Predicting Sexual Risk Behaviour among late adolescents: The role of attitudes and ideology

By

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DECLARATION

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DEDICATION

To my Dad, my Lighthouse

And

My Mom, the rock it is built on.

Love and all it holds...

Thank you, thank you, thank you

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I would like to thank Dr Zuhayr Kafaar for his constant support and assistance. Dr Kafaar's knowledge of statistics far exceeded mine and without his help and discussion sessions I would have been lost. I most appreciated clarifying session when I felt overwhelmed by surveys, data and literature. Thank you Zuhayr.

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ABSTRACT

Sexual Risk Behaviour (SRB) among adolescents is a concern, both globally and in South Africa. SRB is defined by the increased risk of negative outcome, following two distinct routes: firstly an increased chance of contracting or transmitting sexual transmitted disease (STD), including the Human Immunodeficiency Virus (HIV); and secondly, an increased risk of unplanned pregnancy. SRB can have a direct long-term impact on one's health and South African youth are facing a unique challenge in their reproductive and sexual health, because of a common culture where women hold a lower status and experience oppression within sexual relationships. Compounded by a patriarchal system common under traditional African cultures but not exclusive to them.

Contributing factors to SRB are attitudes and behaviours originating from inequitable gender norms as well as hegemonic ideas of femininity ideology, underpinning the need for solutions focused on gender related issues that drive the epidemic.

The aim of this study was to establish whether gender norms and/or femininity ideology predicts SRB. My study formed part of a larger study, exploring SRB and possible predictors thereof. This was a quantitative study which focused on heterosexual late adolescent female and male students from the Stellenbosch University (SU). Data were collected using an online survey with a cross sectional convenience sample from the SU student population. First a pilot study was conducted to test the reliability of the measurement instruments; the reliability of the measurement instruments was confirmed for, after which the pilot survey data were included in the main study. The sample consisted of n=698 female and n=379 male participants, aged 18 to 24 years, from different faculties at SU. I used four measurement instruments instruments, namely the Gender Equitable Men Scale, the Adolescent Femininity Ideology Scale for Girls consisting of two sub-scales namely, the Inauthentic Self in Relationship and the Objectified Relationship with Body scale, the Adolescent Femininity Ideology Scale for Boys and the Sexual Risk Behaviour scale to operationalise my constructs and gather data.

In answering my research aim the results showed that there was a non-statistical significant relationship between GEMS and SRB for females, GEMS for males showed a statistically significant relationship with SRB, translating to gender equitable attitudes predicting low SRB for males students, although with an R-square of 16.7 it showed little significance when translated to real life. For female students gender equitable attitudes showed no relationship

with SRB. The results for AFIS and SRB for females and AFIS-B and SRB for males both showed a non-statistical significant relationship with SRB, translating to femininity ideology for both female and male students showing no relationship with SRB.

Keywords search: sexual risk behaviour, gender, gender equitable attitudes, masculinity, femininity, late adolescence, femininity ideology, patriarchal systems, hegemonic notions, sexual risk behaviour South Africa, factors contributing to sexual risk behaviour, youth risk, students and sexual risk behaviour, culture and femininity ideology, gender norms, GEMS, AFIS, AFIS-B, SRB, ecological systems theory, Bronfenbrenner, multiple regression analysis

OPSOMMING

Seksuele Riskante Gedrag (SRG) onder adolessente is kommerwekkend beide globaal en in Suid-Afrika. SRG word gedefinieer deur 'n verhoogde risiko in negatiewe gevolge, met twee definitiewe rigtings: eerstens 'n verhoogde kans om die Menslike Immuniteitsgebrekvirus (MIV) en ander seksuele oordraagbare siektes op te doen en te versprei; en tweedens; 'n verhoogde risiko vir onbeplande swangerskappe. SRG kan 'n direkte langdurige impak op jou gesondheid hê en jeug in Suid-Afrika word in die gesig gestaar deur 'n unieke uitdaging in hul voortplantings gesondheid, as gevolg van 'n kultuur waar vroue 'n laer status het en onderdrukking in seksuele verhoudings ervaar. Vererger deur 'n patriargale sisteem algemeen onder tradisionele Afrika kulture, maar nie eksklusief tot hul nie.

Bydraende faktore tot SRG is houdings en gedrag met hul oorsprong in onbillike geslagsnorme as ook hegemoniese idees oor vroulikheidsideologie, dit onderstut die behoefte aan gefokuste oplossings rondom geslagsaangeleenthede wat die epidemie dryf.

Die doelwit vir hierdie studie was om vas te stel of geslagsnorme en/of vroulikheidsideologie SRG voorspel. My studie is deel van 'n groter studie wat SRG en moontlike voorspellers daarvan navors. Die studie is 'n kwantitatiewe studie gefokus op heteroseksuele laat adolessente vroue en mans studente aan die Universiteit van Stellenbosch (SU). Data is ingesamel met die gebruik van 'n aanlyn opname met 'n deursnee gerieflikheidssteekproef van die SU student populasie. Eers is daar 'n lootsstudie gedoen om die betroubaarheid van die meetings instrumente te toets; die betroubaarheid van die meetings instrumente is bevestig waarna die lootsstudie data by die hoof studie ingesluit is. Die steekproefhet uit n=698 vroue en n=379 mans deelnemers bestaan, met ouderdomme van 18 tot 24 jaar, van verskillende fakulteite aan die Universiteit Stellenbosch. Ek het 4 meetings instrumente gebruik vir my studie, naamlik die "Gender Equitable Men Scale" (GEMS), die "Adolescent Femininity Ideology Scale for Girls" (AFIS), wat bestaan uit twee sub-skale naamlik, die "Inauthentic Self in Relationship" (ISR) en "Objectified Relationship with Body" (ORB) subskale, the "Adolescent Femininity Ideology Scale for Boys" (AFIS-B) en die "Sexual Risk Behaviour scale" (SRB) om my konstrukte te operasionaliseer en data in te samel. In die proses om my doelwit te beantwoord het my resultate 'n nie statistiese beduidende resultaat tussen GEMS en SRB vir vroue getoon. GEMS vir mans het wel 'n statisties beduidende resultaat met SRB getoon, meenend vir die studie voorspel niediskriminerende geslagsnorme lae SRG vir mans studente, maar met 'n R-Vierkant van 16.7 het dit nie werklik 'n beduidende impak in die regte lewe nie. Die resultate vir AFIS vir vroue en AFIS-B vir mans het beide 'n nie statistiese beduidende verhouding met SRB getoon. Beide die resultate vir AFIS en SRB vir vroue asook die resultate vir AFIS-B en SRB vir mans het 'n nie statisties beduidende verhouding met SRG getoon, meenend dat vroulikheidsideologie vir beide vroue en mans studente geen verhouding met SRG getoon het nie.

Sleutelwoord soektog: seksuele riskante gedrag, geslag, billike geslags houdings, manlikheid, vroulikheid, laat adolessensie, vroulikheids-ideologie, patriargale sisteem, hegemoniese begrippe, seksuele riskante gedrag in Suid-Afrika, bydraende faktore tot seksuele riskante gedrag, jeug risiko, studente en seksuele riskante gedrag, kultuur en vroulikheids ideologie, geslags norme, GEMS, AFIS, AFIS-B, SRB, ekologiese stelsels teorie, Bronfenbrenner, veelvuldige regressie ontleding

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CHAPTER ONE

Introduction to the Study

1.1. Background to the study

Sexual Risk Behaviour (SRB) among adolescents is a concern, both globally and in South Africa. Mirzaei, Ahmadi, Saadat, and Ramezani (2016) emphasise that, "sexual behaviour is a complex private activity, being subject to social, cultural, moral and legal issues" (p. 46), and it is a sensitive and personal research field. In the 18th century we saw the start of academic research into sexual behaviour and the awareness of the health risks, but after the explosion and impact of the Human Immunodeficiency Virus (HIV) in the 90s, public attention focussed on SRB (Mirzaei et al., 2016).

SRB is defined by the increased risk of negative outcome, following two distinct routes: firstly, an increased chance of contracting or transmitting sexual transmitted disease (STD), including the Human Immunodeficiency Virus (HIV); and secondly, an increased risk of unplanned pregnancy (Centre for Disease Control and Prevention, 2017; Mirzaei et al., 2016). SRB can have a direct long-term influence on one's health. While some STDs can be cured, others, if left untreated, can be fatal. These risk behaviours include having more than one sexual partner, frequently changing or having concurrent sexual partners, not using condoms, and the unreliable or irregular use of contraception, early sexual debut and engaging in sex whilst under the influence of alcohol and/or drugs (Mirzaei et al., 2016).

According to UNAIDS' 2016 data, globally 36.7 million people are living with HIV, with new infections being 44% higher among women aged 15–25 years than among their male counterparts. Globally, South Africa (SA) has the largest HIV epidemic, with 7.1 million people living with HIV, and SA contributes to one third of all new infections in Sub-Saharan Africa (Avert, 2018; UNAIDS, 2017). Further, the Population Reference Bureau's World Population data sheet for 2017 shows that Africa's youth population will rise from the current 20% to 35% of the world youth total in 2050 (Population Reference Bureau, 2017).

Given the transition from adolescence to adulthood and the growing risk of HIV/AIDS, Phillips and Malcolm (2006) contend that youth in Sub-Saharan Africa are facing a unique challenge in their reproductive and sexual health. Thus, further study of SRB is integral to informing preventative health promoting strategies, such as targeted sex education intervention programmes for young people (Phillips & Malcolm, 2006).

Pettifor, Measham, Rees, and Padian (2004) found that gender power inequities play a leading role in SRB and the spread of HIV. Adding to this, women often do not hold sexual power in relationships, and they are often unable to discuss safer sex practice, in fear of retribution from their partners.

In SA, attitudes of socio-cultural gender-based norms and hegemonic ideas of femininities and masculinities play a role in the oppression and marginalisation of women (Meyer, 2013). Meyer (2013) postulates that young women and men hold specific ideas/schemas about what constitutes gender norms and ideas of femininity and masculinity. She contends that harmful norms regarding femininity and masculinity are harmful not only to women but also men. Jewkes and Morrell (2012) agree with Meyer (2013), saying that in SA, men hold significant relational power over women, given the persistence of patriarchy and gender inequalities.

1.2. Purpose and aim of the study

Given the prevailing SRB climate in SA, the purpose of this study was to explore whether there is a relationship between gender norms, femininity ideology and SRB for late adolescents. This study forms part of a larger study regarding SRB among late adolescents, exploring SRB and possible predictors thereof.

My aim was to establish whether gender norms and/or femininity ideology predicts SRB. I fulfil this aim by conducting a multiple regression analysis in order to determine the best predictor of SRB.

1.3. Structure of the study

The thesis compromises of five chapters including this chapter in which I provide the reader with the background for this study and the aim of my research in answering my research question. Chapter Two gives the reader a review of literature regarding the prevalent topics of SRB, gender equitability and femininity ideology. This is followed by the theoretical framework in which my study is grounded, namely Ecological Systems Theory (Bronfenbrenner, 1986).

Chapter Three provides a brief introduction to the method I used for my research, followed by my research design in which I used a quantitative design. After which I discuss the sample, being a convenience sample in a cross-sectional study from the SU student population. Under the sub-section **Procedure**, I stipulate the process followed starting with ethical considerations from proposal submission to the committees from which I had to receive permission or approval to move forward with this study. This is followed by a discussion of the pilot study and reliability of the measurement instruments for the study. A discussion of each measurement instrument used for this study follows, namely the Gender Equitable Men Scale (Pulerwitz & Baker, 2008), the Adolescent Femininity Ideology Scale (Tolman & Porche, 2000), the Adolescent Femininity Ideology Scale for Boys (Tolman, Davis, & Bowman, 2016) and the Sexual Risk Behaviour Scale (Kafaar, van Wyk, & Mohammed, 2012), including their reliability in other studies and, where possible, their reliability in a South African context. After this I discuss the main study, data analysis, assumptions of multiple regression analysis, skewness and kurtosis, and homoscedasticity, ending the chapter with the procedures followed to ensure confidentiality and mitigation of risk.

In Chapter Four, after a brief introduction, I report on the results of this study, stating that multiple regression analysis is a predictive analysis explaining the relationship between a dependent variable, SRB, and multiple independent variables (Field, 2016). I show the SPSS output of the results for heterosexual females and males. Chapter Five is the discussion of my research findings in answering my research aim and results, followed by the conclusion and the limitations of this study.

CHAPTER TWO

Literature Review

2.1. Introduction

My aim is to explore if gender attitudes and femininity ideology, among heterosexual adolescents, might or might not, either individually and/or reciprocally, be predictors of SRB.

In this chapter I review literature on factors that contribute to SRB in late adolescence, specifically factors of gender equality and femininity ideology. After this I explore future expectations for adolescent SRB. Lastly, I discuss Bronfenbrenner's Ecological Systems Theory in which I grounded my research.

I used the SUNLearn platform to source studies, journals, articles and information relevant to my study, including peer studies and articles. The time period searched was from 2000 to 2021 with the focus on more recent studies. I also consulted older publications pertaining to Bronfenbrenner's Ecological Systems Theory. Some of the databases I searched were for example Google Scholar, EBSCO, Taylor and Francis, Research Gate pertaining to studies articles and journals. I also consulted government sites for statistical population information.

2.2. Background to adolescent SRB

Sexual health is integral to our wellbeing. The World Health Organization (WHO) (2010) defines sexual health as a "state of physical, emotional, mental and social well-being in relation to sexuality", further stating that "sexual health requires a positive, respectful approach to sexuality and sexual relationships and the possibility of having pleasurable and safe sexual experiences" (p. 1). This should be an experience that is free of influence, discrimination and violence, an experience in which the person's sexual rights are respected, protected and fulfilled.

The findings of the South African Demographic Health Survey (SADHS) (Stats SA, 2017) suggest that South Africans are still engaging in various SRBs that could undermine their health and future wellbeing. For example, the SADHS illustrates how unplanned adolescent pregnancies have both a health and social impact. Adolescent females are inclined to

experience negative pregnancy outcomes, and because of the responsibilities that come with pregnancy and motherhood, they are restricted in their ability to pursue an education (Stats SA, 2017). Beksinska, Pillay, Milford, and Smit (2014) concur that we should focus on the sexual and reproductive health needs of young people in SA as youths between 15–24 years of age continue to be vulnerable to the negative outcomes of SRB, with a HIV prevalence of 7.3% reported for this age group. Hence, the SADHS also underpins the importance of research on sexual behaviour in order to design and monitor interventions to control the spread of STIs.

