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A Multi-Methods Approach to Women's Experiences of Reproductive Health Screening

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Abstract

Patient-clinician interactions in the context of women's reproductive health screenings are rich with psychosocial implications. We used a multi-method approach to collect narratives and self-report responses from 38 young women about their screening experiences. We used content analysis to identify five broad themes in women's narratives of their experience: (1) emotional discomfort, (2) communication, (3) uncertainty, (4) physical pain, and (5) health understanding. We examined relationships among narrative themes, subjective emotional appraisals of the screening experience, and individual differences. We also identified a negative relationship between self-reported psychological presence during the screening visit and perceived powerlessness, such that participants who engaged in detachment strategies during their interaction with the clinician reported feeling less powerful as a patient.

Keywords: Cervical cancer screening, Pap test, health narratives, women's health, presence, emotional appraisal, reproductive health

A Multi-Methods Approach to Women's Experiences of Reproductive Health Screening

Reproductive health screening procedures (e.g., Pap tests, HPV testing) entail a number of potentially distressing elements. For example, these procedures include intimate contact with private body parts and discussion of stigmatized topics such as sexual health practices (Ghane, 2012). Many women, particularly women who have received abnormal Pap test results (Bertram & Magnussen, 2008; Kahn et al., 2005), report negative experiences in this type of medical context (Hoyo et al., 2005; Larsen, Oldeide, & Malterude, 1997). Researchers, however, have yet to fully explore the relationships between patients' qualitative reports of their experiences (i.e., narratives), their emotional appraisals of the visits, and health-related behaviors.

In the present study, we adopted a multi-method approach, combining narrative analyses and questionnaires, to examine women's experiences of reproductive health screening (e.g., Pap tests, HPV testing, pelvic and breast exams). Our goals for this study were: (a) to content analyze women's narratives, identifying broad themes that emerge across women's experiences of reproductive health screening; (b) to examine relationships between narrative themes and relevant individual differences (e.g., self-esteem, English language fluency); and (c) to examine the role of psychological presence, a novel construct, in reproductive health experiences.

A Narrative Approach to Medicine

Using the tool of narrative medicine, a burgeoning approach in the social and health sciences, researchers can acknowledge, understand, and incorporate patients' stories into the practice of medicine (Charon, 2001; Greenhalgh & Hurwitz, 1999). Narratives have been described as "listening devices" (Frank, 2001, p. 76) insofar as they allow researchers to detect a patterned structure across individual stories. The narrative approach thus can be used to examine variables beyond conscious awareness that influence health behaviors (e.g., substance abuse,

sexual health practices; Dunlop & Tracy, 2013; Waitzkin & Britt, 1993). Medical caretakers can refer to patients' narratives as a way to understand their patients' perspectives (Charon, 2001), and patients who tell their story may experience benefit from forming a health-related narrative, such as greater empowerment (Murray, 1997), well-being (Pennebaker & Seagal, 1999), and understanding of the event. Furthermore, in alignment with the biopsychosocial model of health (Engel, 1980), a narrative approach allows researchers to "subjectivize" reality (Bruner, 1990) by capturing the individual's phenomenological understanding of the experience in question.

Reproductive Health Screening

Women's reproductive health screening is paradigmatic of the type of health-related experience that is rife with emotional and psychological nuances. Guidelines suggest that screening should take place every 1 to 3 years, depending upon patients' individual risk profiles (National Cancer Institute, 2013). Despite the ubiquity and frequency of these visits, women often regard reproductive health screening experiences as highly distressing (Hoyo et. al., 2005; Larsen et al., 1997; Savage & Clark, 1998). Furthermore, the topic of women's reproductive health is commonly stigmatized by the general public (Glasier, Gülmezoglu, Schmid, Moreno, & Van Look, 2006; Roberts & Pennebaker, 1995).

A few studies have included narrative approaches to examine women's experiences of reproductive health screening. In one such study researchers conducted focus group interviews and found that anticipated pain was the greatest predictor of nonadherence to reproductive health screening recommendations (Hoyo et. al., 2005). In another study, researchers interviewed a small number ($N = 13$) of women immediately after a Pap test and found that, in addition to anxiety about anticipated pain, women commonly reported the desire for communication with their doctors and a diminished sense of dignity (Larsen et al., 1997).

Larsen et al. (1997) also identified an emergent theme of uncertainty. Specifically, women's report that the exam was "not as bad as they expected" (Larsen et al., 1997) reflects their uncertainty and subsequent management of their expectations (e.g., bracing for the worst; Sweeny, Carroll, & Shepperd, 2006). In a more recent study, researchers compared the narratives of women who had regular reproductive health screenings with the narratives of women who underutilize screening, and found that the latter group reported more cynicism about the medical profession, greater trust in alternative therapies to negate the need for screening, and dependence on physical symptoms to indicate a need for screening (Savage & Clark, 1998; Smith, French, & Barry, 2003).

