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Revisiting "Success": Posttrial Analysis of a Gender-Specific HIV/STD Prevention Intervention

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Abstract

Alongside the recognized need to foster the development of innovative gender-specific HIV interventions, researchers face the urgent need to further understand how current interventions do or do not work. Few studies build posttrial qualitative analysis into standardized interview assessments in randomized controlled trials in order to bolster an assessment of how interventions work. The current investigation is a posttrial qualitative analysis carried out on a randomly selected subsample (*N*=180), representing 50% of women who participated in a 3-arm randomized controlled trial known as Project FIO (The *F*uture *Is O*urs). FIO was a gender-specific HIV prevention intervention carried out with heterosexually active women in a high seroprevalence area of New York City. Posttrial qualitative results extend an understanding of the success of the trial (e.g., reductions in unsafe sex). Qualitative results reflect how the Modified AIDS Risk Reduction Model operated in the expected direction across experimental groups. Results also highlight women's empowerment narratives, reflecting the salience of bodily and sexual rights aspects of the intervention.

Keywords

Gender-specific HIV interventions; posttrial analysis; intervention impact; methodological triangulation; qualitative methods

INTRODUCTION

In 1994, heterosexual transmission surpassed intravenous drug use as the predominant route of transmission to U.S. women with a diagnosis of AIDS (CDC, 1995). Currently, 29% of

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all HIV infections diagnosed through 2001 are in women, and heterosexual contact now accounts for 60% of the identifiable risk for women (CDC, 2002), underscoring the need to continue developing new theoretical and methodological approaches in HIV research that "adequately address the contextual issues of heterosexual relationship dynamics" (Logan *et al.*, 2002, p. 873).

Consistent with the recognized impetus to develop successful interventions, researchers also need to further elucidate how interventions do or do not work (Anderson and Prentice, 1999; Exner *et al.*, 1999; Lobo *et al.*, 2002; MacKinnon, 1994; MacKinnon *et al.*, 1988). Prevention programs can provide greater benefits in the future if effective and ineffective components are identified. Currently, there are several posttrial approaches of evaluating how interventions work. Researchers interested in postintervention analyses increasingly draw on statistical approaches. Analysis of mediators focuses on the effect that an intervention program has on intervening variables and then subsequently examines the link between intervening variables and outcome measures (Baron and Kenny, 1986). This can provide a check on whether interventions changed the targeted intervening variables, extend an understanding of the success or failure of intervention materials, and help to test theories underlying prevention programs (Hansen and McNeal, 1997; Krull and MacKinnon, 1999; MacKinnon 1994; MacKinnon *et al.* 1991; Reynolds *et al.*, 2002). While much information can be gained from mediational analysis, this technique clearly remains underutilized (Baron and Kenny, 1986; MacKinnon *et al.*, 1988; Reynolds *et al.*, 2002).

Another method that can extend an understanding of how interventions work is posttrial qualitative data analysis. During intervention preplanning, it is quite common to carry out a qualitative phase in order to gain a contextualized understanding of the target population, aid the selection of an appropriate theoretical model, and design intervention materials (Altman, 1995; Madriz, 1998; Miller and Crabtree, 2000; Sormanti *et al.*, 2001). Yet, we are not aware of any published study to date that has sought to use the same method posttrial in order to bolster an assessment of how interventions work. The benefits of posttrial qualitative analysis that is based on participant reports include triangulating methods so as to strengthen the validity of outcome measures through corroboration and challenge, rounding out what each individual method might lack (Denzin, 1978; Miller and Crabtree, 2000; Miles and Huberman, 1994; Sandelowski, 1998). Other benefits include extending an understanding of intervention success (or failure) beyond traditional outcome measures and identifying how intervention materials or the selected theoretical model are working (or not) from the perspective of study participants.

The current investigation is a posttrial qualitative analysis carried out on a randomly selected subsample (*N*=180, 60 each arm), representing 50% of women who participated in a 3-arm randomized controlled trial known as Project FIO (The *Future Is Ours*). The goal of this study is to introduce the above benefits of posttrial qualitative analysis when it is built into standardized assessments in clinical trials. Project FIO was a manualized, group-based intervention designed to reduce sexual risk among heterosexually active women recruited from a family planning clinic in a high HIV seroprevalence area of New York City. Quantitative outcomes showed that women in the 8-session intervention had nearly twice the odds of controls to decrease unprotected sex occasions or have no unprotected sex occasions

at 1 month and 1-year postintervention (see Ehrhardt *et al.*, 2002a). At 1- year followup, in order to extend an understanding of the success (or failure) of the intervention, women were asked to describe changes in their lives since participating in the study, whether study participation had a positive, negative, or no impact on their lives, and to elaborate on this impact.