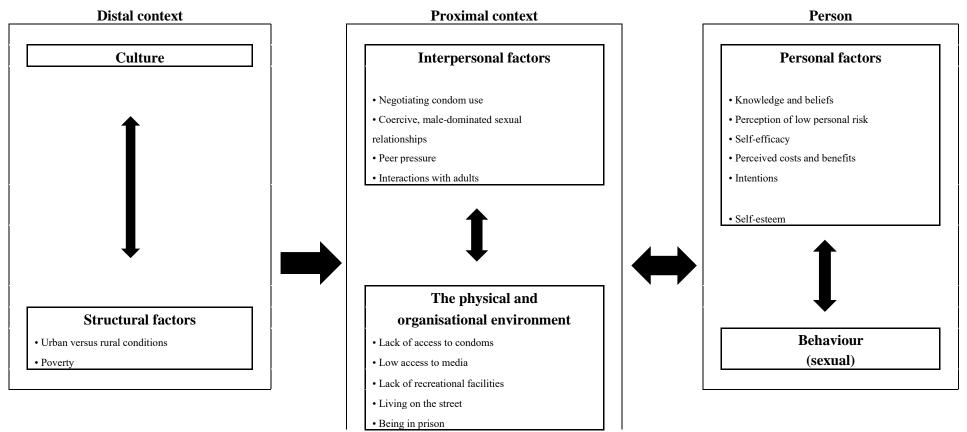
2.3. Future expectations and adolescent SRB

In their study, namely "The impact of future expectations on adolescent SRB", Sipsma, Ickovics, Lin, and Kershaw (2015) argue that future expectations may have the distinct ability to explain risk behaviours over time. Sipsma et al. (2015) integrate Bronfenbrenner's (1977) ecological systems theory with Bandura's (1991; Corey, 2014) social cognitive theory. This integrated theory means that we have the individual nested in the centre of expanding concentric circles (comprising of the micro-, meso-, exo-, macro- and chronosystems), which are naturally porous and reciprocally influence each other. They used Bronfenbrenner's (1977) and Bandura's (1991; Corey, 2014) suggestion that behaviour is influenced by the interaction between the environment and personal factors, in creating their comprehensive framework to explore the impact of future expectations on SRB. Bandura's (1991) social cognitive theory postulates that, "expectations of behaviour" are personal factors that assist in regulating dispositional traits and help manage feelings, impulses and behaviours. Sipsma et al. (2015) argue that although educational interventions have effectively reduced SRB, these interventions are short lived. They posit that this presents us with the rationale for further research on approaches to reduce SRB among adolescents. Sipsma et al. (2015) suggest that their findings demonstrate that future expectations of SRB may be more prevalent for young women than young men. They add that in order to improve future individual outcomes, interventional strategies should target multiple expectations and use multiple levels of influence, i.e., individual, family, peers and environment. They further suggest that these interventions should start before high school and should continue right

through adolescence. Sipsma et al. (2015) conclude that promoting healthy future expectations denotes the capacity for reducing SRBs among adolescents.

2.4. SRB in context: Factors which contribute to and/or mitigate SRB

Similar to Sipsma et al. (2015), Eaton, Flisher, and Aaron's (2003) framework concurs with Bronfenbrenner's (1977) ecological systems theory. They suggest that if we want to understand SRB in SA, we need to consider the interactive impact of proximal, distal and personal risk factors, as illustrated in Figure 1. Figure 1: Framework for organising the relationship between sexual behaviour, personal factors, proximal and distal context. Adapted from "Unsafe sexual behaviour in South African youth," by Eaton, Flisher & Aarø (2003)



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Eaton et al.'s (2003) Theoretical Framework

Firstly, one's personal context refers to one's cognition and understanding of SRB and HIV/AIDS, including thoughts related to self-esteem and self-efficacy. Secondly, the proximal context consists of interpersonal relationships and one's physical and organisational environment, and thirdly the distal context that includes cultural and structural factors. It is important to consider that these sexual risk factors can both act as a deterrent and protection against and as a contributor to SRB.

Eaton et al. (2003) considered three types of SRB: being sexually active (not abstaining or postponing sexual activity); multiple sexual partners (either serial or concurrent); and unprotected sex (including non-, incorrect or irregular condom use). They argue, similarly to Corey (2014) and Bandura (1991), that the interaction between personal factors and proximal and distal contexts does not stand alone but overlaps organically and reciprocally influence each other.

In the same vein, Govender, Cowden, Asante, George, and Reardon (2019) advocate for a multi-system approach to adolescents' SRB. They warn against a narrow focus on individual risk and protective factors, and argue that we should rather look at risk and protective factors across a multi-system level. Failing to do so, we could impede efforts to address maladapted health-risk behaviours, including HIV prevention programmes. They argue that adolescents growing up in countries where sexually transmitted diseases, including HIV, are the highest, are particularly vulnerable to the health risks of SRB. Govender et al. (2019) add that identifying and understanding individual determinant factors for SRB will help us to better structure multi-level interventions.

2.4.1. Distal context

2.4.1.1. Culture and structures of patriarchy

Culture includes traditions, the norms of the larger society, social discourses within the society, shared beliefs and values, and variations of these aspects across subgroups and segments of the population. In SA we have a common culture where women hold a lower status and experience oppression within sexual relationships, compounded by a patriarchal system common under traditional African cultures, but not exclusive to them (Eaton et al., 2003). Shisana, Rice, Zungu, and Zuma (2010) concur that a patriarchal culture influences

the power dynamic in relationships, compromising women's power to negotiate safer sexual practices and exposing woman to sexual abuse. Quinn and Overbaugh (2005) note that in SA, HIV is linked to regional norms that affect power in relationships, underpinning the need for solutions focused on gender related issues that drive the epidemic.

2.4.1.2. Lack of power in relationships

The work of Pettifor et al. (2004) confirm that women's sexual health is negatively impacted by their lack of power in relationships. Quinn and Overbaugh (2005) found that women are four times more likely to be infected by HIV and they identified specific sexual behaviours that might in part explain why women are more vulnerable. Their study found that women are more likely to report inconsistent condom use, they are more likely to have relationships with older partners, they tend to stay in relationship with their main partner for longer, and 15–19 year-olds have sex more often than their male counterparts.

Pregnancy among young women in SA is very high and in their study the majority of these pregnancies were unwanted, and when combined with the high HIV prevalence in SA, it highlights the need for contraceptive use, and even more importantly it highlights the need for dual contraceptive use (Pettifor et al., 2004).

Pettifor et al. (2004) note that Black South Africans are at significantly higher risk for HIV infection compared to other races. They postulate that this risk is because of residual confounding factors, adding that the risk remains even after controlling for socio-economic and sexual behavioural variables. Pettifor et al. (2004) postulate that, given the legacy of Apartheid in SA, the high HIV rates among Black South Africans may be a profusion of socio-economic, social, behavioural, and potential biological factors which heighten the risk of HIV infection. According to Pettifor et al. (2004), the response rate for other South African race groups is lower, especially for White South African women.

Pettifor et al. (2004) confirm that a relationship exists between two measures of sexual power: "relationship control and forced sex", and "condom use consistency". They further say that high-risk sexual behaviour such as multiple lifetime partners or older partners, and STIs, are significantly associated with HIV infection, but they caution us not to look at these risk factors in isolation as they tend to work together to increase the risk. Similarly,

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Govender, Naidoo, and Taylor (2020) found that adolescent women from socio-cultural and economically disadvantaged communities are more likely to partake in transactional sex practice and relationships with older men as a survival strategy. Their data found that the sexual and reproductive health of these women was directly affected by their attitudes and belief about cultural practices and behaviours, contraceptive use and relationship with family, friends and partners. Their participants also noted negative partner reactions to condom use, saying that because of male power dominance it is not in the hands of women to negotiate condom use.

2.4.1.3. Inequitable gender norms

In a similar vein, Pulerwitz and Barker (2008) argue that attitudes and behaviours originating from inequitable gender norms play an important role in sexual relationships, sexual and reproductive health, and risks related to HIV and STIs. They found that attitudes towards gender norms should be explicitly addressed in the design and implementation of programmes to prevent violence, HIV and STIs, as well as in programmes to promote sexual and reproductive health. Curtin, Ward, Merriwether, and Caruthers (2010) point out that traditional gender norms are reinforced by women who adhere to traditional femininity ideologies in which young women remain sexually uninformed and at risk of negative outcomes. Jewkes and Morrell (2012) found in their study that women who strive for gender equitable relationships enhance their long-term protection against HIV infection.

2.4.1.4. Notions of masculinities and femininities

In SA, HIV is linked to regional norms that affect power in relationships and this underpins the need to focus on gender related issues that drive the epidemic (Quinn & Overbaugh, 2005). Jewkes and Morrell (2010) refer to this issue as a predominantly heterosexual epidemic. They argue that the key to preventing SRB and curbing the spread of HIV/AIDS lies in understanding sexual practice as flowing from gender identities, suggesting that to incur change we need to understand these gender identities. Adding to this they found that women who internalise femininities, who forgive and accommodated male gender inequity and anti-social behaviour, have encountered gender power inequity and violence in their relationships and are at greater risk of contracting HIV/AIDS. Men that practise violence and SRB have internalised dominant ideas of masculinities and are more likely to be infected with

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HIV/AIDS. Adding to this, Rwafa-Ponela, McBride, Rebombo, Christofides, and Hatcher (2021), in their cross-sectional study of peri-urban township men, found that men who perpetrated physical and/or sexual violence towards women refused HIV testing. Men felt that testing for HIV was not a masculine activity and that health facilities are perceived as women's spaces. They also found that educated men with socio-economic security were more likely to test for HIV, underscoring the importance of education in the fight against SRB and better future outcomes.

Boonzaier (2008), in her qualitative study on gender, subjectivity and violence, found her participants' discourse on violence and relationships to indicate that gender is constructed relationally at specific moments of intra-psychic, interpersonal, social and historical events. Notably, she found that both women and men, in their narrative on their relationships, drew on hegemonic gender ideas. Analysis on the narratives of many of the women showed that "acceptable" forms of their gender identities involved the assimilation of the "femininity" narrative, by being passive, accepting blame and denying or minimising partner violence (Boonzaier, 2008).

2.4.1.5. Feminisation of the HIV/AIDS epidemic:

Shisana et al. (2010) emphasise the ripple effect of the feminisation of the HIV and AIDS epidemic in SA. Avert's (2018) research data confirm that the groups most affected by HIV in SA are women, young women and adolescent girls, with young women and adolescent girls (540 000) four times more likely to contract HIV than young men (180 000). They report that in 2018, 69 000 young women became HIV-positive, in contrast to 28 000 young men, making the rate of acquiring HIV three times higher for young women. Stats SA's 2019 mid-year HIV estimates show that over one fifth of South African women in their reproductive ages, 15–49 years, are HIV positive (Stats SA, 2019), but noteworthy is that our youth as a group, male and female 15–24 years, showed a sharp decline in HIV infection rate.

GBCHealth (2007), in their overview of the feminisation of HIV/AIDS in Sub-Saharan Africa, propose that gender inequity is the driving force behind this epidemic. They state that because of the prevalence of poverty in Sub-Saharan Africa, women and girls hold a low status in relationships because of their reliance on males for economic support, underpinning

Eaton et al.'s (2003) argument on the "commodification of poverty". GBCHealth (2007) reiterate that poverty renders women open to violence, unable to negotiate save sex with condom use, opening the door to rape and increasing their risk of contracting HIV. They add that young girls who have been trafficked or forced into marriage are at an increased risk of violence.

GBCHealth (2007) sees education as an important tool in the struggle against the feminisation of HIV. Similarly, Shisana et al. (2010) argue that there are differences in levels of poverty between women and men and that the higher level of poverty among women tends to heighten the risk for HIV among women. They add that there is a clear relationship between age, gender and poverty in SA. Their findings confirm that the HIV/AIDS epidemic in SA is perpetuated by gender inequalities, with young woman, especially those that are the heads of households, being more likely to be infected.

Shisana et al. (2010) reiterate the relationship between HIV and age and gender in SA, further linking poverty as a social determinant for HIV infection across all age groups, arguing that their research shows that poverty and HIV/AIDS are concurrent obstacles for many South Africans and need to be addressed as such. Importantly, their study, like others (GBCHealth, 2007; Phillips & Malcolm, 2006; Pulerwitz & Barker, 2008; Singh, et al., 2013), shows a positive relationship between higher levels of education and lower HIV risk. This reinforces the importance of promoting education as part of the intervention process, especially among young Black women, as they are a high risk group in SA.

Eaton et al. (2003) concur that poverty in SA is a pervading structural factor contributing to SRB and the spread of HIV. They highlight how poverty and unequal sexual power in relationships between adolescent girls and boys further heightens the risk for SRB. Poverty leads to the commodification of sex, where women, in exchange for financial support because of dire economic circumstances, turn to men, exchanging sex for financial support. Adding to this, they point out that for young people living in dire socio-economic circumstances, poverty carries the added threat of physical abuse and sexual coercion in relationships. Stats SA (2017) found the most vulnerable in the ongoing struggle against poverty are children aged 17 years and younger, Black Africans, females, people from rural areas and those with

little or no education. They add that at the end of 2015, 30.4 million South Africans were living in poverty, and warned that poverty in SA is on the rise.

2.4.2. Proximal context

2.4.2.1. Peer influence

Govender et al. (2019) contribute to the literature on peer influence by highlighting the underestimated and strong effect negative peer influence has on SRB compared to positive peer influence. Their findings confirm the positive effect community, as a distal system, has on proximal systems such as the individual, saying that interconnected communities have a greater influence on norms and behavioural attitudes of the families and individuals of the community.

2.4.2.2. Predictors of sexual risk behaviour among adolescents

Investigating possible predictors of SRB among adolescents in welfare institutions in Malaysia, Farid, Che'Rus, Dahlui, Al-Sadat, and Aziz (2014) conducted a cross sectional study at 22 sites, namely, a shelter for pregnant women, juvenile detention centres, probation hostels and children's homes. Their analysis showed that female adolescents were more likely to partake in SRB than males. Particularly females with a high level of family connectedness were more likely to engage in SRB, compared to females with low family connectedness. Farid et al. (2014) found this result to be contradictory to findings in previous studies on female adolescents which showed that lower family connectedness was an indicator of SRB. They postulate that although female adolescents in this study indicate a high rate of family connectedness, parental monitoring might be lacking.

Farid et al. (2014) contend that adolescents who were institutionalised often display controlled behaviour in front of caregivers to maintain a solid relationship with their parents. They noted that female adolescent SRB was linked to both individual and interpersonal factors, namely self-esteem and family connectedness. They found that for male adolescents, substance use was a predictor of SRB; these included the use of tobacco, alcohol and narcotics (illicit drugs), with results showing that male adolescents using tobacco were more prone to SRB. They noted that male adolescent SRB was primarily related to individual factors, such as substance use.

Farid et al. (2014) found only one variable that both female and male adolescents had in common that predicted SRB, namely alcohol use. If our aim is to reduce SRB among adolescents, Farid et al.'s findings (2014) indicate the need for gender-specific interventions.

2.4.2.3. Religious affiliation as a protective factor in SRB

Interestingly, Phillips and Malcolm (2006) found that religious affiliation was a protective factor in SRB for female adolescents, saying their religious upbringing and convictions were a deterrent for SRB. Their study also emphasises the need for early intervention programmes, starting in primary school. They argue that the school community needs to co-operate by providing learners with positive integrated experiences in an effort to promote and protect their health, both through formal and informal curricula for health.

