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HIV Infection, Stressful Life Events, and Intimate Relationship Power: The Moderating Role of Community Resources for Black South African Women

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Abstract

Background—Black women in South Africa are vulnerable with limited power in intimate relationships. This study explored whether stressful life events and/or HIV infection were associated with relationship power and whether the impact was moderated by community resources.

Method—104 women living with HIV (WLWH) and 152 women not living with HIV (WNLWH) participated in individual interviews.

Results—Undesirable life changes were negatively associated with relationship control. HIV infection and women's *knowledge* of community resources were associated with mutual decision-making, while frequency of family *use* of community resources was negatively related to female dominated decisions. WLWH perceived their male partners as less dominant when they perceived their community resources to be more helpful.

Conclusions—Power in intimate relationships may enhance the quality and length of life for black South African women living with HIV. Knowledge of and perceived helpfulness of community resources are avenues for promoting relationship power.

Keywords

South African women; HIV; relationship power, community-based resources

Social, political, and cultural factors converge to maintain black South African women's historical status as economically and socially vulnerable (Martineau, 1997). Under apartheid, black Africans were forced to live in government-designated "homelands", denied rights to land ownership (Gilbert, 1996), and access to education, employment, and health care (Motsemme, 2002; Mabokela & Mawila, 2004). Additionally, migrant labor policies, coupled with forced segregation, damaged the African family structure and communities in a way that marginalized black African women (Albertyn, 2003; Spangenberg & Pieterse, 1995) and forced shifts in traditional gender roles (Motsemme, 2002). Women became heads of households. Many hold that men's need to reassert masculinity has led to high rates of intimate partner violence (Outwater, Abrahams, & Campbell, 2005). Although the current government encourages black women's movement into lucrative fields of employment, the

lack of formal education often prevents it (Gilks, Floyd, Haran, Kemp, Squire, & Wilkinson, 1999; Oberhauser & Pratt, 2004). Thus, many black women are either dependent upon male partners for financial support or work in low paying jobs (Fox, 2003; Oberhauser & Pratt, 2004). This economic burden may translate into risky sexual behaviors, maintenance of violent relationships to avoid abandonment (Hoosen & Collins, 2004) or reliance on transactional sex to gain resources (e.g. food, shelter, money).

Connell's theory of gender and power (1987) is a useful framework to understand black women's status in South Africa. The theory purports that economic inequalities, male partner control within relationships (i.e. sexual division of power), and gender roles interact to distribute power disproportionately in society. Economic and social vulnerabilities, translate into limited power in intimate heterosexual relationships for South African women (Albertyn, 2003; Hoosen & Collins, 2004). This study investigated HIV status and stressful life events as markers of social vulnerability that were associated with women's relationship power. Further, we proposed that access to community-based resources, a malleable factor, would buffer the effects of vulnerabilities on relationship power. We considered two aspects of intimate relationship power: 1) relationship control, the degree to which one partner controls her own and her partner's actions, and 2) decision-making dominance, which refers to the partner who controls the majority of decisions in the relationship (Emerson, 1981; Pulerwitz, Gortmaker, & DeJong, 2000).

HIV/AIDS

Approximately 4.7 to 5.3 million people in South Africa are living with HIV/AIDS (Outwater, et al, 2005; Department of Health, 2003), and 32% of HIV infections occur in women between 25 and 29 years of age (Nelson Mandela HSRC Report, 2002). In South Africa, women are at particular risk for stigma and discrimination as a result of being infected (Jennings, Mulaudzi, Everatt, Richter, & Heywood, 2002). HIV testing is frequently performed during antenatal screening and is often the first time a family member is diagnosed. Consequently, women are commonly blamed for bringing the virus into the home (Ackermann & de Klerk, 2002; LeClerc-Madlala, 2001). Blaming women for their HIV infection, and the overall stigma and discrimination associated with HIV, may result in a variety of external negative consequences (e.g., rejection from family and friends & unemployment) (Jewkes, Levin, & Penn-Kekana, 2002), as well as internal negative consequences (e.g., decreased self-esteem) (Carr & Gramling, 2004), all of which can serve to decrease women's power in relationships.

Stressful Life Events

In previous research, stressful life events have been conceptualized to include traumatic victimization experiences (e.g. rape, assault), undesirable life changes (e.g., death of loved one, job loss), recurring life events (e.g. daily hassles), and continuous life events (e.g., financial problems) (Jenkins, 2002; Kendler, Hettema, Butera, Gardner, & Prescott, 2003; Spangenberg & Pieterse, 1995). We focused on traumatic victimization experiences and undesirable life changes because they seemed most likely to impact women's relationship power due to both the unpredictability of the events and their practical (i.e. economical) and psychological implications.

A negative relationship between traumatic victimization experiences and power in intimate relationships is supported empirically (Jewkes et al., 2002; Wingood & DiClemente, 1996). South Africa has an extremely high rate of rape per capita (United Nations Office on Drugs and Crime, 2003), and physical violence and sexual coercion are a part of many romantic relationships (Jewkes et al., 2002). Research with African American women who have had traumatic experiences in childhood suggests that one psychological impact of victimization

is feeling powerless (Jewkes et al., 2002), and becoming vulnerable to later sexually exploitive relationships (Beadnell, Baker, Morrison, & Knox, 2000; Rhodes, Ebert, & Myers, 1993; West, 2002). Scant research exists on the relation of traumatic victimization to relationship power within South Africa.

