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"Why should I put myself at risk of HIV for something that is useless?":

Emic understandings of risky transactional sex in Swaziland

By

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Abstract

"Why should I put myself at risk of HIV for something that is useless?":

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Introduction: Transactional sex is a risk factor for HIV. Qualitative studies have described how transactional relationships manifest in sub-Saharan Africa. However, the standard definition – the exchange of gifts or money for sex as distinct from sex work – does not allow differentiation between motives It requires relationships to be classified as either economically motivated or not -- despite the fact that all relationships may have a degree of economic and sexual obligation -- and does not account for women's emic perspectives.

Methods: We used cultural consensus modeling to build an emic scale of transactional sex that reflects Swazi women's lived experiences of sexual-economic exchange, conducted qualitative interviews to build a theory describing how women navigate the social and physical risks of transactional sex, and then tested this theory using structural equation modeling.

Results: Women in Swaziland are aware of the risk of HIV and carefully navigate both the social and physical risks of transactional sex. They value receiving different types of items from their partner depending on their relationship model, but do not necessarily see these relationships as economically motivated. Male economic support within socially sanctioned relationships is considered normative and highly respectable, but support in non-socially sanctioned relationships is stigmatized and considered unacceptable. In a path analysis, relationship agency had a significant effect on the risk pathways between transactional sex and HIV. Higher social status was associated with receiving more goods from a partner, while being called a nasty name associated with mercenary sexuality reduced social status and constrained agency intensified HIV stigma.

Discussion: Rather than being a single relationship type, some element of transactional sex is inherent in nearly all relationships and can have positive or negative effects on women's social standing. Different types of transactional relationships carry different risks. Future research and interventions should focus on how to best support women as they navigate health risks and the social landscape while considering gendered economic dynamics. HIV prevention strategies must acknowledge women's need to preserve a relationship to maintain social and economic stability.

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Chapter 1: Introduction

Social drivers of HIV

Approximately 25 million people in sub-Saharan Africa are currently living with HIV – 70% of the global total – and 59% of these are women (UNAIDS, 2012, 2014). Young women are especially vulnerable: UNAIDS reports that women ages 15-24 in sub-Saharan Africa are 8 times more likely to be living with HIV than their male counterparts (UNAIDS, 2012). While biomedical prevention and treatment of HIV has made great strides recently, social and structural factors – including gender, poverty, inequality, stigma, and violence – remain some of the most important drivers of HIV vulnerability for women and girls in southern Africa and around the world (Auerbach, 2009; Auerbach, Parkhurst, & Caceres, 2011; Parkhurst, 2014).

Structural factors are "interactive phenomena reflective of social and cultural processes, institutional practices, and sets of arrangements that facilitate HIV transmission" (Auerbach et al., 2011). Rather than linear causal drivers, structural factors can be thought of more as mediators that constrain or facilitate individual's abilities to make choices or avoid risk (Parkhurst, 2014). Addressing structural factors to facilitate individual choice and health requires a clear understanding of how local context generates these drivers and constraints to create risk at each level of the social ecological model– policy, community, intrapersonal, and individual (Auerbach et al., 2011; Bronfenbrenner, 1979; Parkhurst, 2014).

Gender and poverty both drive risk in southern Africa. At the individual level, women are more biologically susceptible to HIV infection, may have had less access to formal education, and may internalize social norms which suggest they should be compliant and submissive to their male partners (Amaro, 1995; Connell, 1987; de Bruyn, 1992; Dworkin et al., 2013; Hunter, 2007; Jewkes, Sikweyiya, Morrell, & Dunkle, 2011; Padian,

Shiboski, & Jewell, 1991; Seidel, 1993; Shannon et al., 2012). Impoverished individuals are less likely to be able to afford ART, healthy foods, or education (Asiedu, Asiedu, & Owusu, 2012; Kalofonos, 2010; Spaull, 2013; Tsai et al., 2011). Within a relationship, intimate partner violence and economic dependence are both associated with HIV risk, and many women may feel unable to disclose their HIV status or use of anti-retroviral therapy (ART) to a partner for fear of desertion or violence (Dunkle et al., 2004; K. L. Dunkle et al., 2004; Root, 2010). Gender inequitable social norms, decreased access to education, gender based violence, pressure to maintain a relationship, and laws and policies that disadvantage women all create systemic risk factors at the societal level. Stigma, gossip associated with poverty, difficulty paying for or accessing health systems, and a lack of a social safety net can also all reinforce or create HIV vulnerability (Ichoku, Mooney, & Ataguba, 2013; Johnston, 2013; Rosenberg, Pettifor, Thirumurthy, Halpern, & Handa, 2014; Shildrick & MacDonald, 2013; Tsai, Bangsberg, & Weiser, 2013; Wabiri & Taffa, 2013).

While gender and poverty can drive HIV risk separately, they also interact to create economic drivers of risk that create specific risks for women. Transactional sex is an important pathway through which gendered economic factors can increase HIV risk.

Transactional sex

Transactional sex is most commonly defined as the exchange of sex for money, gifts, or material goods (Luke, Goldberg, Mberu, & Zulu, 2011; Wamoyi, Fenwick, Urassa, Zaba, & Stones, 2011). Women who engage in transactional relationships have a 50% higher risk of HIV and are significantly more likely to have experienced an instance of intimate partner violence (IPV) than women who do not report exchanging sex for gifts or money (Dunkle et al., 2004; K. L. Dunkle et al., 2004; R. Jewkes, Dunkle, et al., 2006). Transactional sex is not

the same as sex work. Women who engage in transactional sex do not perceive their relationship as commercial (Cole, 2004; Groes-Green, 2013; Stoebenau et al., 2011; Wamoyi et al., 2011). Male partners may acknowledge the importance of a provider role in establishing and maintaining the relationship, however they do not see themselves as clients (Jewkes, Morrell, Sikweyiya, Dunkle, & Penn-Kekana, 2012a; Swidler & Watkins, 2007). Women who self-identify as sex workers perceive the exchange of sex for money as a commercial endeavor with an inherent identity and social reputation which must be managed to reduce physical and social risks (Campbell, 2000; Ghose, Swendeman, George, & Chowdhury, 2008; Stoebenau, 2009). Women who engage in sex work must navigate specific risks, including stigmatized identity, police brutality, lack of legal protections, and dramatically higher rates of HIV and substance misuse, that are not associated with transactional sex (Baral et al., 2012; Decker et al., 2015; Goldenberg et al., 2011; Shannon et al., 2015; Strathdee, Wechsberg, Kerrigan, & Patterson, 2013).

Motives

Women engage in transactional sex for a range of reasons. Some are motivated by poverty, food insecurity or economic desperation – what is sometimes deemed "survival sex" – while others hope that their partners can provide them with commercial goods such as "The 4 C's": cars, cash, cell phones, and cosmetics (Bandali, 2011; Cole, 2004; Masvawure, 2010; Miller et al., 2011; Zembe, Townsend, Thorson, & Ekstrom, 2013). While a rare few relationships may be driven by a single clear-cut motive, most women initiate or maintain sexual relationships with a partner for a range of reasons, including survival, social status, affection, social obligations such as marriage, or a desire for long term socio-economic stability (Groes-Green, 2013; Swidler & Watkins, 2007; Tawfik & Watkins, 2007). Relationships may be short or long term, and women may see their partners as boyfriends,

patrons, husbands, unwitting dupes, or temporary diversions from a troubled primary relationship (Groes-Green, 2013, 2014; Kohler, Behrman, & Watkins, 2007; Maganja, Maman, Groves, & Mbwambo, 2007; Ruark et al., 2014; Swidler & Watkins, 2007; Tawfik & Watkins, 2007). Friends and family may accuse a woman of not valuing herself highly enough if she does not receive anything from a sexual partner (Wamoyi et al., 2011). A woman's family may encourage her – or at least look the other way -- if her partner provides her with items that they are unable or unwilling to provide, or if a partner's financial support is an important part of the household income (Groes-Green, 2013, 2014; Wamoyi et al., 2011). A young woman may also use gifts and financial support from one partner to provide financial support to another (Cole, 2004; Groes-Green, 2013). Men may engage in transactional relationships because they feel pressure to redistribute wealth through sexual relationships, or to enact masculinity as male providers (Jewkes et al., 2012a; Swidler & Watkins, 2007).

Measurement

The typical operationalization of transactional sex is sensitive, but it is not specific. Relationships that combine financial support and sexual obligation are closer to the norm globally than they are the exception (Brinig, 1990; Groes-Green, 2014; Poulin, 2007; Stoebenau et al., 2011; Wentzell, 2014). Given that most sexual relationships will have varying expectations of economic support or sexual obligation between partners, transactional sex may be better understood as the degree of economic dependence or material motivation inherent in nearly all sexual relationships, rather than a unique relationship type characterized by a woman's desire for economic gain. If so, transactional sex is better measured as a scale of sexual-economic obligation, rather than with a binary

definition to categorize relationships as either motivated by sexual-economic exchange or not.

Intervention approaches

A range of interventions have been proposed and piloted to reduce transactional sex or to interrupt the risk relationship between transactional sex and HIV. However in part because of the complex ways in which gender and economic interact to generate HIV risk, many of these interventions have met with mixed success (Abramsky et al., 2014; Dworkin et al., 2014; Kaufman et al., 2013; Kennedy, Brahmbhatt, et al., 2014; Leclerc-Madlala, 2013; Mannell, Cornish, & Russell, 2014; Parikh, 2012; Parkhurst, 2014; Strathdee et al., 2013). A microfinance program in Zimbabwe found that small grants had the potential to increase young women's HIV knowledge and sense of power in their relationships. However many young women faced entrepreneurial difficulty in a turbulent marketplace became targets of sexual harassment and intimidation, or turned to transactional sex to repay loans (Dworkin & Blankenship, 2009). A systematic review of microfinance found that increasing women's economic empowerment may result in violent backlashes from male community members or intimate partners (Kennedy, Fonner, O'Reilly, & Sweat, 2014). Overall, economic interventions have a great deal of potential to mitigate the risk of transactional sex, or decrease women's economic reliance on risky male partners (Kennedy, Fonner, et al., 2014). However to maximize impact and minimize the risk of unintended harms, these interventions require awareness of how gender influences risk across the social ecology, an evidence-based understanding of how transactional sex creates HIV risk, and a clear idea of how the proposed intervention intends to interrupt these pathways (Dworkin & Blankenship, 2009; Kennedy, Fonner, et al., 2014; Parkhurst, 2014).

Many women in southern Africa face legal barriers to owning or inheriting property via either traditional or constitutional court systems. There is some evidence that reforming these by granting women full property rights under both legal systems may reduce women's need to engage in transactional sex for basic survival needs (Dlamini-Ndwandwe, 2013; Dworkin et al., 2013; Dworkin et al., 2014; Tumlinson, Thomas, & Reynolds, 2015). Cash transfer pilot programs have shown promise in reducing sex with risky partners for young women in Tanzania and Malawi, with some evidence that unconditional transfers may be just as effective as those predicated on school attendance (Baird, Garfein, McIntosh, & Oezler, 2012; Kennedy, Brahmbhatt, et al., 2014). Programs which utilize some combination of microfinance, positive gender transformation, and community building have the potential to impact IPV and sexual health outcomes at both the community and individual level beyond the length of a one-time cash transfer program (Dunbar et al., 2014; R. Jewkes et al., 2014; R. Jewkes, Nduna, et al., 2006; R. Jewkes et al., 2008; Kerrigan et al., 2015; Pronyk et al., 2008). National level social transfer programs, including child support grants, may also improve overall health and reduce the risk of coercive or risky relationships (Cluver et al., 2013; Cluver, Orkin, Boyes, & Sherr, 2014; Handa, Halpern, Pettifor, & Thirumurthy, 2014; Schatz, Gomez-Olive, Ralston, Menken, & Tollman, 2012).

Theoretical considerations

Social ecological model

Gender and economics both influence HIV risk across the social ecology (Hunter, 2007). At the societal level, women have less access to education and capital, face challenges owning or inheriting property, and have higher rates of unemployment than men (Baird et al., 2012; Bhana & Anderson, 2013; Dlamini-Ndwandwe, 2013; Dworkin et al., 2014; Spaull, 2013;

Tumlinson et al., 2015). Community norms encourage women to be submissive and compliant, and women often face difficulty negotiating condom use or demanding condoms use from their male partners (Dartnall & Jewkes, 2013; Hardee, Gay, Croce-Galis, & Peltz, 2014; Morrell, Jewkes, & Lindegger, 2012; Shannon et al., 2012; Tumlinson et al., 2015; UNAIDS, 2012; Wabiri & Taffa, 2013). Gender based violence (GBV) increases HIV vulnerability through a number of pathways – men who perpetrate GBV are more likely to engage in other HIV risk behaviors, and women who attempt to negotiate condom use, monogamy, or HIV testing may face violent backlashes, as might women who live with HIV and purposely or inadvertently reveal their own status to a sexual partner (Dartnall & Jewkes, 2013; Jama Shai, Jewkes, Levin, Dunkle, & Nduna, 2010; Jewkes, Dunkle, Nduna, & Shai, 2010; Jewkes et al., 2012a; Jewkes, Morrell, Sikweyiya, Dunkle, & Penn-Kekana, 2012b; Townsend et al., 2011). A woman's decision to engage in transactional sex may be influenced by her personal relationship preferences (Groes-Green, 2013, 2014), tastes in consumer goods (Masvawure, 2010), or economic standing (Pascoe et al., 2015). It may also be influenced by her family's need for the economic support provided by her sexual partner (Groes-Green, 2013; Wamoyi et al., 2011), or peer pressure from friends or acquaintances to engage in sexual relationships or compel commercial gifts from a partner (Maganja et al., 2007).

Hegemonic gender

Hegemonic masculinity describes the way in which men perform behaviors that enact their superiority over women and men who express alternative, less dominant forms of masculinity (Connell & Messerschmidt, 2005; Morrell et al., 2012). While hegemonic masculinity is expressed differently across cultures, it frequently involves some aspect of the male provider role in which men who provide for their female partners and families are seen

as masculine, responsible, and respectable (Jewkes et al., 2012a; Morrell et al., 2012; Wentzell, 2014). Hegemonic masculinity typically demands that men exert sexual dominance through socially visible displays of sexual promiscuity, multiple concurrent partnerships, or both (Jewkes et al., 2012a; Morrell et al., 2012). While hegemonic masculinity is not inherently violent across all cultures, men who enact hegemonic masculinity are more likely to engage in GBV and IPV as a way of exerting their dominance over women (Jewkes et al., 2012b; Morrell et al., 2012). In a study conducted in South Africa, men who embraced the male provider role were more likely to endorse inequitable gender norms, and to have engaged in IPV, sexual violence, or violent crime (Jewkes et al., 2012a). All of these behaviors create a higher risk of HIV for both a man and his partner(s) (Jewkes et al., 2011; Mburu et al., 2014; Morrell et al., 2012; Townsend et al., 2011).

There is a wide body of literature exploring the sexual behavior and health implications of hegemonic masculinity, however hegemonic femininity is less well theorized (Connell & Messerschmidt, 2005; Morrell et al., 2012; Schippers, 2007). Hegemonic femininity encompasses roles and behaviors that compliment hegemonic masculinity and reinforce women's subordinate position in the gender hierarchy (Schippers, 2007). Hegemonic femininity typically demands that women be submissive, compliant, monogamous, and sexually available to their male partner (R. Jewkes & Morrell, 2012; Morrell et al., 2012; Schippers, 2007). Women who reject or actively resist these behaviors may do so by engaging in pariah femininities, in which they take on masculine traits in a way that subverts male dominance. Pariah femininities are by definition considered undesirable, stigmatized expressions of femininity because they do not support male dominance. Women who engage in these types of femininities may be condemned or ostracized (Schippers, 2007). Women who are considered promiscuous or who engage in sexual

relationships with only nominal affective components – traits that are lionized as part of hegemonic masculinity, but which may undermine male dominance – are likely to be criticized by their communities (Stoebenau, 2009; Stoebenau et al., 2011; Strebel, Shefer, Potgieter, Wagner, & Shabalala, 2013).

Current study

Gaps in understanding

The evidence base linking HIV, IPV, and transactional sex is divided into research streams rooted in either the interpretivist or positivist traditions (Lin, 1998; Tebes, 2005). The former typically privileges local, emic, understandings of the nature of transactional sex, while the latter is more likely to utilize "universal," "outsider," or etic definitions (Ahrens, Katon, McCarty, Richardson, & Courtney, 2012; J. W. Creswell & V. L. P. Clark, 2007; Harris, 1976). In many African nations, the quantitative Demographic and Health Surveys operationalize transactional sex as "the exchange of sex for money, favors, or gifts," and many studies in the region use similar wording (Abels & Blignaut, 2011; DHS, 2009, 2010, 2011a, 2011b, 2011c; Onoya et al., 2012). The etic nature of this definition allows for comparison across nations, however it cannot attest to local construct validity and risks conflating transactional sex and sex work. Qualitative studies rooted in the interpretivist paradigm have generated emic conceptualizations that focus on women's experiences blending sexual and economic obligations, but do not allow researchers to make inferences about risk pathways.

The definition of transactional sex typically used in quantitative studies conceptualizes sexual-economic exchange as a specific type of relationship. However qualitative work suggests that it may be better understood as a spectrum of behaviors that

exist inside of all relationships. Quantitative studies that measure sexual-economic exchange as a continuum, rather than a binary, may produce results that better mirror the nuances revealed in qualitative studies.

While the lenses of hegemonic masculinity and the social-ecological model provide useful frameworks for understanding the risks and influences of transactional sex, the literature thus far has not focused on applying, generating, or testing theories as they specifically relate to transactional sex. Quantitative studies have traditionally studied risk pathways using an epidemiological, and primarily atheoretical approach, and many qualitative studies have approached the topic with descriptive or formative, rather than theory generating, aims (Stoebenau et al., 2011; Wamoyi et al., 2011; Wamoyi & Wight, 2014).