Presence. Women often report feeling negative emotions regarding reproductive health screening (Hoyo et al., 2005; Larsen et al., 1997; Savage & Clark, 1997; Smith et al., 2003). Research on emotion regulation suggests that cognitive detachment is a common strategy used during a variety of anxiety-provoking situations to avert attention away from a potentially negative experience (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996; Kalisch et al., 2005). The potentially distressing nature of this context suggests that women undergoing these procedures may be particularly inclined to engage in some form of cognitive detachment. We argue that women's sense of "presence" (conceptualized as a qualitative experience inversely related to detachment and other dissociative processes) during a medical visit may predict their emotional appraisals of the experience. That is, women may engage in cognitive detachment via dissociation, distraction, or suppression as a strategy to manage their anxiety and other negative emotional responses to the threatening experience of reproductive health screening.

Of course, detachment and distraction can be strategically used to prevent rumination (Gerin et al., 2006; Hilt, McLaughlin, & Nolen-Hoeksema, 1996; Lyubomirsky, Caldwell, &

Nolen-Hoeksema, 1998) and attenuate recall of physically painful events (Christenfeld, 1997). However, people who are not able to ruminate about a stressful task experience harmful physiological reactions (e.g., increased blood pressure) when later reminded of the task, which suggests that long-term consequences may be avoidable if people are “present” and thus able to process negative experiences as they occur (Glynn, Christenfeld, & Gerin, 2007).

A secondary goal of this study was to examine the role of a novel construct we refer to as “presence” within reproductive health screenings. We hypothesized that presence would relate to women’s emotional appraisals of reproductive health visits. To test this hypothesis, we developed a measure to capture the construct of presence by combining adapted items from existing measures of mindfulness (Brown & Ryan, 2003) and dissociation (Wright & Loftus, 1999). Mindfulness practice has many benefits for health-related outcomes. Most notably, mindfulness has been linked with a broad array of outcomes related to stress reduction (see Grossman, Niemann, Schmidt, & Walach, 2004, for review). Mindfulness also predicts decreased burnout, depression, and anxiety in physicians (Fortney, Luchterhand, Zakletskaia, Zgierska, & Rakel, 2013), improved quality of patient care (Beach et al., 2013), and even improvements in concrete health outcomes, such as psoriasis (Kabat-Zinn et al., 1998). On the other end of the spectrum, research on dissociation may shed some light on the construct of presence. Dissociation can be as acute as the dissociation of identity that sometimes occurs in the aftermath of trauma, as well as the more commonplace emotion-regulation strategies of detachment, distraction, and suppression (Hayes et al., 1996; Kalisch et al., 2005). Such strategies have been linked with deleterious effects on memory and basic cognitive processing, as well as increased salience of pain (Cioffi & Holloway, 1993; Wenzlaff & Wegner, 2000). The current study is the first to measure women’s sense of presence during a medical interaction.

Study Overview

We used a multi-methods approach to replicate previous research on the prevalence of themes such as vulnerability, communication, indecency (Larsen et al., 1997), and anticipated pain (Hoyo et al., 2005) in women's narratives regarding reproductive health screenings. In addition, we sought to examine relationships between narrative themes and individual differences (i.e., neuroticism, information avoidance tendencies, body dissatisfaction, self-esteem, age, race, English language fluency, and sexual health history and practices). Finally, we were interested in examining the role of the novel psychological construct "presence," during a medical interaction. Although we targeted specific aspects of women's experiences in our analyses, we also employed a descriptive, phenomenological approach to content analyses and coding for narrative themes (Giorgi, 2005), which allowed for exploration of themes that had not been identified in previous research.

Method

Participants

Female students enrolled at a large public university in southern California ($N = 38$; $M_{age} = 19.89$, $SD_{age} = 1.81$; 37% Hispanic/Latina, 11% African American, 26% European American, 21% Asian American, 5% other) were recruited to take part in an interview about their experience(s) with reproductive health screening (i.e., Pap test, pelvic exam, and breast exam procedures). 86% of participants identified as heterosexual; 61% were in a serious monogamous relationship; and 79% indicated they were sexually active. They received partial course credit, in return for their participation.

Materials

The post-interview questionnaire included measures that assess participants' subjective experiences and personal characteristics. Many of the items were novel to this study, developed for the specific context of women's reproductive health screening. All materials were reviewed and approved by the Human Research Review Board of The University of California, Riverside. All items that measured continuous variables were scored on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale unless otherwise noted.

Future health intentions. We assessed future health intentions with an 11-item measure of plans to engage in reproductive health behaviors, developed for use in this study. Sample items include "I plan to learn more about preventing and treating cervical cancer within the next 6 months to 1 year," and "I plan to take action to protect against sexually transmitted diseases within the next 6 months to 1 year (e.g., using condoms, getting tested, etc.)" ($M = 6.18$, $SD = 0.89$, Cronbach's $\alpha = .88$).

Neuroticism. Neuroticism was examined with the Big Five Inventory's 7-item neuroticism subscale (John & Srivastava, 1999). Sample items from this measure include "I see myself as someone who remains calm in tense situations," and "I see myself as someone who worries a lot" ($M = 3.10$, $SD = 0.90$, $\alpha = .85$).