METHODS

Women (*N*=360) who were family planning clients seeking gynecological health, pregnancy prevention, or HIV/STD screening and treatment services were recruited from the waiting room of a Planned Parenthood clinic in Brooklyn, New York from 1994 to 1996. To be eligible for participation, women had to be a client of the above clinic, report heterosexual activity within the prior year, be between 18 and 30 years old, have unknown or negative HIV serostatus, have no history of receiving a blood transfusion from 1980 to 1985, report that they were not currently pregnant nor planning to become pregnant, report no intravenous drug use in the past year, and be comfortable with spoken English. Eligible women who were willing to participate had a baseline interview and were subsequently randomized to one of three study arms: eight 2 h weekly sessions, four 2 h weekly sessions, or an assessment-only control group. Followup assessments took place at 1 month, 6 months, and 12 months postintervention.

Study participants were ethnically diverse (72% Black or African American, 17% Latina, 11% Caucasian or other). One fourth (26%) of women reported total household incomes below the poverty line, the mean age was 22.3 years (median=21.4), many women were in secondary or postsecondary educational programs (48%), and much of the sample was currently working either full or part-time (41%). Most women (82%) had completed high school, and 42% of women had children.

Fifty-eight percent of women reported at least one lifetime STI diagnosis, 49% reported it could be possible that their current partner had other partners since they had been sexually involved, and half of women did not know their partner's HIV status. Furthermore, condom use was low, with 75% of women reporting either no condom use or inconsistent condom use in the previous 3 months. Participants' risk was not driven by a pattern of numerous partners—76% of women who were heterosexually active in the prior 3 months reported one sexual partner.

Theoretical Model and FIO Intervention

Project FIO was theoretically guided by the AIDS Risk Reduction Model (ARRM) (Catania *et al.*, 1990) which relies on a three-stage structure for safer sex behavioral change: recognizing one's sexual behaviors as high risk for STDs/HIV (susceptibility); making a commitment to reducing risky behaviors and increasing low-risk behaviors (intention); and enacting options and strategies to attain behavioral change (enactment).

As a result of focus group interview data collected during preplanning, the research team modified the ARRM. Here, it became clear that urban women faced multiple daily constraints that made the prioritization of safer sex difficult. A prioritization phase was

therefore added to the theoretical model, acknowledging the need to find some relief from daily stressors so as to increase the priority of safer sex. Women also stated that it was particularly challenging to maintain safer sex in committed relationships, given desires for trust, intimacy, pleasure, and pregnancy. As a result, a maintenance phase was added to the model that focused on aiding women to consistently practice safer sex. The final modified AIDS Risk Reduction Model (M-ARRM) had five components: (1) susceptibility; (2) prioritizing; (3) intention; (4) enactment; and (5) maintenance (see Ehrhardt *et al.*, 1992; Miller and Crabtree, 2000).

In addition to crafting intervention materials to reflect the five components of the theoretical model described above, the research team further refined materials by reviewing the HIV intervention literature.

Fully half of the intervention sessions centered on safer sex negotiations including how to ask a partner to use protection, how to influence partners to use protection, and how to creatively maneuver when met with subtle opposition or overt resistance. Intervention materials offered women an expanded range of safer sex alternatives that went beyond the male condom to include outercourse, female condoms, refusal, and leaving a sexual encounter or relationship that was not amenable to safe sex negotiations. Sessions included a section on bodily rights, where women were encouraged to discuss a sexual bill of rights that covered topics such as the right to say no to sex or unsafe sex, the right to bodily safety and integrity, and the right to know one's bodily and sexual needs, likes, and dislikes.