Little research examines the potential relation between undesirable life changes (e.g. job loss, car accident) and women's power in intimate relationships. However, a vast body of literature has established a relationship between undesirable life changes and psychological sequelae (e.g. depression and anxiety) that may be associated with decreased power in diverse samples of women (Franko et al., 2004; Kendler et al., 2003). Further, evidence supports a relationship between undesirable life changes and condom negotiation (Wyatt & Dunn, 1991). Although the current study is not specifically focused on condom negotiation, a well-established link between women's perceived power in intimate relationships and their ability to negotiate condom use with a romantic partner exists (e.g. Albarracín, Kumkale, & Johnson, 2004; Cabral et al., 2004). Thus, it is possible and relevant to the current study, that undesirable life changes may influence women's perceptions of power in areas other than condom negotiation (i.e. decision-making dominance and control).

Community Resources and Perceived Power

Without question South African women face challenges associated with limited educational and employment opportunities as providers and primary caregivers. Moreover, some are further compromised by positive HIV serostatus and/or experiences of trauma or undesirable life changes. Thus, our second aim investigates whether access to community-based resources, a malleable factor, moderates the relations between HIV and power, and stressful life events and power.

Although limited research explores factors associated with power, a few studies have found that community involvement increases one's sense of empowerment (Becker, Israel, Schulz, Parker, & Klem, 2002; Itzhaky & York, 2000; Peterson & Hughey, 2004). These studies, however, have employed broader definitions of power (i.e., one's sense of personal power and his/her power to effect social change) (Gutierrez, 1990) than those we used. For example, in a sample of urban African American women, participation in change-related organizations (e.g. neighborhood crime watch) was associated with higher scores on measures of individual, organizational, and community empowerment (Becker et al., 2002). If community resources are available, helpful, and women can use them, they may increase women's sense of control over their lives and a feeling that they can improve their life circumstances (Becker et al., 2002). Benefits of community resources may be crucial for WLWH or those who have a history of stressful life events. Though limited in number, previous studies have focused on community involvement as a way of increasing power. We explored three other factors related to resources that could potentially influence women's sense of intimate relationship power. In particular, we considered women's knowledge of , use, and perceived helpfulness of community resources.

In summary, our first aim was to explore the impact of women's HIV status and stressful life events on perceived power in romantic relationships. A body of literature has described the components of and emphasizes the importance of power (Dunkle, Jewkes, Brown, Gray, McIntyre, & Harlow, 2004; Dunkle, Jewkes, Nduna, Jama, Levin, Kikweyiya, et al., 2007; Pulerwitz, Amaro, DeJong, Gortmaker, & Rudd, 2002; Sherer, Crawford, Strebel, Simbayi, Dwadwa-Henda, Cloete et al., 2008; Wechsberg, Luysseno, Riehman, Karg, Browne, & Parry, 2008), but a paucity of literature has identified factors associated with power. Identifying factors, particularly those potentially malleable (e.g., community resources) associated with black South African women's sense of power, may prove useful when

developing HIV prevention interventions designed for women. We hypothesized that WLWH and those with more stressful life events would report feeling less powerful in intimate relationships. The second aim was to examine the protective role of community resources in associations between relationship power with HIV infection and stressful life events. Although we expected community resources would be protective for all women, we hypothesized that they would be most protective for women with HIV and/or with histories of stressful life events.

Method

Participants

Participants were part of a larger study designed to investigate the influence of maternal HIV infection on black South African families. To be eligible for the study, women had to be able to participate in the interview in English, Sotho, or Afrikaans and have at least one biological child between the ages of 11 and 16 years with whom they had lived for at least the past year. Community liaisons recruited this convenience sample from three communities on the outskirts of Pretoria, South Africa in areas where women often spent time (e.g. markets, community organizations, clinics, etc). Liaisons used several advertising strategies (e.g. word-of-mouth, local radio broadcast, flyers). Community liaisons and interviewers screened women for eligibility to participate, using a series of screening questions administered verbally (e.g., “How many children do you have and how old is each child?”). Given the recruitment strategy, data were not gathered on the proportion of women who refused to participate prior to the screening process. However, at the point of screening participants for eligibility, no women refused to participate, and three women were ineligible as they did not have a child in the target age range. Interviews were conducted with 104 WLWH and 144 WNLWH.

Procedure

All procedures were reviewed and approved by the appropriate U.S. and South African university's Institutional Review Boards. Formative work with community stakeholders, focus groups and pilot participants occurred in the study location. In particular, information about construct salience, individual measures, and study procedures (e.g., language of assessment tools, participant recruitment) was gathered. The formative work indicated that the provision of interviews in one of three frequently spoken languages would result in minimal participant exclusion. Thus, interviewers were required to be proficient in English, Afrikaans, and/or Sotho. All five interviewers were female with two being black students from the University of Pretoria (U.P.), and the other three being graduate students in clinical psychology from the U.S. (2 Caucasian and 1 African American). All interviewers were experienced in working with WLWH and were additionally trained for several days (i.e., preparation for potential problems during data collection, familiarization with the measures, mock interviews, and debriefing procedures).