Self-esteem. Self-esteem was examined with the 10-item Rosenberg (1965) self-esteem scale. Sample items from this scale include "I feel that I am a person of worth, at least on an equal plane with others," and "On the whole, I am satisfied with myself" ($M = 3.87$, $SD = 0.88$, $\alpha = .93$).

Health behavior and history. We assessed Pap test utilization with four items: "How long has it been since your last Pap test?" (*More than two years/Two years/ One year/ A few months/ A few days*); "Total number of Pap tests you have had" (open-ended); "Have you ever

had an abnormal Pap test?" (*yes/no/not sure/decline to state*); "Have you ever missed an appointment for a Pap test?" (*yes/no/not sure/decline to state*); "Have you ever delayed making an appointment for a Pap test?" (*yes/no/not sure/decline to state*).

We assessed reproductive health history with five items, all with the response options *yes/no/not sure/decline to state*: "Are you currently sexually active?"; "Have you ever had unprotected sex?"; "Have you ever had a sexually transmitted disease?"; "Have you ever experienced sexual abuse?"; and "Have you ever experienced any other kind of physical abuse?"

Satisfaction and perceived efficacy of Pap test. We assessed participants' satisfaction and their perceptions regarding the efficacy of their last Pap test with targeted questions aimed to capture the spectrum of experiences that participants may have had during their most recent/most memorable Pap test, developed for use in this study. The full list of items are as follows: "My conversation with the doctor was important to me"; "My conversation with the doctor was helpful to me"; "I learned some important information"; "I learned some accurate information"; "The doctor was an expert"; "I liked my doctor"; "I respected my doctor"; "I felt comfortable around my doctor"; "I was satisfied with my exam experience" ($M = 5.87$, $SD = 1.33$, $\alpha = .94$).

Emotional appraisals. Subjective emotional appraisals of the Pap test experience(s) were examined with items adapted from the Positive and Negative Affect Schedule (PANAS-X; Watson & Clark, 1994), with additional and similarly worded emotion items added due to their particular relevance to our hypotheses. We then grouped items into composites based on conceptual similarity, using six categories as follows: anxiety ("I felt scared / afraid / tense / nervous / anxious / worried / stressed / a sense of dread"; $M = 4.63$, $SD = 1.60$, $\alpha = .91$); distress ("I felt distressed / upset"; $M = 3.34$, $SD = 1.95$, $\alpha = .86$); shame ("I felt embarrassed / ashamed / indecent / unclean"; $M = 3.67$, $SD = 1.85$, $\alpha = .85$); powerlessness ("I felt vulnerable / fragile /

helpless / powerless”; $M = 3.51$, $SD = 1.84$, $\alpha = .88$); empowerment (“I felt powerful / strong / empowered”; $M = 3.11$, $SD = 1.21$, $\alpha = .73$); comfort (“I felt like an active participant / free to ask question / safe / protected”; $M = 4.64$, $SD = 1.27$, $\alpha = .77$).

Presence. We assessed psychological presence with a newly-developed 8-item measure adapted from previous scales designed to measure mindfulness (Brown & Ryan, 2003) and dissociation (Wright & Loftus, 1999). Participants completed this scale with regard to their most recent/ memorable Pap test. The items on this scale are as follows: “It was difficult for me to focus on what was going on during the exam” (reverse-coded); “I was not paying attention to any feelings of physical tension or discomfort, unless they were really bad” (reverse-coded); “I felt like I was ‘running on automatic’ during the exam” (reverse-coded); “I found myself only partially listening to the medical caregiver during the exam” (reverse-coded); “My mind was focused on something else other than the exam” (reverse-coded); “I felt preoccupied with the future during the exam” (reverse-coded); “I felt preoccupied with the past during the exam” (reverse-coded); “I was aware of my emotions during the exam” ($M = 4.80$, $SD = 1.80$, $\alpha = .71$).

Health information avoidance. Information preferences were examined with the 10-item Health Information Avoidance Scale (Howell & Shepperd, 2014). Sample items from this scale include: “There is some information that I would rather not learn about my health” and “When it comes to my health, sometimes ignorance is bliss” ($M = 2.44$, $SD = 1.21$, $\alpha = .87$).

Body dissatisfaction. Body dissatisfaction was examined with the 14-item Body Shape Questionnaire (Cooper, Taylor, Cooper, & Fairburn, 1987), which assesses negative perceptions of one’s body. Sample items from this scale include: “Has being undressed, such as when taking a bath, made you feel fat?” and “Have you felt ashamed of your body?” (1 = never, 7 = always, $M = 3.77$, $SD = 1.47$, $\alpha = .97$).

Current emotions. We examined participants' emotions upon completion of their participation in our study (as opposed to emotional appraisals of the Pap test experience, as described above) with the negatively-valenced items from the PANAS-X (Watson & Clark, 1994). Sample items include: "I feel anxious"; "I feel upset"; "I feel hostile" (8 items, $M = 2.45$, $SD = 0.60$, $\alpha = .83$). We focused on negative emotions in hopes of identifying correlations that could elucidate the affective nature of what previous studies suggest to be a ubiquitously negative experience (Hoyo et al., 2005; Larsen, Oldeide, & Malterude, 1997).