Francis et al. (2019) found religion to serve as a protective factor against alcohol and drug use (AOD), and SRB among young people in SA. They highlight the need to identify individual and structural factors that prevent adolescents from starting AOD use and partaking in SRB. They point out that religiosity is still highly prevalent despite ongoing social changes in SA, and in the post-Apartheid era people continue to find refuge and meaning in religiosity and spirituality, especially people from disenfranchised communities where unemployment, poverty and other social stressors are still a daily struggle. The church provides a platform and safe place to meet with other community members to engage in discourse about their daily struggles and fears. Francis et al. (2019) add to this by saying that religiosity has been widely reported to have the ability to influence, mitigate or enhance resilience among adolescents by enhancing their ability to navigate harmful behaviour in favour of good health and wellbeing. In their study among grade 8-10 learners, they found that regular attendance of formal and non-formal religious activities provided the participants with the necessary social support, and participants who reported high religiosity showed significantly lower AOD use and SRB. This confirms that religiosity has an inverse effect on SRB and poor health outcomes. Therefore religious practise needs to be explored further as a platform for the prevention of SRB. Farid et al.'s (2014) study results underpins the salience of alcohol use as a behavioural antecedent of SRB and the importance of AOD use to be addressed as separate risk factors in research.

2.4.3. Personal factors

On sexual debut, Eaton et al. (2003) report that at least 50% of young people in SA are sexually active by the age of 16, and an estimated 80% by the age of 20. They found boys reported earlier sexual debut than girls and, compared to other ethnic groups, Black African youth are more likely to start sexual activity in their teens. They found that notions of masculinity, an attitude of bravado and denial of personal risk factors could be fuelled by social norms which encourage young men to defy risk behaviour and promote the risk for heightened sexual activity. Similarly, notions of masculinity and femininity, lack of support and social norms, make girls vulnerable to coercion, "forcing" them to acquiesce to SRB.

We live in a country in which female adolescents at a rate of one in every four are infected with HIV before the age of 22 and young Black women are the group most severely affected, where the increased feminisation of the HIV pandemic highlights the biological and social predisposition of women (Quinn & Overbaugh, 2005). In their study, Govender et al. (2019) found that biological factors such as age, race and sex were the strongest determinants for SRB.

Exploring SRB among adolescent school girls in the Western Cape, Phillips and Malcolm (2006) confirmed that their study showed that many high school girls (27.6%) engage in SRB that could lead to short- and long-term consequences related to health, wellness and educational achievements. Similarly, Farid et al. (2014) concluded that the heightened health effects/risks of SRB for female learners and the specific risk associated with being female, underpins the need for gender-specific prevention programmes. They also found that in spite of a clear knowledge of the risks and consequences of their actions, learners still partake in SRB.

2.5. Gender and SRB

As stated in Chapter One, one of the aims of this study is to explore whether gender norms and/or femininity ideology predicts SRB, or whether a combination of gender norms and femininity ideology predict SRB, or whether neither predicts SRB. I will now focus on the role of norms.

2.5.1. Norms and attitudes

Cislaghi and Heise (2020), in their definition of gender norms, posit that gender norms are social norms defining acceptable and appropriate actions for women and men in a given group or society (e.g., adhering to cultural rules and traditions). These gender norms are imbedded in formal and informal institutions, residing in the mind, and produced and reproduced through social interactions. Gender norms shape women and men's often unequal access to resources and freedoms, resulting in the loss of voice, power and sense of the self. They postulate that if norms are understood as beliefs, clearly if we use strategies to change these norms, we will change people's beliefs about what others do and approve of. Attitudes are one's personal opinions about something, whereas norms are a social construct. It is also important to note that individuals might conform to a social norm in spite of their personal attitude towards it because of the fear of rejection by the group. Cislaghi and Heise (2020) acknowledge that when norms and attitudes align it can lead to risk behaviour. People might, for example, engage in risk behaviour both because they want to and because they might profit from their behaviour, either materially or via peer approval.

Worldwide and in SA gender-related norms, beliefs and experiences are seen as key drivers of HIV risk behaviour (Gottert et al., 2016). When we consider equitable and inequitable gender norms as variables that impact on SRB, we need to understand gender attitudes. Singh, Verma, and Barker (2013) define attitudes towards gender roles as either traditional or egalitarian. Traditional roles for women tend to be non-egalitarian, for example, in such contexts women are primarily responsible for the household and not pursuing a professional career. In such relationships, a woman's voice is often not heard and the views and authority of her partner or husband dominates. For men, on the other hand, as the head of their household and the breadwinner, traditional roles hold more power and accountability. In contrast, egalitarian gender roles encompass an equal sharing of accountabilities in family, professional, social and educational life (Singh et al., 2013).

2.5.2. Norms and gender relationships

What does a gender equitable relationship look like? In their studies, Pulerwitz and Barker (2008) defined the gender equitable man as a man who seeks a relationship with a woman based on equality, respect, and intimacy rather than sexual conquest. He seeks to be involved in household chores and child care, meaning that he takes both financial and care giving responsibility for his children and household. He acknowledges some responsibility for sexually transmitted infection prevention and reproductive health in his relationships. The equitable man is opposed to violence against women under all circumstances, even those that are commonly used to justify violence (e.g., sexual infidelity, AOD use). In the same breath, he is opposed to homophobia and violence against homosexuals.

The Gender Equitable Men Scale (GEMS) (Pulerwitz & Barker, 2008) was developed from a social constructionist perspective of gender, arguing that appropriate behaviours for men and women are prescribed by a given culture, and these gender norms are passed on within a culture, and are interpreted and internalised through family, peer groups and social institutions. Gender norms, according to this social constructionist framework, are also created in power roles and reinforced through the relationships and interactions between men and women. Importantly, gender norms can evolve and change over time and attitudes can shift as individuals and groups reconstruct them (Baron & Branscombe, 2014; Pulerwitz & Barker, 2008).

Pulerwitz and Barker's (2008) findings explicitly indicate the important role attitude towards gender norms play in SRB. They argue that gender norms need to be directly addressed in the development and implementation of intervention programmes to prevent HIV/STI and violence, and in turn promote sexual and reproductive health. Singh et al. (2013) add to this by saying that changing fixed gender norms in order to promote gender inequality is increasingly recognised as a key strategy for intervention. Similarly, De Meyer et al. (2014) emphasise that key issues of sexual and reproductive development and health during adolescence go hand-in-hand with gender equality. De Meyer et al. (2014) contend that the link between gender and sexuality is a multifaceted and multi-determined relationship, influenced by societal, interpersonal and personal elements.

2.5.3. Norms and changing inequitability through education

Pulerwitz and Barker (2008) found a positive relationship between individuals with a higher education and the development of more equitable gender norms. They state that the influence of peers and teachers in a formal educational environment and, indeed, the school setting itself, leads to the development of more equitable norms. Additionally, it seems that the development of critical thinking skills in school may lead these young men to question inequitable gender norms and/or the traditional cultural roles men hold. Parallel to Pulerwitz and Barker's (2008) findings that young men with less education had lower levels of support for gender equitable norms, Sayem and Nury (2018) found that women's current age is inversely related to their gender equitable attitudes. They postulate that the inverse relationship with age may be attributed to a higher acceptance of male dominance amid older women, stemming from less opportunity for education, less opportunity to be informed about their own rights and less opportunity activities, while they tend to their household, children and husband, making these women more dependent on their male partners over their live span.

Singh et al. (2013) concur with these findings. In their study in five developing countries (Brazil, Chile, Croatia, Mexico and Rwanda) they found that men with a higher educational achievement show more equitable attitudes. Reinforcing the value of education in enhancing gender equitable norms, Sayem and Nury's (2008) study showed that women with a higher level of education and women who work and are able to interact with others, have more equitable attitudes towards gender. Singh et al. (2013) add that these equitable attitudes extended to married men. Across all the countries involved in their study, unmarried men (single or with a partner) showed the least equitable gender attitudes. These findings suggest a softening or modifying of gender attitudes in married men when in a cohabiting relationship. Their findings highlight that the more equitable the attitude, the less physical violence is reported. Men who show the least equitable attitudes towards woman in turn reported the most physical and sexual violence, followed by young men with a moderate level of support and then by young men with high levels of support. In their study in Ghana and Tanzania, Shattuck et al.'s (2013) results showed that a higher score in inequitable

gender norms correlates positively with an increased number of sexual partners, as well as decreases in condom use. Importantly, like Pulerwitz and Barker (2008) and Singh et al. (2013), they found that lower levels of education correlated with higher scores in inequitable gender norms.

In their 2018 study among young church-going women and men in Kinshasa (DRC), Lusey, San Sebastian, Christianson, and Edin (2018) feature similar issues of low education allowing inequitable gender norms to impede growth towards equitable gender norms. They found that both women and men hold high inequitable gender norms, stinting growth toward equitability. In order to remedy these views they implored the church to challenge archaic cultural and harmful norms of masculinity and femininity. Once again education is singled out as one of the ways towards forming more equitable gender norms, underscoring the fact that high scores correlated positively with a higher education. Lusey et al. (2018) concluded by saying churches need to focus on positive messages and role models for young women and men by promoting the importance of education, health, non-violence and gender equitable lifestyles, changing attitudes to secure a better future outcome in an effort to decrease SRB and the spread of HIV in Sub-Saharan Africa.

2.5.4. Gender norms and social background

Sayem and Nury (2018) highlight the role a woman's social background plays in gender norms and health outcomes, saying that at a personal level, factors in a woman's social background, comprising of her labour force participation, age, education, religion and individual bias, affect whether she has modern or traditional attitudes towards gender norms. Their study focused on married Muslim women (n=653) in Bangladesh, and they found that these women have a clear understanding of their own interest in sexual intercourse. This is a positive indicator that in a traditional cultural setting where women are purely seen as "reproductive machines", reproductive rights issues have evolved from inequitable to more equitable. Contrary to the literature indicating that women can often not negotiate condom use because of gender-based power dynamics, and they are seen as promiscuous with "intent to use" when carrying their own condoms, Sayem and Nury's (2018) finding partly supports the argument that woman are able to suggest condom use.

2.5.5. Traditional gender roles, CEP and the "Now Women"

Cislaghi (2018) reiterates the importance of a bottom-up approach to changing attitudes about traditional gender roles in Sub-Saharan Africa. We need to acknowledge that change is possible in rural communities with traditional gender roles, but it will take time. Cislaghi worked with the Tostan's Community Empowerment Program (CEP), a non-formal human rights education system, over a six month period in a small rural community. Using the traditional community meetings, they introduced Tostan's transformative human rights education (THRED) programme. Women were invited to attend and actively participate in discourse about the traditional role of a man and a woman within the community and home. The women found their voice and it was so profound that men and women started to speak of the "now-women". The 'now-women' speak their truth and inspire change in traditional gender norms, and men and women alike respect this change. The men's attitude changed. One of the male participants reflected and said that "now-women have gained confidence" (Cislaghi, 2018, p. 259), realising that they have the right to speak in community meetings, saying that it is in the community's interest that both women and men speak, and the participant added that he thinks women say "interesting things".

2.5.6. Gender equality and legislation reforms in the New South Africa

When the ANC swept into power in SA in 1994, they ushered in new legislative reforms designed to eradicate racism and amend inequalities, with a specific commitment to rectifying gender equality. Recognised as one of the most liberal constitutions in the world and adopted in 1996, this constitution expressed equality for all South Africans (Morrell, Jewkes, & Lindegger, 2012). The constitution fronted women's rights and recognised the right to sexual orientation. In 1993, marital rape was recognised and deemed illegal and legal protection against domestic violence was adopted. A liberal abortion act was passed to strengthen sexual and reproductive health and rights, contraception was free and available from clinics, maternity services fees were dropped, sexual harassment was made illegal, and rights to maternity leave mandated.

Despite these efforts, the new outlook in SA was still very far from a gender equal 'Shangrila' as government's focus on redressing racial inequalities has left gender inequalities by the wayside. Morrell et al. (2012) found SA to be a highly patriarchal society with grossly racialised, gender inequality where the use of violence is the norm. Adding to this, they found that deep rooted race, class and urban or rural realities gave way to identifying hegemonic masculinities embedded in very definite social settings. This fixed understanding of hegemonic masculinity by gender equality activists created/recreated the misnomer that links hegemony with bad men, which in turn has stigmatised certain types of African male behaviour and attitudes as hegemonic.

Strebel et al. (2006) noted that all human societies make social distinctions based on gender. Power and higher status are given to men, thereby linking culturally sanctioned gender roles with both gender-based violence and HIV risk. In their qualitative study on two communities in the Western Cape, they found that traditional gender roles in these communities were still pervasive, with women expected to be submissive to men and to stay home and raise the family, while the men went to work. There was, however, a gradual shift in gender roles, with more women now working and often the head of the household and the decision maker, thereby giving women more power. Important to note is that this finding was coupled with a higher rate of unemployment for men. Interestingly, participants' perception of SRB and contracting HIV was seen as less of a problem in Coloured than African communities. Strebel et al. (2006) also noticed that gender roles were still endorsed by traditional values, culture and religion, e.g., in some contexts going to prison was seen as proof of masculinity among young men. Strebel et al. (2006) further confirmed that the cycle of AOD abuse and poverty escalated violent behaviour in these communities.

2.6. Femininity ideology and SRB

Cole (2019) defines an ideology as the "lens through which a person sees the world" (para.1). It is a set of ideas which shape our thoughts, which in turn gives us identity within a society and determines our actions and interactions with the world in which we live.

Tolman et al. (2016) argue that fully understanding femininity and masculinity ideologies, and how they work in tandem, could help us to get to the core of the perpetuation of gender inequity. Understanding the interaction of these ideologies will allow us to better explain feelings of unhappiness, unmet expectations, feeling bad about oneself, and even violence. They argue that gender is a socially constructed network of ideologies about femininity and masculinity which works in tandem, organising gender appropriate emotional expressions, behaviours, bodies, and sexuality that are grounded in the politics of gender.

2.6.1. Inauthenticity in Relationships and Objectified Relationship with Body

Tolman, Impett, Tracy, and Michael (2006) suggest an important and empowering first step is to enable girls to engage in discourse in which they critically analyse cultural constructions of femininities. Their study, using the Adolescent Femininity Ideology Scale's (AFIS) two subscales, Inauthenticity in Relationships (IRS) and Objectified Relationship with Body (ORB) as predictors of self-esteem and depressive mood, confirms that young women who internalise traditional femininity ideology from early adolescents, in particular relating to body objectification, have poorer mental health outcomes, emphasising that they did not anticipate the true scope of this impact. The internalisation of behaviours and beliefs of what it means to be appropriately feminine are directly linked to the mental wellbeing of girls as they move into adolescence. With the onset of puberty there is a high emphasis on how young girls look (body objectification), rather than the ability to voice their wants and needs (inauthentic in relationships). They postulate that the salience of IRS and ORB as dimensions of femininity ideology may shift over time, with IRS becoming more significant than ORB in late adolescence. Their results further show that IRS and ORB have a stronger association with women's mental health than any of the more prevalent demographic factors that have been widely studied. By using the AFIS to measure these two aspects of femininity ideology, Tolman et al. (2006) assert that they have shown the strength and relative significant influence ISR and ORB have on a girl/woman growing up in a patriarchal constructed society.