Another key area in Project FIO was intervening in gender scripts so as to introduce greater fluidity in enacting gender norms. Gender scripts are a means of conceptualizing how women and men strategically manage their behavior in heterosexual relationships. (Schwartz and Rutter, 1998; Simon and Gagnon, 1999). Materials were written to underscore and challenge traditional gender and sexual scripts that typically prescribe norms to both women and men and that may act as obstacles to safe sex (Ortiz-Torres *et al.*, 2003; Seal and Ehrhardt, 2003). Lastly, reflective of multiracial feminist work (Collins, 1990; Thornton-Dill, 1988) the intervention emphasized not only self-empowerment, but a broader emphasis on the health and empowerment of family and community members. The four-session intervention was structured to be highly similar in content to the eight-session, and was simply compressed in length.

Qualitative Postinstrument Trial Data

The information used in this investigation consisted of data obtained from the 1-year follow-up assessment. In the final section of the 12-month followup interview which assessed sexual risk behavior, epidemiological, demographic, psychosocial, and psychosexual factors, women were asked the following open-ended questions by the interviewer for the main trial: "Since you joined Project FIO, what kinds of changes have there been in your life, including any changes in your relationships with men or women, in the way you see things, in how you feel about yourself?" "Has this study had any effect on your life—positive, negative, or no effect?" "Can you tell me more about that?" Questions were structured by an interdisciplinary research methods team to be as broad as possible, leaving study participants open to determining the relevance and specificity of intervention impact in their own lives.

Ethnically and educationally diverse female interviewers who were extensively trained in semistructured interviews (Meyer-Bahlburg and Gruen, 1992) conducted the interviews and provided formal, standardized probes. Interviewers were blind to hypotheses and to condition unless spontaneously disclosed by the participant.

Interviewers provided recorded handwritten verbatim responses to interview questions. To validate the accuracy of written data, the first author randomly selected and transcribed 20 interview tapes, crosschecking transcriptions with recorded responses. Handwritten data were accurately recorded in all instances where participant responses were three lines or fewer. Due to the infeasibility of an interviewer accurately recording a lengthy verbatim narrative, the first author transcribed all original tapes where participant responses were equal to or greater than four handwritten lines.

A 50% random sample (N=60 for each arm) was selected for these analyses. To ensure blind coding of the interviews, a random number generator was used to replace original participant identifiers. To establish a codebook, 10% of interviews were randomly selected and independently evaluated using an open coding process that is often employed during the initial phase of coding in qualitative research (Lofland and Lofland, 1995; Spradley, 1979). From this initial process of broad category generation, two coders coded an additional randomly selected subset (10%) of the original interviews. After a second round of coding, coders met to ensure full refinement of primary and secondary categories often referred to as focused, intensive, or axial coding (Berg, 2001; Dey, 1993; Lofland and Lofland, 1995). Once the full range of categories was established, the remaining 144 interviews were double coded independently by both authors. Following independent coding, decision trails were noted and documented, and the overall concordance rate was calculated to be 86% across the 144 interviews. If any new themes emerged during the coding process, these were only added in consultation with the research team. Such consultations did not involve adding larger categories to the analysis, but involved refining more minor subcodes. All interview data were analyzed in NVivo, a qualitative software package.

RESULTS

Across the three intervention arms, the vast majority of women reported that being a part of the study had a positive impact on their lives (N=163, 90.6%). No women reported negative impact. Seventeen (9.4%) women reported no effect. Approximately half of the women who reported no effect were in the control condition (N=8), and of the women who reported positive impact, almost one-third (30.1%) were in the control group. Since questions about change were posed as broadly as possible and questions about intervention impact were asked directly afterwards, responses across the two questions had considerable overlap. The analysis was run twice to determine if responses to questions differed if analyzed separately or together, and it was found that modal categories did not change across the two intervention groups—hence, results are analyzed together. In the control group, the first two of the four modal responses shown below overlapped across questions, while the second two responses were offered when specifically probed for intervention impact. The results that follow are arranged in descending order in terms of the prevalence of responses to questions about life changes and the impact of study participation across experimental groups. These

include: an increased sense of susceptibility to HIV/STDs, greater social support, informational/educational benefits, increased openness to discussing sexual matters, and empowerment themes (see Table I below).