Mixed method studies are necessary to build and test theories that quantitatively measure risk pathways but are rooted in the local context and emic understandings (J. Creswell & V. CLark, 2007).

Methods and approach

We used cultural consensus modeling to identify and describe different models of transactional sex in Swaziland. Consonance models were used to build emic scales, allowing transactional sex to be measured as a spectrum of concrete behaviors, rather than a self-identified relationship type. We then used a mixture of qualitative and quantitative methods to build a test an emic theory of risky transactional sex.

Cultural consensus modeling

Cultural consensus modeling is a mixed methods approach to measurement that outlines a systematic process of moving from qualitative description to quantitative measurement within one study (Dressler, 2005; Weller, 2007). The method is used to define the

boundaries of a culturally relevant domain from an emic perspective, identifying shared rules, values, and understandings within a presumed cultural group or culture (Weller, 2007). Assuming that there is a "right" way to think about certain categories, like transactional sex, researchers can use CCM to identify the culturally correct array of variables within a model. They can then use this "answer key" to determine the degree to which individual's beliefs and practices do or do not conform with an identified cultural model (Weller, 2007). When an individual's beliefs and practices align with those of the population cultural model then an individual is said to be culturally consonant; when they do not align then the person is said to be culturally incongruent. Cultural consensus theory "assumes a fixed knowledge base for questions that are meaningful in a particular social context…the cultural consensus model determines the degree of sharing in a domain" (Dressler, 2005).

Building a cultural consensus and consonance model is a multi-step process. Qualitative data are used to generate potential items within a specific domain of interest for the consensus model. To create the consensus model, new informants are then asked to rank or rate these items, and factor analysis is used to determine the weighted importance of each item and overall degree of consensus on the model (Handwerker, 2002). Finally, a cultural *consonance* model is measured, using a much larger sample size. This final step assesses the degree to which an individual participant agrees with, values, or practices the cultural domain as it has been operationalized in the consensus model. This level of individual consonance can then be correlated with other outcome measures, including self-reported and biological measures of health (Dressler, 2005; Weller, 2007).

Study setting

Swaziland is a small nation in southern Africa with the world's highest HIV prevalence. The Ministry of Health and the national HIV coordinating body have identified gender disparities and transactional sex as key drivers of the epidemic in the country. The 2006-2007 Demographic and Health Surveillance survey found that 26% of adults between the ages of 15 and 49 are currently living with the virus (DHS, 2007), and a nationally representative survey conducted in 2010-2011 found a prevalence of 31% among adults ages 18-49 (Watt et al., 2012). Data collected at antenatal clinic sites and in population based surveys indicates that prevalence peaks at 54% in women ages 30-34 and at 49% for men at ages 35-39 (ANC, 2010; Watt et al., 2012).

HIV is highly stigmatized in Swaziland. In one qualitative study, HIV positive respondents reported name-calling, being excluded from sources of food and water, gossip about their HIV status, and conjecture about how they may or may not have acquired the virus (Root, 2010). A report in Swaziland using hearsay ethnography – a method in which local research assistants keep diaries of overheard conversations throughout the day (Watkins & Swidler, 2009) -- reports similar levels of gossip and a social fascination with sexual partnerships and modes of HIV acquisition (NERCHA, 2011).

Two-thirds of Swazis live on less than $1.25 per day, unemployment is approximately 30%, and nearly one quarter of Swazis required some form of food aid from the World Food Programme in 2011 (UN, 2011). A study commissioned in 2012 by the African Union found that 40% of Swazi children were stunted as a result of malnutrition (Spaull, 2013). The findings suggested that under nutrition could be costing Swaziland up to 3.1% of its annual GDP (Spaull, 2013).

The physical and social burdens of poverty and unemployment in Swaziland have disproportionately affected women. Swaziland is a patriarchal nation, in which men expect, and are expected, to be able to exert power over their wives and girlfriends physically, sexually, and socially (Brear & Bessarab, 2012; Shannon et al., 2012). The government has recently enacted laws to combat GBV and to allow women to inherit and own property upon the death of their spouse, but these laws are only sporadically enforced (Naysmith, de Waal, & Whiteside, 2009; UN, 2011; Weiser et al., 2007; WFP, 2012). A court hearing in July of 2013 on marital power – in which a man acts as his wife's legal guardian, with control of her property and the ability to represent her in legal proceedings – ruled that the latter, but not the former, is unconstitutional according to Swazi law ("Swaziland: Court Confirms New Rights for Women," 2013).

Study aims

This study used mixed methods to define different models of transactional sex, describe the demographic and risk profile of women who engage in transactional sex for different purposes, and measure the HIV risks of each model.

Aim 1: Use cultural consensus modeling to create an emic scale, or scales, of transactional sex in Swaziland and validate this scale against the binary etic definition.

Aim 2: Use qualitative data and methodologies to understand: 1) How Swazi women perceive sexual-economic relationships, how they conceptualize risk within these relationships, and what strategies do they use to mitigate risk, and 2) How hegemonic and pariah femininities in compliment or resist the male provider role inherent in transactional sex.

Aim 3: Conduct a quantitative study in Swaziland to understand the risk pathways between transactional sex, social standing, and HIV.

H_1: Social standing influences the pathway from transactional sex to HIV,

H_2: Structural factors shape this relationship and the link between transactional sex and HIV risk behavior.

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Chapter 2: Cultural consensus modeling to measure transactional sex in Swaziland: Scale building and validation

Introduction

The term "transactional sex" emerged approximately two decades ago to differentiate between sex work and relationships that focus on sexual-economic exchange but are not perceived as 'commercial' by either party (Chatterji, Murray, London, & Anglewicz, 2005; Cole, 2004; Dunkle et al., 2004; Groes-Green, 2013; Leclerc-Madlala, 2003). In southern Africa transactional sex increases a woman's risk of HIV by up to 50% and is significantly associated with intimate partner violence (IPV) (Dunkle et al., 2004; Dunkle et al., 2007; Dunkle et al., 2006; Dunkle, Wingood, Camp, & DiClemente, 2010; Jewkes, Dunkle, Nduna, & Shai, 2010). Transactional sex is typically operationalized as "the exchange of sex for gifts or money," (Luke, Goldberg, Mberu, & Zulu, 2011; Swidler & Watkins, 2007) a definition that is sensitive but not specific. Many relationships contain both some degree of economic dependence and an expectation of sex. While the risks inherent in transactional relationships are often clear in context, "the exchange of sex for gifts or money" could conceivably capture behaviors ranging from sex work to receiving an engagement ring (Brinig, 1990). Women whose sexual relationships are their primary source of economic support may identify the relationship as transactional, or sex work, or they may vehemently reject those labels and the associated stigma (Cole, 2004; Dunkle et al., 2010; Groes-Green, 2013; Stoebenau, 2009; Stoebenau et al., 2013; Stoebenau et al., 2011). Rather than a binary measurement, transactional sex may be better operationalized as a characteristic present in all relationships as a matter of degree (Maganja, Maman, Groves, & Mbwambo, 2007; Stoebenau et al., 2011; Swidler & Watkins, 2007; Wamoyi, Fenwick, Urassa, Zaba, & Stones, 2011).

Sexual-economic relationships exist within a network of social and financial obligations that affect women's social standing in their communities (Cole, 2004; Groes-

Green, 2013, 2014; Stoebenau et al., 2013; Stoebenau et al., 2011; Swidler & Watkins, 2007; Wamoyi et al., 2011; Wamoyi, Wight, Plummer, Mshana, & Ross, 2010). Peers or family may encourage women to charm their partners for more gifts and financial support, and those who receive nothing in exchange for sex may be mocked as "prostitutes" who have devalued themselves or failed to support their family (Groes-Green, 2013, 2014; Wamoyi et al., 2011). Despite the importance of economic support from a partner, women must be careful to cast their relationships as affective, rather than financial. Those who do not may be called "prostitutes" or "materialistic," and risk being cut off from support in times of need (Bandali, 2011; Fielding-Miller, Mnisi, Adams, Baral, & Kennedy, 2014; Kaschula, 2011; Miller et al., 2011; Stoebenau et al., 2011; Strebel, Shefer, Potgieter, Wagner, & Shabalala, 2013). In a US study, less than 10% of women who reported initiating or staying in a relationship because of financial concerns agreed that they had ever exchanged sex for money (Dunkle et al., 2010). Measuring transactional sex based on what women actually receive from their partners, and how they weigh these items when considering their sexual obligations, would more accurately capture the degree of transaction inherent in the relationship than asking women to identify with a possibly stigmatizing motive.

To understand the context in which health behaviors like transactional sex take place, and to measure their prevalence and impact, researchers rely on qualitative and quantitative methods (Rosenthal & Rosnow, 1991; Schutt, 2004; Tebes, 2005). The quantitative approach draws on a positivist tradition that seeks to measure prevalence and infer associations. Qualitative approaches privilege textual data and stem from an interpretivist paradigm that suggests local, emic understandings of a culture are as relevant to a research question as outside, etic understandings (Harris, 1976; Schutt, 2004; Tebes, 2005). Measuring transactional sex in a way that captures both individual behaviors and

surrounding social pressures and consequences requires a positivist tool grounded in an emic understanding of how sexual-economic relationships manifest in women's lives and social environment. The traditional operationalization of transactional sex stems from an international, etic, perspective that can be quantitatively compared across cultures. However it does not necessarily reflect women's lived experiences and fails to capture the degree to which economic considerations influence sexual relationships.

Cultural consensus modeling is a systematic measurement approach that moves from interpretive, emic description to positivist, quantitative measurement within one study design (Dressler, 2005; Weller, 2007). It is based on the theory that informants who answer a question in a similar way do so because they are drawing on the same cognitive domain, or realm of cultural knowledge. The analysis process is essentially an exploratory factor analysis that uses participants as the variables of interest and identifies clusters of similar response patterns (Weller, 2007). The researcher uses rapid ethnographic methods to define the boundaries of a set of knowledge or behaviors shared by a group – a cultural domain -- followed by quantitative analysis of numerical data generated in the ethnographic phase. The final product is a cultural consensus model (CCM), an emicly valid operationalization of a cultural domain that can be used in quantitative studies (Weller, 2007).

We used cultural consensus modeling to create an emic scale of transactional sex. We validated our scale by measuring its association with social standing and condom use compared to the binary etic definition. To do so we used an iterative series of research questions:

1) What items do women hope to get in exchange for sex?
2) How are these valued in exchange for sex?

3) Are there distinct subgroups that value items differently?
4) How do these distinct subgroups differ from one another?
5) How does level of participation in a CCM affect social status and condom use?

Methods

Setting

Swaziland is a small absolute monarchy in southern Africa with a population of approximately 1.2 million (DHS, 2007). Two thirds of Swazis live on less than $1.25 a day and one in four are food insecure (AfDB, 2013). Swaziland has an adult HIV prevalence of approximately 31% and the Swazi government and international donors have highlighted gender inequality and transactional sex as drivers of the epidemic (Bicego et al., 2013; NERCHA, 2014).

Ethical considerations

Ethics approval was granted by the Emory University IRB, the Swaziland Scientific and Ethics Committee, traditional leadership at rural study sites, and head nurses at clinical sites. Preliminary results were disseminated at the community and national level at the conclusion of fieldwork.

Study design

Drawing on the qualitative notion of research as a cyclical, rather than linear, process, we collected and analyzed data iteratively (Creswell, 2013; Hennink, Hutter, & Bailey, 2011). We used cultural consensus analysis (CCA) to build and characterize transactional sex CCMs, in-depth interviews (IDIs) to learn about Swazi women's perceptions of transactional sex and risk in their own relationships, and a clinic-based survey with pregnant women to measure the association between transactional sex CCMs, social standing, and condom use.

What do women hope to get in exchange for sex?

To compile a list of items that Swazi women hoped to get in exchange for sex we discussed the etic definition of transactional sex with local colleagues and created a free-list question that preserved the intent but allowed participants to express the concept emicly: "What do Swazi women get, or hope to get, in exchange when they have sex with a man?"

We recruited a convenience sample of women from university, rural, urban, and peri-urban sites. Swazi research assistants (RAs) and the first author approached women in public spaces and asked them to list as many items as they could think of in English or siSwati in response to the free-list question. The meaning was left to participants' interpretation: an exchange "item" could be emotional (love), tangible (a cell phone), or relational (marriage). Researchers purposively sought women with a range of education, age, and marital statuses as these were thought to influence what types of things women would hope to get. Free-list responses were condensed to a single master list based on frequency of mention, discussion with local colleagues and experts, and theoretical interest.

How are items valued in exchange for sex?

We used a rating activity to understand the importance of receiving an item in exchange for sex. A second convenience sample was approached in the same way and same locations as before. For each item women were asked, "On a scale of 1-5, how important is it to get this item in exchange when having sex with a man?" Researchers emphasized that the question related to Swazi women in general rather than the participant's individual preference. Age, education, recruitment site, and marital status were recorded for each participant. After the rating activity we asked women if they were interested in participating in a longer personal

interview. If they agreed we recorded their contact details and linked these to rating data using an anonymous unique ID.

Are there distinct transactional sex CCMs?

We used cultural consensus analysis, multiple regression quadratic assignment procedure (MRQAP), exploratory factor analysis (EFA), and bivariate tests of significance to identify distinct answer patterns, the most 'correct' way of rating each item within a CCM, and individuals who were highly competent within a CCM (See technical appendix).

How do transactional sex CCMs differ from one another qualitatively?

IDIs with key informants (KIs) elicited personal narratives of engaging in a particular transactional sex CCM. KIs were women who had participated in the rating activity, had high cultural competence scores within a CCM, and had agreed to a follow-up interview. A bilingual female Swazi RA trained in qualitative interview methods conducted all interviews in siSwati. Interviews were recorded, transcribed, translated, and analyzed using comparative analysis (Creswell, 2013; Hennink et al., 2011).

How does participation in a CCM affect social status and condom use?

We conducted an audio-computer assisted self-interview (ACASI) survey with pregnant women accessing antenatal care in one urban and one rural public clinic. Antenatal clinics were chosen because this project is nested within a larger study examining transactional sex and HIV risk. 95% of Swazi women experience at least one lifetime pregnancy, 97% of these access care at least once, and all pregnant women accessing antenatal care receive HIV screenings at all clinic visits (DHS, 2011; "Maternal Health Services in Swaziland," 2011). A female Swazi RA systematically recruited women from the clinic line. The survey was self-administered and took place in a private area with the RA present to assist women who were

unfamiliar with laptops or had questions. The survey was translated into siSwati, back translated into English, and administered in siSwati.

Women were asked which of the list items they had received from their most recent sexual partner, if they had used a condom the last time they had sex, and to place themselves on the MacArthur scale of subjective social status, an internationally validated measure of community social status (Brown et al., 2008; Hu, Adler, Goldman, Weinstein, & Seeman, 2005; Operario, Adler, & Williams, 2004; Yip & Adler, 2005). Women were also asked if they knew or thought that they had ever been called a nasty name that implied mercenary or promiscuous sexuality. Other measures included socio-economic indicators and sexual history. HIV status was recorded from test results of that day's clinic visit.

We asked if women had had sex with their most recent partner because of poverty, hunger, for basic groceries, or for the sake of her children. Women who answered affirmatively to any of these were coded as having engaged in 'etic transactional sex.'

To assess how strongly women conformed to a transactional sex CCM we built a weighted scale based on the 'correct' rating for each item within a CCM. Items were weighted according to the value established by CCA. A participant's consonance with a CCM was equivalent to the total weighted value of each item she had received from her most recent sexual partner. Participants who had received more items that were rated more highly were considered more consonant with the CCM.

We examined the bivariate associations between CCM consonance and subjective social status, and CCM consonance and condom use at last sex. For each CCM we built a logistic regression model to assess the adjusted odds ratio (aOR) of condom use at last sex by CCM consonance, and a multinomial logistic regression model to assess the adjusted

relative risk ratio (aRRR) of subjective social status according to CCM consonance. To validate our scales we built a final logistic regression model examining the aOR of condom use or high social status for women who had self-identified engaging in etic transactional sex.

Results

What do Swazi women hope to get in exchange for sex?

47 women were recruited for the free-list activity. Mean age was 28.0 (SD 8.9, range 18 – 40) with mean education of 11.1 years (SD 1.9, range 6 – 13). Participants named 177 unique items. These were condensed into a list of 31 items based on frequency of mention and theoretical interest (table 1).

Are there distinct CCMs that value items differently?

77 women rated the 31 list items. Mean age was 27.4 (SD 8.1, range 18-57) and mean years of education were 10.9 (SD 2.5, range 0 – 13). Initial cultural consensus analysis of the full sample was conducted using UCINET software and found an eigenvalue ratio of 1.37, suggesting that the 77 participants were drawing on multiple CCMs (Borgatti S.P., 2002; Hruschka, Sibley, Kalim, & Edmonds, 2008).

MRQAP showed that recruitment from a rural area accounted for 11% of response variance ($p < 0.001$), and recruitment from a non-rural site accounted for 6% of variance ($p = 0.02$). Being married accounted for approximately 5% of variance ($p=0.04$). Women who reported being unmarried did not answer in a way that was significantly consistent with one another, nor did age or education significantly explain variance in item rating patterns.

To identify clusters of participants who had rated items similarly we conducted EFA in Stata 13 with participants as the variable of interest (StataCorp, 2013). EFA suggested

four distinct patterns of item weighting and participants were assigned to one of 4 groups based on their factor loading.

We conducted a second CCA with each of the 4 groups. Three had eigenvalue ratios greater than 3.0, indicating that each represented a distinct cultural consensus model. The fourth had an eigenvalue ratio of 2.59, suggesting participants were not drawing from a unique CCM. Participants from this fourth group were more likely to be recruited from peri-urban sites with high work migration, making it likely they were drawing on multiple cultural models. Based on IDI and demographic data, we named the 3 significant groups "*inkhosikati"* (a traditional Swazi term denoting a respected senior woman), "aspirational," and "university." We elaborate on each of these group descriptors below.

How do CCMs differ demographically?