2.6.2. The role of femininity ideology in late adolescent girls

Impett, Schooler, and Tolman's (2006) study which investigates the role of femininity ideology in late adolescent girls' ability to make healthy sexual choices, confirms that femininity ideology is a complex and multifaceted construct. They found that the two subscales, IRS and ORB, were indicators of poorer sexual self-efficacy, inferring that adolescents with higher self-efficacy (the ability to let themselves be heard) may exhibit less SRB and adolescents with low self-efficacy (the inability to voice themselves) may exhibit high SRB. Finding that women who internalise the ideology that they should be seen and "not 15 heard" have a diminished capacity to act on their own desires and beliefs in a sexual relationship. Impett et al. (2006) also say that the negative relationship between femininity ideology and sexual experience proposes that women who internalise norms of traditional femininity are unlikely to voice their sexual desires and are more likely to engage in unwanted sexual behaviour. Impett et al. (2006) point out that IRS and ORB also predict different kinds of protective behaviour during sexual encounters. Higher IRS is associated with less frequent use of contraception and higher ORB is associated with less frequent condom use. Both these prevention methods, contraception and condoms, provide protection against pregnancy, but condom use has the added benefit of stopping the spread of STI's.

Three interesting questions Impett et al. (2006) touch on for future study are:

- "Do girls tend to internalize or become more resistant to femininity ideology as they mature?"
- "Are possible changes in femininity ideology associated with changes in sexual health over time?"
- "Are such trajectories influenced by a girl's race, class, or social status?" (p. 142)

2.6.3. Femininity ideology and sexual agency

Curtin et al. (2010), in their study on femininity ideology and sexual health, aim to narrow the divide between femininity ideology and multiple aspects of young women's sexuality by exploring aspects of sexual agency, sexual knowledge and sexual embodiment (feelings about their bodies during sexual encounters). Curtin et al. (2010) point out that the traditional notion of feminine sexuality and the objectification of women make it difficult for women to negotiate safe and enjoyable sexual encounters. They further state that gender norms, sexual passivity, ignorance and objectification of women have traditionally been linked to femininity, and they raise concerns about how the acceptance of these norms impede on women's sexual agency and subsequent sexual health.

Their study replicates previous studies and concurs that, indeed, there is a negative relationship between femininity ideology and sexual agency and women's experience during sex. Women who adhere to more traditional roles within their community show a decrease in sexual health knowledge, combined with less power and assertiveness to navigate sexual

encounters. Additionally, their study provides evidence of the negative relationship between femininity ideology and sexual knowledge, saying that women who hold more traditional roles have less knowledge about sexually transmitted disease, reproductive health and pregnancy prevention, making them a high risk group for SRB. Curtin et al. (2010) also confirm the notion that women who hold traditional femininity ideas are more self-conscious and less comfortable with their bodies and have less enjoyable sexual encounters, and this negatively affects sexual assertiveness.

In a similar vein as Curtin et al. (2010), Wigderson and Katz's (2015) research contributes to the multifaceted dimensions of femininity ideology by investigating the way in which traditional femininity ideology relates to sexual assault. They investigate two aspects of femininity ideology, namely deference (consenting to male partners' wants and goals) and purity (abstaining makes you a more feminine woman), and how these two variables impact the risk of sexual assault by deterring women from showing sexual refusal assertiveness (SRA). They postulate that women's endorsement of feminine deference puts them at greater risk for unwanted sexual advances and interaction, given their greater comfort with submission than assertiveness compared to less deferent woman. They add that the assumption is that low SRA behaviour increases the risk of sexual assault. In turn, women that adhere to feminine purity hold values of religion, modesty, conservatism and abstinence in high regard and will traditionally avoid situations that put them at risk for sexual assault. These women may also reject and avoid alcohol use to maintain their pure status. In the same breath, it is suggested that these women are disempowered by the endorsement of traditional femininity ideology beliefs, thus putting them at greater risk for sexual assaults during sexual interactions. In their study, Wigderson and Katz (2015) found no direct relationship between women's endorsement of traditional femininity and sexual assault. They extended their study by following a separate wave of investigation into women's investment in specific types of traditional femininity ideology. They found that although feminine defence and feminine purity are two conflicting parts of traditional femininity ideology, none predicted sexual assault. Further, they found that both defence and purity were indirectly associated with sexual assault through certain behaviours. Specific beliefs in defence were associated with a

decrease in SRB and abstinence, while purity-specific believes lead to less frequent use of alcohol, decreasing risk of sexual assault.

2.6.4. Traditional roles of femininity

It is the view of Jewkes and Morrell (2012) that women who prescribe to traditional roles of femininity are complicit with the unequal structure of gender roles and implicitly accept being subordinate to their male partners. They add to this observation that the element of "choice" for women is constrained through social rewards and penalties when prescribing to particular femininities. These punishments are upheld by local moral discourses, including the threat and use of violence. Further, they found that due to the poverty and severe socio-economic restraints in Eastern Cape communities, including the prevailing narrative of patriarchy and age hierarchy, women's agency was highly constrained by the structural elements of their lives. In these communities, older men hold power over younger men and women, and older women over younger women. Young women are literally worth less, as explained by one of the women regarding funeral contributions made per person in the community, where a young man (R5) or a young woman (R2) dies without funeral insurance.

Jewkes and Morrell (2012) found that part of the tolerance of violence in settling disputes, for example, was due to its common use in the communities' everyday life. They further state that they found no evidence that these women challenged the status quo of patriarchy, as male control is seen as legitimate and the general order of things. These traditional cultural views and practices are an integral part of day-to-day life, and understanding the contours of gender power in these relationships will help us to understand the origins of high HIV risk behaviour and SRB in the community. Similar to Tolman et al. (2006) and Impett et al. (2006), Jewkes and Morrell (2012) conclude by suggesting that a different approach to challenging traditional femininity ideologies is by creating a space for young women to discuss their sexual desires and hopes for emotional and relational fulfilment.

2.7. Theoretical framework

Social psychologists refer to frameworks as schemas; mental frameworks which help us organise social information and guide our processing of information and actions relevant to specific situations (Baron & Branscombe, 2014). These frameworks tend to be similar for

people from the same culture and people in a specific society tend to have similar basic frameworks. Once these frameworks are formed, they steer what we notice in our social world, influencing what information we store and how we use and determine this information in the decisions we make (Baron & Branscombe, 2014).

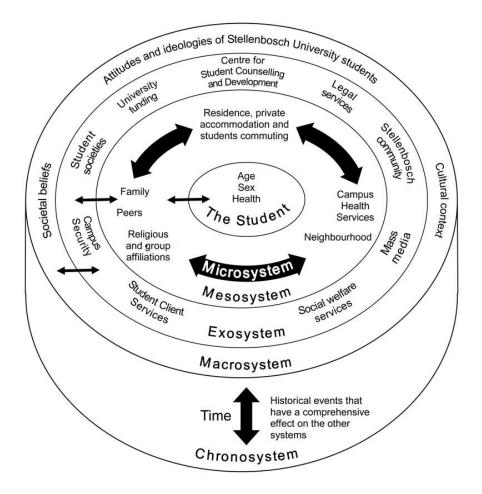
I will ground my study in Bronfenbrenner's (1977) Ecological Systems Theory. According to Bronfenbrenner, the individual is nested in the centre of expanding concentric systems that influence their life. Bronfenbrenner (1977) sees human development as "the progressive, mutual accommodation, throughout the life span, between a growing human and the changing immediate environments in which it lives" (p. 514). He contends that this process is influenced by relationships within and between these immediate environments, which are embedded within our larger formal and informal social contexts.

Bronfenbrenner (1977) names these nested systems in which the individual is embedded, the micro-, meso-, exo-, macro- and chronosystem (Bronfenbrenner, 1986; Newman, 2018). The microsystem is the relationship between the developing person and their immediate environment which actively involves the person (e.g., home, university, work). The mesosystem involves the interrelationship between a person's microsystems, for example, a student might be involved with their family, peer groups, university activities, lecturers, church, volunteers, etc. In short, a mesosystem is a system of microsystems. The exosystem is an extension of the mesosystem, including other specific social structures, both formal and informal; these systems do not include the developing person, but rather influence the person or their immediate setting. These include the world of work, the neighbourhood, mass media, agencies of government (local, state and national), informal social networks, etc. The macrosystem is the overarching institutional pattern, like blueprints, both informal and implicit, of a culture or subculture, for example, the economic, social, educational, legal and political systems of which micro-, meso-, and exosystems are the concrete presentation. Most macrosystems are informal and unspoken, carried unknowingly in a person's mind as ideology, manifesting through the routine of everyday life (Bronfenbrenner, 1977). The chronosystem adds the dimension of time, demonstrating the influence of both change and constancy in a person's environment. This can include a change in family or social structure,

societal change because of war, economic cycles, etc. (Bronfenbrenner, 1986; Newman & Newman, 2018; Tudge, Mokrova, Hatflield, & Karnik, 2009).

Figure 2

Bronfenbrenner's Ecological Model for Stellenbosch University



Bronfenbrenner's Ecological Model for SU students illustrates a defining feature of ecological systems theory, namely that the boundaries between the different systems are porous, allowing for one system to impact the other and vice versa; connecting context within

systems, for example, connecting the SU student to SU peers within the microsystem; and linking context across systems, for example, notions of patriarchy in the macrosystem impacting the microsystem, the SU student and their peers (Darling, 2007). In considering the chronosystem (over time), we can take note of events such as the #Metoo movement and #FeesMustFall and the implications thereof for the whole system. This system is comprised of SU students from different cultural backgrounds, different countries and languages, different socio-economic and political climates, it is a system that is changing, growing and assimilating organically over time.

2.8. Conclusions

Thus, from the findings of the studies discussed above, it is evident that there are clear indicators/triggers and possible consequences for partaking in SRB. I We therefore need to look at SRB on a multi-systems level and create a framework that allows me to investigate personal factors, peer influence, lack of power, gender, age related issues, regional gender norms, femininities, masculinities, socio-cultural influences, and so on. At the same time it is important to identify individual factors that might influence and/or reciprocally influence SRB, in order to compile effective intervention for our youth.

CHAPTER THREE

Methods

3.1. Introduction

My study formed part of a larger study, exploring SRB and possible predictors of SRB. The larger study consisted of a group of honours and masters students who focused on different factors that may influence late adolescent SRB. My study focused on heterosexual adolescent males and females. Participants had to complete a survey, in which filter questions directed participants to my measurement instruments. My research question was to determine whether gender equitable attitudes and/or femininity ideology best predict SRB.

In this chapter I discuss the research design of my study, followed by a discussion of the sample. I proceeded to test the data for skewness, kurtosis and homoscedasticity. These results informed me that I could utilise multiple regression analysis on the data to answer my research question. I report on the procedures I used to first establish reliability of my measurement instruments by running a pilot study, and then I report on my main study. Additionally, I discuss my measurement instruments and their reliabilities in prior studies, and where available I noted their reliabilities in a South African context. Lastly, I report on the ethical considerations and mitigation of risk for this study.

3.2. Research design

I used a quantitative research design using an online survey with a convenience sample in a cross-sectional study of SU students. The advantage of a quantitative design is that it is numerical, making it easier to interpret the outcome data. Additionally, statistical data analysis allows you to work with a large amount of data at one time. An online survey further allows one instant access to groups or communities that might be difficult to reach otherwise, also giving one a large participant pool (Muijs, 2004).

3.3. Sample

I used convenience sampling in a cross sectional study from the SU student population. It was practical to use SU participants only as I am an SU student and thus based at the university,

also late adolescent university students are known for their risk taking behaviour making them well suited to explore factors that might contribute to SRB (Stawbridge et al., 2018). Convenience sampling is a non-probability sampling method drawing data by selecting participants that are easily accessible, however, the risk is that the sample might be biased and not represent the whole population (Etikan, Musa, & Alkassim, 2015). The sample consisted of 379 male and 698 female participants, aged 18 to 24 years, from different faculties at SU (see Table 3.1 below). Only registered students for 2018 who used their university e-mail addresses were included in this study and received the survey via their student e-mail address. According to the June 2018 census, a total of 31 765 students were registered at SU, in terms of home language, 47.8% indicated English, 37.8% Afrikaans, 10.3% indicated other official SA languages and 4.1% reported international languages (Stellenbosch University Statistical Profile, 2018). Students younger than 18 years and older than 24 were excluded from the study. The main study was launched on the 28 August 2018 and closed on the 6 October 2018 after I reached the total of 1600 responses. After cleaning the raw data, incomplete surveys and surveys from students not fitting the criteria for the study were removed.

Variable	Category	F	Valid %	Cumulative %
Gender	Male	379	34.9	34.9
	Female	698	64.3	99.3
	Other	8	0.7	100.0
Age	18	83	7.6	7.6
	19	246	22.7	30.3
	20	295	27.2	57.5
	21	192	17.7	75.2
	22	127	11.7	86.9
	23	95	8.8	95.7
	24	47	4.3	100.0
Language	Afrikaans	420	38.7	38.7
	English	548	50.5	50.5
	Other	117	10.9	100.0
Year of				
Study	First	324	29.9	29.9
	Second	263	24.2	54.1
	Third	211	19.4	73.5
	Honours	133	12.3	85.8
	Master's	73	6.7	92.5
	Other	81	7.5	100.0

Frequency Distribution of Participants' Demographics (n=1085)

In Table 3.1 the frequency distribution of participants' demographics (n=1085) in my survey which focused on heterosexual students, indicated that nearly double the amount of females to males completed the survey, of which 20-year-olds showed the highest participation (295 participants). When we look at the SU statistics above, the language distribution statistics

were in line with the language distribution in my study, further the first year students show the highest participation rate, followed by second year students.

3.4. Procedure

3.4.1. Ethical considerations

I first presented my research proposal to the Department of Psychology Departmental Ethics Screening Committee (DESC). On approval of my research, I applied for ethical approval from the SU Research Ethics Committee (REC, see Appendix A, IRPSD-1021). Once I received approval from the REC, I contacted the Division of Institutional Research and Planning (see Appendix B) for permission and access to SU students' email addresses through the SUNSurvey's platform.

The pilot study was conducted using snowball sampling. Given the nature of snowball sampling, in the recruitment we assured the participants that although their participation would not be anonymous, their responses would be confidential, and that they could decide not to participate in the main study. The participants confirmed their agreement to participate in the main study and their surveys data were included.

Participants were informed of the purpose of the study in the online consent form, stating that participation was voluntary and could be withdrawn at any time (see Appendix D). Once participants completed the online consent form they were allowed to participate in the survey. Participants were assured that their information would be confidential and only accessed by the researchers and our two supervisors.