Susceptibility to HIV/STIs

Across intervention arms, it was frequently reported that the study assisted women in assessing their own sexual history, challenging their myths about (in)vulnerability, and increasing an awareness of risk. For instance, women across groups often reported that the study "made me really think about my life and all the people I've slept with and why I slept with them." Even in the control group, women reported that participating in the assessment interviews changed their sense of susceptibility: "the first interview scared me when I realized how many men I've had sex with." While some women described increased susceptibility as fear, it was more common that the study was characterized across intervention arms as eliciting an awareness of risk, as evidenced by statements such as:

"it opens your eyes that there are a lot of STDs—how you get them—it helped me a lot."

Several women described susceptibility as a challenge to personally held myths about vulnerability to HIV. These themes were reported in statements such as:

"it has made me more aware of how risky my behavior is. I don't feel invulnerable. Me and them. I'm not so distanced from it. I don't see AIDS as a gay disease."

While women reported classic susceptibility narratives such as those above which revealed either an awareness of risk or challenges to conflations of sexual identity and risk, a smaller group of women gazed more directly at their own behavior, examining themselves as an object of study in their own right. For instance, one woman reported that:

"It is like I hear myself in what I am saying to you. I listen to what I am saying and evaluate my own behavior."

Susceptibility to STIs/HIV With Prioritization

Whereas increased susceptibility to HIV/STDs was the most frequently occurring theme across study arms, women in the four-session group also distinctively described susceptibility as including a shifting prioritization of risky behaviors. Women who expressed an increased awareness of risk *and* a statement of changed attitudes toward risky behaviors were coded as having "susceptibility with prioritization." For example, women in this group indicated that:

"I had a flashback of old sexual behavior and deciding things that might put me at risk—not to continue them."

Other women in the four-session group reported a reprioritization of safe sex that included the recognition of a need for consistent safe sex:

"Before I came to Project FIO I saw protecting myself as something else. It was like...once in a while I would not use a condom and I didn't worry...I thought this

is risky, but I was like whatever, nothing is going to happen to me. I used to think slipping up was ok before, not a big deal, and I've left that idea in the trash."

Other women reported prioritization as a shift in self-care:

"I think about AIDS more now. I think about myself more, my health. I learned not to deal with a guy who got somebody else."

Another woman stated that this sense of self-care extended into carrying more condoms:

"I'm more aware of sex and things that happen. I've become more careful also by way of condoms and things...to protect myself...when I was younger I wasn't into condoms...now I always carry condoms and talk about it. I care about protecting myself more."

Susceptibility with Enactment

While a shifting prioritization of risky behavior was more commonly reported in the four-session group, the eight-session group more often stated susceptibility narratives that were inextricably intertwined with explicit themes of behavioral change (enactment). Women who referenced *behavioral change* in addition to a shift in risk awareness (susceptibility) were coded as having "susceptibility with enactment." For instance, women in the eight-session group noted that the intervention:

"...makes me think about certain things I do...from the first interview until now, there's been big changes in the amount of people I have sex with using a condom-vs- not using a condom."

Another woman from the eight-session group described that Project FIO:

"has made me more aware of the dangers of having unprotected sex and made me more aggressive in protecting myself and partners."

Other women from the eight-session intervention described enactment as not only including condom use, but also expanding one's options for safe sex beyond the male condom:

"I increased the condom use. I do more outercourse. I used to think it could never happen to me. I was naive before the group. I'm more aware."

Social Support

In both the assessment-only and the eight-session group, study participation was described as either providing a vital source of social support or a valued source of referrals. In the assessment-only group, when probed for intervention impact, women described the study as a safe space in which interviewers would listen to personal matters without judgment. For instance, one woman stated that she felt comfortable speaking to the interviewer and that:

"there were a lot of things I was always holding in and I could get it off my chest, I could talk about it."

Another woman stated that she: "doesn't feel helpless any more. I feel like I can always talk to someone." Those in the eight-session group also described the intervention as an

influential source of social support, however, unlike the assessment-only group, these narratives were depicted with an emphasis on the social nature of the group experience:

"I don't really get to socialize with women and I'm glad I got to talk with other women about these situations."

Another woman described that:

"I met a lot of new people and you know, I've grown a lot as far as...I was holding onto a lot of things, and they showed me...to just let it go and live my life...and vice versa, you know, we show each other...we all have different things that we were going through..."