In ANOVA analyses of the rating sample, place of recruitment and education level were significantly different across groups. In chi-square and t-tests women in the *inkhosikati* group were on average 5.3 years older ($p = 0.02$) and those in the "university" group had 1.8 more years of education ($p < 0.01$) and were more likely to have been recruited at an urban or university site (table 1).

How are items valued in exchange for sex?

CCA generated a unique 'answer key' of the most culturally correct way of rating exchange items within each CCM along with participant competence scores. Item scores for each CCM are shown in table 1.

How do transactional sex CCMs differ qualitatively?

We interviewed 3 aspirational, 3 *inkhosikati*, and 5 university KIs. All emphasized love and felt marriage was every woman's long-term goal. Women in the aspirational group spoke

practically about their partner's economic role in their lives. They felt it was their partner's responsibility to provide for them and gifts were expected when they met for sex. *Inkhosikatis* linked a partner's ability to provide financial support with the courtship process and family approval. They felt it was a man's responsibility to provide for his family and that marriage improved social status for both partners. University informants linked love to gift giving, but were not immediately interested in marriage. A primarily economic motivation was acceptable, but relationships were affectionate. Family and friends were more likely to approve of a relationship if money and high status items were shared. Across all CCMs, participants agreed that women's respectability was closely linked to sexual behavior and financial resources. "Materialistic" women were condemned, and participants suggested that "loose" women would have difficulty accessing financial assistance from their community in times of need (table 2).

How does participation in a CCM affect social status and condom use?

We recruited 406 pregnant women for the quantitative survey. Each participant was assigned a consonance score assessing how much she participated in each CCM -- how many items she got and how valuable these items were according to each weighted CCM scale. The original 31 items were further collapsed 22 items to account for redundancy and non-material things women hoped to receive from their partners ("fashionable" clothes vs. "label" clothes, and "love" or "marriage," for example). We converted each consonance scale into a standardized Z-score to make analyses comparable across groups. Each participant had 3 unique scale scores, corresponding to the 3 unique scales.

Higher consonance scores were associated with lower condom use in student t-tests for aspirational and *inkhosikati* scales, but not university. Women who reported using a

condom at last sex scored 0.2 units lower on the *inkhosikati* and aspirational scales (p=0.04, both). In simple linear regression women placed themselves 0.32 points higher on the social status ladder for each standardized increase in the *inkhosikati* scale (p = 0.02), 0.43 points higher for each increase in the aspirational scale (0.002), and 0.38 points higher per standardized unit in the university scale (p = 0.006). Women who had engaged in etic transactional sex in the last 12 months placed themselves 0.89 rungs lower (p = 0.03). Results for logistic and multinomial logistic regression models are shown in table 4.

Subjective social status was collapsed into a categorical variable by quartile to account for non-normality. Consonance with the *inkhosikati* scale was only marginally associated with increased subjective social status. Women who placed themselves in the highest consonance quartile scored 0.41 units higher on the *inkhosikati* consonance scale than women who placed themselves in the lowest quartile, although the lower end of the confidence interval overlapped with 1.00. For the aspirational consonance scale, women were marginally more likely to rate themselves in the 3rd quartile of social status as the number of items received from a partner increased (aRRR: 1.44, 95% CI: 1.00 – 2.06), and 50% more likely to place themselves in the top quartile of their community for each unit increase in items received (95% CI: 1.05 – 2.17). The university consonance scale was significantly correlated with women placing themselves in the top 3rd and 4th quartiles (aRRR 1.49, 95% CI: 1.04 – 2.15, and aRRR 1.52, 95% CI: 1.06 – 2.19). In all models, feeling that she had been called a nasty name made women 77% less likely to put themselves in the 3rd social status quartile (p <0.001), and approximately 60% less likely to put themselves in the 4th social status quartile (p < 0.05) (data not shown).

For every increase in standardized Z-score women were approximately 25% less likely to have used a condom at last sex across all scales.

The binary etic definition of transactional sex had no association with condom use at last sex or subjective social status.

Discussion

Measuring transactional sex using an emic scale created an operationalization that was more responsive to health behavior and social effects than the etic binary measurement. Rather than a subjective declaration of her motives, each CCM scale relied on what women had actually received from a partner weighted in a way that was relevant to her social context. The consensus model process identified three dominant CCMs through which Swazi women conceptualize sexual-economic exchange that would have been fused together under the etic operationalization. Conducting IDIs with culturally competent KIs from each CCM provided contextual data on the reasons behind our quantitative findings based on the experiences of women whom we knew to be experts within a model.

Our findings suggest that condom use does decrease as financial support increases. While this may be a result of uneven power dynamics, as previous research suggests (Miller et al., 2011), IDI informants felt that gifts from their partners demonstrated love and serious intent, implying that women may choose to eschew condoms out of trust and affection rather than coercion.

Women must walk a careful tightrope to manage social and sexual reputations, financial needs, and financial obligations (Cole, 2004; Groes-Green, 2013; Kohler, Behrman, & Watkins, 2007; Swidler & Watkins, 2007). For some, higher consonance with a transactional sex scale can significantly improve social status. However for all women being perceived as

promiscuous or materially driven can severely compromise social status. IDI participants confirmed that financial support or a high status partner may increase a woman's social standing, but being seen as 'loose' or a 'gold digger' can harm her.

Understanding transactional sex as a scale rather than a binary status variable promotes its conceptualization as a spectrum that manifests differently in different relationship types, rather than a categorical one-dimensional identity. This has implications for interventions that seek to discourage behaviors or relationships that women may not identify with, versus those that seek to support women who want to exit relationships with aspects they consider harmful (Baird, Garfein, McIntosh, & Oezler, 2012; Dunbar et al., 2014; Tawfik & Watkins, 2007).

When using consensus modeling to measure the impact of emic perspectives on health outcomes, it is important to keep in mind that it is not women's valuations of different items – the distinct cultures of transactional sex – that create HIV risk. Rather the environment of poverty and gender inequality in which those CCMs take place, and the local and global policies that cement those broader factors, generate a risk landscape that individuals must carefully navigate.

The use of a cross-sectional clinic-based sample to validate our scale presents several limitations. The link between transactional sex consonance and condom use at last sex may be bi-directional – more gifts may decrease women's desire to use condoms with a partner, but decreased condom use may also increase a partner's gift giving or financial support, or both cases may be simultaneously true. While asking participants to report condom use at last sex is likely a more accurate measure than condom use frequency overall, the very high proportion of pregnant women reporting condom use at last sex suggests that this measure

was subject to social desirability bias. Despite these shortcomings, triangulating our qualitative and quantitative findings allows us to suggest possible causal links between transactional sex, condom use, and social status, and to report the link between transactional sex and decreased condom use with some confidence.

While our scale is specific to Swaziland, the methods used were rapid and inexpensive, and are easily transferrable to other cultural settings. Similar approaches have been used globally to identify competing models of health knowledge, measure the health effects of cultural consonance, and define the process and effects of acculturation from one model to another (Brewis & Gartin, 2006; Broesch & Hadley, 2012; Hruschka et al., 2008; Sweet, 2010). Consensus modeling can create an emicly grounded measure of a construct that is epidemiologically meaningful but difficult to operationalize. Because this approach bridges the divide between interpretivist and positivist approaches, CCMs are in important tool for areas of research, such as transactional sex, in which emic constructions of meaning and quantifiable risk surveillance are equally necessary.

Technical Appendix

Model Building Using Cultural Consensus Analysis, Multiple Regression Quadratic Assignment Procedures, and Exploratory Factor Analysis

Cultural consensus analysis uses the assumption that informants who answer a question in a similar way do so because they are drawing on the same cognitive domain, or realm of cultural knowledge. To use Romney and Weller's illustration, if a group of 50 individuals are asked to explain how to play tennis – 10 of whom are professional tennis players and 40 of whom have no experience with the sport – it is safe to assume that the 10 professional players would give reliably similar answers while the 40 non-experts would be more likely to respond in scattershot. The questioner could reasonably conclude that the 10 similar answers were likely similar as a result of expertise whereas the 40 scattershot answers were guesswork (Romney, Weller, & Batchelder, 1986). The cultural consensus analysis process is essentially an exploratory factor analysis that uses participants, rather than items, as variables of interest and identifies clusters of similar answer patterns. When conducting CCA an eigenvalue ratio greater than 3.0 between participant answer clusters suggests that participants are drawing on a single dominant CCM. An eigenvalue ratio below 3.0 suggests that no single dominant CCM exists within the sample and participant answers are drawing from two or more CCMs.

To conduct our cultural consensus analysis and identify emic CCM groups, we used UCINET software to perform cultural consensus analysis on rating data (Borgatti S.P., 2002). Data was double entered in excel and then imported into UCINET. Our initial eigenvalue ratio for the full sample was 1.37, suggesting that our participants were drawing from more than one transactional sex CCM. To identify which, if any, demographic characteristics participants who answered similarly had in common we used a multiple

regression quadratic assignment procedure via double dekker semi-partialling (MRQAP) in UCINET (Borgatti S.P., 2002). This is a matrix regression that determines the amount and significance of answer variability explained by demographic characteristics that participants have in common as compared to participants who do not share that characteristic. Coefficients are equivalent to the amount of answer variance explained by sharing a given characteristic. Our analysis found that being recruited from a rural area explained an additional 11% of model variability ($p = 0.001$), while not being recruited from a rural area explained an additional 6% of variability ($p = 0.02$), implying that being from a rural area has a larger effect on women's tendency to rate items similarly than being from a non-rural area. Being married explained 4.8% of variability in answer patterns ($p = 0.04$), while women who were not married did not rate items in significantly similar ways (table 5).

After identifying demographic characteristics that significantly explained variability in answer patterns, we conducted exploratory factor analysis with the full sample ($n = 77$) in Stata 13, using participants as the variables of interest (StataCorp, 2013). We constrained Stata to 4 total factors, and created four separate UCINET data sets based on participants with the highest factor loading within each factor generated in Stata. Group size ranged from n=12 to n=27 (see table 1). We conducted a second round of CCA in UCINET with each group data set to determine if the four groups identified in EFA were drawing on distinct transactional sex CCMs. Three of the four groups had eigenvalue ratios greater than 3.0. The fourth group had an eigenvalue ration of 2.59, indicating that women in this group did not share a dominant transactional sex CCM.

Of all our participants, women in the "university" group were most likely to share a common environment and common experiences and had the highest eigenvalue ratio, 4.55.

This is consistent with ethnographic literature in the region that has suggests transactional sex is common and openly discussed on University campuses. Our own IDIs with "university" KIs reflected a similar dynamic. The "work migration" group consisted of significantly more women recruited from peri-urban regions which feature a large amount of work migration and temporary factory jobs. Insignificant CCA results are consistent with a population of women who come from diverse backgrounds and may be drawing from multiple cultural models.

Consensus analysis in UCINET provides an answer key of the most correct answer within a CCM as well as competence scores for each participants. Answer keys reflect which items are the most important within each transactional sex CCM and are shown in table 4. The answer keys were used to construct weighted scales in analysis of the survey data. If in the ACASI survey a woman reported receiving a cell phone, basic groceries, and basic clothes from her partner her score would be 11.85 (3.57+4.36+3.92) out of a possible 92.12 in the "pragmatic urban" model, 10 (3.93 + 3.17 + 2.90) out of a possible 58.4 within the "older rural" CCM, and 9.79 (2.58+3.61+3.60) out of a possible 87.77 in the "university" model. The participant would then be considered 13%, 17%, and 11% consonant with each model, respectively, suggesting that her actions – or the items given by their partners – was most consistent with the "older rural" transactional sex CCM.

Competence within a CCM is scored from 0 – 1.00. A competence score of 1.00 implies a participant answered every question "correctly" exactly as it appears in the CCM answer key and is assumed to have perfect knowledge of the CCM. In the case of this study, it would mean a rating participant rated each item as closely as possible to the answer key generated by CCA. We recruited In-depth interview participants based on competence

scores for participants within each of the three significant CCMs. The higher an individual's competence score, the higher the probability they can give a 'correct' answer when asked a question that relates to a CCM (D. J. Hruschka & Maupin, 2013). Sampling participants whom we already knew had a high probability of giving a correct answer about a relevant CCM in effect let us assume sample saturation a priori, rather than waiting for saturation to emerge as part of the data analysis spiral (Guest, Bunce, & Johnson, 2006; Hennink et al., 2011; Hruschka et al., 2008; D. J. Hruschka & Maupin, 2013).

Table 1: CCM groups and answer keys

		Aspirational	Work migration	*Inkhosikati*	University
n		12	27	19	17
Eigenvalue ratio		3.61	2.59	3.03	4.55
Age	mean (SD)	27 (7.27)	26.48 (7.16)	31.44† (11.43)	24.41 (3.24)
Education*	mean (SD)	11.33 (2.19)	10.30 (2.96)	10.21 (2.37)	12.29 (1.36) ††
Married	% (n)	16.67 (2)	37.04 (10)	47.37 (9)	11.76 (2)
Rural*	% (n)	41.67 (5)	70.37 (19)	68.42 (13)	29.41 (5) †
University ****	% (n)	50.00 (6)	22.22 (6)	15.79 (3)	64.71 (11) ††

Significant ANOVA: * p< .05 ** p<.01
Significant ttest or chi-square vs. other consensus groups: † p< .05 ††p<.01

Item	Score
*fun night out	4.5
*phone	4.4
*airtime	4.1
*clothes	3.9
*toiletries	3.7
*hairstyle	3.7
*restaurant	3.6
*alcohol	3.6
label clothes	3.6
*basic food	3.6
expensive clothes	3.6
*takeaway	3.6
enjoyment	3.5
*fashionable clothes	3.5
sexual satisfaction	3.4
*rent	3.4
*shoes	3.4
*jewelry	3.3
*transport	3.2
status	3.1
*place to sleep for the night	3.0

Item	Score
*basic food	3.9
*alcohol	3.4
*phone	3.2
*clothes	2.9
*airtime	2.7
*cosmetics	2.6
*fashionable clothes	2.5
*toiletries	2.5
*hairstyle	2.4
*provide for child	2.2
*provide for family	2.1
marriage	2.1
label clothes	2.0
sexual satisfaction	2.0
*nice lifestyle	1.9
*fun night out	1.9
enjoyment	1.8
*rent	1.7
love	1.7
status	1.6
*jewelry	1.6

Item	Score
love	4.2
marriage	4.1
*provide for children	3.9
label clothes	3.9
*fashionable clothes	3.7
expensive clothes	3.7
*nice lifestyle	3.7
enjoyment	3.6
*phone	3.6
*clothes	3.6
*rent	3.5
*shoes	3.5
*hairstyle	3.3
sexual satisfaction	3.3
*job	3.2
*provide for family	3.0
*car	2.9
status	2.8
*fun night out	2.7
*basic food	2.6
*jewelry	2.6

*nice lifestyle	2.8		school fees	1.5	*cosmetics	2.5
*cosmetics	2.8		*takeaway	1.3	school fees	2.5
*job	2.2		*job	1.3	*restaurant	2.4
*provide for family	2.1		*place to sleep for the night	1.2	*transport	2.1
love	1.8		expensive clothes	1.2	*airtime	2.0
*car	1.2		*shoes	1.0	*toiletries	1.8
*provide for child	1.2		*car	0.8	*alcohol	1.2
school fees	1.1		*transport	0.7	children	0.8
children	0.8		*restaurant	0.6	*place to sleep for the night	0.7
marriage	0.7		children	0.5	*takeaway	0.5

*Retained in quantitative consonance scale

Table 2: IDI quotes

	Aspirational	Inkhosikati	University	Respectability
Quote	You develop a mentality that you're going to get what you're having sex for… It is what I am in need of that particular time, what you have both agreed on, what he promised to give…maybe it's airtime, maybe we agreed that you would buy me that airtime when we sleep together… You don't sleep with someone you do not love; you only sleep with someone you love. *36 years old, grade 11 education, not married.* *Consonance score: 0.77*	He would give me money just so I could be able to buy myself toiletries or clothing… we would sleep together, it would be my way of saying thank you. It was basically that …At home they did not want to understand, because he has a poor family background, so they felt like I had no future with him. But I loved him and today he is my husband. And they accepted him -- everything is fine. *28 years old, grade 9 education, married.* *Consonance score 0.78*	I do it because I love this person and he promised me heaven and earth… The fact that he loves me and he promised to give me everything I need and mostly he loves me…that he will love me till the end and one day we will get married and be husband and wife… I don't have that mentality of being dependent on other people… I do ask him for some money if I need to do my hair… He knows that every month he has to give me money to do my hair and buy myself anything I need. *21 years old, university student, not married.* *Consonance score 0.81*	She is respected by the way she dresses up and the manner in which she talks to people…It has to be in a respectable way like she doesn't dress in clothes which will reveal her body and she has to look so smart … a woman has to know her status and if she is still playing some games then she has to stop doing so…the cheating games, having more than one boyfriend and if she is married having secret lovers, you have to be straight. *20 years old, grade 12 education, not married.*
Quote			I started this relationship not based on love but I wanted his money… the allowance we get here is not enough to get us through the whole year. He is understanding. He can see that I'm a single parent and I am still at school, he helps me a lot when I tell him my problem. The only problem I have is that I have to have sex with him whereas I don't love him at all… my friends they were supportive of this relationship because they also get to have a share. *19 years old, university student, not married.* *Consonance score 0.76*	I have to respect myself and respect those that I live with so that… when I am in need of something they can help me…. You have to know other people and humble yourself before other people… if you are known in the community that you have money, of course they will want to get closer to you, because they know that if they need help they will get it from you. *28 years old, grade 9 education*