Data collection occurred over three months at the HIV clinic located in Kalafong Hospital and the Hammanskral and Mamelodi campuses of the University of Pretoria. Screenings, informed consent, and measure administration were all completed in the women's preferred language. Women signed and received a copy of the written consent form. With the exception of the measure containing the HIV disclosure item, the sequence of the individual measures was randomized to protect against order effects. The HIV disclosure item was always placed at the end of the interview to maximize the likelihood of disclosure of seropositive HIV status. Upon completion of the interview, all participants received a list of community resources, a small gift of hand lotion, and R70 (\$10 USD) for their time and participation.

Variables and Measures

Once the data collection instrument was finalized, two independent translators translated all measures from English into Afrikaans and Northern Sotho. The measures were then back translated into English (Brislin, 1970) and the two English versions were compared for equivalency. Discrepancies were resolved via consultation with community liaisons and other South Africa-based grant personnel.

Demographic Variables—Mothers provided information on their education, marital and employment status, and age.

HIV Status—HIV status was obtained through self-report on a single item (i.e., What major health problems do you have? For example cancer, asthma, diabetes, HIV, hypertension, TB). This method has limitations (e.g. misreporting HIV status due to lack of knowledge or fear); however, preliminary evidence garnered during focus and pilot groups illustrated that women were willing to disclose HIV status. Further, we placed the item at the end of the interview to allow rapport to build before asking about HIV status.

Undesirable Life Changes and Trauma—Experiences of stressful life events were assessed using a modified version of the Life Stressor Checklist (LSC; Wolfe & Kimerling, 1997). The measure inquires about events that represent *undesirable life changes* (e.g. *You were separated or divorced*) and *trauma* (e.g. You've been mugged, robbed, or attacked by someone you did not know). Based on formative work, we eliminated one of the original 22 items and added two items deemed relevant to South African women (i.e. “You were forced to live with in-laws and they treated you badly;” “Someone made you/ forced you to have sex by threatening or bribing you”) A 23-item measure resulted. The subscale constituting undesirable life changes consisted of nine items, whereas the trauma subscale contained five items. Like the original measure, the modified scale consisted of two subscales assessing the occurrence and impact of stressful events experienced primarily by women. We used only the occurrence subscale with response options coded as either 0 (event had not occurred) or 1 (event occurred). Each item represented a single event with higher scores representing the occurrence of a greater number of stressful events. Though not previously used with this specific population, the original measure has been used successfully with low income, HIV-infected African American women (Kimerling et al., 1999).

Community Resources—Through formative work, we developed an instrument to measure participants' level of involvement in community-based resources, which included six categories of community-based resources (Government, Religious, Clinics/NGOs, Mental Health Facilities, Social Services/Activities, and Other). Three subscales were developed to assess participants' community involvement. The Knowledge subscale was created by participants generating a list of resources across the six categories and then summing all unique resources listed. To assess frequency of use and perceived helpfulness, participants responded using a 4-point Likert-type scale with options ranging from (1) Never to (4) About once a week and (1) Not at All to (4) Very, respectively. Total scores for frequency of use and perceived helpfulness were dependent on the number of community resources each participant generated. Higher scores represented more frequent use or more perceived helpfulness of community-based resources. Mean scores were calculated for both the Frequency of Use and Perceived Helpfulness subscales.

Sexual Relationship Power—We assessed relationship power using 22 of the 23 items on the Sexual Relationship Power Scale (SRPS; Pulerwitz et al., 2000). Women reported on their power within their current or most recent relationship. We deleted one item because it was not relevant to South African women. Several items on the SRPS were revised to

facilitate translation and maximize comprehension. The SRPS contains two subscales: Relationship Control (e.g. If I asked my husband/boyfriend to use a condom he would hurt me) and Decision-Making Dominance (e.g. *Who usually decides when you have sex?*). Participants responded on a Likert-type scale to items on the Relationship Control scale. The scale ranged from (1) Never to (4) Always. Either total scale scores representing low, medium, and high power, can be used, or scores on the two subscales can be used. Scores on the Relationship Control subscale can range from 15-60. Lower scores represented higher levels of perceived relationship control. For the Decision-Making Dominance subscale, participants responded to questions about who makes decisions in various aspects of the couples' lives with the following options: (1) Your husband/boyfriend, (2) Both of you together, and (3) You. Three different 2-point (0 or 1) scales were created (i.e. Male Dominated, Female Dominated, and Mutual Decision Making). Possible total scores on each scale ranged from 0-7, with higher scores representing higher levels of decision-making dominance. Specifically, higher scores on the Male Dominated scale indicated that men made most of the decisions, and higher scores on the Female Dominated scale indicated that women made more of the decisions.

The original 23-item scale was designed and validated with a sample consisting of African American and Latina women. However, a subset of questions from the SRPS has also been used in a sample of South African women aged 15-24 with adequate internal reliability (Cronbach's alpha= .69; Pettifor, Measham, Rees, & Padian, 2004). Cronbach's alpha for the current sample was also adequate (alpha= .70).