The second major subcategory of social support was one involving descriptions of Project FIO as a solid source of referrals or as offering assistance in negotiating life stressors. For instance, a woman in the assessment-only group reported that "It felt good that if I ever had a problem, I can call FIO," while another underscored how the study:

"...makes me feel that I have somewhere to go when I need to talk about something. I feel less stressed—it helps me deal with stress."

Women in the eight-session group agreed:

"If there's a problem, there's someone to call. Each time I come here, I can put out what I usually keep inside...makes me feel better. Someone, a number, I can call or talk to. So it has helped."

Openness with Sexual Matters or Talk

Women in the control group frequently reported that participation in the assessment led to an increased comfort with discussing sexual matters:

"I never used to talk about sex...now I can talk about it."

Another woman agreed:

"I could talk about sex without feeling uncomfortable...that it's ok to talk about sex."

Several women in the assessment-only group noted that they could talk about sex more deeply with the interviewer than with their own peers or family members:

"You get to talk about things you want to talk about. You can talk freely without feeling uncomfortable. You have girlfriends but you don't talk about it...you don't get in deep talking about sex with them..."

A few women in this group also reported that the assessment interview normalized sexual thoughts, feelings, and behaviors overall:

"It made me open up more. The questions made me realize there's people out there freakier than I am (e.g., sex fantasies). It made me feel that anything about myself that might be "odd" would be accepted."

Informational/Educational Benefits: Individual Level

Both intervention groups reported that there were informational and educational benefits to study participation. As might be expected, women reported that they "understand more about sex, condoms, HIV, diseases," or "learned about disease…even some I haven't heard of." Some women valued what they perceived to be objective information:

"they give me information-like when I was coming to the meetings...they have accurate information."

Other women indicated the importance of the information, given knowledge gaps they perceived in the educational system and family:

"I've just been educated in things sexually that I've never learned before in school or at home."

Informational/Educational Benefits to the Community

In addition to women describing the educational benefits of the study at the individual level, women in both intervention groups stated that study participation aided information dissemination to others and reinforced a sense of giving to one's community. Here, women described a desire to help the community through transferring knowledge gained to peers, friends, and family members. For instance:

"Everything I learned from the workshops about sexual awareness...I talk to my girlfriends, family members, and hopefully that helped them..."

At times, participants in intervention groups described the informational and educational benefits as providing a benefit to the community at large:

"I feel like I'm doing something to help the community. That makes me feel like... well...sometimes I get frustrated and I try to have a one-on-one conversation and try to help someone understand why they need to use protection...sometimes I can't help, but if I know you are doing this on a larger scale, I feel like I can help, I know I am helping through you guys..."

Empowerment

Empowerment themes that were characterized by confidence, strength, and bodily respect were among the four most frequently reported themes across all groups (see Table I). Despite not having experienced the intervention, women in the control group commonly reported life changes such as "confidence," "strength," and "better" overall. Some women reported that they felt more confident concerning the current or future possibility for negotiating safer sex or refusing unsafe sex. For example, one woman reported:

"I think I have a lot more confidence in myself...I feel better about myself overall. I think before I was a little timid to insist especially with a main partner to use a condom, I think now I can more so do it and feel confident to doing it. And saying no to sex without a condom."

Another woman reported that she feels "more confident about telling a man to use a condom."

Finally, a few women described an empowering shift in bodily respect. For instance, one woman stated that:

"it gave me a more positive outlook on life, having respect for my body."

Some narratives of bodily respect were coupled with challenges to feminine socialization that can prescribe more concern for others than for oneself:

"I'm more tuned into myself and no longer so eager to please—I realized I'm my own woman and I should start putting myself and my body first."

While the control group commonly reported empowerment themes that involved descriptions of "strength," and "confidence" as life changes, women from the four and eight-session intervention groups were much more likely to attribute empowerment to study participation. Here, women in the intervention groups described empowerment not simply as strength or confidence, but as the right to have control over one's own bodily destiny, as new assertions of female sexual pleasure, and as a willingness to leave relationships that were not amenable to safe sex negotiations.

Another woman had her own discourse of bodily rights:

"Um, its made me think that its very important for women to have a strong sense of who they are...saying that I mean that a woman should be able to control her life sexually and not allow a male to say what she should or should not do with her body or...what she should or should not do sexually."

Sometimes women described their right to say no to unsafe sex as involving a shift in relationship dynamics:

"Its my right to say no if I'm like not interested in having it, I tell him no. Where before I said no, he made me feel guilty, so I ended up giving in, but now I can stick to it more."