Table 3: ANC Survey Demographics

	n	mean (SD)	range	%	(n)
Consonance Score	401				
"Inkhosikati"					
raw		11.41 (8.24)	0.00 – 40.71		
standardized		0 (1)	-1.38 – 3.56		
Aspirational					
raw		16.23 (12.60)	0.00 – 67.03		
standardized		0 (1)	-1.29 – 4.03		
University					
raw		13.97 (10.61)	0.00 – 57.78		
standardized		0 (1)	-1.32 – 4.13		
"Etic" Transactional sex	401			12.97	(52)
Condom use at last sex (yes)	403			42.68	(172)
Social status quartiles	357				
1-2				31.37	(112)
3-4				19.33	(69)
5-6				27.17	(97)
7-10				22.13	(79)
Ever called a nasty name	394				
no				75.13	(296)
yes				24.87	(98)
Lifetime sexual partners	372	2.75 (5.14)	1-87		
Age	406	24.54 (4.99)	18-42		
Education	406				
none				3.45	(14)
primary				24.14	(98)
secondary				64.53	(262)
University or technical college				7.88	(32)
Ever done work to earn money	405			53.33	(216)
HIV status	375				
positive				34.13	(128)
negative				65.87	(247)

Table 4: aOR of condom use at last sex and aRRR of social status by CCM consonance quartile. Validated against etic definition of transactional sex

	Inkhosikati consonance (Z-score)		Aspirational consonance (Z-score)		University consonance (Z-score)		Etic Definition	
	aOR	*(95% CI)*	*aOR*	*(95% CI)*	*aOR*	*(95% CI)*	*aOR*	*95% CI*
Logistic Regression 1								
Condom use at last sex	0.73	(0.58 – 0.93)	0.76	(0.60 – 0.96)	0.76	(0.60 – 0.97)	0.78	(0.40 – 1.52)
Multinomial Logistic Regression 2	*aRRR*	*(95% CI)*	*aRRR*	*(95% CI)*	*aRRR*	*(95% CI)*	*aOR*	*95% CI*
Subjective social status								
Quartile 1	Ref		Ref		Ref		Ref	
Quartile 2	1.17	(0.80 – 1.70)	1.23	(0.83 – 1.82)	1.23	(0.83 – 1.82)	0.80	(0.31 – 2.07)
Quartile 3	1.36	(0.96 – 1.94)	1.44	(1.00 – 2.06)	**1.49**	**(1.04 – 2.15)**	0.39	(0.14 – 1.14)
Quartile 4	1.41	(1.00 – 2.00)	**1.51**	**(1.05 – 2.17)**	**1.52**	**(1.06 – 2.19)**	0.89	(0.35 – 2.24)

*Controlling for woman's age, HIV status, education, having ever earned own income, lifetime number of sexual partners, and ever called a nasty name

Table 5: MRQAP

Variable	coefficient	p-value
Rural*	0.114	0.001
Not rural*	0.060	0.023
Married*	0.048	0.041
Not married	-0.017	0.216
Grade 12 education	0.029	0.141
No grade 12 education	0.010	0.344
Over 25	0.012	0.273
Not over 25	0.026	0.115
Intercept	0.071	

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Chapter 3: "She is doing the wrong things for the right reasons": Navigating hegemonic femininity and risk in sexual-economic relationships

Introduction

In sub-Saharan Africa, 60% of people living with HIV are women, and young women are eight times more likely become infected than young men (UNAIDS, 2012, 2014). Transactional sex is one driver of gendered HIV vulnerability, and is associated with intimate partner violence (IPV) and an up to 50% increase in HIV risk (Dunkle et al., 2004; Dunkle et al., 2007). The term "transactional sex" denotes economically motivated relationships or one time sexual encounters that differ from sex work in that neither party considers the encounter to be a formal commercial exchange (Dunkle et al., 2004; Jewkes, Morrell, Sikweyiya, Dunkle, & Penn-Kekana, 2012a). Women may receive a variety of items from their partners. These range from "survival" necessities such as cash, rent, or food to ease poverty, to fashionable clothing, electronics, or consumer goods intended to bolster social status (Cole, 2004; N. Luke, 2003; Masvawure, 2010; Tawfik & Watkins, 2007; Wojcicki, 2002).

Economic entanglement is expected in sexual relationships (Brinig, 1990; Dunkle, Wingood, Camp, & DiClemente, 2010; Tawfik & Watkins, 2007). Rather than being hidden, friends, family, and community members often closely follow the sexual, economic, and romantic aspects of individual's relationships (Stoebenau et al., 2011; Watkins & Swidler, 2009). Men may feel pressure to engage in sexual patronage relationships to redistribute wealth throughout a community (Groes-Green, 2014; Swidler & Watkins, 2007). Women who 'give away' sex without receiving anything in return can be mocked as 'prostitutes' who do not value themselves or their sexuality highly enough (Wamoyi, Fenwick, Urassa, Zaba, & Stones, 2011), or if they do receive something from a partner they may be shamed for being

materialistic or promiscuous if their motives as perceived as mercenary (Strebel, Shefer, Potgieter, Wagner, & Shabalala, 2013).

Hegemonic masculinity calls for men to be economic providers who can support their partners, wives, or families (Jewkes et al., 2012a; Swidler & Watkins, 2007). The concept of hegemonic masculinity describes the ways in which men take on lionized, normative masculine characteristics that allow them to assert dominance over women (Connell, 1987; Connell & Messerschmidt, 2005). In southern Africa it also implies sexual dominance and entitlement along with a willingness to use violence to affirm one's power (Morrell, Jewkes, & Lindegger, 2012). In a South African study, men who saw themselves as the provider in their relationships were three times more likely to have perpetrated the rape of a woman or man, and three times more likely to report more than one episode of intimate partner violence (Jewkes et al., 2012a).

Hegemonic femininity, the female counterpart of hegemonic masculinity, denotes behaviors or practices that are normative for women and position them as complementary and inferior to men (Schippers, 2007). In southern Africa these include compliance, respect, and sexual availability to a male partner (Morrell et al., 2012). Hegemonic femininities contrast with "pariah" femininities, behaviors that are stigmatized and penalized by a society in part because they mirror hegemonic masculine behaviors in a way that threatens male power (Schippers, 2007).

A wide body of literature has considered the links between hegemonic masculinity, sexual entitlement, and transactional sex in southern Africa (Jewkes, Dunkle, Nduna, & Shai, 2010; Jewkes et al., 2012a; Jewkes, Morrell, Sikweyiya, Dunkle, & Penn-Kekana, 2012b; Jewkes, Sikweyiya, Morrell, & Dunkle, 2011; Morrell et al., 2012). Less work has been done

describing how women perceive and engage with hegemonic femininity and how this may contribute to the risk of HIV within transactional relationships (Connell & Messerschmidt, 2005; Morrell et al., 2012; Schippers, 2007). This study used a qualitative research design to understand the connection between transactional sex and hegemonic femininities by exploring two linked research questions:

1) How do Swazi women perceive sexual-economic relationships, how do they conceptualize risk within these relationships, and what strategies do they use to mitigate risk?
2) How do hegemonic and pariah femininities in Swaziland compliment or resist the male provider role inherent in transactional sex?

Methods

Setting

Swaziland is an absolute kingdom in southern Africa with a population of approximately 1.2 million and an adult HIV prevalence of 31%, peaking at 54% for pregnant women age 30-34 ("Antenatal Surveillance," 2010; Bicego et al., 2013; DHS, 2007). Poverty and food insecurity are widespread in the kingdom -- approximately 2/3 of Swazis live on less than $1.25 a day (AfDB, 2013). Swaziland is a patriarchal society. Unemployment in the nation is 30% overall, but 70% for women (AfDB, 2013). It was not until 2010 that married women could register property in their own names and their husbands must still represent them in court (Langwenya, 2010). The Swazi Ministry of Health and the National Emergency Response Council on HIV/AIDS (NERCHA) have identified women's empowerment and strategies to reduce transactional sex as an important element of HIV prevention and mitigation (NERCHA, 2014).

Study Design

This study used in-depth interviews (IDIs) and focus group discussions (FGDs). IDIs were used to elicit women's personal narratives of transactional sex, strategies for navigating attendant health risks, and experiences managing social and sexual reputations. FGDs were used to understand normative community perspectives on transactional sex and hegemonic femininity.

Participants

This qualitative study was part of a larger mixed methods project to identify and understand different models of transactional sex in Swaziland. We used free listing and rating exercises to identify dominant models of transactional sex and hegemonic femininity in Swaziland. We first generated two lists of items in response to the questions:

1) What makes a Swazi woman admired in her community?
2) What items do Swazi women get, or hope to get, in exchange for sex?

A convenience sample of women was asked to rate the importance of each list item. At the conclusion participants were asked if they would be interested in participating in a second personal interview. Contact details were recorded for those who agreed and linked to rating data using an anonymous unique ID.

Using cultural consensus analysis we identified three cultural models of transactional sex and one dominant model of Swazi female respectability. Cultural competence scores within models denoted each rating participant's degree of knowledge about each cultural model. Scores can range from 0-1.00 with 1.00 reflecting perfect knowledge about a cultural model. Further details on this process are reported in the previous chapter.

IDI participants were sampled from the pre-existing pool of rating participants. FGDs were conducted at an urban clinic and a residential university using convenience sampling to recruit women who were immediately available and interested. A rural FGD was conducted with women who were members of a pre-existing women's community group who had collectively agreed to participate.

IDI Data collection

We purposively sampled women with high cultural competence scores within cultural models. A common interview guide was used for all interviews. Interviews with women who were culturally competent about a transactional sex model emphasized discussions of transactional sex. Interviews with women recruited based on respectability competence emphasized social respectability. A trained female Swazi research assistant (RA) conducted all IDIs in siSwati.

FGD Data collection

A facilitator asked FGD participants to discuss items that women hope to get in exchange for sex, what type of woman might want what type of item from her partner, and how a community would perceive that woman. Participants were asked to reflect on feminine respectability, how a woman's sexual reputation could impact her respectability, and what the social and financial implications of this might be. FGDs were conducted in English or siSwati, depending on the group's preference.

Analysis

All FGDs and IDIs were transcribed in siSwati and translated into English except for FGDs that were directly transcribed in English. The first author checked a subset of all IDI and FGD transcripts for translation and transcription error.

Data were analyzed iteratively following Creswell's analysis spiral and using a combination of narrative and modified grounded theory approaches (Creswell, 2013). Women's narratives of transactional sex were extracted from the transcripts and compared by cultural model to identify distinctions and commonalities. Transcripts were coded inductively using MaxQDA software ("MaxQDA," 2014), and codes were condensed into categories. We organized categories into matrices and concept maps to clarify relationships. We used memos throughout data collection and analysis to check saturation, track ideas, and provide a space for researcher reflexivity. A second reader reviewed all transcripts and discussed coding schemes, matrices, and concept maps. IDI and FGD data was triangulated, and we used iterative member checks with RAs and local colleagues to enhance data credibility.

Ethical considerations

The Emory University Institutional Review Board and the Swaziland Scientific and Ethics Committee (SEC) approved all research activities. Traditional leadership approved study activities at the rural research site. Nurses and clinic leadership approved study activities at clinical sites.

Participants provided written informed consent. A small snack was provided to all participants to thank them for their time, but no monetary incentive was offered per SEC preferences. Pseudonyms were assigned to participants in the analysis stage to protect participant confidentiality. Preliminary study results were shared with stakeholders at the national and community level.

Results

We interviewed 16 IDI respondents and conducted 3 FGDs. The rural FGD consisted of 12 participants, the university FGD of 7, and the urban clinic FGD of 6. In all we interviewed 41 participants. Based on demographic data and women's narratives, we labeled the three pre-identified models of transactional sex "university," "aspirational," and "*inkhosikati*" – a term in siSwati that describes an older woman who is highly respected in her community. Two women from the *inkhosikati* model were contacted and declined an interview, as did one from the aspirational and one from the respectability model. Because of high levels of cultural agreement on what makes a Swazi woman respectable, many women interviewed about transactional sex models were also culturally competent about female respectability. See table 1 for participant sampling by cultural model and demographics.

Respectability and sexual reputations

Informants in FGDs and IDIs agreed that the ideal Swazi woman would have "good character" (*similo sahle*), be respectful, "behave well" (*tiphatsa kahle*), and be humble, Christian, and kind. While "good character" and "behaving well" are vague in English, their siSwati counterparts – *similo sahle* and *tiphatsa kahle* – refer to specific character traits and actions.

> Respecting other people means you do listen to them and you do submit to everyone regardless of their status or age… people in your community know you, that you are a daughter in law of whatever family and not sleeping around if you are married. Also not insulting people**.**
> -Zobuhle

Wives with working husbands and women with money or from well off families were more likely to be respected in their communities. A woman without a husband is economically and socially vulnerable. Rural FGD informants compared her to a childless widow or a woman with a disability:

> **Interviewer**: Who is considered [to receive help from the community]?
> **Informant**: The needy, the unemployed and those who belong to the community.
> **Informant**: The disabled.
> **Informant:** Like the old women with no children.
> **Informant:** A woman without a husband.
> -Rural FGD

Some women, typically those who were younger or had more formal education, felt that changing norms had created a place for a more independent style of feminine respectability:

> In rural areas a woman cannot build a homestead without being married or being assisted by a male during the kukhonta process [in which the chief grants land access for a homestead]. Ok let's say that this woman she managed to build her homestead without being assisted by a male, then other women they will admire her courage and that she has managed to achieve something which other women thought it was impossible to achieve.
> -Buhle

Most participants felt that within their communities men were more likely to offer material support while women were more able to offer emotional support.

> Mostly when you have financial problems you are helped by men rather than women. You know females they don't get to help someone who is in need of financial help. She is going to tell you her problems rather than helping you.
> -Thandile

While this was the majority opinion, others felt that women – especially married women – were more approachable, even if the eventual financial assistance still came from a man.

> In this community of ours it's the women who help you a lot, because it is hard to just go to a man asking for help. You go to his wife, talk to her, and then she will ask [her husband] for that help if she doesn't have [the means herself].
> -Nonhlanhla

Financial support from men, especially husbands or partners, was normative and expected, however relationships that were clearly predicated on an exchange of sex for material gain were condemned. Informants referred to women whose primary motivation was not love or

marriage as "gold diggers" or "prostitutes." A promiscuous or materialistic woman would likely have a bad reputation and would not receive help from her community in times of need.

> **Informant 1**: Maybe she is dropped off by this car and picked by another one. No one can respect a person like that, no one can take that person seriously. They say, "Ah, that one."
> **Informant 2**: She is loose.
> **Informant 1:** She likes material things, like you will not sleep for nothing [laughs]… but she thinks she is a hard worker because she works hard to get those things.
> -University FGD

Should a woman with a poor sexual reputation fall ill, some participants thought she would be less likely to receive care than a woman with a good reputation:

> Her behavior contributes in determining whether she gets the help she needs or not… Like let's say the woman is sick, people might not help her if she was sleeping around. So people will feel that you are reaping what you sow.
> - Nkosingiphile

Some transactional relationships were more sympathetic and less subject to social censure. Women who were poor or obviously being taken advantage of were pitied, although their behavior was still not considered acceptable.

> **Informant**: They hide the things that they do so you can't tell. Just to take care of the family she is offering herself to this man. She is not entirely a bad person.
> **Informant:** I think that she knows what she wants but she didn't go to the perfect school to get where she wants to be.
> I**nformant**: She is doing the wrong things for the right reasons. These are important things. She is better than this [materialistic] one.
> -University FGD

Relationship Models

In addition to the three models that we sought out *a priori*, IDI participants referenced relationships they had had when younger with older men in return for gifts or cash. These

are typically called "sugar daddy" relationships in Swaziland and so we too chose to use this term.

The four relationship models can be arranged across a spectrum according to when they take place in a woman's life-course and whether she benefits only economically, or economically and socially. Sugar daddy relationships, for example, typically take place when women are younger. They are usually hidden from a woman's community and only provide material benefits. On the other end of both axes, *inkhosikati* women tend to be older and married – with the high social status conferred by marriage -- and a woman's husband is expected to provide her with financial support as much as he is able (figure 1).

While we did not ask about HIV explicitly, the topic was implicit. Women are aware that HIV is a constant risk in any sexual relationship and that risk can be mitigated through monogamy, consistent condom use, and frequent HIV tests. They carefully weigh the potential tradeoff between economic benefits and health risks for themselves and their families:

> I didn't eat in this fancy restaurant -- who can tell what food I eat every day? No one. So why should I put myself at risk of contracting HIV for something which is useless? It would be fine if I sleep with a man and then he builds me a house. If I die I will leave my children with property. -Nokuthula

Nearly all women worried about cheating and the risk that a partner – or his other partners – might introduce HIV into their relationship. Some women were confident in their own partner's faithfulness, but nearly all felt that men in general were not suited to monogamy. One informant explicitly linked women's ambiguity about the possibility of sexual monogamy to gendered norms and expectations:

> You know, boys and men they are not faithful. Because we don't live together you may find that he has a wife yet I don't know. But he doesn't have one I'm just making an example of the things they are capable of doing….You know I can't trust him because we don't stay together so I don't know what he engages himself in when he is not with me. So I can say that you know have lost trust to men but yes you know we do still love [men]. With us girls you get to love even if this person has lied to you.
> -Nokuthula

The likelihood of monogamy and condom use differed depending on relationship types (table 2), as did women's alternate strategies for protecting their own health along with the socio-economic stability provided by the relationship. Specific strategies are described below.

Inkhosikati

We interviewed 3 *inkhosikati* key informants with high competence scores. One woman was not married, but all three informants described similar relationship types with similar priorities. FGD informants and women with high competence on Swazi respectability also shared their opinion on the social value of marriage, which confers high levels of both social and economic benefits. Married women have higher social status and are considered more trustworthy:

> We reach a point where we can do anything to get married. I think that this happens in the rural areas because the community is watching. If you are not married you will take all their husbands because you do not have your own. So that puts too much pressure.
> -Nonhlanhla

> **Informant 1:** If you seek help from married women you will definitely get help.
> **Interviewer:** A married woman can help somebody more than an unmarried woman?
> **Informant 1**: Oh can you say that!
> **Informant 2:** For example financially a woman in Swaziland has her husband to take care of most of the things unlike a single woman who has all the stress of taking care of all her needs.