Data Analyses

We tested our moderation hypotheses following Baron and Kenny (1986) with four regression analyses, one for each dependent variable (relationship control, male dominated, female dominated, and mutual decision making). After controlling for employment and education status we entered women's HIV status and history of stressful life events (i.e. trauma, undesirable life changes) in the second block, frequency of use, helpfulness, and knowledge of community resources in the third block and moderation terms, calculated from centered variables in the fourth block. To determine the fit for moderating models, we used the criteria of a significant change in variance explained by the model with the addition of the interaction term. The selection of employment and education as covariates was guided by our interest in controlling the influence of variables theoretically related to relationship power (i.e. education, employment) so that we could identify the unique contributions of HIV status, stressful life events, and knowledge, frequency, and helpfulness of community resources. Prior to data analysis, we evaluated variables for normality. Knowledge of community resources and perceived helpfulness variables were not distributed normally and were transformed. We used a square root transformation for the knowledge subscale of the community resources measure and a reflection and square root transformation for the helpfulness subscale. We also assessed the groups for demographic equivalence, using Chi-square analyses for categorical variables and t-tests for continuous variables.

Results

HIV-infected and non-infected women did not differ with respect to women's age, education, language, or relationship type (Table 1). Level of education was low (less than 11 years on average in this sample), and approximately 75% of the sample was unemployed (Table 2). Less than half were in marital relationships. Women reported perceptions of relationship control in the midrange of the 45-point scale with substantial variability and that their relationships were either characterized by mutual decision making or by decisions made by their male partners more than decisions they made. Women hailed from a range of ethnic groups, with the most commonly represented being Sesotho, Pedi, and Tswana.

Perceived Relationship Control

Women with higher levels of completed education perceived that they had more relationship control, with education accounting for 3% of the variance in relationship control (Table 3). The addition of women's HIV status, trauma, and undesirable life changes in step two resulted in an additional 4% ($F(5, 240)= 4.87, p<.001$) of the variance explained. In this step, however, only women's experiences of undesirable life changes were significantly associated with relationship control, indicating that the experience of undesirable life changes was negatively associated with women's perceived relationship control. Community resource moderating variables were not significantly associated with relationship control, and no interaction effects were significant.

Perceived Male Decision Making Dominance

Women's level of education accounted for approximately 6% of the variance ($F(2, 243)= 8.3, p<.001$) in women's perception that their male partners dominated decision making in their relationship (Table 3). Women with more completed education perceived their male partners as less dominant in decision making. Of potential community resource variables, only knowledge emerged as significant and was inversely related to women's perception of their male partners dominating decision making. A significant interaction between HIV status and women's perception of the helpfulness of community resources (Figure 1) emerged. As predicted, perceived helpfulness of community resources attenuated the relation of HIV infection to perceived male dominance in decision making. When both groups of women perceived resources to be highly helpful, they perceived less male dominated decision making. However, particularly for WLWH, as the perception of helpfulness decreased, the perception of male dominated decision-making increased. The full model accounted for 7% of the variance ($F(9, 236)= 3.01, p<.01$).

Perceived Female Decision Making Dominance

When women's perception of themselves as the dominant decision maker served as the dependent variable, only the frequency of use variable, added in the third step, was significant and only .3% of the variance in the dependent variable was explained (see Table 3). Women who reported more frequent use of community resources viewed themselves as less dominant in relationship decision making.

Outcome Variable: Mutual Decision Making

Women's education was significantly associated with mutual decision making and accounted for approximately 8% of the variance ($F(2, 243)= 11.0, p<.001$) (see Table 3). Specifically, women who have achieved higher levels of education reported that relationship decisions were more often reached together. Participants' HIV infection emerged as being significantly associated with mutual decision making in the second block. WNLH reported that decisions were more likely to be reached mutually. Only knowledge of community resources was significantly and positively associated with mutual decision making. When the community resource moderator was knowledge, the full model accounted for approximately 10% of the variance in mutual decision making ($F(6, 239)= 5.3, p<.001$). No interaction terms were significant for this dependent variable.

Discussion

As a result of a confluence of social, political, and cultural factors, black women in South Africa are an economically and socially vulnerable group. Marginalization across educational and financial domains, along with societal gender role expectations, places women in positions of lesser power in their intimate relationships. Given the health and

safety consequences of women's lesser status, the current study aimed to identify factors associated with intimate relationship power (i.e., relationship control and decision-making dominance) beyond those typically examined in the literature (e.g., socioeconomic status).

We hypothesized that HIV status and stressful life events would be associated with less relationship power, but that community-based resources would attenuate that relation. We turn first to analyses when perceived relationship control served as the outcome variable. As expected, less formal education and the experience of undesirable life changes were found to be negatively associated with women's perceived relationship control, whereas HIV, trauma, and the community-level variables did not significantly contribute to women's perceptions of control in their relationships. Though the extant literature supports associations between HIV and relationship power (Gilks et al. 1999), as well as trauma and relationship power (Jewkes et al., 2002), only undesirable life changes emerged as important in this study. Undesirable life changes included events such as job loss, death of a loved one, and physical illness. These types of events might be particularly likely to result in chronic strain on psychological and tangible resources in a way that the occurrence of an acute traumatic event, for example, would not. In fact, existing literature demonstrates support for a relationship between undesirable life changes and negative psychological sequelae (e.g., Franko et al., 2004). Perhaps this chronic strain and the associated depression and anxiety, particularly diminishes a woman's ability to assert control in many areas of her life, including in her relationships.