Women in the intervention groups also described the importance of underscoring and challenging traditional gender scripts of feminine sexual vulnerability for women and masculine aggressiveness for men. This was characterized in themes such as:

"I learned that I can't let nobody take advantage of me, can't be vulnerable to men. I started off...I used to be 'out there'...person didn't want to use protection, I would give in. Now I know what I want and I don't want to be hurt and be healthy and live to a future...if he doesn't agree...forget it."

Some women offered how intervention materials on gender scripts opened up the possibility for more fluidity in enacting femininity, allowing for the creative eroticization of safer sex:

"it made me take...be in charge...the man doesn't always have to be in charge, it's a manly thing to have the man be in charge, but women can be in charge, have fun, enjoy sex, but be safe. It was a good study...makes me think about things going on in the world and not be so closed-minded."

Finally, similar to the assessment-only group, some women in the eight-session group described narratives of assertiveness through "strength" and "confidence" surrounding safe sex discussions:

"I think it made me stronger in a sense that I could speak more openly about sex and not be afraid, and also it gave me more confidence to speak to my partner about protection and pregnancy and sexually transmitted diseases."

Several women reported that the intervention facilitated new stances surrounding their own independence, leaving behind relationships that did not seem satisfactory or were perceived as harmful. For instance:

"I see myself as important in life to not risk my life for sex. I don't have the same partner as I did before."

Some women described the specific relationship dynamics that no longer seem tolerable:

"I see a lot of different things in me. I changed my mind about certain things—that's why I'm not with Q anymore—I was always jumping to his requests and stuff and I came here and found out I didn't have to do that anymore."

Other study participants agreed:

"I don't accept things I used to accept in relationships. I had an ex-boyfriend who didn't want to use condoms and I broke up with him. I realized this was best for me. The meetings helped me."

DISCUSSION

The goal of this investigation was to introduce the benefits of building posttrial qualitative analysis into standardized assessments in clinical trials. An analysis of open-ended questions asked at the end of a randomized controlled trial reinforced and extended our past understanding of the success of our gender-specific HIV intervention. The manner in which women across groups responded to questions about changes in their lives and the impact of the intervention lends some credence to the selected theoretical model (susceptibility, prioritization, enactment). Specifically, the way in which increased susceptibility to HIV/STDs was the modal response category in the assessment-only group while susceptibility narratives were intertwined with safer sex prioritization and enactment narratives in the four and eight-session groups, respectively, lends some support to the validity of our theoretical model (M-ARRM). The way that women in the intervention groups spoke about prioritizing and enacting risk reduction also extends confidence in the validity of our quantitative demonstration of significant reductions in unsafe sex (Ehrhardt *et al.*, 2002a,b). These results point to the importance of theoretically driven, gender-specific, and social-psychological models in intervention research.

Although it should not be surprising that informational and educational benefits were salient to intervention groups, the fact that women described not only individual-level but also community-level benefits to study participation deserves further attention. Women appeared to value disseminating the knowledge they gained during the intervention to family, peers, and community. This may reflect the grounding of the intervention in the broader context of

community and underscores the way in which diffusion can result from group-based intervention work (Rogers, 1995). It also reinforces the voice of multiracial feminist researchers who have emphasized the simultaneous importance of self, family, and community when conceptualizing women's empowerment (Collins, 1990, 1999; Eitzen and Baca-Zinn, 1995).

Results also showed that the assessment-only group reported a wide variety of changes, reinforcing our previous quantitative findings that control group participants did in fact also change (Ehrhardt *et al.*, 2002a,b). This result is reflective of longstanding debates about placebo effects in clinical trials (Djulbegovic, 2001; Newman *et al.*, 2001; Parsons, 1974), but sheds light on how and why control groups change. The finding of increased sexual openness in the control group likely reflects the degree to which a lengthy assessment of psychosexual factors, sexual pleasure, and sexual functioning facilitates more comfort with discussing sexual matters. It is also striking that social support and referrals provided by Project FIO were mentioned as one of the most salient aspects of study participation for both the control and eight-session groups. This may indicate the relative degree of disenfranchisement of women in our sample or may underscore difficulty with accessing services beyond those provided by the study site. It also suggests that, for some women, the mere opportunity to discuss important life issues with a respectful and nonjudgmental listener meets an important unmet need.