> **Informant 1:** I also feel like it is easier to relate to someone who is married than someone who is single
> **Informant 3**: Yes you think that one has experience in lots of things that you can practice now and then.
> -University FGD

While married women are highly respected, a few women felt that even married women could fall short of the feminine ideal, and were likely to engage in secret relationships for material gain or sexual pleasure.

> Eish people they no longer value these things because now they get in relationships with different men because they want to get money and fancy things. Even if you are married once you get involved in another relationship then you will not respect your husband since now you have another partner.
> -Zobuhle

> Everyone wants to have…sexual satisfaction. You know you find that this lady she is married but since her husband doesn't satisfy her then she will leave the man in the house and go around sleeping with men to satisfy her sexual appetite.
> -Jabulile

Husbands are expected to take on a provider role within the relationship and are responsible for the economic wellbeing of their family. Wives are expected to ensure their husband is sexually satisfied. Informants saw these as normative gender roles within the relationship rather than one-to-one transactions.

> The main reason [for sex] is that I want to make him happy. […] He will give me money when I ask him and cater for my needs as we are in a relationship and we are supposed to make sure that we are both happy in this relationship… I don't have the mentality that when I have sex with him then he has to give me something afterwards.
> -Sihle

Having children is an important component of a successful marriage, which may decrease women's desire to use condoms.

> We had a child our first born, he died then when we got married it became hard to get another one, and he wanted to have another child and that got me worried that maybe our marriage would come to an end if I couldn't have another child.
> -Nonhlanhla

Children create extra motivation to maintain a marriage or stay with an abusive partner. A woman with no economic alternative may stay in a relationship to ensure that her husband continues to provide for their children.

> You don't want your marriage to get ruined. These are reasons that force you to sleep with him no matter how bitter the relationship is. You will stay provided he takes care of the children.
> -FGD informant, urban clinic

Many women felt that according to both Swazi culture and local interpretation of biblical tenets, their husbands are entitled to conjugal rights and a married woman cannot decline her husband's sexual advances or negotiate condom use.

> Maybe they should educate [married women] more about their right when it comes to sex in marriage, because most women they find themselves obligated to have sex with men without using protection, whereas men sleep with other women and don't use condoms. So women should be empowered and educated about such issues because we have lost many women because of such cases like she has to sleep with her husband without using condoms as she is afraid of the husband and knowing very well that there are other women he sleeps with outside their marriage.
> -Thandeka

The majority of women agreed that marriage was "every woman's destiny," in the words of one informant, and that marriage relationships exemplified respectability as well as social and economic stability. Other women pushed back against male dominance in marriage relationships, expressing admiration of female strength in the community.

> You know as a woman I need to be respected and heard when we are in meetings. I need to voice out my views and people they should take it seriously. Also I have to be respected by men and as women. You know that we have to submit to men but then what if the man is wrong? Then I need to say that he is wrong and get him to agree in everything. Respect it

> has to start with you, you have to respect yourself in order for you to gain some respect from the people in your community.
> -Nokuthula

Inkhosikati women's main strategy to protect their health and relationship is to ensure their husband or partner is sexually satisfied. One married woman explained that being consistently receptive to sex would prevent cheating that could introduce HIV into the relationship:

> If I do satisfy him, he won't need to go out and bring home what may be a risk, like these diseases, you see. It is what is very expected from a wife. Because when you get married, they do say that, "The cake is eaten anytime." You have to give each other you see.
> -Nonhlanhla

Aspirational relationships

We interviewed three experts on the aspirational relationship model. Women in aspirational model relationships blend pragmatic economic need with the hope of a more stable emotional and social life in the future via marriage:

> Maybe there is something big which he will do for you, like giving you pocket money so that you can buy things you need or else he surprises you and buys you things that you need. Maybe he knows that you need a new phone then he buys you one. Maybe you need clothes, maybe he notices that you need to do your hair and he takes you to the salon. Or maybe next day he marries you and you become his wife.
> -Nomzamo

The relationship is rarely hidden. It often begins through the introduction of a family member or neighbor. Couples frequently live together. Male partners are expected to assume a provider role for women and their children, although they may not always be able to do so and this may cause tension.

> We started our relationship and then he moved in to live in with me, in my flat. So he was the one who knew what we needed and he bought everything, especially food. He was responsible when it came to food and rent. So he started playing that part. […] He has changed a lot from what

> he was when we meet. He is an abusive person. We are always fighting because he now doesn't meet my needs. When I get to do things for myself he has a problem with that.
> -Nomvula

If the couple does not live together a woman's partner is still expected to provide support as he can. Men's willingness to take on a male provider role, similar to what is expected in a traditional marriage, is important to women in aspirational relationships.

> I told him that I wanted to open a clothing business. At home my family gave me the money to start it but it is not enough. He said ok no problem I will give you the rest. If he didn't give me the money I was going to be stressed because I didn't have another way and at home they had already given me the little they could give.
> -Nomzamo

Despite the importance of the male provider role in aspirational relationships, women disavowed overt economic motives. Instead they hoped that their relationships would eventually transition into marriage:

> That's what makes you fall in love with a person, until you trust them enough to believe that they want to marry you… I had a job, when somebody offered me money it came straight from his heart to give me whatever… I slept with him because I loved him, because he promised to marry me.
> -Nomsa

Because relationships tend to be predicated on the hope of a future marriage, women in urban pragmatic relationships are less likely to use condoms. This is especially true as relationships progress over time.

> At first we [used condoms], but we got used to each other and forgot all about that…He told me he was not used to it, and came up with a lot of excuses…. He used to tell me that he couldn't get a full reaction, you know those stupid excuses…he told me that he really hated it, so we stopped using it.
> -Nomsa

Aspirational relationships are less socially regulated than marriage and less egalitarian than the university model. Because of this, women tend to worry more about cheating but are less willing to end a relationship over potential infidelity.

> It's pointless to ask him that what problem is because he will never tell me. Because maybe you can find that the problem is in me and he will tell me because he is shy to tell me…or maybe you find out that there is someone else he is dating that is why he gets annoyed but he usually does ignore me….I do love him…I can be patient with his mistakes.
> -Nomzamo

While the hope of marriage counterbalances some worries, a woman will end a relationship if she decides that cheating presents a serious and immediate health risk.

> Just because of alcohol put myself at risk of contracting HIV… We broke up [because] he used to misbehave, and then I found out he was cheating.
> -Nomsa

A man's family has the ability to end the relationship or prevent a marriage if they believe a woman is interested in marrying him for solely economic reasons.

> He had the intention of making me his wife. He told his family about his intentions of us getting married after we had a child. His dream was crushed by his mother who was against the whole idea and she was the one who had a final say. She didn't like me at all. The problem was that she had the mentality that I was after her son's money.
> -Nomvula

Not all aspirational relationships were predicated on the hope of marriage, especially if a partner was already married or in a primary relationship. For these women, the main relationship benefits were economic, without the eventual hope of social sanction. Despite economic dependence on a male partner, the utilitarian nature of the relationship made condom negotiation more viable than in relationships that had the potential for marriage:

> **Informant:** It's someone I know and if I need money I call him and ask for him for some money. Ok he is married and he will never marry me. So I make sure that when he comes over to my place my fridge is empty and

> he has to put it into his consideration that we won't get married so there is something he should do for me, like to make sure that my fridge is full…so he has to help me when I'm in need of something.
> **Interviewer**: So is there many an instance whereby maybe you found yourself that you had sex and you didn't use condoms?
> **Informant:** Eish. It has never happened I think the reason is that he is married and he is extra careful that I don't get pregnant and I am extra careful.
> -Thembi

University relationships

We interviewed five experts on the university model relationship, and found that these may manifest in two different ways – a more egalitarian model, and an economically motivated model. The more egalitarian type tends to begin as a friendship or after getting acquainted in school or church. Women emphasized that while they expect gifts as a demonstration of love they are not motivated by these. This may in part be because their partners are also currently students who are not capable of large economic outlays.

> Since I was young I didn't have that mentality of being dependent to other people. I have learnt to do things for myself and besides … where did I except him to get the things I needed? I do ask him for some money if I need to do my hair, I simply tell that that I need to do my hair. He knows that every month he has to give me money to do my hair and buy myself anything I need. I can say he is my friend because we get along just fine… He is not that much older than me that I'm scared of sharing my problems with him. … Like I do give him the respect he deserves as my boyfriend but I'm free when I'm with him.
> -Buhle

In egalitarian university relationships, condoms are normative and women feel empowered to negotiate condom use with their partners. As relationships continue and trust builds couples may decide together to discontinue condom use.

> **Informant:** We didn't get a condom I had thought I had one only to discover that there weren't any…but then I regretted it later…I felt uncomfortable I was uneasy
> **Interviewer**: Did you talk before doing, that you both want to have sex without a condom

> **Informant:** We both agreed and he was telling me that he trusts me and all that…he said he trusts me he said he knows that I wouldn't do something like that…so I just trusted him…and [because] we really wanted to do it.
> -Khethiwe

Monogamy is normative for both partners, although many women worry about cheating, especially in long distance relationships.

> I do love him but then you get to experience so many things. Like being hurt by the person you love, being cheated on and all those sorts of things. You know I can't trust him because we don't stay together so I don't know what he engages himself in when he is not with me.
> -Nokuthula

Women's families usually know about these relationships and approve of their daughters involvement with an educated man who has a strong financial future.

> My family they know him and what makes them to accept him is that he is educated and employed so they are happy that we will have a good future unlike if I'm in a relationship with someone who is less educated than I am.
> -Nkosingiphile

Economically motivated relationships tend to have more overtly materialistic motives. Women may use this type of relationship to supplement tuition, support a child, or finance a fashionable lifestyle.

> **Interviewer:** Let us talk about here at [University] what are some of the reasons why young women agree to have sex?
> **Informant 1:** Just to stay with the guy so they have sex with them.
> **Informant 2:** So some are forced to do it because of that?
> **Informant 1:** I think…people just see as part of the relationship you can't be in a relationship and not have sex. It's not wrong for some people.
> **Informant 3:** Also for money, yes.
> **Informant 1:** I will sleep with you because you will pay [laughs]. Not necessarily paying but for the benefits I will get from you.
> **Informant 3:** Friends with benefits.
> **Informant 2:** I feel like I have to pay back.
> **Interviewer:** What do they use the money for? Like for the students here what do they use the money for?
> **Informant 1:** For shopping sprees, expensive phones, trips, latest phones – [Samsung] galaxy phones.

> **Informant 3:** Nice things exactly.
> **Interviewer:** Would a woman still sleep with a man if he was not giving her all this gifts and nice things?
> **Informant 1:** If she loves him.
> **Informant 2:** If she loves the man I think that is the only reason she can sleep with him.
> **Interviewer:** Would she still sleep with him if she did not love him but he was still giving all this gifts?
> **Informant 1:** I guess.

Three university informants described their personal experience with this second type of university relationship.

> He is someone who understands my situation and when I ask him anything he is so understanding as he can see that I'm a single parent and I am still at school. He is someone who helps me a lot when I tell him my problem. The only problem I have is that I have to have sex with him whereas I don't love him at all. We met at a restaurant, I was having lunch and he asked to share a table with me. I said yes and he bought me a drink he also offered to pay for my meal…. He made sure that I could see he has money so I told myself that I will no longer struggle financially, and he also told me that if I need anything I should call him. He is someone who really helps me in most times.
> -Jabulile

> You know that as university students there are things which you need and you feel that they are important to you but they're not important to another person, and so when you ask for that thing at home they will give you money to but it because they feel that it's not that important. So you will sleep with a person because you need him to buy you an expensive phone, so that was the case with my situation. I slept with a man because I needed to buy the latest phone.
> -Nkosingiphile

The economically motivated university relationship provides fewer social benefits than the egalitarian type, although it does provide some. Peers may be more willing to provide loans if the presence of a male partner increases the likelihood their loan will be repaid.

> If he doesn't have money then he tells me to borrow it from someone and he will pay it when he gets it. So that's what I do, I don't have any other means in which I can get money.

-Nokuthula

Friends and family are also more likely to approve of a more overtly economically motivated relationship if material and economic benefits are shared.

> [My friends] didn't have any problems with it because they also benefited, whatever I used to get from this person they also had a share.
> -Jabulile

While there was some distinction between economically motivated and egalitarian relationships, there was also a good deal of overlap. Women saw gift giving and financial support as a sign of love and affection, and one relationship may contain elements of both motives:

> He is a nice person… my child calls him daddy and he calls him son. So that makes me happy that he loves me and my child. That is what I like about him, and he helps me when I need anything for my child …. As for my family they know that he is supportive and he helps us so they just love him. At home I'm the eldest child we don't have a mother or father so I am the one who has to take care of my sisters, even though they are old enough, then are not working. You know, they tell themselves that they will get money from boys. So I have to make sure that there is always food and they don't run out of electricity. So he helps me and they know that, so they are ok with my relationships.
> -Nokuthula

In both types of relationships, women worried about cheating and monogamy and felt that having sex whenever their boyfriend requested it was a way to both "prove" their own fidelity, and prevent their partner from straying.

> "I think it was peer pressure from my friends. Because I kept complaining that he is cheating and they asked me what I was expecting because I was not sleeping with him. Since I found him not a virgin he will definitely go to sleep with someone else."
> -Khethiwe

Sugar daddies

Several women described relationships that they had had with older men for financial gain when they were younger. Some purposely used men's desire for a sexual relationship to try and get as many gifts as possible:

> We used to meet when I coming from school and he used to offer me a lift, I can say that is how we meet at that's how the relationship started. He used to flash around his money and I was tempted to be in a relationship with him and my friends they also managed to convince me to do so… I freely asked him [for what I wanted] as I took advantage of the fact that I knew that he was going to give me anything I asked for because I knew that it was his way of drawing me closer to him in order for me to have sex with him.
> -Nkosingiphile

The man tended to be older and was often married. Girls were usually school age, presumably secondary school. Sugar daddy relationships are typically hidden from family and communities, although peers may encourage them and women may enjoy some degree of social status from dating a high status man.

> He was someone who is well known like I said and he liked women a lot and most girls in my area they wanted to go out with him as is someone who flashes his money. Well, we will get tempted and also to be known that you are dating so-and-so.
> -Thandile

Women get some social benefits from sugar daddy relationships with high status men, but they also run the risk of social censure and may be accused of breaking up another woman's marriage.

> There was this old guy I was in a relationship with when I was still at school, you know with that relationship it was peer pressure … my friends they told me to accept this man's proposal so that we can get to spend his money and I said yes to him. So we dated for about a few months … I decided to end the relationship as he was older than me and I was scared of my parents finding out that I was dating an older man and to make matter worse he was married… One thing led to the other and we ended up having sex but we used condoms… He used to give me his money

> without a problem and he used to buy me birthday presents I remember my first cell phone, it was a gift from him.
> -Nkosingiphile

> As for my friends some were fine with my relationship but some they envied me and one of my friends ended up dating him. Then my family they were against it because he was married and my sister she used to tell me that what we were doing it was wrong.
> -Thandile

Condom use is more likely if a woman's partner is married and does not want her to get pregnant. However if the young woman has few economic alternatives outside of the relationship she is less able to negotiate condom use.

> We ended up not using condoms … you know it becomes a challenge when you try to insist that he should use them and he refuses and you will end up giving in because you need his money. So you are scared of not doing what he wants because you need his money and he knows very well that if he doesn't want us to use condoms you will do what he wants.
> -Jabulile

Neither partner is expected to be monogamous. The man is likely already married or already has a primary partner. A young girl who is "just playing" may also have other partners, and feels no need to be faithful to the older partner. Women were aware that the lack of monogamous expectations within the relationship heightened HIV risk, although external factors could still prevent their use.

> I was worried of contracting HIV because I knew very well that he was not only dating me but there are other ladies he was dating and sometimes when we had too many drinks we didn't use condoms.
> -Thandiile

If a girl's family – or her partner's wife – finds out about the relationship then the girl is likely to be the one contacted and told to end the relationship.

> One lady called me and she told me that she was going to tell my mother of my behavior, that I was in a relationship with someone who is married. That is one reason I decided to end things…I didn't want my parents to be disappointed in me.

-Nkosingiphile

Discussion

As with all qualitative studies, our results are meant to describe emic perceptions and understandings of transactional sex, rather than make generalizable claims about prevalence and risk correlates (Creswell, 2013). While distinct differences between relationship models emerged, it is possible that some salient themes did not reach saturation due to the relatively small number of key informants from each model. We were also unable to seek out key informants on the sugar daddy relationship model, in part because the sample was restricted to informants 18 and over for ethical reasons. Despite these shortcomings, we feel that recruiting key informants based on their cultural competence score – women whom we knew to be experts within each relationship model *a priori* allows us to be confident in the themes we did identify within the data (Hruschka & Maupin, 2013; Hruschka, Sibley, Kalim, & Edmonds, 2008). While qualitative data are not intended to be generalizable, we believe that grounding our findings in theory – the social ecological model to understand how women's personal preferences, relationships, and community pressures affect transactional sex across the life-course, and hegemonic masculinity to understand the social pressures surrounding transactional sex – increase transferability, as does our attempt to thickly describe our participant's lives and experiences both here and in notes and memos throughout the data collection and analysis process (Creswell, 2013; Lincoln & Guba, 1985). We also used prolonged engagement and informal observation, along with data triangulation between IDIs and FGDs, and member checking with RAs, clinicians, and local Swazi social scientists to improve data credibility (Lincoln & Guba, 1985).

Hegemonic femininity theory suggests that pariah femininities are stigmatized and condemned by community members because they threaten male dominance, while

hegemonic femininities are condoned and encouraged because they support it (Schippers, 2007). Three of the relationship models we examined manifest hegemonic femininity, while two exemplify pariah femininities. In the hegemonic models women receive socially sanctioned male economic support. In return they are humble, submissive, respectful, and sexually well behaved – monogamous and available to their partners. In the pariah models women also receive male economic support. However, they do so without avowing love for their partners, expecting marriage, or maintaining an aura of monogamy -- behaviors that simultaneously mirror hegemonic masculinity and subvert male dominance. As a result they are condemned and less likely to receive help from their communities in times of crisis, including if they fall ill. They contrast with the sympathetic woman who is "doing the wrong thing for the right reasons." Her motives are clearly material, and she may be engaged in multiple partnerships, but her economic need reinforces her dependence on men. Her actions do not threaten hegemonic masculinity, so her behavior is discouraged but it is less stigmatized.