3.4.2. Confidentiality

In the online consent form, I informed the participants of the purpose of the study, that participation was voluntary and that they could withdraw from the study at any time with no repercussions (see Appendix D). The participants were assured that their information would be confidential and that the information would only be accessed by the researchers and our two supervisors. We also informed participants that the data would be stored on a computer that is password protected, that the data would be kept for five years, after which we will delete and destroy the data. Only the students who completed the informed consent form were included in the study and allowed to continue with the survey. Once a student selected

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"yes" on the electronic consent form they were automatically directed to the survey; those students who selected "no" on the electronic consent form could not access the survey.

As an incentive to participate in the study, participants were offered the opportunity to participate in a lucky draw opportunity and those who were interested in the lucky draw were directed to a separate link where they had to provide their contact information. Although we assured confidentiality, the entrants for the lucky draw and the pilot sample participants could not be assured anonymity. The lucky draw entrants had to provide their contact details for notification about the lucky draw and the participants in the pilot study were recruited via snowball sampling. However, we assured these participants confidentiality and that their responses would not be linked to their identities.

3.4.3. Mitigation of risk

This study did not pose any risk for physical harm to the participants. However, in the event of a participant experiencing emotional discomfort because of the self-reflective and sensitive nature of some of the questions about themselves and their sexual behaviour, we provided them the contact information of the Student Counselling Services and the Welgevallen clinic where they could receive free counselling sessions (see Appendix E).

3.4.4. Pilot study

When using an instrument for research purposes we want to know that the instrument is fit for purpose, in order to establish this I used Cronbach's Alpha on the pilot study, determining the reliability of the instrument (Foxcroft & Roodt, 2013). The pilot study was launched on 14 August 2018, and consisted of 42 participants. Since this study formed part of a larger project, the research team recruited the participants for the pilot study by means of snowball sampling. Snowball sampling is a non-probability sampling method by which initial participants are known individuals and they in turn generate/refer more participants (Heckathorn, 2011). For this study each of the research students suggested two participants, we then asked these participants to refer more participants, and we continued with this method until we had a total of 42 participants. Foxcroft and Roodt (2012) state that .65 and higher is a good reliability for groups; the SRB and GEMS instruments showed high reliability, which is good. The reliability of the AFIS sub-scale for ORB was less than .65. Despite this I decided to use ORB, as the AFIS sub-scale for ISR showed good reliability of .71. After cleaning and testing the data for the pilot study, I found the instruments were reliable, as seen in Table 3.2. Hence, the data from the pilot study were included in the main study.

Table 3.2

Scales	Sub-scales	No. of	Pilot
		Items	Reliability
GEMS		24	0.89
AFIS	Inauthentic-Self-in-Relationship (ISR)	10	0.71
	Objectified-Relationship-with-Body (ORB)	10	0.54
AFIS-B		15	0.75
SRB		25	0.88

Cronbach Alpha Scores for the Pilot

Note. GEMS = Gender Equitable Men Scale; AFIS = Adolescent Femininity Ideology Scale; AFIS-B = Adolescent; Femininity Ideology Scale for Boys; SRB = Sexual Risk Behaviour Scale.

3.5. Measurement instruments: GEM, AFIS, AFIS-B and SRB

The students first completed the online informed consent form (see Appendix D), after which they completed a biographical questionnaire that included information regarding the participants' age, home language, and year of study, course/programme, gender, race, accommodation, significant mother figure and significant father figure. Thereafter, participants completed the Gender-Equitable Men Scale (GEMS), the Adolescent Femininity Ideology Scale (AFIS) for females, the Adolescent Femininity Ideology Scale for Boys (AFIS-B) and the Sexual Risk Behaviour (SRB) scale (see Appendix F).

3.5.1. The Gender Equitable Men Scale (GEMS) (Pulerwitz & Barker, 2008)

The GEMS was developed for the Population Council organisation's Horizons programme and Promundo, a Brazilian-based NGO, to measure individuals' attitudes towards gender norms in Brazil (Singh et al., 2013). The negative impact of inequitable gender norms on sexual and reproductive health-related behaviours and disease prevention, including the use of violence by men against women, spurred the development of the GEMS scale. The GEMS is meant to be used broadly but still be culturally sensitive and relevant to a specific cultural context (Pulerwitz & Barker, 2008), with the objective to reveal prevalent norms in a specific community thus informing the development of programmes aimed to effectively influence these norms. Initially designed for young men between the ages of 18–24, the GEMS evolved and has been adapted to include women and to be administered across age groups (Singh et al., 2013).

The GEMS is a 24-item scale, consisting of two sub-scales, measuring inequitable and equitable gender norms. The inequitable gender norms sub-scale consists of 17 items, asking participants to answer questions about inequitable behaviours such as "I would be outraged if my wife asked me to use a condom" or "you don't talk about sex, you just do it". The equitable gender norms sub-scale consists of seven reverse scored items measuring equitable behaviours such as "in my opinion a woman can suggest using a condom just like a man" or "a man should know what his partner likes during sex".

A Likert-type scale is used for response on items ranging from 1 =Strongly agree, 2 =Somewhat agree, and 3 = Do not agree, for the inequitable items, and in reverse for the equitable items (e.g. 3 = Strongly agree). Scores for the two sub-scales are calculated individually but can be combined for use in statistical analysis as a continuous variable or categorised as: Low Equity = 1–23; Moderate Equity = 24–47; and High Equity = 48–72 (Singh et al., 2013). In Pulerwitz and Barker's (2008) study, they found factor analyses on the GEMS supported the two sub-scales and the scale is internally consistent, with a reliability of .83. In their study, Gottert et al. (2016) took the first critical look at the GEMS performance in a South African context, among men in Mpumalanga. They subjected it to rigorous factor analysis (factor loadings were significant at p<.05, p=.00 for all but three items) and they found the unidimensional GEMS had adequate fit and the scale also demonstrated good

reliability of .83. Because of the unidimensional quality of the GEMS, I deemed it useful for my study.

3.5.2. Adolescent Femininity Ideology Scale (AFIS) (Tolman & Porche, 2000)

AFIS for girls was developed because of the need for a measurement instrument that measured femininity ideology in a racially, ethnically and socio-economically diverse world, for girls form early to late adolescence. Additionally, it was inspired by the fact that all of the instruments available at the time were developed with White, middle-class samples (Tolman & Porche, 2000).

Tolman and Porche (2000) developed the AFIS to measure the degree to which girls have internalised two negative aspects of femininity ideology: Inauthenticity Self in Relationship (ISR) and Objectified Relationship with Body (ORB). ISR refers to when a girl would rather not say or do anything in a relationship with a partner which goes against what her partner believes. ORB is the process in which a girl looks at her own body as the object of another's gaze (How I perceive myself through another's eyes), rather than how she feels about her body. Tolman and Porche (2000) found that while these two constructs overlap slightly, they were conceptually distinct.

The AFIS, consists of 20 items and measures specific variables of femininity ideology in two sub-scales. The Inauthentic-Self-in-Relationship (ISR) sub-scale consists of 10 items of which item 4, 5 and 10 are reverse scored, for example, "I worry that I make others feel bad if I am successful" or reverse score "I usually tell my friends when they hurt my feelings". The Objectified-Relationship-with-Body (ORB) sub-scale consists of 10 items of which item 6, 8, 9 and 10 are reversed scored, for example, "I think a girl has to be thin to feel beautiful" or reverse score "the way I decide I am at a good weight is when I feel healthy" (Tolman & Porche, 2000).

A 6-point Likert-type scale is used for responses in both sub-scales, ranging from 1 = Strongly disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, to 6 = Strongly agree. In their development of the AFIS, Tolman and Porche (2000) found a reliability score for the sub-scale ISR of .67 for the eighth-grade site, .75 for the high school site and .81 for the first-year college site. The ORB sub-scale had a reliability score of .70 for

the eighth-grade site, .80 for the high school site and .81 for the first-year college site. In a South African context, Kafaar et al. (2012), in their study on adolescent female SU students living in residence, found the reliability of the ISR sub-scale was .69 and the ORB sub-scale was .81.

3.5.3. Adolescent Femininity Ideology Scale for Boys (AFIS-B) (Tolman, Davis, & Bowman, 2016)

The AFIS-B measures the extent to which boys internalise conventions of girls' femininity as a monolithic construct, e.g., "I like it when a girl plays hard to get". Tolman et al. (2016) developed the AFIS-B to measure femininity ideologies in adolescent boys in heterosexual relationships. Items related to self-relevant experience, e.g., "a good girlfriend puts her boyfriend's needs ahead of her own needs", were retained from the AFIS (Tolman & Porche, 2000) and rewritten in the third person and in the context of heterosexual relationships by Tolman et al. (2016).

The AFIS-B consists of 15 items and follows a 4-point Likert-type scale, with 1 = Disagree a lot, 2 = Disagree a little, 3 = Agree a little, and 4 = Agree a lot. Items 4, 11 and 12 are reverse scored where the scoring scale runs in the opposite direction. In Tolman et al.'s (2016) study sample of 106 boys, the AFIS-B showed adequate internal consistency and score distribution with a reliability of .74. The AFIS-B has not been used in SA before, thus I conducted the pilot study to ascertain the reliability of this measure for my study. I found an Alpha of .75, showing that the AFIS-B holds good reliability in a South African context; therefore I included the instrument in my study.

3.5.4. Sexual Risk Behaviour Scale (SRB) (Kafaar et al., 2012)

Kafaar et al. (2012) developed the SRB scale for use in their study exploring SRB in relation to gender constructs. They felt the need to establish a new measure, measuring SRB in a South African context. The SRB scale consists of 28 items, of which item 1 is a yes/no answer: "in the past three months have you had sex or engaged in sexual behaviour", item 2 is a selection of how many sexual partners participants have had, 1 or 2,..., 5 or more than 5, and item 3 requires an age fill in: "how old where you when you first had sex'. All other items responses follow 6-point Likert-type scale, with 1 = Always, 2 = Almost always, 3 = A

lot of the time, 4 = Some of the time, 5 = Almost never, and 6 = Never; items 5, 6 and 17 are reverse scored. Kafaar et al. (2012), in a sample similar to the participants in this study, reported that the SRB scale had a reliability of .83. Thus, I found the SRB scale suitable to use in my study, for its reliability and because it was developed for a South African context.

3.5.5. Main study

The main survey was released through SUNSurvey's online platform on the 29 August 2018, where registered students were invited to participate via an e-mail to their student accounts. Those students who chose to participate linked in through a Uniform Resource Locater (URL) and were directed to the battery of surveys. Once linked, the participant received an electronic consent form explaining the purpose of the study, including information on anonymity, confidentiality and the option to discontinue participation at any time, by informing us telephonically or via e-mail.

The group study made the decision that the cut-off for surveys returned was 16h00 on 6 October 2018. Before the cut-off time and date for the surveys those participants who saved incomplete surveys were requested via e-mail to please complete and submit their surveys on two separate occasions. The mean age of the participants in my study was 19.87 years and the standard deviation was 1.64. After I cleaned and sorted the data, 515 surveys were excluded from the study because of missing data and not fitting the criteria. By including the 515 excluded surveys, the data set could distort the inferences made about the population by reducing the representativeness of the sample (Horber, 2020). In total 1085 surveys were imported into the Statistical Package for the Social Sciences (SPSS). The SPSS was launched by SPSS Inc. in 1968 and IBM acquired the company in 2009. SPSS is used for research purposes across a wide range of disciplines, working with complex statistical data analysis for the processing and analysis of survey data (Foley, 2018). Table 3.3 shows the reliability of the measurement instruments and respective sub-scales for this study.

Table 3.3

Cronbach Alpha Scores for the Main Survey of the Current Study

		No.	
Scales	Sub-scales	of Main study	Main study
			31

		Items	Reliability	Reliability
			Female	Male
GEMS		24	0.92	0.92
AFIS	Inauthentic-Self-in-Relationship (ISR)	10	0.70	
	Objectified-Relationship-with-Body			
	(ORB)	10	0.83	
AFIS-B		15		0.90
SRB		25	0.00	0.86

Note. GEMS = Gender Equitable Men Scale; AFIS = Adolescent Femininity Ideology Scale; AFIS-B = Adolescent; Femininity Ideology Scale for Boys; SRB = Sexual Risk Behaviour Scale.

3.6. Data analysis

I coded, cleaned and analysed the raw data, and uploaded the data to the IBM Statistical Package for Social Sciences (SPSS, version 25). The following items were reversed scores for each measurement instruments: the AFIS ISR scale items 4, 5, and 10; the AFIS ORB scale items 6, 8, 9 and 10; the AFIS-B items 4, 11 and 12; the GEMS items 18–24; and the SRB scale 5, 6 and 17. The minimum and maximum summative scores for the measurement instruments are as follows: AFIS ISR scale a min. = 10 and max. = 60; AFIS ORB scale a min. = 10 and max 60; AFIS-B a min. = 15 and max. 60; GEMS a min. = 24 and max. = 72; and SRB scale min. = 24 and max. = 144. I first tested the data for skewness and kurtosis, and homoscedasticity to establish whether the assumptions of multiple regression analysis were met, after which I subjected the data to multiple regression analysis to answer my research question.

3.6.1. Four assumptions of Multiple Regression Analysis

Osborn and Waters (2002) warn of four assumptions of multiple regression which researchers should be aware of. Firstly, they stipulate that regression assumes that our variables have normal distributions. Relationships and significance testing can be distorted by non-normally distributed variables, for example, highly skewed or kurtotic variables or variables with considerable outliers. Secondly, on the assumption of a linear relationship between dependent and independent variables, the true relationship between variables will be underestimated if

the relationship is not linear. Thirdly, that variables are measured without error (reliably), explaining that the more independent variables with a low level of reliability are added to the equation, the greater the chance that the variance accounted for is incorrectly allocated. Fourthly, the assumption of homoscedasticity, which assumes that the variance of errors is the same across all levels of the independent variables.

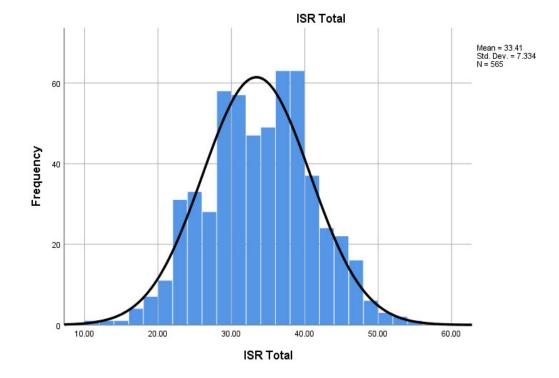
3.6.1.1. Skewness and kurtosis

Skewness and kurtosis are measures that indicate if your collected data has a normal distribution. Skewness measures the degree and the direction of the asymmetry of your distribution, stating that a symmetric normal distribution has a skewness of 0 and looks the same to the left and the right of the mean, forming a normal bell curve through the shape of the frequency distribution of the data. When a distribution mean is more than the median, we see more scores fall to the higher end of the scale and fewer scores to the lower end of the scale, thus we say the distribution is negatively skewed. The long tail end of lower scores points to the left, therefore we also refer to negatively skewed distributions as skewed to the left. In turn, when the distribution mean is less than the median we see more scores fall to the lower side of the distribution and less scores to the higher side, thus we say the distribution is positively skewed. The long tail end with the lower scores points to the right, therefore positively skewed data is also referred to as skewed to the right (McAlevey & Stent, 2017; Measures of Skewness and Kurtosis, n.d.; UCLA Institute for Digital Research & Education, 2019;). Bulmer (1979, p. 87) promotes the following guidelines for skewness: skewness values < -1 and > 1 indicate highly skewed data; skewness values between -1 and -.5 or between .5 and 1 indicate moderately skewed data; and skewness values between -.5 and .5 indicate approximately symmetric data.