Finally, the empowerment finding across intervention arms deserves greater discussion, as it is an outcome that is not captured by our behavioral outcome assessing reductions in unsafe sex and may provide insight for future mediational analyses or new directions in HIV intervention research. Second wave feminist analysis (1960s–1990s) has long emphasized the importance of seeking gendered bodily rights (MacKinnon, 1989; Martin, 1987; Millet, 1970) challenging traditional gender norms, roles, and scripts (Eisenstein, 1986; Firestone, 1970; Friedan, 1974; Lorber, 2001), and emphasizing female sexual agency (Haug, 1987; Schwartz and Rutter, 1998; Segal, 1994) as central to women's empowered subjectivity. While concepts of gendered power relations have increasingly been translated into and operationalized within HIV research in the cognitive realm (Amaro, 1995; Amaro and Raj, 2000; Jenkins, 2000; Logan *et al.*, 2002; Pulerwitz *et al.*, 2000; Wingood and Diclemente, 1996, 1998, 2000), the bodily realm has only begun to be explicitly theorized in the past few years (Gollub *et al.*, 2002). Gendered bodily empowerment may in fact offer a key link between increased susceptibility and behavioral enactment and our next quantitative investigation will explore this possibility more precisely.

Our posttrial qualitative findings are consistent with contemporary feminist work generally titled "third wave," moving beyond conceptions of power as solely owned or used by men to categorically oppress or objectify women (Bordo, 1993; Connell and Dowsett, 1999; Dowsett, 2002; Heywood and Dworkin, 2003). Recognizing that gender relations are "at play" in a shifting field of negotiated power relations among different groups of women and men, while tailoring the specificities of these relations to each unique target population, seems particularly promising (Fullilove *et al.*, 1990; Mane and Aggleton, 2000; Messner, 1997). Indeed, Project FIO's combined emphasis on recognizing constraints while drawing

on agentic possibilities for change and empowering one's community appears to offer promising results.

The major limitation to this postintervention qualitative analysis relates to the demand characteristics inherent in this methodology. Open-ended questions asked by a study interviewer at the close of a year-long study that requires considerable participant investment is likely to lead to desirable responding whether results are quantitative or qualitative. Confidence in our findings is bolstered by the fact that the trial's behavioral outcome was unrelated to social desirability (Ehrhardt et al., 2002a,b), and by the pattern of susceptibility, prioritization, and enactment that is concordant with the theory underpinning this study. Nonetheless, a more compelling approach would have been to ask a general change question and to follow-it up with a question that specifically asks "which, if any of the changes would you attribute to your participation in the intervention?" Another alternative approach that could maintain the benefits of the current type of analysis while preserving the rigor of triangulating methods and minimizing socially desirable responses may be to have an interviewer outside of the main trial perform posttrial assessments. Within HIV prevention work that is directed at heterosexually active women, it is generally understood that skills-based, theoretically-driven interventions that are tailored to the unique circumstances of the target population, have sustained contact with participants, and are embedded in the context of women's relationships and sexual negotiations offer an effective means to changing risky sexual behaviors (Amaro, 1995; Amaro and Raj, 2000; Ehrhardt and Exner, 2000; Exner et al., in press; Exner et al., 1997; Logan et al., 2002; Wingood and DiClemente, 2000). Our quantitative and qualitative results point to one possible combination of gender-specific intervention materials that succeeds or "works." Intervention researchers interested in triangulating methods, extending beyond traditional outcome measures, and underscoring fruitful areas for future mediational analyses or intervention development may consider adding posttrial qualitative analysis to their repertoire of methodological strategies.

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Table I

Most Commonly Reported Themes (Descending Rank Order): Life Changes and the Impact of Study Participation (N = 180)

Assessment-only group	4-session intervention group	8-session intervention group
Increased Susceptibility to STDs/HIV	Increased susceptibility to STDs/HIV and Prioritization of safer sex	Increased susceptibility to STDs/HIV and <i>Enactment</i> of safer sex strategies
Openness with sexual matters	Informational/educational benefits-individual level	Empowerment
Social support	Empowerment	Informational/educational benefits-individual level
Empowerment	Informational/educational benefits-community, family, peers	Social support