Risky transactional sex is likely a manifestation of the relationship between harmful hegemonic gender roles and HIV vulnerability rather than an exogenous cause. All women had difficulty negotiating condom use and enforcing their partner's monogamy, however women in pariah models may face additional vulnerability as a result of decreased social support. Interventions designed to mitigate the risks of transactional sex may have greater impact if they focus on the role of hegemonic masculinity and femininity across the social-ecological spectrum, rather than on the direct exchange of gifts or money within a relationship. Those that do not may risk pathologizing certain relationship types and increasing vulnerability by adding to the stigma of pariah femininities.

For *inkhosikati* or married women, policy changes can mitigate the effects of economic dependence and legally sanctioned male sexual entitlement by addressing women's property rights and outlawing marital rape. In much of southern Africa women's limited property rights reinforce men's role as economic providers and there is some indication that women's inability to own, inherit, or control property may increase HIV vulnerability (Dworkin, Grabe, et al., 2013; Tumlinson, Thomas, & Reynolds, 2015). The legal status of marital rape is ambiguous (Stefiszyn, 2008), and it is not uncommon in the region (Dartnall & Jewkes, 2013; Mugweni, Pearson, & Omar, 2012). As in other structural intervention strategies, legal reforms to address property rights and marital rape would work best within a package designed to influence traditional leadership structures and social norms while bolstering community based enforcement mechanisms (Dworkin et al., 2014; Kim et al., 2007).

Women's high unemployment and low access to financial resources reinforces dependence on male breadwinners. Microfinance programs have shown promise as a way to decrease women's reliance on men and promote economic empowerment. In Malawi, an unconditional cash transfer program significantly reduced young women's risk of HIV and HSV-2, likely by allowing them to choose less risky partners (Baird, Garfein, McIntosh, & Oezler, 2012). While unconditional cash transfers may be a more efficient or lower cost short term intervention choice, programs that emphasize vocational skill building and long-term economic empowerment may have a better chance of allowing women to resist harmful hegemonic expectations in the long run (Dunbar et al., 2014; R. Jewkes et al., 2014).

Interventions that focus on gender transformative work with men and women have potential to reshape the social landscape and create new, empowering models of masculinity

and femininity (Baker et al., 2014; Connell & Messerschmidt, 2005; K. L. Dunkle & Jewkes, 2007; Morrell et al., 2012; Schippers, 2007). By definition hegemonic masculinity is a process that allows men to exercise power over women, sometimes violently. Because of this, men must be engaged in the gender transformation process or women who attempt to challenge gender norms on their own will risk potentially dangerous backlash. Qualitative evaluations of The One Man Can campaign in South Africa suggested that community based workshops and dialogues among men can provide a space for men to reflect on how hegemonic masculinity harms both men and women, and increase gender equity norms (Dworkin, Hatcher, Colvin, & Peacock, 2013; van den Berg et al., 2013).

All the relationship models we examined included some degree of economic dependence and some degree of potential HIV risk. Consistent with previous findings in the region, some women did feel unable to make empowered sexual decisions or negotiate condom use because they felt economically beholden to their partners (Dunkle et al., 2004; N. Luke, 2003; N. Luke, Kurz, KM., 2002). However, most women felt that rather than a simple economic exchange, their relationships were a complex blend of gendered sexual and economic obligations. They were aware of the risks inherent in their relationships and actively worked to mitigate them. Despite this, the same factors that dictate relationship obligations also constrained their ability to request condoms or demand monogamy from their partners. Future research and programming agendas may be more effective at capturing and ameliorating the consequent risks if they consider this complex interplay between individuals, communities, and gender hegemonies.

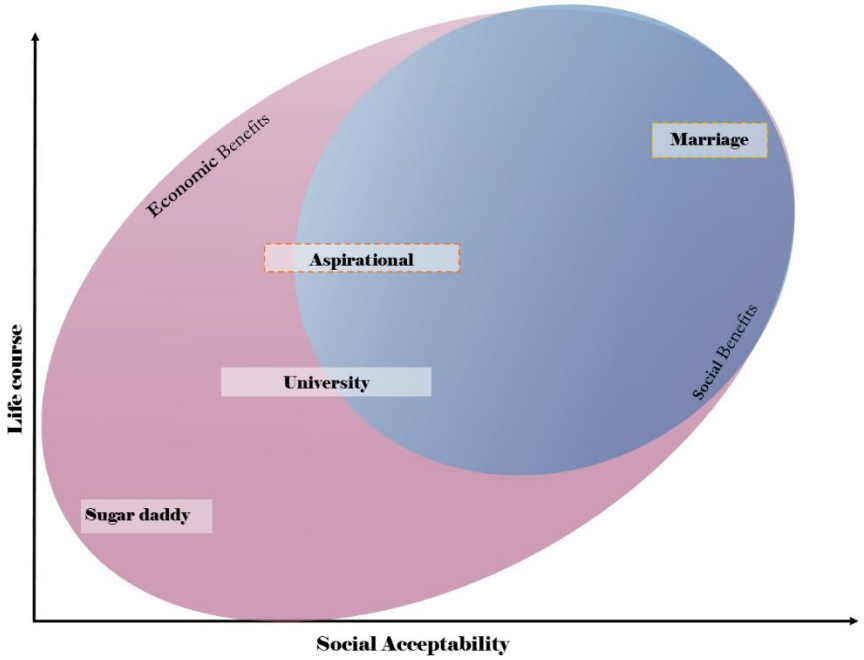
Table 1: Participant competence scores and demographics

ID	*Age*	*Education*	*Marital status*	*Recruitment Site*	*University*	*Aspirational*	*"Inkhosikati"*	*Respectability*
BUHLE	21	Tertiary	Single	University	0.81			0.79
JABULILE	19	Tertiary	Single	University	0.76			
KHETHIWE	21	Tertiary	Single	University	0.68			0.83
NKOSINGIPHILE	30	Tertiary	Married	University	0.67			
NOKUTHULA	34	12	Single	Peri-urban	0.60			
NOMSA	36	11	Single	Rural		0.77		
NOMVULA	38	Tertiary	Married	University		0.65		0.72
NOMZAMO	24	12	Single	Rural		0.60		0.61
NONHLANHLA	28	9	Married	Rural			0.78	0.84
SIHLE	50	12	Married	Urban			0.73	0.77
SIMPHIWE	19	9	Single	Rural			0.64	0.77
THANDEKA	20	12	Single	Urban				0.86
THANDILE	30	12	Married	Peri-urban				0.84
THEMBI	30	10	Single	Peri-urban				0.79
ZOBUHLE	28	8	Married	Rural				0.71
ZODWA	27	Tertiary	Single	Peri-urban				0.68
				Declined				
	40	8	Married	Rural		0.74		0.61
	50	5	Married	Rural			0.86	0.67
	23	10	Single	Peri-urban			0.82	--
	26	10	Married	Rural				0.72

Table 2: Monogamy and condom use likelihood by relationship type

		Relationship expectations	**Relationship trust and duration**	**Her socio-economic alternatives**
Sugar Daddy	*Condoms*	More likely. • He may be married and wants to avoid a pregnancy	More likely. • Low trust and short term on both parts.	• Difficult if there are few alternatives • Negotiation is possible if she is 'just playing.'
	Monogamy	Less likely. • He may be married or have primary partner. • She may feel bad or face social censure about being with a married man and end relationship.	Less likely • Relationship is "hidden" from both social networks. • Less likely if she is 'just playing.' • More likely she hopes the relationship will become serious.	More or less likely • More likely he is her only source of income • Less likely if she is 'just playing.'
University	*Condoms*	More likely • Condom negotiation expected. • She may end relationship if he refuses.	More or less likely • Egalitarian: slightly less likely. • Economically motivated: Unclear, but slightly more likely.	More or less likely • Egalitarian: Gifts demonstrate love and may not affect condom use. • Economically motivated: Condom negotiation difficult if he doesn't want them.
	Monogamy	More likely • She is more likely to demand monogamy than in other relationship types. • She may end relationship if he refuses.	More or less likely • Egalitarian: She is more likely to be monogamous but worries about him. • Economically motivated: Both partners less likely to be monogamous. • Sex to prove she is faithful or ensure his monogamy.	More or less likely • Egalitarian: Family may pressure her to stay with educated or financially stable partner, but she still worries about cheating. • Economically motivated: She cannot demand monogamy from him. She is more likely to have second partner
Aspirational	*Condoms*	Not discussed	Less likely as relationship continues.	Not discussed
	Monogamy	Less likely • Cheating suspicions common, normative. • Infidelity may not be worth ending relationship.	More or less likely • Less likely to end relationship over cheating as relationship becomes longer.	Unclear. • Possibly less likely to demand monogamy as partner takes on male provider role.
Inkhosikati	*Condoms*	Less likely. • Children cement and sanction marriage.	Less likely. • May provoke a fight or accusations of cheating.	Not discussed
	Monogamy	Aspirational. • Wives are expected to have sex with husband on demand.	Aspirational • She may have sex with him to prove she is faithful, or ensure his monogamy.	Not discussed

Figure 1: Relationship models by social acceptability across the life course



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Chapter 4: Constrained agency and HIV risk in transactional sex relationships

Introduction

Thirty five million individuals around the world are currently living with HIV, and in recent years there have been major advances in biomedical approaches to treat and prevent the virus (UNAIDS, 2014a, 2014b). While biomedical approaches which focus on individual risk have great potential, social drivers such as gender disparities, wealth inequality, and stigma that manifest at the community and societal, as well as individual, level remain important considerations in the fight against AIDS (Auerbach, Parkhurst, & Caceres, 2011; Seeley et al., 2012).

Transactional sex typifies the ways in which economic and gender inequality manifest at multiple levels of the social ecology to create HIV risk. It has been shown to increase women's risk of HIV by up to 50%, and is significantly associated with increased intimate partner violence (IPV) (Dunkle et al., 2004; Hunter, 2007; Jewkes et al., 2006). While transactional sex is typically measured at the relationship level using the operationalization "the exchange of money or gifts for sex" (Luke, Goldberg, Mberu, & Zulu, 2011), it is shaped by gender norms, local and international policies, social pressures from family and peers, and individual preferences and motives (Bhana & Anderson, 2013; Groes-Green, 2013; Hunter, 2007; Ruark et al., 2014).

Transactional sex is distinct from sex work. While sex workers and their clients typically acknowledge the commercial nature of their relationship, women who engage in transactional sex may not see their relationship as economically motivated and do not associate themselves with a stigmatized sex work identity (Dunkle, Wingood, Camp, & DiClemente, 2010; Groes-Green, 2013; Stoebenau et al., 2011). Women engage in transactional sex with long or short-term partners for reasons ranging from immediate

survival needs to a desire for fashionable goods or status symbols (Groes-Green, 2013, 2014; Masvawure, 2010; Swidler & Watkins, 2007). Because the nature and motives of relationships vary widely there are also a range of risk etiologies for HIV and IPV. Men who embrace the male provider role as an aspect of hegemonic masculinity are more likely to be controlling and violent (Jewkes, Morrell, Sikweyiya, Dunkle, & Penn-Kekana, 2012). Women may feel less able to negotiate condom use if they are economically dependent on their male partners (Luke et al., 2011). They may also feel pressure to maintain a relationship that can diffuse economic support to their families and broader social networks, or which offers them higher social status in their community (Cole, 2004; Masvawure, 2010; Wamoyi, Fenwick, Urassa, Zaba, & Stones, 2011).

Motives for sexual relationships – or speculation about motives -- are common topics of conversation in much of southern Africa and a woman's sexual reputation and financial resources can affect her standing in her community (Stoebenau, 2009; Stoebenau et al., 2011; Watkins & Swidler, 2009). A high status partner or access to high status commercial goods may be prestigious (Masvawure, 2010; Stoebenau et al., 2013; Stoebenau et al., 2011); however being perceived as promiscuous or materialistic may cause women to be cut off from material or emotional support in times of need (Stoebenau et al., 2011; Strebel, Shefer, Potgieter, Wagner, & Shabalala, 2013; Swidler & Watkins, 2007). Perceptions of promiscuity and material motives may be especially stigmatized because they are considered incompatible with normative notions of African femininity (Morrell, Jewkes, & Lindegger, 2012). If women who are perceived this way are also poor or living with HIV they may be accused of bringing misfortune on themselves through deviant behavior and face the loss of both social and material resources (Nyblade et al., 2003; Stoebenau, 2009).

The stigma attached to material motives may influence attempts to understand the risk correlates of transactional sex in southern Africa. Women may be reluctant to affirm survey questions that ask them to identify material gain as a primary motive. One US based study found that only 15% of women who reported initiating a relationship for economic reasons agreed that they had ever exchanged sex for money (Dunkle et al., 2010). Operationalizations of transactional sex based on concrete behaviors, rather than subjective self-identification of motive, may reduce social desirability bias and reveal distinctions between women who identify with stigmatized sexual-economic relationships and those who feel that theirs are socially sanctioned.

A strong body of quantitative evidence supports the association between transactional sex and HIV, and ethnographic studies have described the links between transactional sex, social standing, and HIV. However little quantitative evidence exists that explores how social constraints such as poverty or women's need to carefully manage their sexual reputation affect these connections. We conducted a quantitative study in Swaziland to understand the risk pathways between transactional sex, social standing, and HIV. We hypothesized that social standing would influence the pathway from transactional sex to HIV, and that social constraints would shape both this relationship and the link between transactional sex and HIV risk behavior.

Methods

Setting

Swaziland is a small nation in southern Africa with the world's highest HIV prevalence: 31% of adults age 18-49 are currently living with the virus and antenatal data suggest that prevalence peaks at 54% for pregnant women age 30-34 ("Antenatal Surveillance," 2010;

Bicego et al., 2013). Although it is technically considered a middle income country, Swaziland has high income inequality – the majority of Swazis live on less than $1.25 a day while the king enjoys an annual household budget of US $61 million (AfDB, 2013; AFP, 2014; DHS, 2007). HIV is highly stigmatized in Swaziland, and people living with HIV have reported name-calling, being excluded from sources of food and water, gossip, and conjecture about how they may have acquired the virus (Root, 2010). Research with Swazi women who sell sex and live with HIV has documented women being denied food and fired from jobs unrelated to sex work as a result of their HIV status (Fielding-Miller, Mnisi, Adams, Baral, & Kennedy, 2014).

Participants

The study was conducted with a clinic-based sample of pregnant women accessing antenatal care. Approximately 95% of Swazi women give birth to at least one child in their lifetime and 97% of these access antenatal care at some point in their pregnancy (DHS, 2007; "Maternal Health Services in Swaziland," 2011). All pregnant women receive free HIV testing, counseling, and appropriate linkages to care at every antenatal visit (PANOS, 2012).

Participants were recruited systematically from the clinic line by a female Swazi research assistant (RA) and were eligible for the study if they were 18 years or older, receiving antenatal care that day, and spoke siSwati.

Ethical considerations

The Swaziland Scientific and Ethics Committee (SEC) and the Emory University Institutional Review Board approved this study. Management and head nurses granted permission at each clinic site. Traditional leadership reviewed and authorized the study protocol at the rural study site. All participants provided written informed consent prior to

beginning study procedures. Per SEC preferences we did not provide participants with any financial incentives. We did provide food, drink, and childcare while they participated. The first author shared preliminary findings with the Ministry of Health, the national HIV coordinating body, and clinic staff at each study site at the conclusion of fieldwork.

Measures

Women were asked to provide a pseudonym for each sexual partner in the last 12 months. Questions relating to transactional sex, reasons for sexual relations, violence, and partner's HIV status were repeated for each partner, for up to 5 partners. Data and analyses presented here are for the single most recent partner.

The survey was created in English, translated into siSwati, and back translated into English to check accuracy. It was piloted with a small convenience sample of urban clinic attendees using cognitive interviewing techniques and modified as necessary. The survey was self-administered in siSwati using audio computer-assisted self-interview software. An RA assisted participants with initial demographic questions to ensure they were comfortable and then withdrew unless participants requested assistance.

Transactional sex

Transactional sex was measured with 22 items which previous work suggested Swazi women hoped to get in exchange for sex (table 1). Women were asked which items they had received from each sexual partner in the last 12 months. Items were weighted according to 3 different possible models of transactional sex and standardized using Z-scores. The scale on which a woman had the highest score was considered the model with which her relationship most closely aligned. We built a single composite scale in which the highest of the 3 Z-scores was her overall transactional sex scale score.

Reasons for having sex

Survey participants were asked to select any of 27 reasons that could describe why they had agreed to have sex with a partner in the last 12 months. Qualitative findings from a previous study phase, supported by an initial exploratory factor analysis, suggested that poverty, spite, money, hunger, her children's sake, violence, abuse, fear he would leave, being forced by her parents, and hoping for marriage were likely indicators of a single latent construct designating the experience of constrained agency which could increase risk or make exiting a relationship difficult.

HIV

All women receive an HIV test at every clinic visit using the Determine HIV rapid test. Positive results are confirmed using Uni-Gold HIV rapid test. Participant's results from that day's HIV test were recorded separately, double entered, and later linked to survey data using an anonymous unique ID. Serostatus for women who had tested HIV positive on a previous visit was recorded from clinic records provided by participants.

Condom use

To reduce social desirability and recall bias, condom use was assessed based on condom use at last sex. Women were asked, "The last time you had sex with [partner], did you use a condom?" Women who responded "yes" were coded 1, women who responded "no" were coded 0.