Procedure

Participants were informed that their interview would be audio recorded for later analysis. In order to be eligible for this study, participants must have had undergone at least one Pap test. The study began with the interview phase. During the interview, participants were asked to describe their most recent or most memorable exam (i.e., an exam that included a Pap test and could have also included a pelvic exam or breast exam), their worst exam, and/or their best exam (if they had multiple experiences from which to draw). Undergraduate research assistants trained to conduct semi-structured interviews were instructed to prompt participants when responses were vague or terse. All interviews were audio-recorded. The average length of interviews was just over 4 minutes ($M = 245$ sec., $SD = 135$ sec.). Following the interview, participants completed a brief battery of measures, which contained our assessment of subjective experiences and demographic information. Upon completion of the measures, participants were debriefed and provided with the researchers' contact information, as well as resources to learn more about women's reproductive health.

Coding and Analyses

Although participants responded to three separate prompts regarding their experiences with reproductive health screenings (recent/memorable, best, and worst), we considered their responses holistically (across all three experiences) as a larger overall narrative account of their general experiences of reproductive health screening.

Narratives generated by participants were coded in three stages. First, the first author listened to all of the interviews to compile a list of commonly occurring topics (themes) mentioned by participants. Next, research assistants listened to the audio-recordings and indicated the occurrence of each theme (coded as present = 1, absent = 0). Each theme was coded separately by three research assistants. In cases where the three coders lacked agreement, a final decision was made based on the majority (2 of 3 coders) decision. For example, if one research assistant coded the theme of physical pain as present but the two other coders marked this theme as absent, it was deemed absent.

Finally, the first author condensed commonly occurring topics into five overarching categories that represent broader narrative themes: *emotional discomfort* (vulnerability, awkwardness, indecency), *communication* (good communication, poor communication), *uncertainty* (uncertainty, expectation management, knowledge as power), *physical pain*, and *health understanding* (behavioral consequences, screening efficacy). Although we sought to replicate themes identified by previous researchers (i.e., physical pain, indecency, vulnerability, uncertainty, communication; Hoyo et al., 2005; Larsen et al., 1997), we also allowed for identification of novel subthemes (i.e., awkwardness, screening efficacy, behavioral consequences) to arise during the coding process (see Figure 1 and Table 1 for content and frequency information).

We examined relationships between broad categories of narrative themes, self-reported subjective experiences, individual differences, and health-related outcomes. To explore the role of broad narrative categories, we created a composite score for each category, using a presence/absence coding scheme for the entire category. For example, if the subthemes of vulnerability and awkwardness were absent in one participant's narrative, but she did mention indecency, she received a total score of 1 on the broad category of *emotional discomfort*. We conducted bivariate correlations to assess relationships between two continuous variables (see Table 2) and chi-square tests to assess relationships between dichotomous variables.

Results

Narrative Subthemes and Emotional Appraisals

An initial inspection of relationships between broad narrative themes (coded as present/absent) and participants' self-reported emotional appraisals of their exam experience (i.e., anxiety, distress, shame, powerlessness, empowerment, comfort) revealed no statistically significant results, so we examined relationships between narrative subthemes and participants' emotional appraisals of their exam experience (see Table 2). We observed that participants whose narratives included mention of behavioral consequences (e.g., by demonstrating a cohesive link between sexual health practices and health outcomes, a subtheme of health understanding) reported higher levels of shame appraisals.

Broad Narrative Themes and Individual Differences

We next examined relationships between the presence (vs. absence) of broad narrative themes and individual differences. First, we noted that the broad theme of communication was associated with participants' history of an abnormal Pap test result, such that a higher percentage of participants who reported having had an abnormal Pap test result mentioned this theme (80%)

compared to participants who did not report ever having had an abnormal Pap test (30%), $\chi^2(1, N = 38) = 4.61, p = .03$. Turning to the broad narrative theme of uncertainty, we found a relationship with engagement in unprotected sex, such that the narratives of participants who reported having engaged in unprotected sex were more likely to include themes of uncertainty (97%, vs. 67% for participants who had not engaged in unprotected sex), $\chi^2(1, N = 38) = 6.77, p = .009$. In addition, the broad theme of pain was significantly related to self-esteem, such that participants with higher self-esteem were less likely to discuss physical pain. Finally, the broad theme of health understanding was associated with neuroticism, such that participants with higher levels of neuroticism were more likely to mention the theme of health understanding in their narratives.

Narrative Subthemes and Individual Differences

Next, we examined relationships between narrative subthemes and individual differences. Participants who did not learn English as their first language were significantly more likely to mention the theme of indecency (38%) than were participants whose first language was English (4%), $\chi^2(1, N = 38) = 7.64, p = .006$. We also noted that pap test history were associated with the subtheme of bad communication, such that the majority of those who had received an abnormal Pap test result mentioned this subtheme (80%), in contrast to those who had never had an abnormal Pap test result (13%), $\chi^2(1, N = 38) = 12.03, p = .0005$. Additionally, participants with higher levels of neuroticism were more likely to discuss the acquisition of information as a source of empowerment (knowledge as power subtheme). Finally, screening efficacy was associated with health information avoidance, such that participants with lower levels of information avoidance tendencies were more likely to discuss the benefits of screening.