Kurtosis is a measure of the shape of the tail in a distribution, where a normal mesokurtic distribution has a kurtosis value of 3 (k=3). The kurtosis of your distribution minus 3 gives you the excess kurtosis of the distribution. A leptokurtic distribution with a kurtosis of more (>) than 3, indicates positive excess kurtosis and a platykurtic distribution with a kurtosis of less (<) than 3 indicates negative excess kurtosis. Kurtosis also indicates the presence of outliers in a distribution; these are points that lie outside the overall pattern of your distribution (UCLA Institute for Digital Research & Education, 2019; Measures of Skewness

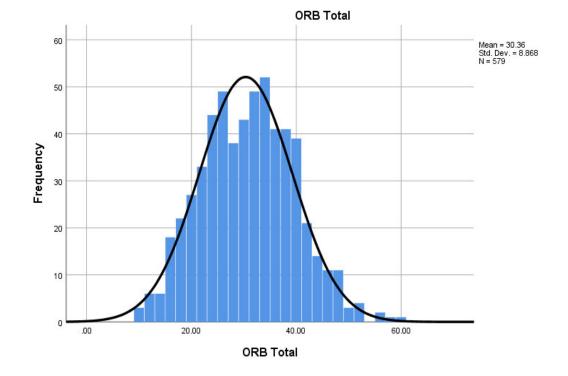
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and Kurtosis, n.d.; McAlevey & Stent, 2017). I explored assumptions of skewness and kurtosis by examining the histograms for my measurement instruments.



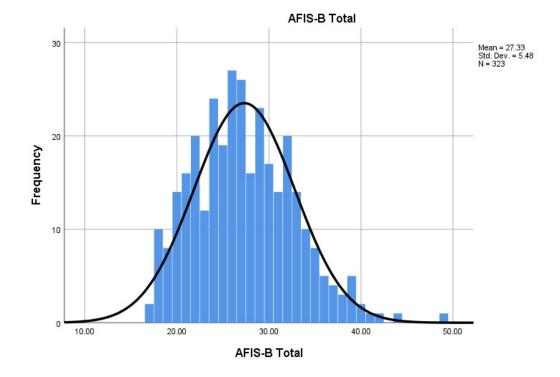
Histogram for ISR Total Frequency Distribution

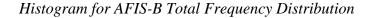
For ISR the minimum score (or smallest value) was 10 and the maximum score (or largest value) was 60. This instrument was completed by 565 heterosexual female participants; the histogram shows a normal symmetrical distribution of the data around the mean = 33.4, and a median = 30, with a standard deviation (Std. Dev.) = 7.33, dictating skewness = 0 and kurtosis = 3.



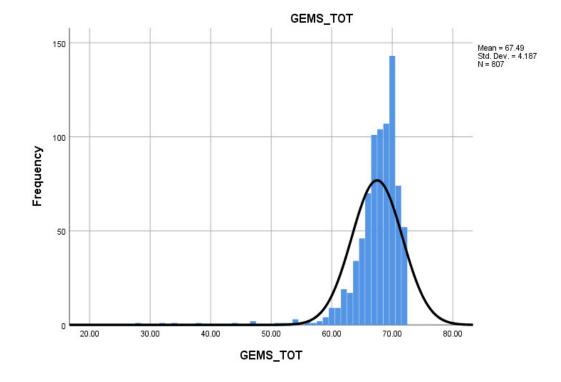
Histogram for ORB Total Frequency Distribution

For ORB the minimum score (or smallest value) was 10 and the maximum score (or largest value) was 60. This instrument was completed by 579 heterosexual female participants; the histogram shows a normal symmetrical distribution of the data around the mean = 33.41, a median = 30, with a Std. Dev. = 8.87, dictating skewness = 0 and kurtosis = 3.



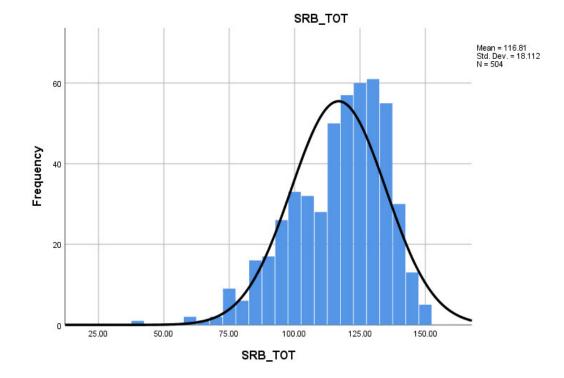


For AFIS-B the minimum score (or smallest value) was 15 and the maximum score (or largest value) was 45. This instrument was completed by 323 heterosexual male participants; the histogram shows a normal symmetrical distribution of the data around the mean = 27.33, with a median = 25, with a Std. Dev. = 5.48, dictating skewness = 0 and kurtosis = 3.



Histogram for GEMS Total Frequency Distribution

For GEMS the minimum score (or smallest value) was 24 and the maximum score (or largest value) was 72. This instrument was completed by 807 heterosexual female and male participants, with the distribution of the data around the mean = 67.49, with a median = 36, with a Std. Dev. = 4.19. The mean is greater than the median with a skewness of -3.88, confirming that the data are negatively skewed to the left which, according to Bulmer (1979), indicates highly skewed data. The GEMS shows kurtosis where k>3 and this dictates positive excess kurtosis with a leptokurtic data distribution.



Histogram for SRB Total Frequency Distribution

For SRB the minimum score (or smallest value) was 25 and the maximum score (or largest value) was 150. This instrument was completed by 504 heterosexual female and male participants, with the distribution of the data around the mean = 116.81, with a median = 75, with a Std. Dev. = 18.11. The data show that the mean is greater than the median with a skewness of k=.29, confirming that the data are negatively skewed to the left which, according to Bulmer (1979), indicates approximately symmetric skewed data. SRB shows mesokurtic kurtosis of k=.29 indicating normal kurtosis.

I acknowledge that the GEMS is negatively skewed, in the same way it is also important to acknowledge that my sample is from a specific student population who may have been sensitised to gender issues while attending university, which could have resulted in more gender equitable behaviour, explaining the negatively skewed data for GEMS. Therefore the result of the skewness and kurtosis of the data was accepted and informed me that I could use

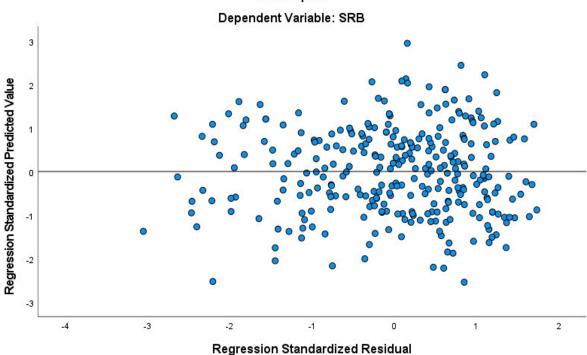
multiple regression analysis (UCLA; Institute for Digital Research & Education, 2019) to analyse the data and answer my research aim.

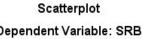
3.6.1.2. Homoscedasticity versus heteroscedasticity

Next I investigated the data for homoscedasticity, which assumes that the variance of errors is the same across all levels of the independent variables. What we want to see is that the residuals are randomly scattered around a straight line, giving us a relatively even distribution. Heteroscedasticity occurs when the residuals are scattered and deviate significantly from an even distribution. We can investigate the assumption of homoscedasticity by examining the scatterplots of the measurement instruments' standardised residual (the errors) by the regression standardised predictive value (Osborn & Waters, 2002).

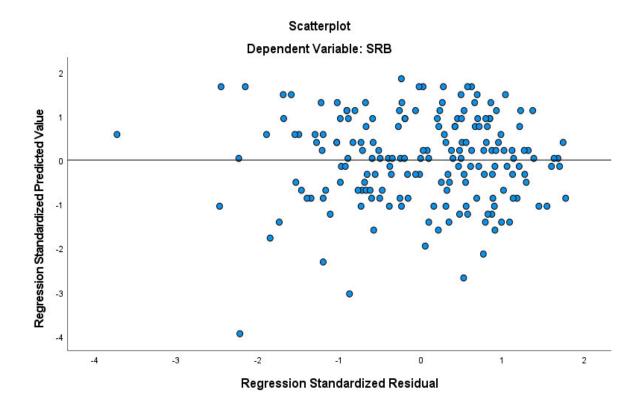
Figure 8

Scatterplot for Heterosexual Females of the Standardised Residuals for AFIS by the **Regression Predicted Values SRB**

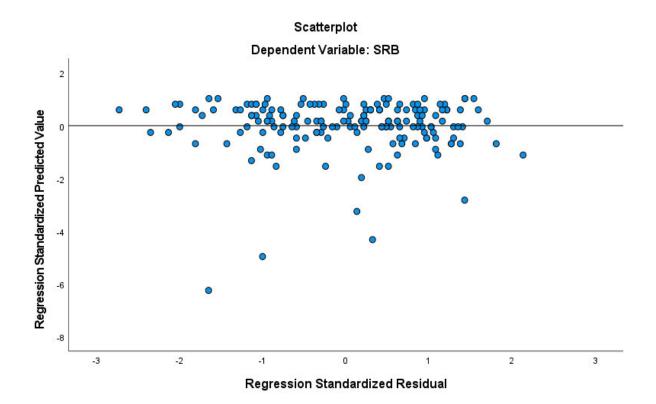




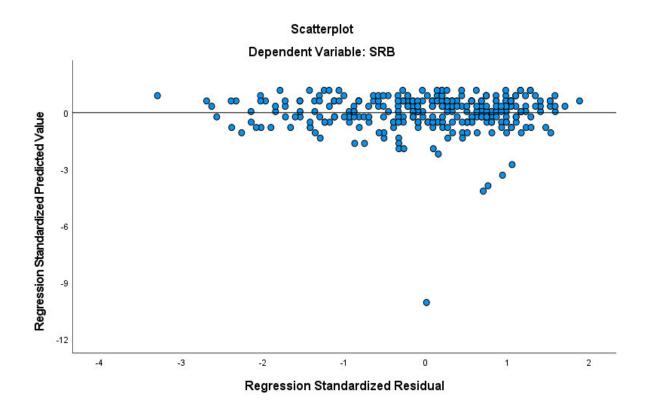
Scatterplot for Heterosexual Males of the Standardised Residuals for AFIS-B by the Regression Predicted Values SRB



Scatterplot for Heterosexual Females of the Standardised Residuals for GEMS by the Regression Predicted Values SRB



Scatterplot for Heterosexual Males of the Standardised Residuals for GEMS by the Regression Predicted Values SRB



Figures 8 to 11 confirmed the assumption of homoscedasticity of the data. The data satisfied Osborn and Walters's (2002) four assumptions of multiple regression analysis which informed me that my measurement instruments are fit for regression analyses.

3.6.2. Multiple regression analysis

I subjected the data to multiple regression analysis to answer my research questions, whether or not ideology, or attitude, or both, best predict SRB. When exploring or determining the functional relationship between two or more variables and identifying and quantifying this relationship, we use regression analysis. Regression analysis is a form of predictive modelling technique investigating the linear relationship between variables (Gallo, 2015). It is expressed as a linear relationship between two variables Y and X, which we refer to as the regression line. This relationship can either be positive or negative, depending on the slant of the regression line, or have no relationship at all when the data is so scattered that no line can be drawn through it (Folley, 2018; Kruger & Janeke, 2011).

Through regression analysis I established which variables mattered most, and/or which could be ignored; I also determined how variables interact with each other. The model allowed me to statistically explore which of my independent variables (gender equitable attitudes and femininity ideology), or both, statistically predict my dependent variable SRB (Gallo, 2015). In Chapter Four, I report on the results of my multiple regression analysis.

CHAPTER FOUR

Results

4.1. Introduction

In this chapter I discuss the three key uses of multiple regression analysis. After which I detail the SPSS output for the results of my analysis for heterosexual late adolescent females and males, with the aim of answering my research question whether or not ideology, or attitude, or both, best predict SRB. I decided on a statistical significance level of p=.05 for this study.

4.2. Multiple regression analysis

Regression analysis is a predictive analysis; it explains the relationship between a dependent variable, in this study SRB and one or multiple independent variables namely ISR, ORB, AFIS-B and GEMS (Field, 2016). Multiple regression analysis has three key uses, firstly we can look at the strength of the effect ISR, ORB, AFIS-B and GEMS have on SRB. Secondly, we can use it to predict the effect interventions tailored for ISR, ORB, AFIS-B and GEMS will have on SRB, in other words we can forecast how much SRB will change for every 1 unit increase or decrease in ISR, ORB, AFIS-B or GEMS. Thirdly, we can use multiple regression analysis to predict future behaviour and in so doing we can take preventative action with tailored interventions (Field, 2016; Foxcroft & Roodt, 2013).

4.3. Multiple Regression of AFIS and GEMS on SRB for females

The multiple regression analysis for female participants of AFIS and GEMS to establish if femininity ideology and/or gender norms predicting SRB.

Table 4.1

ANOVA^{a,b} for Multiple Regression of AFIS and GEMS on SRB for Females

Regression 1867.92 3 622.63 2.42 .08° Residual 58922.07 229 257.30 229 257.30 Total 60789.98 232 232 232 232		Sum of Squares	df	Mean Square	F	Sig.
	Regres	sion 1867.92	3	622.63	2.42	.08°
Total 60789.98 232	Residu	al 58922.07	229	257.30		
	Total	60789.98	232			

^aDependent Variable: SRB TOT

^bSelecting only cases for which SO Hetero = 1

°Predictors: (Constant), ORB Total, GEMS TOT, ISR Total

Table 4.1 shows the SPSS output for heterosexual females (gender=1); we see the analysis of

variance for the dependent variable SRB as predicted by the independent variables ORB, ISR

and GEMS. The statistical significance level or p-value is .08, this value is higher than a p-

value of .05, showing no statistical significance in the ANOVA results. No further

investigation of this multiple regression is possible given that the ANOVA for this model is

non-significant.

4.4. Multiple Regression of AFIS-B and GEMS on SRB for Males

The multiple regression analysis for male participants of AFIS-B and GEMS to establish if femininity ideology and/or gender norms predict SRB.