Social status

Social status was measured using the MacArthur subjective social status scale, a globally validated instrument (Brown et al., 2008; Hu, Adler, Goldman, Weinstein, & Seeman, 2005;

Operario, Adler, & Williams, 2004). Participants were shown an image of a ladder and asked to think of it as representing where people stand in their communities. They were then asked to place themselves on the ladder according to how they considered their own social standing. They could do so by either entering a number or clicking on an image. Participants were reassured that community means many things and to think of community in a way that was relevant to them. Social status score was collapsed into a categorical variable by quartile.

To assess negative sexual reputation participants were asked if they had ever been called a nasty name or thought they had been called a nasty name behind their back. "Nasty name" was defined with a series of examples that implied mercenary or promiscuous sexuality ("gold-digger" or "slut"), gathered during formative focus group discussions. Responses were assessed on a 4-point likert scale: "yes," (4) "maybe yes," (3) "maybe no," (2) and "no" (1).

Partner's HIV status

Women were asked if their partner's HIV status was positive, negative or unknown. Those who reported that their partner was HIV negative were coded "0." Those who responded that their partner was living with HIV or that they did not know their partner's HIV status were collapsed into a single category and coded "1" on the assumption that both not knowing a partner's HIV status and knowing that a partner was living with HIV implied HIV risk and a motivation for condom use.

Violence

Violence measures were based on the WHO violence against women instrument as adapted in similar South African studies (Jewkes et al., 2008; WHO, 2005). Individual items are

shown in table 1. For each item women were asked if an incident had happened never, once, a few times, or many times. Answers were collapsed into a dichotomous variable. Women who had experienced 2 or more incidents in the past 12 months were coded as having experienced IPV.

Duration of sexual relationship

Relationship duration was calculated in months based on the length of time from the first time a woman had had sex with her partner to the most recent time. Women who could not remember the exact date were told to record the day as the 1st and make their best guess as to the month.

Age and education

Level of education was collapsed into none, primary (through grade 7), secondary (grades 8 – 12), and tertiary (any university or vocational training). Age was calculated as the difference between the birthdate participants provided and the date of the interview.

Analysis

Because a voluntary clinic-based sample may not be generalizable, we compared our data with 2010 national antenatal surveillance data and summary statistics from a population based random household survey conducted in 2010-2011. Antenatal data were provided privately by the Swaziland Ministry of Health ("Antenatal Surveillance," 2010). Comparisons with population level data were based on initial study findings issued in a report (Bicego et al., 2013; "SHIMS," 2012).

We built a measurement model in MPlus to assess whether the hypothesized cluster of reasons that could constrain a women's agency represented a single latent construct.

After assessing the fit of the measurement model we examined the prevalence of constraint indicators across relationships. We created a single dichotomous grouping variable in which women were coded 0 if they were "not constrained" and 1 if they were.

To compare the correlation between HIV and transactional sex for women with constrained agency versus those who were not constrained we conducted a multi-group path analysis in MPlus. The hypothesized path model specified was based on indications from previous research that the influence of transactional sex on condom use and social status may in part explain the link between transactional sex and HIV risk (Fielding-Miller et al., 2014; Miller et al., 2011; Watkins & Swidler, 2009). Qualitative findings from a previous study phase suggest that this relationship may differ for women with constrained agency versus those who experience relatively low constraints on agency.

We first allowed all structural coefficients to vary freely across groups and assessed this model for overall fit and significance of individual variables. Per recommendation by Kline, model fit was assessed based on model chi-square statistics, ($p \geq .05$), root mean square error of approximation (RMSEA) in which RMSEA $\leq .05$ was considered good fit, comparative fit index (CFI), and the Tucker Lewis index (TLI) (Kline, 2005). For both CFI and TLI, fit indices greater than 0.95 were considered excellent fit and values over 0.90 were considered moderate fit (Kline, 2005).

We constrained one coefficient at a time to equality across groups and assessed how this influenced model fit. If constraining a path to equality across groups did not result in a significant difference in model fit according to chi-square difference tests we did not consider that path to differ significantly across groups. If fixing a path to equality resulted in significantly poorer fit then that path was considered to differ significantly between groups.

After assessing each path we ran a final full model. Paths that were not significantly different across groups were constrained to equality. Paths that were significantly different across groups were allowed to vary freely.

Results

Sample

A total of 406 women participated in the survey. Of these, 392 provided information on reasons why they had agreed to have sex with their partner in the last 12 months and are included in this analysis. The sample represented an approximately 58% acceptance rate, which was lower than preferable and likely influenced by a lack of financial incentive. Women who declined typically cited being in a hurry, being too busy, or not being interested. Summary statistics are shown in table 2.

Comparison with ANC surveillance data using t-tests showed no statistically significant difference in age between our sample and typical antenatal clinic attendees. Chi-square comparisons with population level data showed that our sample had a higher proportion of women age 18-24 ($p < 0.001$), and a lower proportion of women age 35+ ($p < 0.001$) than the general population. Fewer women in our sample reported having no education than women in the household survey (3.5% vs. 6.4%, $p = .02$), but there was no significant difference compared to ANC sentinel surveillance data. Women with only primary education were under-represented in our sample compared to both ANC and household survey data (24% vs. 29.6% and 31.3%, both $p < 0.05$), while secondary school education was over-represented (68.2% vs. 50.8% and 58.0%, both $p < 0.001$). The proportion of women with tertiary education was significantly lower than in population level data (4.19% vs. 12.70%, $p < 0.001$), however there was no significant difference compared to

antenatal surveillance data. Our sample had an HIV prevalence of 33.79%. This is not significantly different than the 38% female prevalence found in the household survey ($p = 0.11$). It is significantly lower than the 41% prevalence reported in the antenatal surveillance data ($p = .014$).

Constrained agency measurement model

Poverty, spite, money, hunger, the sake of one's children, fear a partner would leave, hoping for marriage, violence, abuse, or being forced by one's parents all appear to measure a cohesive latent construct with moderately good fit (RMSEA = .029, CFI = .940, TLI = .923). Each indicator loaded at greater than 0.50 with $p \leq 0.05$.

70.66% of the sample did not report having sex for any reason that would indicate constrained agency. Of the 115 women who reported at least one indicator of constrained agency, the majority reported only 1. Women who reported one or more indicators of constrained agency were coded as "constrained" in their relationship. Women who reported no reasons were coded as "not constrained."

Summary statistics

As summarized in table 2, 41.94% of participants reported using a condom at last sex and 38.11% reported 2 or more incidents of intimate partner violence in the last 12 months. 16.3% of women reported that their partner was living with HIV and 32.1% of women reported that they did not know their partner's HIV status. Women who did not report constrained agency in their relationships were approximately 25% more likely to report that their partner was HIV positive or that they did not know their partner's status than women who were constrained ($p < 0.05$). Approximately a quarter of women thought they had been called a nasty name in person or behind their back.

Table 3 shows median transactional sex score by select outcome variables for the full sample and across groups. Women with higher transactional sex scores were significantly more likely to have a partner whom they believed to be negative than women whose partner was positive or whose status they did not know (Z-score 0.25 vs. 0.03, p=0.04) and to have a positive linear association between higher social status and receiving more items from a partner (p=0.01). Women with relatively unconstrained agency had similar associations between transactional sex, partner's HIV status, and subjective social status. Women who did not report constrained agency indicators were less likely to report condom use at last sex as their transactional sex score increased, an association that was not significant for the full sample or women with constrained agency.

Path model

The pathways from social status to HIV outcome and from the transactional sex scale to condom use at last sex differed significantly across groups and were allowed to vary freely in the final model. This model had excellent global fit, with RMSEA = 0.014, CFI = 0.985, TLI = 0.978, and a chi-square value of 34.168 (df = 33, p=0.41). The final model had 25 free parameters (figure 1). Our sample size provided sufficient power to test this model according to the heuristic suggesting a 10:1 ratio of participants to parameters and Kline's suggestion that a sample size of $n \geq 200$ is generally sufficient for a structural model (Kline, 2005; Tanaka, 1987).

The pathway between transactional sex and HIV was not statistically significant for either group. For all women, receiving more items that were valued more highly was significantly positively associated with subjective social status. Each standardized increase in the transactional sex Z-score resulted in a 0.137 unit increase in subjective social status for

women who did not experience constrained agency (p = 0.035), and a 0.130 unit increase for those who did (p = 0.036). Condom use at last sex was associated with a 0.195 standard deviation increase in the likelihood that a woman was living with HIV for unconstrained women (p=0.014), and a 0.181 increase for those who were constrained (p=0.017).

The pathway from transactional sex to HIV differed across groups. Living with HIV decreased women's subjective social status by 0.325 standard deviations if they were in a constrained relationship (p=0.006). The path was insignificant for women who did not experience constrained agency. Women who did not report any indicators of constrained agency were less likely to report using a condom at last sex as material support increased (standardized coefficient = -0.245, p = 0.006). The relationship between material support and condom use was not significant for women who reported agency constraints. Standardized coefficients and overall fit statistics are shown in figure 1 and table 3.

Discussion

This study was cross-sectional and most participants were already aware of their HIV status, which limits our ability to make causal inferences. While the response rate was relatively low, comparisons with nationally representative population and antenatal surveillance data suggest that age and education within our sample does not differ dramatically from the standard public antenatal clinic-goer. The HIV prevalence in our sample is significantly lower than that found in the 2010 antenatal surveillance survey, which suggests that our estimates of HIV risk may be more conservative than the reality. Reported condom use at last sex is relatively high for a pregnant population, and this measure may be suffering from social desirability bias. However previous qualitative work associated with this study

supports the statistical association between increased material support and decreased condom use.

The decision to label the latent construct as "constrained agency" reflects one possible interpretation of what the 10 indicator variables may be measuring. Other explanations are possible. Rather than "constrained agency" the construct may represent relationships in which women prioritize social or economic stability over affective motives, or relationships which were once affective but which have become less so over time. Regardless of the chosen construct label, the 10 indicators do appear to represent negative, rather than affirming, reasons for agreeing to or initiating sexual contact, in ways that create differential effects on women's health behaviors and experiences of HIV stigma. These different pathways are important considerations when tailoring interventions to mitigate HIV vulnerability.

Increased material support from a partner significantly reduces condom use for women who do not have a constrained-agency relationship. For many couples in southern Africa, gift giving and financial support from a male partner are a normative part of courtship and relationships (Morrell et al., 2012). The pathway was not significant for women in constrained-agency relationships. Financial support can make condom negotiation difficult for women who are economically dependent on their partners; however men may be more willing to use condoms in relationships they perceive as casual or short-term and women who perceive financial support as utilitarian, rather than affective, may be more likely to attempt to negotiate condom use (Murray et al., 2007).

Receiving more valued items from a partner significantly improves subjective social status for both relationship groups. While it is possible that women with high social status

receive more and better gifts from their partner, research in the region suggest the opposite causal pathway (Cole, 2004; Masvawure, 2010). In a context in which women face 70% unemployment – compared to men's 30% – and significant legal challenges buying, owning, or inheriting property, male sexual partners are a primary means of accessing financial security, commercial goods, and symbolic capitol (AfDB, 2013; Groes-Green, 2013; Hunter, 2007; Stoebenau, 2009). Women with financial resources and access to consumer commercial goods via a high status partner are more likely to be respected in their communities than women who do not have these things (Groes-Green, 2014; Masvawure, 2010).

For women in constrained-agency relationships subjective social status is significantly negatively associated with HIV status. This pathway is not significant for women who are not in constrained-agency relationships. In bivariate analyses, being in a constrained-agency relationship alone was not significantly associated with lower social status. While it is possible that high social status is protective against HIV, it is more likely that HIV has a negative effect on social standing for women who face structural or social constraints on their agency. The stigma of HIV, poverty, and perceptions of unfeminine behavior – promiscuity or mercenary sexuality – may interact synergistically for women who are especially socially or financially dependent on their partners. The insignificant path coefficient for women who are not in constrained-agency relationships suggests that they may be benefitting from additional social, emotional, and material resources that buffer the effects of HIV stigma.

The reputational danger and real potential for social ostracism means that programming efforts which conflate transactional sex and sex work or, require women to

acknowledge financial gain as a primary relationship motive, may not reach all women who are at risk of HIV as a result of transactional relationships. Instead of focusing on whether a relationship is solely or primarily driven by economic motives, interventions designed to mitigate the effects of transactional sex on HIV vulnerability may be more successful if they focus on the ways in which women's agency is constrained by larger social factors including personal and familial poverty, access to education, and social and legal environments which create more socio-economic stability for women in long-term relationships compared to those who are not. Interventions may also need to be specifically tailored to address the synergistic effects of stigma on women with constrained agency who are living with HIV.

Women with high levels of constrained agency may lack the social, emotional, and material resources that likely buffer other women from the stigmatizing effects of HIV. Interventions designed to increase social capitol while bolstering livelihoods and economic alternatives may be the most effective way to reduce risk for these women. In South Africa, the IMAGE trial found that a combined microfinance and participatory gender transformation intervention significantly increased social capital in a rural community while decreasing intimate partner violence (Kim et al., 2007; Pronyk et al., 2008). While transactional sex and sex work are distinct sets of behaviors and identities, interventions with sex workers have demonstrated that community-based empowerment approaches can foster social cohesion, increase condom use, and decrease the risk of HIV and other STIs (Kerrigan et al., 2015).

For women with relatively unconstrained agency in their relationships the risk pathway from transactional sex to decreased condom use may as much a product of women's individual decisions as their male partner's coercion. While economic coercion is a

real impediment to condom use for women with constrained agency, for other women the decision to forgo condoms with a sexual partner is made with agency, affection, and trust. Programming efforts that acknowledge women's agency or mutual decision making within a couple may be more effective than efforts predicated on the notion that women have minimal agency within their relationships.

Conclusion

Social standing and condom use both play significant roles in the pathway from transactional sex to HIV. Constraints on women's agency influence these pathways through decreased condom use or increased stigma for women living with HIV. While material support from a partner can significantly improve social standing, being accused of mercenary sexuality is associated with a significant decrease. This creates a double bind for women: Receiving gifts or financial support from a partner is admired, but being with a partner for financial reasons is unacceptable and stigmatized. Stigmatized sexual relationships have the potential for real material consequences, including decreased support from women's communities in times of financial crisis. Interventions designed to mitigate the impact of transactional sex may be more effective if they consider the role of the social landscape on women's individual agency and work to build social capital and community empowerment while reducing individual women's economic dependence on male sexual partners.

Table 1: Select measures

Transactional sex	**Reasons for having sex**	**IPV**
Has [partner] given you any of the following items, or money for any of the following items?	*Have you ever had sex with [partner] for any of the following reasons?*	*"In the past 12 months, did [partner]…"*
Fun night out	Poverty	Insult you or make you feel bad about yourself?
Smartphone	Spite	Do things to scare or intimidate you on purpose?
Airtime	Fear of violence	Threaten to hurt you?
Clothes	Money	Slap you or throw something at you that could hurt you?
Toiletries	Hunger	Push or shove you?
Hairstyle	Rape or abuse	Hit you with a fist or something else that could hurt you?
Meal at nice restaurant	Parents forced you to	Physically force you to have sex when you did not want to?
Alcohol	Hope he would marry you	
Basic food	Sake of your children	
Takeaway	Fear he would leave	
Fashionable clothes	Love	
Rent	Sexual satisfaction	
Fashionable shoes	To have children	
Jewelry	Peer pressure	
Transport	A nice lifestyle	
Place to sleep	Get or keep a job	
Nice lifestyle	Security	
Cosmetics	So he would commit	
Job	To show commitment	
Things for family	Sex work	
Car	Prevent infidelity	
Things for child	His right as a husband	
School fees	Women should submit to men	
	He has a nice lifestyle	
	He has high status	
	So he wouldn't cheat	

Table 2: Summary and bivariate data by group

Variable	Full sample	Unconstrained	Constrained
	%(n)	%(n)	%(n)
Constrained count		70.66 (277)	29.34 (115)
0	70.66 (277)		
1	19.90 (78)		
2	5.10 (20)		
3	2.04 (8)		
4	1.53 (6)		
5	0.51 (2)		
6	0.00 (0)		
7	0.26 (1)		
HIV†			
negative	66.21 (241)	64.73 (167)	69.81 (74)
positive	33.79 (123)	35.27 (91)	30.19 (32)
Violence			
34-985 events last 12 months	61.89 (242)	64.13 (177)	61.89 (242)
2+ events last 12 months	38.11 (149)	35.87 (99)	43.48 (50)
Educationǂ			
none	3.57 (14)	3.97 (11)	2.61 (3)
primary†	24.23 (95)	25.27 (70)	21.74 (25)
secondary†	67.86 (266)	66.06 (183)	72.17 (83)
tertiary	4.34 (17)	4.69 (13)	3.48 (4)
Partner's HIV status*			
negative	51.53 (202)	48.38 (134)	59.13 (68)
positive or don't know	48.47 (190)	51.62 (143)	40.87 (47)
Condom at last sex			
no	58.06 (227)	56.88 (157)	60.87 (70)
yes	41.94 (164)	43.12 (119)	39.13 (45)
Subjective Social Status Quartile			
1 (1-2)	31.50 (109)	32.10 (78)	30.10 (31)
2 (3-4)	19.36 (67)	19.34 (47)	19.42 (20)
3 (5-6)	26.88 (93)	28.40 (69)	23.30 (24)
4 (7-10)	22.25 (77)	20.16 (49)	27.18 (28)
Called a nasty name ("slut")			
no	69.63 (266)	71.75 (193)	64.60 (73)
maybe no	6.28 (24)	6.32 (17)	6.19 (7)
maybe yes	7.33 (28)	7.06 (19)	7.96 (9)
yes	16.75 (64)	14.87 (40)	21.24 (24)
	Mean (SD) Range	Mean (SD) Range	Mean (SD) Range
Ageǂ N=392	24.55 (4.99) 18-42	24.46 (5.08) 18-42	24.76 (4.77) 18-37
Relationship duration (months) N=373	51.02 (59.59) 0.13 – 583.82	50.64 (62.19) 0.33-583.82	51.93 (53.02) 0.13-351.15
Transactional sex scale (Z-score) N=389	0.14 (1.02) -1.29 – 4.13	0.16 (1.04) -1.29 – 4.13	0.10 (0.99) -1.29 – 3.31