Individual Differences in Subjective Experiences and Presence

Although the primary goal of the present study was to examine women's narrative themes in the context of reproductive healthcare, we also explored relationships between individual differences and emotional appraisal categories (see Table 3). We found that higher levels of neuroticism were associated with more appraisals of anxiety and shame, the proclivity for health information avoidance was associated with fewer appraisals of comfort and lower psychological presence during their Pap test, and body dissatisfaction was associated with less psychological presence during the Pap test and more negative emotions as participants completed the questionnaire.

Relationships among Subjective Experiences

Finally, we explored relationships among emotional appraisals and health-related outcomes (see Table 4). Greater patient satisfaction with the most recent or most memorable Pap test was associated with more health intentions, more comfort appraisals, and fewer shame, powerlessness, distress, and anxiety appraisals.

Discussion

The primary goal of the present study was to identify themes in women's experiences of reproductive health screening. We examined relationships among narrative accounts, emotional appraisals, individual differences, and health-related outcomes. A secondary goal of this study was to examine the novel construct of psychological presence in a healthcare context.

We identified five broad themes, and several subthemes, within women's reproductive health narratives: emotional discomfort (vulnerability, awkwardness, indecency), communication (good communication, poor communication), uncertainty (uncertainty, expectation management, knowledge as power), physical pain, and health understanding (behavioral consequences, screening efficacy). Some narrative themes (i.e., awkwardness, screening efficacy, behavioral

consequences) are novel to this study, and others replicated previous research (i.e., physical pain, indecency, vulnerability, uncertainty, communication; Hoyo et al., 2005; Larsen et al., 1997)

Narrative Themes and Subjective Experiences with Reproductive Health Screenings

One unique contribution of our study is that we were able to relate narrative accounts to self-reported evaluations, which resulted in a more comprehensive portrayal of women's reproductive health screening experiences. The adoption of a multi-method approach in this study allowed women to provide unrestricted reflections on their experiences of screening contexts in addition to responses to survey questions that targeted specific qualities and dimensions of screening experiences.

Narratives that included the theme of health understanding, specifically behavioral consequences (in which the participants acknowledged that health outcomes are related to their own sexual health practices), correlated with appraisals of shame. This finding suggests that perceived health risk, as informed by previous sexual health decisions and practices, may contribute to the degree to which screening contexts are viewed as threatening. That is, women who perceive themselves to be at risk for sexually transmitted infections or a disease may find the exam context more threatening based on the presumed shame associated with the possibility of an undesirable screening outcome. This sense of risk and subsequent vulnerability might be even more salient for women who are regularly sexually active or those who perceive their own sexual behavior as "promiscuous." We note that women's perceptions of their health risks are not necessarily related to their objective health risks (Price, Easton, Telljohann, & Wallace, 1996) and yet are often highly predictive of health decisions and perceptions (Brewer et al., 2007; Pearlman, Clark, Rakowski, & Ehrich, 1999). In future, researchers should examine the

link between perceived threat of screening contexts, perceived sexual health risk, and sexual health practices by including direct measures of perceived risk of infection or disease.

The Role of Individual Characteristics

We identified a series of correlations between women's self-related views and their emotional appraisals. To begin, women with higher levels of neuroticism reported more appraisals of anxiety and shame, and were more likely to discuss the direct connection between sexual health decisions and outcomes. Taken together, the relationship between neuroticism and women's experiences of Pap testing perhaps demonstrate a heightened awareness of the threat of sexual health risks, which is consistent with previous findings that identify neuroticism as a predictor of perceived threat (Schneider, 2004).

Similarly, women who were less satisfied with their bodies reported more negative emotions as they completed the questionnaire. The relationship between personality, body dissatisfaction, and reproductive health experiences are supported by research that links neuroticism and self-views with heightened sensitivity toward negative information (Gomez, Gomez, & Cooper, 2002; Jansen, Nederkoorn, & Mulken, 2005; Faunce, 2002). These findings suggest that certain women may be predisposed toward negative reproductive health-related experiences based on individual characteristics, such as personality and self-views, particularly when these characteristics influence attentional processes and threat perception.

Relationships Among Subjective Experiences

In addition to the relationships between individual characteristics and reproductive health experiences, we also considered interrelationships among reproductive health experiences. Participants' satisfaction with their Pap test experience was linked with appraisals of anxiety, shame, powerlessness, and distress. These relationships may appear intuitive; however, it is

interesting to consider how satisfaction with screening is linked to participants' self-views (e.g., feeling ashamed), and perceptions of interpersonal dynamics, during the screening interaction. Furthermore, participants' future health intentions were associated with their satisfaction with their prior Pap test experience, which aligns with research that shows that decisions to maintain health behaviors are based on satisfaction with or perceived efficacy of past health behaviors (Rothman, 2000). Subjective health experiences are difficult to parse from judgments of the efficacy and validity of reproductive health visits and future health intentions. Once again, it is important to note that additional research is required to understand the sequential order of these relationships, as the current data cannot support causal claims.