In terms of understanding the study variables' relations with whom women perceived as the decision makers in their romantic relationships, we considered the outcome in three ways: male dominated decision-making, female dominated decision-making, and mutual decision-making. With respect to perceived male decision-making dominance, women who had more formal education and who were knowledgeable of resources available in their communities were less likely to report that their male romantic partners dominated the decision making in their relationships. Further, as predicted, perceived helpfulness moderated the relationship between HIV infection and male dominance. When both groups of women perceived resources to be highly helpful, they perceived less male-dominated decision making. However, particularly for WLWH, as the perception of helpfulness decreased, perception of male-dominated decision-making increased. This finding speaks to the importance of ensuring that community-based resources are not just present, but also helpful to those seeking services; particularly WLWH. Though not explored here, helpfulness might include characteristics such as service quality, accessibility, and relevance to the families in the community.

When dominance in decision-making was scored to reflect the level of female dominance, women who reported more frequent use of community resources viewed themselves as having less decision-making power in their relationships. One possible explanation for this unexpected finding is that greater use of community-based resources might be indicative of women experiencing high levels of stress and/or having fewer individual or family-based coping resources at their disposal. Though not examined here, fewer internal and/or family resources may be associated with women being less well able to share in the decision making process.

Finally, with respect to mutual decision-making, perhaps the ideal approach to decision-making in intimate relationships, women's level of education, HIV status, and knowledge of community resources were significantly and positively associated with mutual decision making. Specifically, these findings, which are consistent with the hypotheses and some of the existing literature (e.g., Albertyn, 2003; Becker et al., 2002), suggest that education, HIV seronegativity, and knowledge of available community resources contribute to women

feeling that they have decision-making capital. These findings also serve to reinforce the importance of formal education, HIV/AIDS prevention programs, and access to information about resources for black South African women. Focusing specifically on education, it is possible that women who have more years of formal education are better able, internally and in their relationships, to combat misogynistic traditional beliefs about men's superior intelligence and, in turn, feel more empowered. As anticipated, HIV infection appears to interfere with mutuality in decision making, which is likely explained, at least in part, by the stigma associated with this disease (Jennings et al., 2002). The fact that women are typically diagnosed before their partners, and thus perceived to have brought the illness into the family (Ackerman & de Klerk, 2002), may impede equitably shared decision making. Finally, the positive association between knowledge of community resources and mutual decision making might suggest that just making women aware of the available community-based resources enhances their decision-making power.

As previously mentioned, the Theory of Gender and Power suggests that limited opportunities, financial dependence, and traditional gender roles contribute to women feeling vulnerable in intimate relationships. Consistent with this theory, women with more years of education and women who were more knowledgeable about and pleased with the resources in their community, perceived themselves to have significantly more relationship power. It is possible that the educational opportunities and connections with community resources provide women with an external source of validation, which in turn empowers them in their relationships.

Interestingly, trauma did not affect perceived relationship power. One possible explanation is that the effects of trauma were minimized due to the frequency with which women in South Africa experience, or are exposed to, traumatizing events (Jewkes et al., 2002). Alternatively, it is possible that the measure used to assess trauma was not optimal for addressing these research questions. Specifically, the current research team did not assess the date, frequency, or duration of the traumatic experiences. Women who have recently experienced a trauma may be more vulnerable (i.e. have fewer coping emotional resources) and, as such, less likely to assert themselves in their relationships. Further, it is possible that women who have experienced frequent and/or repeated traumatic experiences might have more psychological and emotional sequelae than women who have experienced fewer and/or acute traumatic experiences. Women in this study only reported whether a traumatic event had ever occurred not how often it had occurred. As such, future research might consider exploring these additional variables and their potential impact on perceived relationship power.

With respect to the minimal significant findings when relationship control served as the outcome variable and the relatively small percentage of the variance accounted for with all study outcomes, several factors were likely influential. Women who were currently in relationships, as well as those not currently in relationships, were included in this study. Moreover, women who were married and those in nonmarital partnerships were included. Perhaps considering each of these two groups of women individually would have yielded different results; however, our sample size (and statistical power) was inadequate to analyze the data in this way so as to provide statistically meaningful results. In fact, with respect to marital status, anecdotal reports about romantic relationships in the South African context suggest that women who are married have less power in their relationships than unmarried women.

Further limitations of the current study were the cross-sectional design and reliance solely on self-report data. The cross-sectional, non-experimental design of the study prohibits us from making any causal or directional statements regarding our findings. Of particular note

is the fact that, though we conceptualize HIV status and stressful life events as predictors of power in intimate relationships, it is equally plausible that low power in relationships leads to increased risk of HIV and stressful life events. In addition to design-related constraints, we also had a number of measurement challenges. Few measures are designed to assess the challenges faced by black South African women. As a result, it is possible that the measures used in this study did not adequately tap the constructs of interest for the current study. Specifically, the community-based organization availability measure was created for this study and has not been standardized. Additionally, several of the measures were modified to fit the South African context (e.g. Adult Life Stressor Scale), which may have altered the validity or reliability of the measures. Lastly, these data were gathered from a community-based convenience sample, and, thus, may not be representative, so that these results may not be generalizable, of all black South African women. Given the design and measurement limitations, the current study is best viewed a preliminary exploration of the factors related to intimate relationship power for Black South African women.