Table 4.2

ANOVA^{a,b} for Multiple Regression of AFIS-B and GEMS on SRB for Males

	Sum of Squares	df	Mean Square	F	Sig.
Regression	8474.00	2	4237.00	14.39	.00 ^c *
Residual	42410.46	144	294.52		
Total	50884.46	146			

^a Dependent Variable: SRB_TOT

^bSelecting only cases for which Gender = Males ^cPredictors: (Constant), AFIS-B Total, GEMS TOT *GEMS significance < than .001

Table 4.2 shows the analysis of variance for heterosexual males (Gender=2), for the dependent variable SRB as predicted by AFIS-B and GEMS. The F statistic is 14.39 (df=2), in general we expect the F value to be close to 1, where a larger F value indicates that either the data are not sampled from populations with the same mean or because of random sampling. I ended up with large values in some groups and small values in others, the latter explains my higher F values. The F statistic equals the Mean Square (Regression) divided by the Mean Square (Residual). The statistical significance level or p-value is <.00, this value is lower than a p-value of .05, showing a statistical significance in the ANOVA results for Table 4.2 (SPSS Annotated output regression analysis, 2019) (Field, 2016). This result informed me that the predicted model is statistically significant.

Table 4.3

Model Summary for Males GEMS and AFIS-B

R			
Gender = Males		Adjusted R	Std. Error of the
(Selected)	R Square	Square	Estimate
.41ª	.17	.16	17.16

^aPredictors: (Constant), AFIS-B Total, GEMS_TOT

Table 4.3 shows the SPSS output Model Summary with SRB as the dependent variable and AFIS-B and GEMS as the independent variables. From this table R-Square = .17 and represents the percentage variance in SRB that can be explained by AFIS-B and GEMS, for this study it is 16.7%, indicating that for every 100 unit increase in a predictor I can expect a 16.7% change in SRB. As indicated in Table 4.3, R-Square is a measure of strength of the

relationship between SRB and AFIS-B and GEMS, and not a measure of association between these variables (SPSS Annotated output regression analysis, 2019) (Field, 2016).

Table 4.4

Coefficients^{a,b} for Males on SRB

			Standardised		
-	Unstandardis	sed Coefficients	Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	4.59	26.39		.17	.86
GEMS_TOT	1.65	.33	.41	5.01	.00
AFIS-B Total	.04	.29	.011	.13	.90

^aDependent Variable: SRB_TOT

^bSelecting only cases for which Gender = Males

Table 4.4 indicates the coefficient for GEMS is statistically significant with a p-value of <.00, the coefficient for AFIS-B is not statistically significant with a p-value of .90. The Unstandardised Coefficients Beta value (B) in Table 4.4 is the regression equation for predicting the dependant variable from the independent variable. The direction of the coefficient indicates a positive relationship between the scores on GEMS and SRB. The standardised coefficient Beta, GEMS = .41, is the coefficient obtained by standardising both the dependent and the independent variables before running the regression. By doing this I put all my variables on the same scale enabling me to compare the magnitude of the coefficients to see which one has more of a statistical effect. However, while the coefficient for GEMS is statistically significant with p-value of .00 which is smaller than p=.05, with an R-Square of 17%, the statistical significance when translated to real life holds little practical significance (SPSS Annotated output regression analysis, 2019) (Field, 2016).

CHAPTER FIVE

Discussion

5.1. Introduction

My aim was to establish whether gender norms and/or femininity ideology predicts SRB, or whether neither predicts SRB. Govender et al. (2019) underpin the importance of understanding individual determinant factors for SRB, which will help us to better structure multi-level interventions to deter SRB.

In Chapter Three I introduced the psychometric measurement instruments I used for this study, namely, GEMS, AFIS, AFIS-B and the SRB scale, in order to achieve the aim of my research.

5.2.Conclusion

Both GEMS and AFIS's two sub-scales, ISR and ORB, showed a non-statistical significant relationship in predicting SRB for my sample of SU students. Kafaar et al. (2010) used the AFIS (ISR and ORB) and SRB scale in their study of female students; contrary to my study they found a significant relationship between AFIS and SRB. Here one could postulate that a change in the Chronosystem over time (8 years) had a positive impact on female students' perception and internalisation of femininity ideologies on a microsystem level. Impett et al. (2006) found that the negative relationship between femininity ideology and sexual experience proposes that women who internalise norms of traditional femininity on a macrosystem level through socio-cultural belief systems, are unlikely to voice their sexual desires and are more likely to engage in unwanted sexual behaviour. Curtin et al. (2010), in their study replicates previous studies and concurs that, indeed, there is a negative relationship between femininity ideology and sexual agency and women's experience during sex on a microsystem level. My study showed low scores on ISR and ORB for female participants indicating a more egalitarian view of femininity ideology, which in turn had no statistical significance in predicting SRB. One could argue that changes in the exosystem with the exposure to student societies and community over time through the chronosystem,

could have reciprocally influenced students through the meso- and microsystem, by changing their views to be more egalitarian.

AFIS-B showed non-statistical significance for predicting SRB. GEMS showed a statistically significant relationship for SRB, predicting that for every unit increase in GEMS we can expect a 17% increase in SRB. However, this percentage increase is too small and does not translate to real life, concluding that while GEMS has a statistically significant relationship in predicting SRB, it will not be practical to use GEMS as a means of reducing SRB.

Gottert et al. (2018) in their South African study using GEMS found that factors influencing HIV risk behaviour on a microsystem level, such as multiple partners, intimate partner violence and alcohol abuse correlates significantly with inequitable gender norms stemming from the exosystem. Similarly Shattuck et al.'s (2013) results showed that a higher score in inequitable gender norms correlates positively with an increased number of sexual partners, as well as decreases in condom use on a microsystem level. These results agree with my findings where high gender equitable attitudes for males predicted low SRB. Here again one can postulate that interactions and exposure on a meso- and ecosystems level, lead to more equitable views on gender norms.

Bronfenbrenner's (1986) Ecological Systems Theory, in which I grounded my study, similar to Eaton et al. (2003), Corey (2014) and Bandura's (1991) frameworks, states that the interaction between micro-, meso-, exo-, macro- and chronosystems do not stand alone, but overlap organically and reciprocally influence each other. De Meyer et al. (2014), adds to Bronfenbrenner's (1986) theory, contending that the link between gender and sexuality is a multifaceted and multi-determined relationship, influenced by societal, interpersonal and personal elements. Govender et al. (2019) found that biological factors such as age, race and sex were the strongest determinants for SRB. When we look at Table 3.1, it is important to note that my sample (female n=698 and male n=379) is a unique exosystem (population) of SU students. According to SU's 2018 enrolment census, they recorded 51.5% White, 20.1% African Black, 18.1% Coloured, 3.1% Indian and 0.2% Asian students. We have to acknowledge that this population is well educated. This is important as Shisana et al. (2010), like others (GBCHealth, 2007; Phillips & Malcolm, 2006; Pulerwitz & Barker, 2008; Singh

et al., 2013; Sayem & Nuri, 2008), emphasised that there is a positive relationship between higher levels of education and equitability within the micro- and mesosytems.

Different from the participants in Tolman et al. (2016), Curtin et al. (2010) and Impett et al.'s (2006) studies, the participants in my study did not adhere to traditional gender role division and notions of femininity ideology as experienced on the macrosystem through societal beliefs and cultural context. Pulerwitz and Barker's (2008) findings explicitly indicate the important role attitude towards gender norms play in SRB. Singh et al. (2013) add to this by saying that changing fixed gender norms in order to promote gender equality is increasingly recognised as a key strategy for intervention. Similarly, De Meyer et al. (2014) emphasise that key issues of sexual and reproductive development and health during adolescence go hand-in-hand with gender equality. This is reflected in the results of my study where gender equitable attitudes predicted practising low sexual risk behaviour in males. It also differs from my findings in that femininity ideology for both female and male students showed no relationship with SRB.

This study contributes to the body of research available on SRB. Pursuing femininity ideology and gender equitable attitudes (for females) to plan interventions may not have significant outcomes as predicted by my data. This study could be a good comparison study for similar studies conducted in rural communities that are under socio-economic pressure with limited access to education and communities under a patriarchal system or adhering to hegemonic notions of masculinity. Eaton et al. (2003) emphasised that a culture where women hold a lower status and experience oppression within sexual relationships, compounded by a patriarchal system common within traditional African cultures but not exclusive to them, have direct implications for SRB.

5.3. Limitations and Recommendations

An important limitation of this study was that it only included heterosexual female and male students. A further limitation was that it was only conducted at one university. My results may have been different had I conducted this study with late adolescents in rural communities. The idea for future studies would be to conduct this study at other universities

as well as in rural communities, to collect a comprehensive data set regarding the effect of gender equitability and femininity ideology on SRB. Furthermore, we need to investigate if gender equitability and femininity ideology has any implication for SRB in the LGBTQIA communities. Also, multicollinearity was not tested for in my analysis, future studies should do so.

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Appendices

Appendix A: REC Humanities New Application Form



NOTICE OF APPROVAL

REC Humanities New Application Form

14 March 2019

Project number: 7438

Project Title: Predicting Sexual Risk Behaviour: The role of attitudes and ideology.

Dear Miss Jeanne Van Schoor

Your response to stipulations submitted on 9 January 2019 was reviewed and approved by the REC: Humanities.

Please note the following for your approved submission:

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
28 June 2018	27 June 2019

GENERAL COMMENTS:

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (7438) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

	Document Type	File Name	Date	Version
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Stellenbosch University https://scholar.sun.ac.za

Informed Consent Form	I C Group Electronic survey	31/05/2018	
Data collection tool	Ethics Commitee FULL SURVEY	31/05/2018	
Research Protocol/Proposal	PROPOSAL 11118148 - Jeanne van Schoor	31/05/2018	
Request for permission	Division for Information Governance	31/05/2018	
Default	Cover letter - Response to REC stipulations - Project 7438	04/08/2018 1	
Default	Informed Consent - Group Survey Revised	04/08/2018 2	
Default	Institutional Permission_Standard Agreement_J van Schoor	08/01/2019	
1			

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Human Research (Humanities)

National Health Research Ethics Committee (NHREC) registration number: REC-050411-032.

The Research Ethics Committee: Humanities complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides by the ethical norms and principles for research established by the Declaration of Helsinki (2013) and the Department of Health Guidelines for Ethical Research: Principles Structures and Processes (2nd Ed.) 2015. Annually a number of projects may be selected randomly for an external audit.

Investigator Responsibilities

Protection of Human Research Participants

Some of the general responsibilities investigators have when conducting research involving human participants are listed below:

1. Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2. Participant Enrollment. You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use.

3.Informed Consent. You are responsible for obtaining and documenting effective informed consent using **only** the REC-approved consent documents/process, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4. Continuing Review. The REC must review and approve all REC-approved research proposals at intervals appropriate to the degree of risk but not less than once per year. There is no grace period. Prior to the date on which the REC approval of the research expires, it is your responsibility to submit the progress report in a timely fashion to ensure a lapse in REC approval does not occur. If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5. Amendments and Changes. If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current Amendment Form. You may not initiate any amendments or changes to your research without first obtaining written REC review and approval. The only exception is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6. Adverse or Unanticipated Events. Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, aswell as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouche within **five (5) days** of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch University Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7. Research Record Keeping. You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research proposal and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC

8. Provision of Counselling or emergency support. When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

9.Final reports. When you have completed (no further participant enrollment, interactions or interventions) or stopped work on your research, you must submit a FinalReport to the REC.

10. On-Site Evaluations, Inspections, or Audits. If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.

Appendix B: Institutional Permission



INSTITUTIONAL PERMISSION:

AGREEMENT ON USE OF PERSONAL INFORMATION IN RESEARCH

Name of Researcher:	Jeanne van Schoor
Name of Research Project:	Predicting sexual behaviour among late adolescents: The role of attitudes and idealogy
Service Desk ID:	IRPSD - 1021
Date of Issue:	13 September 2018

You have received institutional permission to proceed with this project as stipulated in the institutional permission application and within the conditions set out in this agreement.

What is POPI?	1.1 POPI is the Protection of Personal Information Act 4 of 2013.
	1.2 POPI regulates the entire information life cycle from collection, through use and storage and even the destruction of personal information.
Why is this important to us?	 Even though POPI is important, it is not the primary motivation for this agreement. The privacy of our students and employees are important to us. We want to ensure that no research project poses any risks to their privacy. However, you are required to familiarise yourself with, and comply with POPI in its entirety.
What is considered to be personal information?	 'Personal information' means information relating to an identifiable, living, individual or company, including, but not limited to: information relating to the race, gender, sex, pregnancy, marital status, national, ethnic or social origin, colour, sexual orientation, age, physical or mental health, well-being, disability, religion, conscience, belief, culture, language and birth of the person; information relating to the education or the medical, financial, criminal or

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Appendix C: Stellenbosch University Consent to Participate in Research Pilot Study



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY jou kennisvennoot • your knowledge partner

STELLENBOSCH UNIVERSITY CONSENT TO PARTICIPATE IN RESEARCH

You are invited to participate in a research study conducted by Brigitta Kepkey, Meagan Gasnola, Danai Nyagani, Kate Prowse, Jeanne van Schoor and Ielhaam Jacobs from the Department of Psychology at Stellenbosch University. You were selected as a possible participant in this study as the research is specifically on students registered at Stellenbosch University that are between the ages of 18 and 24 years old.

1. PURPOSE OF THE STUDY

Using an online survey, we aim to study the relationships between attitudes to gender equity, ideas about adolescent femininity and masculinity, sexual behaviour, self-efficacy and social movement identity. We aim to answer a number of research questions with this data as part of the requirements for our respective degrees. The data will also be published in the form of a research article in a peer-reviewed journal. The data may also be used for secondary data analysis in the future.

2. WHAT WILL BE ASKED OF ME?

If you agree to partake in this study, you will be asked to do the following:

- Provide some biographical information
- Answer questions and respond to statements on the Adolescent Femininity Ideology Scale (AFIS)
- Answer questions and respond to statements on the Adolescent Femininity Ideology Scale for Boys (AFIS-B)
- Answer questions and respond to statements on the Sexual Risk Behaviour Scale (SRBS)
- Answer questions and respond to statements on the General Self-Efficacy Scale (GSES)
- Answer questions and respond to statements on the Gender Equitable Men's (GEM) scale according to your level of agreement
- Answer questions and respond to statements on the Social Movement Identity Scale (SMIS)
- Once you have completed the survey, an optional link will direct you to another site which allows you to participate in a lucky draw for a R500 mall or book voucher.

The survey should take approximately 20 minutes to complete.

3. POSSIBLE RISKS AND DISCOMFORTS

Participation in this survey involves a reflective process and we therefore acknowledge that you may experience some negative feelings which may cause you some discomfort. We would like to inform you that you are able to withdraw from this survey at any time without any consequences.

Should you experience any discomfort while answering these questions, and feel you need to speak to someone, please feel free to contact the following units on campus:

 Centre for Student Counselling and Development (CSCD): (Freely available to registered students)
 Physical address: 37 Victoria Street, Stellenbosch

Central Reception: 021 808 4707

Tygerberg Campus: 021 938 9590

• Welgevallen Community Psychology Clinic: (We have obtained a permission letter/referral) Physical Address: Welgevallen House, Suidwal Street

Telephone number: 021 808 2696

4. POSSIBLE BENEFITS TO PARTICIPANTS AND/OR TO THE SOCIETY

We hope that by completing this survey, that we will gain some insight into the relationships between attitudes to gender equity, ideas about adolescent femininity and masculinity, sexual behaviour, self-efficacy and social movement identity.