The Role of Presence

Finally, we examined the role of a novel construct we call "presence." Women who reported body dissatisfaction reported being less psychologically present during their Pap test experience. Participants with a greater proclivity toward information avoidance also reported less psychological presence during their Pap test experience. Although not evident in our analyses, other individual differences (e.g., sexual orientation, history of sexual abuse) may predict the likelihood that people will engage in detachment-related strategies during reproductive health screening. Our sample was relatively homogenous with regard to these individual difference variables, which limited our ability to examine their (potential) roles in the experience of presence. Given the possibility, however, that presence may be linked with trauma, vulnerability, shame, or stigmatization, we recognize the possibility that such variables may also be linked with psychologically presence.

Finally, we found that presence was associated with participants' subjective emotional appraisals of reproductive health screening contexts. Specifically, participants who reported a

lack of psychological presence during their screening procedures reported more appraisals of anxiety, shame, powerlessness, and distress, as well as fewer appraisals of comfort. Participants who reported feeling less psychologically present during their Pap test also reported more negative emotions during their participation in our study. It is possible that the negative outcomes associated with presence may be a byproduct of a third variable associated with both presence and negative emotional appraisals (e.g., inattention). For example,, women who engage in psychological detachment may report more appraisals of distress and powerlessness due to a legitimate concern that they missed some important information as a result of their inattention during the interaction. Alternatively, echoing previous research on emotion regulation (Glynn, Christenfeld, & Gerin, 2007), people may engage in detachment as a defensive strategy in the face of a perceived threat. Regardless of how presence is shaped, its relationship to negative reproductive health screening experiences is clear. Future researchers should consider how presence could be promoted by facilitating patients' active participation and mindful attention during reproductive health screening visits.

Limitations and Future Directions

We have illuminated a series of relationships between health experiences, beliefs, and self-reported behaviors. However, several limitations limit the extent to which we may draw generalizations from this research. First, our data were collected retrospectively and primarily self-reported, introducing the possibility of bias, such as selective reporting or degraded memory of the experience (DiMatteo & Martin, 2002).

Second, the correlational nature of the data renders inappropriate any inference about causation or the direction of the relationships we found. Of course, the decision to make a new appointment for screening is likely influenced by subjective and potentially biased memories of

past experiences, thus these data are informative to the extent that participants' memory of prior health experiences relates to their current beliefs about the efficacy of health behaviors as well as their intentions to engage in future health behaviors. That said, this area of research would benefit from longitudinal studies that map the dynamics of the relationships between women's beliefs about, experiences of, and responses to reproductive health visits across time and over multiple levels of analyses.

Third, despite the ethnically diverse makeup of our participants, the majority of our participants had had only one prior experience of a Pap test, making it impossible to examine the role of variables such as age and frequency of past Pap experiences. Nonetheless, previous findings suggest that early health experiences contribute to the formation of future health beliefs and long term health behaviors (see Rothman, 2000). Although we did not capture the entire demographic spectrum of patients for cervical cancer screening, we studied a critical developmental stage for the maturity of habits and beliefs of reproductive health screening efficacy.

Similarly, the sample consisted of only 38 women, which limited the ability to draw meaningful comparisons between demographic groups. This limitation is especially important in light of well-documented women's reproductive health disparities among racial, cultural, and sexual-orientation groups (Downs, Smith, Scarinci, Flowers, & Parham, 2008). Our goal was to model an approach to research on women's reproductive health by applying a multi-methods approach, which can now be extended to larger scale studies examining the role of variables such as race, age, and sexual history. Finally, our coding scheme and many of the measures utilized in this study are new and, therefore, yet insufficiently validated. Even among the themes that were

coded for replication of previous findings, the method of identification and coding has not been standardized and was therefore approximated by our coders.

Conclusion

We find that the context of women's reproductive health screening is rich with psychosocial nuances that demonstrate how subjective experiences are intimately linked with concrete health practices and behaviors, both during the health visit (e.g., remaining psychologically present) and outside of the health visit (e.g., delayed appointment-setting).

Women tend to refer to this experience as one that is physically and emotionally uncomfortable, yet also acknowledge the overall efficaciousness of Pap testing and reproductive health checkups. It is our hope that these findings inform future studies and potential interventions to improve women's psychosocial experiences of reproductive health contexts.