Implications

As the rates of domestic violence, poverty, and HIV/AIDS continue to climb among women in sub-Saharan Africa, research exploring factors that promote women feeling empowered in their intimate relationships is urgently needed. Although best viewed as a preliminary exploration of the link between interpersonal and community-level variables, this study begins to fill a gap in existing research. Specifically, we have gained initial knowledge about constructs related to women's sense of empowerment in romantic relationships. Increasing our knowledge of this area is important not only within the South African context, but more broadly considering women's vulnerable status worldwide. Although the current research study focused solely on the experiences of black South African women, women throughout the world are consistently undereducated, underemployed, and disproportionately impacted by violence and HIV/AIDS. Additional basic and applied research in this area could contribute interventions across several domains (e.g. intimate partner violence, HIV/AIDS). The development of measures designed to assess power and empowerment in romantic relationships would be one productive direction. A second is the development, implementation, and evaluation of community-based resources with significant outreach components to reach vulnerable women.

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References

- Ackermann L, de Klerk GW. Social factors that make South African women vulnerable to HIV infection. *Health Care for Women International* 2002;23:163–172. [PubMed: 11868963]
- Albarraçín D, Kumkale GT, Johnson BT. Influences of social power a normative support on condom use decisions: A research synthesis. *AIDS Care* 2004;16(6):700–723. [PubMed: 15370059]
- Albertyn C. Contesting democracy: HIV/AIDS and the achievement of gender equality in South Africa. *Feminist Studies* 2003;29(3):595–615.
- Baron RM, Kenny DA. The moderator-mediator distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* 1986;51:1173–1182. [PubMed: 3806354]
- Beadnell B, Baker SA, Morrison DM, Knox K. HIV/STD risk factors for women with violent male partners. *Sex Roles* 2000;42:661–689.

- Becker AB, Israel BA, Schulz AJ, Parker EA, Klem L. Predictors of perceived control among African American women in Detroit: Exploring empowerment as a multilevel construct. *Health Education and Behavior* 2002;29(6):699–715. [PubMed: 12456130]
- Cabral RJ, Galavotti C, Stark M, Gargiullo PM, Semaan S, Adams J, Green BM. Psychosocial factors associated with stage of change for contraceptive use among women at increased risk for HIV and STDs. *Journal of Applied Social Psychology* 2004;34(5):959–983.
- Carr RL, Gramling LF. Stigma: A health barrier for women with HIV/AIDS. *Journal of the Association of Nurses in AIDS Care* 2004;15(5):30–39. [PubMed: 15358923]
- Connell, R. *Gender and Power*. Stanford University Press; Department of Health; Stanford, CA: Pretoria: 1987. Department of Health (2001). Twelfth national HIV and syphilis sero-prevalence survey of women attending public antenatal clinics in South Africa
- Department of Health (2003). National HIV and syphilis antenatal sero-prevalence survey in South Africa 2002. Department of Health; Pretoria:
- Dunkle KL, Jewkes RK, Brown HC, Gray GE, McIntyre JA, Harlow S. Genderbased violence, relationship power, and risk of HIV infection in women attending antenatal clinics in South Africa. *The Lancet* 2004;363:1415–1421.
- Dunkle KL, Jewkes RK, Nduma M, Jama N, Levin J, Sikweyiya Y, Koss MP. Transactional sex with casual and main partners among young South African men in the rural Eastern Cape: Prevalence, predictors, and associations with gender-based violence. *Social Science & Medicine* 2007;65:1235–1248. [PubMed: 17560702]
- Emerson, RM. Social exchange theory. In: Rosenberg, M.; Turner, RH., editors. *Social Psychology: Sociological Perspectives*. Basic Books; New York: 1981. p. 30-65.
- Fox, S. Organisational responses to gender-based violence and HIV/AIDS in South Africa. Center for AIDS Development, Research, and Evaluation (CADRE) for the Department of Health, South Africa; Johannesburg, South Africa: 2003.
- Franko DL, Striegel-Moore RH, Brown KM, Barton BA, McMahon RP, Schreiber GB, Crawford PB, Daniels SR. Expanding our understanding of the relationship between negative life events and depressive symptoms in Black and White adolescent girls. *Psychological Medicine* 2004;34:1319–1330. [PubMed: 15697058]
- Gilbert L. Urban violence and health- South Africa 1995. *Social Science Medicine* 1996;43:873–886. [PubMed: 8870151]
- Gilks, C.; Floyd, K.; Haran, D.; Kemp, J.; Squire, B.; Wilkinson, D. *Sexual health and health care: Care and support for people with HIV/AIDS in resource poor settings*. 1999. Department for International Development
- Hoosen S, Collins A. Sex, sexuality and sickness: Discourses of gender and HIV/AIDS among KwaZulu-Natal women. *South African Journal of Psychology* 2004;34(3):487–505.
- Itzhaky H, York AS. Empowerment and community participation: Does gender make a difference? *Social Work Research* 2000;24(4):225–234.
- Jenkins EJ. Black women and community violence: Trauma, grief, and coping. *Women & Therapy* 2002;25:29–44.
- Jennings, R.; Mulaudzi, J.; Everatt, D.; Richter, M.; Heywood, M. *Discrimination and HIV/AIDS*. 2002. Department of Health, South Africa
- Jewkes R, Levin J, Penn-Kekana L. Risk factors for domestic violence: Findings from a South African cross-sectional study. *Social Sciences and Medicine* 2002;55:1603–1617.
- Kendler KS, Hettema JM, Butera F, Gardner CO, Prescott CA. Life events dimensions of loss, humiliation, entrapment, and danger in the prediction of onsets of major depression and generalized anxiety. *Archives of General Psychiatry* 2003;60:789–796. [PubMed: 12912762]
- Kimerling R, Calhoun KS, Forehand R, Armistead L, Morse E, Morse P, Clark R, Clark L. Traumatic stress in HIV-infected women. *AIDS Education and Prevention* 1999;11:321–330. [PubMed: 10494356]
- S. *Demonizing women in the era of AIDS: On the relationship between cultural constructions of both HIV/AIDS and femininity*. *Society in Transition* 2001;32(1):38–46.
- Mabokela RO, Mawila KFN. The impact of race, gender, and culture in South African higher education. *Comparative Education Review* 2004;48(4):396–416.

