., Zungu, N., ... Onyia, D. (2016). South African national HIV prevalence, incidence and behaviour survey 2012. Cape Town: HSRC Press. Retrieved from http://ecommons.hsrc.ac.za/handle/20.500.11910/2490

Sniehotta, F. F., Presseau, J., & Araujo-Soares, V. (2014). Time to retire the theory of planned behaviour. Health Psychology Review, 8(1), 1–7. doi:10.1080/17437199.2013.869710

Statistics SA. (2011). South African census 2011. Pretoria: South Africa.

Statistics SA. (2018). General household survey, 2017. Pretoria: Statistics South Africa.

Toska, E., Cluver, L. D., Boyes, M., Pantelic, M., & Kuo, C. (2015). From ‘sugar daddies’ to ‘sugar babies’: Exploring a pathway among age-disparate sexual relationships, condom use and adolescent pregnancy in South Africa. Sexual Health, 12(1), 59–66. doi:10.1071/SH14089

Toska, E., Cluver, L. D., Hodes, R., & Kuo, C. K. K. (2015). Sex and secrecy: How HIV-status disclosure affects self-sex among HIV-positive adolescents. AIDS Care, 27(sup1), 47–58. doi:10.1080/09540121.2015.1071775

Toska, E., Pantelic, M., Cluver, L., Meinck, F., & Keck, K. (2015). Systematic review protocol the state of the evidence of sexual risk-taking among adolescents and youth living with HIV in sub-Saharan Africa: A systematic review of prevalence, determinants and interventions. small, 19, 25–29.

Whitley, M. A., Gould, D., Wright, E. M., & Hayden, L. A. (2017). Barriers to holistic coaching for positive youth
development in South Africa. Sports Coaching Review, 1–19. doi:10.1080/21640629.2017.1361169
Zuma, K., Shisana, O., Rehle, T. M., Simbayi, L. C., Jooste, S., Zungu, N., … Moyo, S. (2016). New insights
into HIV epidemic in South Africa: Key findings from the national HIV prevalence, incidence and beha-
viour survey, 2012. African Journal of AIDS Research, 15(1), 67–75. doi:10.2989/16085906.2016.1153491