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Table 1

Sample Narrative Themes

Themes	Description	Example
Emotional discomfort		
Vulnerability	Defenselessness/ helplessness, fragility, apprehensiveness	"It just felt like [...] impersonal [...] I can't really describe it, it was just like really emotional."
Awkwardness	Embarrassment, self-consciousness, strangeness, unfamiliarity	"It was not weird in a physical way, rather it was just a weird feeling you get."
Nudity/ indecenty	Feeling exposed, shy, indecent or unclean.	"Just having to lay there on the table, pretty much naked under this like thin blanket..."
Communication		
Good communication	Positively-valenced statements regarding communication with the clinician.	"The doctor made me feel really comfortable and she made sure to like describe everything really well [...], so it was really calming and not nerve racking."
Bad communication	Negatively-valenced statements regarding communication with the clinician.	"He was very business-like. Like very 'go, go, go.' [...] He was like 'Here's your clear cut explanation and that's that.' And you're just like 'ok, what does all that mean?' [...] I didn't understand some of those words."
Uncertainty		
General uncertainty	Vagueness, ambiguity, unpredictability	"I don't like not knowing what was happening. It makes me very uncomfortable."
Expectation management	Managing expectations; comparison between anticipation and experience	"It wasn't as scary as I thought it would be. After, I just walked out and I felt like I got something off my chest."
Knowledge as power	Confidence, assuredness, or certainty upon receiving information.	"They were so careful to lay out what was going to happen, why they were doing certain treatments [...] I like being very knowledgeable about what's being done to me. "
Physical pain	Physical pain during screening procedures.	"It like hurts, even if you've already been sexually active, it hurts really bad."
Health understanding		
Behavioral consequences	Awareness of how behavior is related to reproductive health.	"Well I'd recently become sexually active so I felt the need to go to my physician to get things checked out."
Screening efficacy	Importance of reproductive health screening and other behaviors.	"Afterward, it helped a lot. I was really careful about taking my medication, doing my treatment for my yeast infection. [...] And, I got better."

Table 2

Correlations Between Narrative Themes and Responses to Screening Experiences

Theme (in bold, subthemes below)	Anxiety	Distress	Shame	Powerlessness	Empowerment	Comfort	Negative Emotions	Satisfaction	Health Intentions	Presence
Emotional discomfort	.13	.26	.26	.22	-.14	-.23	.06	-.07	.15	-.14
Vulnerability	.37*	.46**	.43**	.45**	-.41**	-.17	.03	-.01	.19	-.21
Awkwardness	.10	.30 ⁺	.27 ⁺	.23	.12	-.39*	.06	-.17	-.00	-.10
Indecency	-.08	.01	-.03	-.01	.03	-.17	-.07	.07	.14	.02
Communication	-.10	-.07	-.12	-.14	-.10	.22	.15	-.16	-.18	-.13
Good communication	-.23	-.16	-.23	-.27 ⁺	.06	.10	.03	-.19	-.29 ⁺	-.17
Poor communication	-.10	-.03	-.03	-.03	-.13	.17	.06	.00	-.07	-.04
Uncertainty	.14	.04	.07	.05	.12	.12	.14	-.01	-.16	-.14
Uncertainty	.08	.02	-.13	-.02	.15	-.10	-.18	.15	-.04	-.09
Expectation management	.10	-.12	-.17	-.06	.04	.19	-.07	.15	-.18	.21
Knowledge as power	.06	.00	.01	.01	.02	.05	.29 ⁺	-.05	-.07	.05
Physical pain	.01	-.22	.05	-.02	-.06	.04	.29⁺	.06	-.06	-.03
Health Understanding	.30⁺	.22	.16	.20	.23	.01	.06	.09	-.06	.03
Behavioral consequences	.31 ⁺	.30 ⁺	.34*	.30 ⁺	.08	-.01	.03	-.12	-.16	.07
Screening efficacy	.15	.09	.05	.08	.24	.18	.00	.18	.03	.08

Notes. ** $p \leq .01$. * $p < .05$, $^+p \leq .10$.

WOMEN'S EXPERIENCES OF REPRODUCTIVE HEALTH SCREENING

Table 3

Correlations Between Individual Characteristics and Narrative Themes

<i>Theme (in bold, subthemes below)</i>	Age	Body Dissatisfaction	Neuroticism	Information Avoidance	Self-Esteem	Total Paps
Emotional Discomfort	.10	-.08	.03	-.17	.13	.14
Vulnerability	.02	-.02	-.02	-.05	.08	-.06
Awkwardness	-.18	-.12	-.12	-.13	.06	.10
Nudity/ indecency	-.14	-.05	.03	.01	.13	-.10
Communication	.41**	-.03	.06	.09	.08	.36*
Good communication	.42**	.03	-.01	.18	.13	.33*
Poor communication	.50**	-.08	-.06	-.02	.14	.52**
Uncertainty	.12	.11	.37**	.17	-.15	.08
Uncertainty	.04	-.07	-.10	.06	.19	-.03
Expectation management	-.25	.08	.22	-.01	-.07	-.26
Knowledge as power	.15	.19	.36*	-.06	-.20	.13
Physical pain	.01	-.01	.16	.10	-.33*	.17
Health understanding	-.14	-.05	-.34*	-.16	-.19	-.18
Behavioral consequences	.04	-.15	.28 ⁺	-.16	.04	-.02
Screening efficacy	-.20	-.15	.22	-.34*	-.17	-.13
<i>Responses to screening experiences</i>						
Anxiety	-.24	.30 ⁺	.38*	.24	-.05	-.36*
Distress	-.14	.14	.19	.21	.08	-.02
Shame	-.24	.21	.31*	.23	-.13	-.24
Powerlessness	-.26	.23	.29 ⁺	.19	-.05	.12
Empowerment	.09	-.08	-.11	-.11	-.11	-.22
Comfort	.02	-.25	.02	-.34*	<.01	.03
Negative emotions	-.11	.47**	.47**	.26	-.70**	-.12
Satisfaction	-.01	.05	.01	-.11	-.17	-.03
Health intentions	.17	.18	-.13	-.09	-.03	.12
Presence	-.19	-.40**	-.06	-.51**	.22	-.24

Notes. ** $p \leq .01$. * $p \leq .05$, ⁺ $p \leq .10$.