- Motsemme N. Gendered experiences of blackness in post-apartheid South Africa. *Social Identities* 2002;8(4):647–673.
- Nelson Mandela/HRSC Study of HIV/AIDS. South African national prevalence, behavioral risks and mass media household survey. HSRC Press; Cape Town: 2002.
- Oberhauser AM, Pratt A. Women's collective economic strategies and political transformation in rural South Africa. *Gender, Place and Culture* 2004;11(2):209–228.
- Outwater A, Abrahams N, Campbell JC. Women in South Africa intentional violence and HIV/AIDS: Intersections and prevention. *Journal of Black Studies* 2005;35(4):135–154.
- Peterson NA, Hughey J. Social cohesion and intrapersonal empowerment: Gender as moderator. *Health Education Research* 2004;19(5):533–542. [PubMed: 15150135]
- Pettifor AE, Measham DM, Rees HV, Padian NS. Sexual power and HIV risk, South Africa. *Emerging Infectious Diseases* 2004;10(11):1996–2004. [PubMed: 15550214]
- Pulerwitz J, Amaro H, DeJong W, Gortmaker SL, Rudd R. Relationship power, condom use, and HIV risk among women in the USA. *AIDS CARE* 2002;14:789–800. [PubMed: 12511212]
- Pulerwitz J, Gortmaker SL, DeJong W. Measuring sexual relationship power in HIV/STD research. *Sex Roles* 2000;42:637–660.
- Sherer T, Crawford M, Strebel A, Simbaiy LC, Dwadwa-Henda N, Cloete A, Kaufman MR, Kalichman SC. Gender, power, and resistance to change among two communities in the Western Cape, South Africa. *Feminism & Psychology* 2008;18:157–182.
- Spangenberg JJ, Pieterse C. Stressful life events and psychological status of Black South African women. *Journal of Social Psychology* 1995;135:439–446. [PubMed: 7564304]
- Wechsberg WM, Luseno W, Riehmman K, Karg R, Browne F, Parry C. Substance use and sexual risk within the context of gender inequality in South Africa. *Substance Use and Misuse* 2008;43:1186–1201. [PubMed: 18649238]
- West CM. Battered, black, and blue: An overview of violence in the lives of Black women. *Women and Therapy* 2002;25:5–27.
- Wingood GM, DiClemente RJ. HIV sexual risk reduction interventions for women: A review. *American Journal of Preventive Medicine* 1996;12(3):209–217. [PubMed: 8743877]
- Wyatt GE, Dunn KM. Examining predictors of sex guilt in multiethnic samples of women. *Archives of Sexual Behavior* 1991;20:471–485. [PubMed: 1747042]