*significantly different between "constrained" and "not constrained" groups ($p < 0.05$)

† significantly different compared to ANC sentinel surveillance data ($p < 0.05$)

ǂ significantly different compared to population level data ($p < 0.05$)

Table 3: Transactional sex score by variable for full sample and groups

Variable	Full sample	Unconstrained	Constrained
	Mean (SD)	Mean (SD)	Mean (SD)
HIV			
negative	0.21 (1.07)	0.24 (0.08)	0.15 (1.08)
positive	0.07 (0.09)	0.11 (0.11)	-0.03 (0.75)
	p=0.24	p=0.35	p=0.40
Violence			
0-1 events last 12 months	0.19 (1.04)	0.19 (1.04)	0.17 (1.05)
2+ events last 12 months	0.07 (1.00)	0.10 (1.04)	0.01 (0.90)
	p=0.29	p=0.49	p=0.41
Partner's HIV status			
negative	0.25 (1.08)	0.29 (1.10)	0.16 (1.04)
positive or don't know	0.03 (0.95)	0.04 (0.96)	0.01 (0.91)
	p=0.038	p=0.046	p=0.41
Condom at last sex			
no	0.23 (1.05)	0.32 (1.08)	0.02 (0.96)
yes	0.03 (0.98)	-0.05 (0.94)	0.22 (1.02)
	p=0.06	p=0.004	p=0.30
Subjective Social Status			
Quartile	-0.12 (0.77)	-0.13 (0.80)	-0.11 (0.70)
1 (1-2)	0.14 (0.95	0.04 (0.95)	0.37 (0.92)
2 (3-4)	0.26 (1.12)	0.42 (1.18)	-0.19 (0.78)
3 (5-6)	0.33 (1.24)	0.31 (1.18)	0.37 (1.36)
4 (7-10)	p=0.010	p=0.007	p=0.07

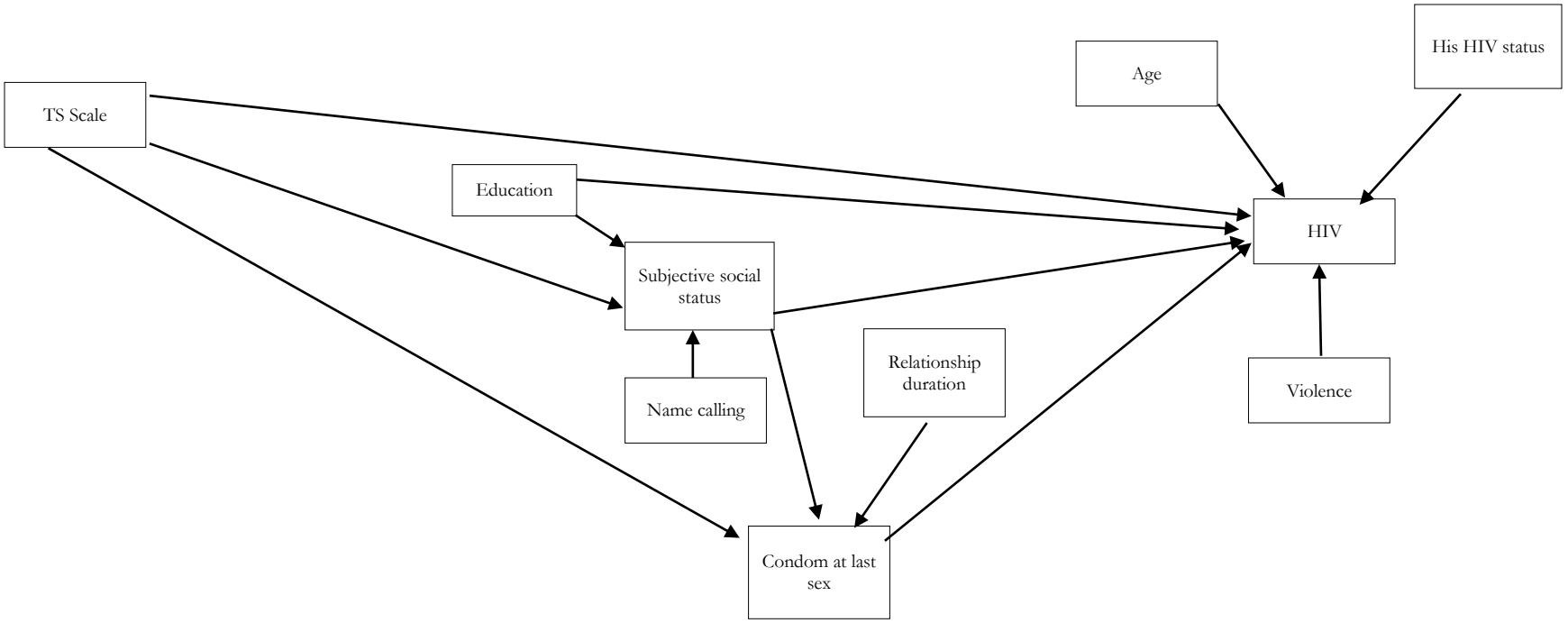

Figure 1: Path model

Table 4: Model fit and standardized path coefficients

Multigroup path model		
***RMSEA (90% CI)*: 0.14 (0.00 – 0.057)**		
***CFI / TLI*: 0.985 / 0.978**		
***chi-square, df (p-value):* 34.168, 33 (p=0.41)**		
	Unconstrained n=254	**Constrained** n=107
	standardized coefficient (p-value)	*standardized coefficient (p-value)*
HIV	R^2 = 0.318	R^2 = 0.399
Condom use at last sex	**0.195 (0.014)**	**0.181 (0.017)**
Social status*	-0.019 (0.831)	**-0.325 (0.006)**
Transactional sex scale	-0.009 (0.894)	-0.008 (0.895)
Age	**0.160 (0.024)**	**0.148 (0.026)**
Education	-0.118 (0.097)	-0.098 (0.099)
Partner's HIV status	**0.407 (<0.001)**	**0.377 (<0.001)**
Violence	0.021 (0.749)	0.021 (0.749)
Condoms	R^2 = 0.072	R^2 = 0.051
Social status	-0.073 (0.333)	-0.074 (0.333)
Transactional sex scale	**-0.245 (0.002)**	0.228 (0.080)
Relationship duration (months)	0.012 (0.946)	0.010 (0.946)
Social Status	R^2 = 0.123	R^2 = 0.124
Transactional sex scale	**0.137 (0.035)**	**0.130 (0.036)**
Name calling	**-0.175 (0.004)**	**-0.190 (0.004)**
Education	**0.235 (<0.001)**	**0.207 (<0.001)**

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Chapter 5: Overview and implications for future research and theory

Main findings

We identified and built scales to measure three distinct ways in which Swazi women engage in sexual-economic relationships, and described a fourth model which emerged in the course of qualitative interviews. Women carefully weigh and navigate both the social and physical risks of transactional sex. Higher social status was associated with receiving more good from a partner, although there were differences in the magnitude of effect across models, but being seen as promiscuous or avaricious could result in social censure or isolation, possibly in part because these motives may undermine male dominance. In a path analysis of the clinic-based sample, the most important factor in determining HIV the pathway between transactional sex and HIV risk appeared to be not whether or not a woman was receiving economic support from a partner, but whether or not she could leave the relationship at will should she desire to do so.

Value of blended emic and etic perspectives

A major methodological problem in the study of transactional sex has been how to bridge the gap between qualitative explorations of local emic meanings and quantitative studies that can measure risk associations (Dunkle et al., 2004; R. Jewkes et al., 2006; R. K. Jewkes, Dunkle, Nduna, & Shai, 2010). This problem tends to manifest as a divide between studies that draw from the positivist or interpretivist tradition and are eticly or emicly oriented, respectively.

The studies presented in this dissertation used women's emic perspectives of sexual-economic exchange as the starting point from which to understand and measure transactional sex the associated risk of HIV. Privileging participant's voices and experiences highlighted the importance of reputation management and social status in the link between

transactional sex and HIV. While previous ethnographic studies have described this connection, this is the first quantitative study that we know of which has incorporated the role of social status and sexual reputation into a quantitative study of transactional sex and HIV. We used qualitative data to generate a theory of risky transactional sex, which we then tested using structural equation modeling. Collecting and analyzing the qualitative and quantitative data in parallel allowed us to attempt to bridge the gulf between etic and emic perspectives.

Transactional sex as a scale, not a binary

Measuring transactional sex as an emic spectrum of gift giving and economic support inherent in all relationships, rather than a definitive relationship type, results in a scale that is more sensitive to both health behaviors and the social landscape in which health behaviors take place. While the typical etic binary operationalization is sensitive to HIV and IPV risk, it rests on an assumption that all economic support or material provisions are equal and engender the same level of risk. It can suggest that a relationship in which a woman is dependent on a man for financial support is a unique relationship type, whereas financial support between partners is both gendered and normative the world over.

Identifying the primary motive within any relationship is a subjective process. Asking women to self-identify with motives that may result in real social and financial harms increases the risk of measurement error through social-desirability bias. Measuring economic dependence based on concrete behaviors – items received from a partner – based on emic valuations is more likely to capture the true range of transactional relationships. Building an emic scale unique to each context does require more work at the beginning of

the research process than simply using the typical etic definition. However the process is rapid and relatively inexpensive.

The single process of cultural consensus modeling -- which consisted of simple free-list and rating exercises and took approximately two weeks – resulted in 3 weighted scales of transactional sex, the ability to demographically describe women whose answers most closely resembled a cultural model, and a roster of potential key informants whom we knew to be experts within a model despite having found them through convenience sampling in public areas.

Women actively manage their social and physical risks

The etic – Western -- approach to understanding transactional sex risks supporting the perception that African women who receive economic support or gifts from their partner do so either because they value commercial goods more highly than their own health, or they (or their families) are too poverty stricken to prioritize long-term health over short-term survival. Indeed, much – although by far not all – of the literature on transactional sex in Africa falls into one of these traps (Lucie Cluver, Orkin, Boyes, Gardner, & Meinck, 2011; Greif, 2012; Miller et al., 2011; Zembe, Townsend, Thorson, & Ekstrom, 2013). Understanding and measuring transactional sex based on how Swazi women themselves value different items emphasizes the agency and choice of Swazi women within their own sexual-economic relationships.

Our qualitative and quantitative findings together demonstrate that women engage in intense mental calculus when weighing the potential harms and benefits of financial support from a partner. Marriage, or a high status partner, can significantly boost a woman's esteem in her community. Receiving more valued goods from a partner can also increase social

status for women who are not married. Women use careful strategies to manage HIV risk within a social landscape that prioritizes a stable partnership with concomitant social and economic stability.

As shown across multiple dimensions of this project, financial support and gift giving are normative in relationships across the life-course, although acknowledging that a partnership is motivated by material gain is socially unacceptable. Relationship types and perceptions of relationship motives have different effects on social status. In general, relationships in which women's actions exhibit hegemonic femininity – they are submissive, sexually available, and primarily claim to be motivated by love and marriage – show a positive relationship between receiving more items from a partner and increased social status. Relationships which have characteristics of pariah femininities – women do not aspire to marry their partners or commit to monogamy and indicate that their primary motive is financial rather than affective – may harm women's social status.

Risk pathways differ depending on relationship circumstances

In our SEM analysis, women who report having sex with a partner because of poverty, hunger, spite, money, violence, abuse, fear he would leave, for the sake of her children, or because forced by her parents were more likely to report a significant drop in social status if they were living with HIV than women who did not report sex for any of these reasons. While these reasons do not perfectly align with the models of pariah femininity described in the qualitative study, they do suggest that relationships with the potential of being seen as promiscuous or avaricious may present unique risks compared to relationships in which financial dependence is seen as normative and socially acceptable (ie, relationships that mirror hegemonic femininity).

In contrast to much previous work, the research here suggests that the risk of transactional sex may lie not in the exchange of gifts or reliance on financial support from a partner. Rather risk likely lies in the degree to which women feel they can or cannot exit a relationship in combination with the potential for social censure or ostracism if a woman is considered to have brought her misfortune upon herself. Women in constrained relationships face greater social censure if they are living with HIV, supporting the notion that the "constrained" group in the quantitative study may be closely aligned with the notion of pariah femininity. Interventions that seek to improve condom use or reduce risk must be careful to not reinforce stigma by pathologizing relationships which are already considered socially unacceptable. Women in less constrained relationships were less likely to use condoms as financial support increased. Many previous studies have suggested that condom use decreases as a result of economic coercion. While this is certainly true in many relationships, our findings suggest an alternate pathway in which gift giving and financial support is a marker of affection, leading to reduced condom use as a result of trust, not coercion.

Strengths and limitations

A major limitation of these studies is the use of a clinic based sample with a low response rate which limits our ability to generalize findings. However comparisons with a national level survey and a similar clinic population suggest that our study sample is not dramatically different from the average clinic goer, and that age and education differs from the national average in expected ways (ie, more women of child-bearing age). Triangulating the qualitative and quantitative data improves the internal validity of our findings, and we believe that drawing on the social ecological model and the theory of hegemonic masculinity

improves internal and external validity, as well as credibility and transferability, of our findings.

To ensure credibility in the qualitative study, we triangulated focus group and interview findings with the free-list and rating data, and used ongoing member checks with research assistants, Swazi colleagues, and clinic staff. Memoing was used consistently throughout the process to both create a space for researcher reflexivity and improve the confirmability of findings.

Implications for theory

Research on transactional sex – and structural drivers of the HIV epidemic overall – can benefit from a greater use of theory to explicate the locus of risk and predictors of risk pathways. Theory improves the transferability of qualitative findings (Hennink, Hutter, & Bailey, 2011), suggests potential research questions and methodologies for quantitative and qualitative studies (Painter, Borba, Hynes, Mays, & Glanz, 2008), and provides a lens for developing focused interventions that are more likely to be successful than those which are atheoretical (Glanz & Bishop, 2010).

Hegemonic masculinity and the social ecological model

Hegemonic gender and the social ecological model are both useful theoretical lenses for understanding the risk pathways of transactional sex in southern Africa and around the world either intersectionally or alone. Hegemonic masculinity suggests that transactional sex is risky not because it incorporates mutual obligations of sex and financial support, but because these obligations are a product of a harmful gender hierarchy. Viewing the risk of transactional sex as a symptom of hegemonic masculinity, rather than an independent driver

of risk, allows researchers, practitioners, and policy makers, to consider risk dynamics at higher levels of the social-ecological model.

Much of the work to understand transactional sex has been done to examine women's risk and agency. However understanding transactional sex through the lens of hegemonic masculinity suggests that while men may have the privilege of social ascendancy, they may also feel social pressure to engage in transactional relationships and the attendant harmful behavior. Men who do not work to attain hegemonic masculinity may face similar social sanctions and consequences as women who express pariah femininities (Morrell, Jewkes, & Lindegger, 2012).

Southern theory

In addition to shedding light on how gender hierarchies generate risk through sexual-economic relationships, theory has a role to play in considering the process of evidence generation and intervention planning. Scholars of gender hegemony are increasingly turning their attention to the ways in which social position is determined not just by gender, but by race, politics, colonialism, and history.

While it was not included in the original framing and design of this study, southern theory is an emerging theoretical framework which acknowledges the role that these factors play in the social sciences and highlights the importance of valuing theories and knowledge creation strategies from the global south (Connell, 2014a, 2014b).

Privileging women's perspectives and risk management strategies to build and test an emic theory of risky transactional sex is one step towards acknowledging the inherent value of local, southern perspectives in the process of global health research. Southern theory suggests that research and intervention strategies which privilege perspectives from the

global north are more likely to view African women as objects to be understood and regulated, rather than autonomous agents whose perspectives and actions can offer valuable insights into reducing HIV vulnerability and impact. As the field moves forward, more explicit incorporation of southern theory into the study of structural drivers of HIV in general, and transactional sex in particular, will allow researchers to acknowledge and potentially subvert hierarchies of "knowing" and knowledge creation for evidence and recommendations that are more compatible with men's and women's lived experiences.

Future research

Transactional sex as a scale

This study represents the first time that cultural consensus modeling has been used to measure the spectrum of transactional sex within relationships. The scales we built were specific to Swaziland. Further research is necessary to learn how well this tool for scale building can be applied in other contexts and to refine the process. It is currently unclear if there is an ideal number of scale items, if increasing the range will increase specificity, or if reducing the number by identifying certain key items will decrease respondent burden while maintaining accuracy. Similarly, other ways of valuing items may produce slightly different results – for example, having participants rank all items together, or simply asking participants to decide if an item is valuable at all. Future research which aims to build and validate a variety of emic scales across the region and possibly globally will allow researchers to compare differences and similarities in the transactional sex spectrum. Different scales may also reveal different associations between economic support, HIV, condom use, and social factors.

Gender and transactional sex

Further research is needed to consider the ways in which the gender hierarchy operates at each level of the social-ecological model to generate or reduce HIV risk. Men's roles in transactional sex need to be better understood. A similar set of studies to those described in the preceding chapters, conducted with men, would provide a window into men's priorities and risk perceptions of the male provider role in general and transactional sex in particular. Very little work exists which seeks to identify men's perceptions of risk and risk management in transactional relationships. Understanding how men conceive of HIV risk and violence within their relationships would help elucidate possible intervention strategies for both men and women.

Summary and contribution

These findings contribute to a rich ethnographic literature which has described the complicated ways in which women navigate gender hegemony and social-sexual reputation dynamics, but has not yet been able to measure how these complex dynamics contribute to risk (Cole, 2004; Groes-Green, 2013; Stoebenau, 2009; Stoebenau et al., 2013; Swidler & Watkins, 2007). They also compliment a strong body of quantitative literature which has clearly illustrated the physical risks of transactional sex, but has struggled to find the right methods with which to incorporate ethnographic approaches that situate this risk within women's lived experiences of the social landscape (L. Cluver et al., 2012; Luke, Goldberg, Mberu, & Zulu, 2011).

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