Table 4

Correlations Among Responses to Screening Experiences

	Anxiety	Distress	Shame	Powerless- ness	Empower- ment	Comfort	Negative Emotions	Satisfaction	Health Intentions	Presence
Anxiety	--	.76**	.77**	.86**	-.56**	-.30 ⁺	.12	-.27 ⁺	-.15	-.31
Distress		--	.80**	.84**	-.43**	-.50**	.05	-.47**	-.17	-.32 ⁺
Shame			--	.90**	-.49**	-.28 ⁺	.09	-.41**	-.22	-.43**
Powerlessness				--	-.44**	-.34*	.09	-.40*	-.17	-.29 ⁺
Empowerment					--	.06	-.11	.17	.02	.24
Comfort						--	-.23	.51**	.11	.33*
Negative emotions							--	-.13	.08	-.28 ⁺
Satisfaction								--	.57**	.25
Health Intentions									--	-.09
Presence										--

Notes. ** $p \leq .01$. * $p \leq .05$, ⁺ $p \leq .10$.

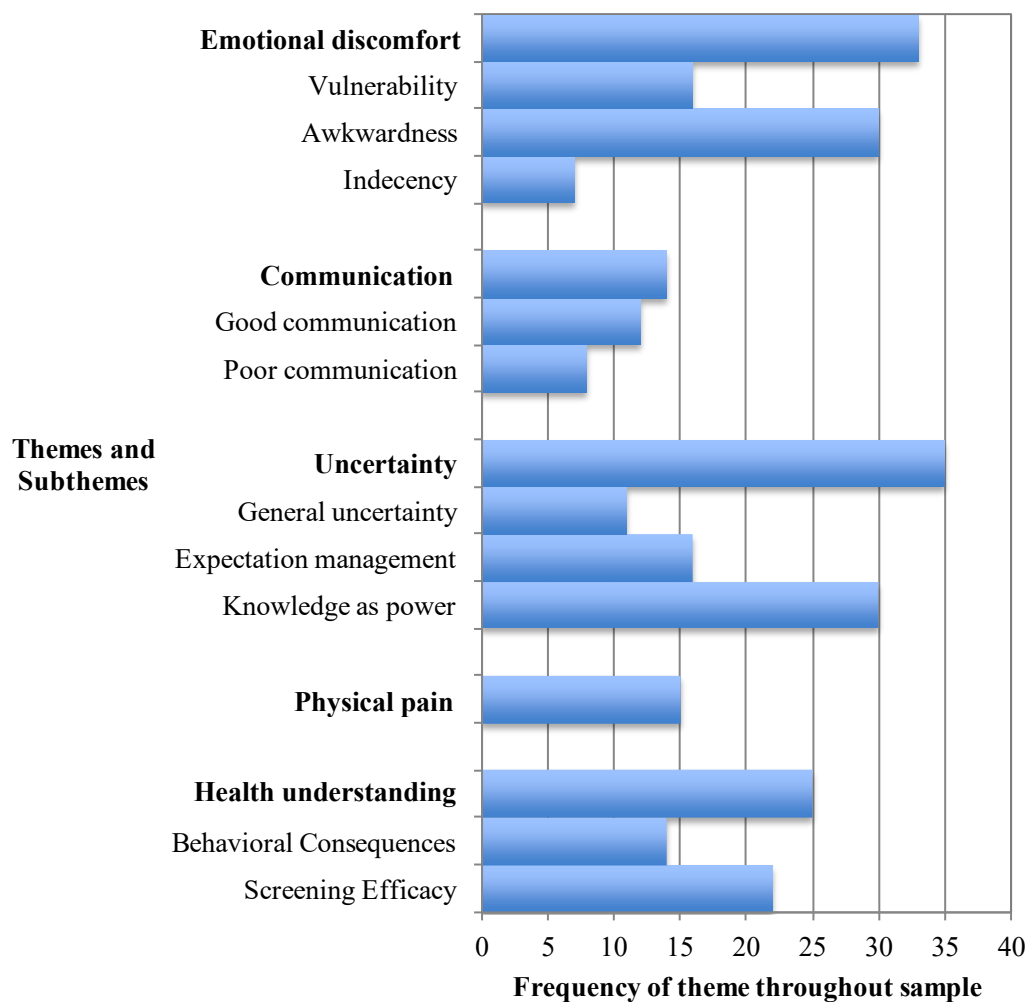


Figure 1. Frequency of narrative themes and subthemes.