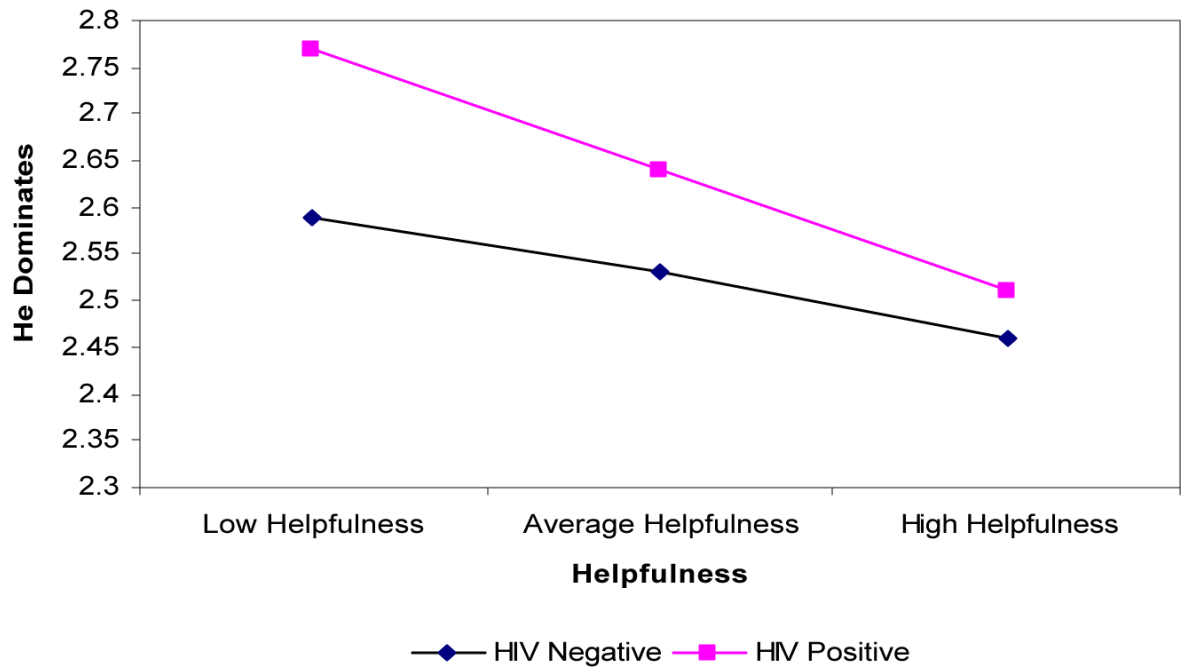


Figure 1.
Interaction between HIV Status and Perceived Helpfulness of Community Resources on Perception of Male Dominated Relationships

Table 1

Demographic Characteristics of Participants by HIV Status

	WLWH n=144		WNLWH n=144	
	n	Percent	n	Percent
Education ¹				
Less than grade 5	5	4.8	12	7.9
Grade 5-7	18	17.3	14	9.3
Grade 8-11	47	45.2	60	39.7
HS grad	26	25	53	35.1
Attended Univ.	8	7.6	11	7.3
Employed ²	25	24	40	26.5
Relationship Type ³				
Married	30	28.9	40	26.5
Boyfriend	68	65.4	58	38.4

Note: WLWH = women living with HIV, WNLWH = women not living with HIV;

¹ Education was derived from women's report of the highest level of education completed.

² Reflects those employed at least part-time.

³ Due to missing values, percentages do not sum to 100%

Table 2

Means, Standard Deviations for Outcome, Independent, and Moderator Variables

N = 248	Mean (SD)	Range
Outcome Variables ¹		
Relationship Control	24.40 (7.90)	15-60
Male Dominated Decision Making	2.54 (1.99)	0-7
Female Dominated Decision Making	1.58(1.38)	0-7
Mutual Decision Making	2.87(2.08)	0-7
Independent Variables		
Trauma	.93(1.16)	0-5
Undesirable Life Changes	3.17(1.93)	0-9
Community-Level Moderators ¹		
Knowledge	6.48(3.66)	0-36
Frequency	3.17(.68)	1=never - 4=once a week
Helpfulness	3.54(.53)	1 = not at all - 4 = very

¹Note: Higher scores represent higher levels of variable than low scores.

Table 3

Regression models for the relationship power variables

Block	Variable	Relationship Control			Male Dominated Decision Making			Female Dominated Decision Making			Mutual Decision Making		
		B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
1	Education	-1.17	.46	-.16**	-.16	.12	-.24**	-.11	.08	-.08	.54	.12	.28**
	SES	-1.92	1.13	-.11	-.30	.29	-.07	.09	.21	.03	.21	.30	.04
2	HIV Status	1.57	1.00	.10	.42	.26	.11	.12	.18	.04	-.53	.26	-.13*
	Trauma	.02	.44	.00	-.13	.11	-.070	.02	-.08	-.02	.13	.12	.07
	Life Changes	.77	.26	.19**	-.01	.07	-.01	.05	.04	.07	-.04	.07	-.03
3	Knowledge	.136	.79	.01	-.35	.20	-.12*	-.08	.09	-.07	.43	.21	.14*
	Frequency	.28	.72	-.03	.02	.19	.08	-.27	.13	-.13*	-.00	.19	.020
	Helpfulness	.85	2.4	.02	-.12	.62	-.01	.29	.44	.04	-.23	.63	.72
4	<i>I</i> HIVxHelpfulness				-2.60	1.6	-.17*						
² Knowledge						.06			-.02			.09	
	R ²		.07			2.85**			.51			3.79**	
	F		3.02**										
² Frequency						.05			.00			.07	
	R ²		.07			2.40**			1.09			3.18**	
	F		3.08**										
² Helpfulness						.07			-.00			.07	
	R ²		.07			3.0**			.90			3.15**	
	F		3.1**										

Note:

¹ Only significant interactions were included in table

² Signifies the final adjusted R² for each of the moderator variables

* denotes $p < .05$

** denotes $p < .01$

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