5. PAYMENT FOR PARTICIPATION

There will not be any payment for participating in this study. However, after the completion of this survey, there is an option to participate in a lucky draw for a R500 mall or book voucher. If you would like to participate in the lucky draw, we will require you to provide us with your contact details.

In alignment with the ethical requirement of confidentiality, we assure you that your contact details will only be used to notify you should you be the winner of the lucky draw.

6. CONFIDENTIALITY

Please complete this survey in a private area due to the sensitive nature of the questionnaires as completing it in a public computer lab puts you at risk of shoulder-surfing. Any information obtained during this study and that could possibly identify you as a participant will be kept confidential and will only be disclosed with your permission or if the law requires it. Password-protection will be used to ensure confidentiality, as anonymity is not guaranteed. Information obtained will only be disclose any information that will be linked to particular responses.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you agree to take part in this study, you may withdraw at any time without any consequence. You may also refuse to answer any questions you don't want to answer and still remain in the study. The researcher may withdraw you from this study if circumstances arise which warrant doing so. These circumstances include being younger than 18, or older than 24, or not being a registered student.

8. IDENTIFICATION OF RESEARCHERS

If you have any questions or concerns about this study, please feel free to contact us, the researchers (Primary Researchers: Brigitta Kepkey, Meagan Gasnola, Danai Nyagani, Kate Prowse, Jeanne van Schoor and Ielhaam Jacobs) via email at **Exercise State Stat**

9. RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Ms Maléne Fouché [_______; ____] at the Division for Research Development.

SIGNATURE OF RESEARCH PARTICIPANT OR LEGAL REPRESENTATIVE

I have read and understand the above information regarding this study. By clicking on the ACCEPT button, I hereby voluntarily consent to participate in this study.

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Appendix D: Consent to Participate in Research Main Study



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CONSENT TO PARTICIPATE IN RESEARCH

Dear prospective participant

You are invited to participate in a research study conducted by Brigitta Kepkey, Meagan Gasnola, Danai Nyagani, Kate Prowse, Jeanne van Schoor and Ielhaam Jacobs from the Department of Psychology at Stellenbosch University. The results of this survey will contribute to our respective research projects in order to complete our Psychology Honours' and Masters' degrees.

Please take some time to read the information presented here, which will explain the details of this project. Your participation is entirely voluntary, and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

The purpose of this study is to study the relationships between attitudes to gender equity, ideas about adolescent femininity, sexual risk behaviour, self-efficacy and social justice. We aim to answer several research questions with this data as part of the requirements for our respective degrees. The data will also be published in the form of a research article in a peer-reviewed journal. The data may also be used for secondary data analysis in the future.

The survey will take approximately 25-30 minutes to complete and will contain a combination of questions covering adolescent femininity ideology, gender equity, self-efficacy, sexual risk behaviour and social justice.

Once you have completed the survey, an optional link will direct you to another site which allows you to participate in a lucky draw for a R500 mall or book voucher. We will require you to provide us with

your contact details. In alignment with the ethical requirement of confidentiality, we assure you that your contact details will only be used to notify you should you be the winner of the lucky draw.

RIGHTS OF RESEARCH PARTICIPANTS:

You have the right to decline answering any questions and you can exit the survey at any time without giving a reason. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Mrs Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

Your information and response to the survey will be protected by Any information obtained during this study and that could possibly identify you as a participant will be kept confidential and will only be disclosed with your permission or if the law requires it. Password-protection will be used to ensure confidentiality, as anonymity is not guaranteed. Information obtained will only be disclosed by the primary researchers and their supervisors, and publication of results will not disclose any information that will be linked to particular responses.

If you have any questions or concerns about the research, please feel free to contact the researcher Brigitta Kepkey, Meagan Gasnola, Danai Nyagani, Katey Prowse, Jeanne van Schoor and Ielhaam Jacobs) via email at the second s

To save a copy of this text, a pdf link for the informed consent form will be attached in the email invitation. Please click the link and download the pdf to save a copy of the informed consent information.

I confirm that I have read and understood the information provided for the current study.	YES	NO

I agree to take part in this survey.	YES	NO

Appendix E: Contact Information – Free Counselling Service



WELGEVALLEN COMMUNITY PSYCHOLOGY CLINIC

Department of Psychology, Stellenbosch University

Tel: 021 808 2696 Email: wcpc@sun.ac.za Web: www.sun.ac.za/wcpc

27/03/2018

RE: Free Psychological Services

The Welgevallen Community Psychology Clinic is a clinic offering free psychological services to peoplein need within the greater Stellenbosch area.

This letter serves as confirmation that the clinic services are available to provide support to any research participants who may experience psychological distress during or due to participation in theresearch being conducted by the following researchers:

Brigitta Kepkey Kate Prowse Meagan Gasnola Danai Nyagani Ielhaam Jacobs Jeanne van Schoor (Research Masters)

The abovementioned research students are conducting their research under the supervision of Dr ZKafaar and Dr S. van Wyk.

Their research will be exploring the relationships between various variables including sexual risk behaviour, ideology, self-efficacy and attitudes amongst Stellenbosch University students.

The aforementioned researchers agree to provide the clinic details to all research participants to ensure that they are aware of the support available, and are thus able to access the necessary support should the need arise.

Please do contact me for further information

Megan Snow

Clinical

Psychologist Clinic Manager

Welgevallen Community Psychology Clinic

Stellenbosch University

Web: <u>www.sun.ac.za/wcpc</u> Tel: 021 808 2696

Email: wcpc@sun.ac.za

Appendix F: SUNSurvey

Questionnaire

Biographical Information

1. Age:



2. Home language:

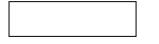
Afrikaans	1
English	2
IsiNdebele	3
IsiXhosa	4
IsiZulu	5
Sepedi	б
Sesotho	7
Setswana	8
SiSwati	9
Tshivenda	10
Xitsonga	11
Other	12

3. How would you identify your sexual orientation?

Lesbian	1
Gay	2
Bisexual	3
Transgender	4
Queer	5
Intersex	6
Asexual	7

Heterosexual	8
If other, please specify:	9

4. Year of study:



- 5. Course/ Programme:
- 6. Who is your significant mother figure? (please mark appropriate block)

Biological mother	1
Aunt	2
Grandmother	3
Sister	4
Other	5
If other, please specify:	

7. Who all lives in the place you call home? (please mark appropriate block)

	Yes	No
Mother	1	0
Father	1	0
Brother	1	0
Sister	1	0
Grandmother	1	0
Grandfather	1	0
If other, please specify:		1
		07

87

AFIS

The following questions relate to your interpersonal relationships. For each question choose the answer that best describes your relationships with others. There are no right or wrong answers – just give your honest opinion. Select the appropriate box for each question.

ISR1. I would tell a friend she looks nice, even if I think she shouldn't go out of the house dressed like that.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR2. I express my opinions only if I can think of a nice way of doing it.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR3. I worry that I make others feel bad if I am successful.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR4. I would not change the way I do things in order to please someone else.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR5. I tell my friends what I honestly think even when it is an unpopular idea.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR6. Often I look happy on the outside in order to please others, even if I don't feel happy on the inside.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR7. I wish I could say what I feel more often than I do.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR8. I feel like it's my fault when I have disagreements with my friends.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR9. When my friends ignore my feelings, I think that my feelings weren't very important anyway.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ISR10. I usually tell my friends when they hurt my feelings.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

The following questions relate to how you feel about your body. For each question choose the answer that best describes the feelings you have about your body. There are no right or wrong answers – just give your honest opinion. Put a check mark in the appropriate box for each question

ORB1. The way I can tell that I am at a good weight is when I fit into a small size.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB2. I often wish my body were different.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB3. I think that a girl has to be thin to feel beautiful.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB4. I think a girl has to have a light complexion and delicate features to be thought of as beautiful.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB5. I am more concerned about how my body looks than how my body feels.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB6. I feel comfortable looking at all parts of my body.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB7. I often feel uncomfortable in my body.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB8. There are times when I have really good feelings in my body.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB9. The way I decide I am at a good weight is when I feel healthy.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

ORB 10. I decide how much to eat by how hungry I am.

Strongly	Disagree	Slightly	Slightly	Agree	Strongly
Disagree	2	Disagree	Agree	5	Agree
1		3	4		6

AFIS-B

The following questions relate to how you feel about your body. For each question choose the answer that best describes the feelings you have about your body. There are no right or wrong answers – just give your honest opinion. Put a check mark in the appropriate box for each question

1. I like it when a girl plays hard to get.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

2. It's important for a girl to look happy on the outside, even when she feels angry or unhappy inside.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

3 If a girl has a boyfriend, he should be the most important thing in her life.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

4. I believe that girls spending lots of energy on makeup, fashion, or hairstyles is a general waste of time.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

5. If a girl doesn't feel good about herself, the best thing she can do is try to change the way she looks.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

6. I think it is more important for a girl to look good than to have a good personality.

Disagree a lot Disagree a little Agree a littl	e Agree a lot
1 2 3	4

7. Girls who are overweight deserve to be teased.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

8. A good girlfriend would never do or say anything that might embarrass her boyfriend.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

9. Girls always take criticism too personally.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

10. A girl should only express her opinions if she can think of a nice way to do it.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

11. It bothers me when a girl downplays her achievements.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
4	3	2	1

12. I believe it's normal for girls to act on their sexual feelings.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
4	3	2	1

13. A good girlfriend puts her boyfriend's needs ahead of her own needs.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

14. I would treat a pretty girl better than a girl who is not attractive.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

15. I think it is important for a girl to go to a lot of trouble to look good.

Disagree a lot	Disagree a little	Agree a little	Agree a lot
1	2	3	4

Sexual Risk Behaviour

The following questions relate to sexual risk behaviour. For each question choose the answer that best describes the feelings you have about your sexual behaviour. There are no right or wrong answers – just give your honest opinion. Put a check mark in the appropriate box for each question

1. In the past three months have you ever had sex or engaged in sexual behaviour? (Sex is defined as penetrative sexual intercourse. Sexual behaviour includes oral sex, and hand to genital masturbation)

Yes	1
No	2

2. How many sexual partners have you had in the past three months?

0	1	2	3	4	5	More than
						5

3. How old were you when you first had sex?



4. I have had more than one sexual partner at the same time.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

5. I use condoms during sex.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

6. I have known the person before having sex with them.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

7. I have engaged in unplanned sexual activity.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
I	2	3	4	5	0

8. I have had sex with someone whom I'd known for less than 48 hours.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	D

9. I have had sex with someone whom I'd known for less than 1 week.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

10. I have had a sexual partner whom I was not in a relationship with.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

11. I have had sex with someone who has had multiple sexual partners.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

12. I have had sex with someone that I do not trust.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

13. I have had sex with someone who was also engaging in sex with others during the same period.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

14. I have gotten so drunk that I couldn't control my sexual behaviour.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
L	2	3	4	5	0

15. I have gotten so turned on that I couldn't control my sexual behaviour.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

16. I have engaged in anal sex without using a condom.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	6

17. I have used protection against pregnancy when I have had vaginal intercourse.

Always	Almost	A lot of the	Some of the	Almost	Never
	Always	time	time	never	

1	2	3	4	5	6

18. I have given fellatio (oral sex on a man) without using a condom.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
Ť	2	3	4	5	0

19. I have received cunnilingus (oral sex on a woman) without using a dental dam (a thin sheet of latex used as a prophylactic device during cunnilingus and anilingus).

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

20. I have had vaginal intercourse without using a condom.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

21. My partner and I have engaged in anal sex without using a condom.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	6

22. I have given or received analingus (oral stimulation of the anal region) without using a dental dam (a thin sheet of latex used as a prophylactic device during cunnilingus and anilingus).

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
Ĩ	2	3	4	5	0

23. I have had sex while being drunk.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

24. I have had sex while under the influence of drugs.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

25. I have had sex with a new partner before discussing their sexual history with them.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
	2	3	4	5	0

26. I have had sex with a new partner before discussing intravenous drug use with them.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	6

27. I have had sex with a new partner before discussing their sexually transmitted disease status with them.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

28. I have had sex with a new partner before discussing possible current sexual partners with them.

Always	Almost Always	A lot of the time	Some of the time	Almost never	Never
1	2	3	4	5	0

Gender Equitable Men's Scale (GEMS)

Inequitable gender norms subscale.

1. It is the man who decides what type of sex to have.

Strongly	Somewhat	Do not agree
agree	agree	

2. A woman's most important role is to take care of her home and cook for her family.

Strongly	Somewhat	Do not agree
agree	agree	

3. Men need sex more than women do.

Strongly	Somewhat	Do not agree
agree	agree	

4. You don't talk about sex, you just do it.

Strongly	Somewhat	Do not agree
agree	agree	

5. Women who carry condoms on them are "easy."

Strongly	Somewhat	Do not agree
agree	agree	

6. A man needs other women, even if things with his wife are fine.

not agree

7. There are times when a woman deserves to be beaten.

Strongly	Somewhat	Do not agree
agree	agree	

8. Changing diapers, giving the kids a bath, and feeding the kids are the mother's responsibility.

Somewhat	Do not agree
agree	

9. It is a woman's responsibility to avoid getting pregnant.

Strongly	Somewhat	Do not agree
agree	agree	

10. A man should have the final word about decisions in his home.

Strongly	Somewhat	Do not agree
agree	agree	

11. Men are always ready to have sex.

Strongly	Somewhat	Do not agree
agree	agree	

12. A woman should tolerate violence in order to keep her family together.

Strongly	Somewhat	Do not agree
agree	agree	

13. If a woman cheats on a man, it is okay for him to hit her.

Strongly	Somewhat	Do not agree
agree	agree	

14. If someone insults me, I will defend my reputation, with force if I have to.

Strongly	Somewhat	Do not agree
agree	agree	

15. I would be outraged if my wife asked me to use a condom.

Strongly	Somewhat	Do not agree
agree	agree	

16. It is okay for a man to hit his wife if she won't have sex with him.

Strongly	Somewhat	Do not agree
agree	agree	

17. I would never have a gay friend.

Strongly	Somewhat	Do not agree
agree	agree	

Equitable gender norms subscale.

1. A couple should decide together if they want to have children.

Do not agree	Somewhat	Strongly
	agree	agree

2. In my opinion, a woman can suggest using condoms just like a man can.

Do not agree	Somewhat	Strongly
	agree	agree

3. If a guy gets a woman pregnant, the child is the responsibility of both.

Do not agree	Somewhat	Strongly
	agree	agree

4. A man should know what his partner likes during sex.

Do not agree	Somewhat	Strongly
	agree	agree

5. It is important that a father is present in the lives of his children, even if he is no longer with the mother.

Do not agree	Somewhat	Strongly
	agree	agree

6. A man and a woman should decide together what type of contraceptive to use.

Do not agree	Somewhat	Strongly
	agree	agree

7. It is important to have a male friend that you can talk about your problems with.

Do not agree	Somewhat	Strongly
	agree	agree

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