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**PSYCHOSEXUAL FACTORS IN WOMEN'S
PERCEPTIONS OF AND ANTICIPATED RESPONSES TO
SEXUALLY TRANSMITTED DISEASES**

by

KRISTA L. WARREN, B.A. (HONS.)

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfilment of
the requirements for the degree of

Master of Arts

Department of Psychology

Carleton University

Ottawa, Ontario

August 24, 1994

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**PSYCHOSEXUAL FACTORS IN WOMEN'S
PERCEPTIONS OF AND ANTICIPATED RESPONSES TO
SEXUALLY TRANSMITTED DISEASES**

submitted by Krista L. Warren, B.A. (Hons.)
in partial fulfilment of the requirements for
the degree of Masters of Arts

Thesis Supervisor

Chair, Department of Psychology

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September 1994

Abstract

It was proposed that psychosexual factors (i.e. self-defined promiscuity) and perceptions of sexually transmitted diseases (STDs)(i.e. stereotypes held towards women who have STDs) would influence how a woman would anticipate reacting to an STD contraction. In order to obtain a better understanding of the effect of these factors, the women in the present study (N=150) completed measures assessing sexual feelings and experiences, perceptions and knowledge of STDs, and communication patterns regarding sexual issues and then were given one of three written scenarios in which they were diagnosed with one of three differing severities of STDs (i.e. curable (chlamydia), incurable non-life threatening (herpes), incurable life threatening (AIDS)). Their coping responses and their expectations as to how others would respond to them were then assessed. A series of canonical analyses and MANOVAs showed that while actual sexual behaviours, beliefs about STDs, and communication were inter-related, they did not predict responses to STDs. Coping responses were primarily affected by the severity of STD, in that in contrast to the acquisition of chlamydia and herpes, women role-playing a diagnosis with AIDS would inform significant others of the contraction, while not accepting it themselves. In contrast to what was expected women who self-defined themselves as more promiscuous were significantly more likely to anticipate denying and less likely to anticipate accepting the STD diagnosis, thus using an emotion-focused as opposed to a problem-focused strategy for coping. Findings were interpreted in terms of perceptual differences in coping.

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Introduction

In the past decade North Americans have been exposed to what has been termed "the peaking of a sexual revolution" (Hobart, 1992) which began about 30 years ago (Walsh, 1989). This sexual revolution has entailed a new sexual liberation which can be illustrated by the increasing number of sexually open relationships and common-law living arrangements (Peck, 1979), and a growing preference for sexual acts of all varieties, with and without emotional significance (Walsh, 1989).

Along with this revolution has come an increase in the dilemma of sexually transmitted diseases (STDs) in epidemic proportions as well as the discovery of the human immunodeficiency virus (HIV) (Leonardo & Chrisler, 1992; Arafat & Allen, 1977; Rosenberg & Gollub, 1992; Peck, 1979). Now, more than ever, people require an increased awareness about STDs so that they can both take measures to protect themselves and cope with the ramifications of acquiring a disease. Obviously, however, with over 50,000 annually reported cases of herpes alone in Canada (Rodway & Wright, 1988), the message of using safer sex methods, such as using barriers, is either not getting out or is being ignored. It is therefore the goal of the present proposal to examine how individuals cope, or do not cope, with the threat of STDs, and how they perceive the personal ramifications of acquiring one.

Sexually Transmitted Diseases

Over the last decade there has been an attempt to make individuals more aware of sexually transmitted diseases through the educational systems and the mass media

in particular. Not surprisingly, however, information about the incidence and nature of STDs appears to have resulted primarily in an increase in the level of fear of acquiring one. However, such social fears may be a necessary step, if changes in sexual behaviours are to occur (Leventhal, 1970).

Sexually transmitted diseases can be roughly categorized into three levels of severity; curable, incurable non-life threatening, and incurable life threatening. Theoretically it would be expected, that as the degree of severity in the STD increases, the degree to which an individual worries about contracting that disease should also increase. Indeed, Cochran and Peplau (1991) have found that individuals who worried about contracting an incurable STD, as opposed to STDs in general, were significantly more likely to engage in risk reduction behaviours.

Curable STDs. Curable STDs, such as chlamydia, gonorrhea, and syphilis, are generally seen mainly as a nuisance, if detected early. In the United States there are 4 million new cases of chlamydia, and 1.4 million new cases of gonorrhea reported each year (Rosenberg & Gollub, 1992). Both men and women contract these diseases, however, women tend to be diagnosed more often due to the annually recommended PAP tests. Although the PAP test itself does not test for STDs, up-to-date medical practitioners often do check for STDs such as chlamydia, especially in women who are not in monogamous relationships.

Symptoms for curable STDs differ depending on the disease. The most prevalent type of curable STD at this time is chlamydia, for both women and men.

Chlamydia in women may be detected by identifiable symptoms such as a new or different discharge from the vagina, a burning feeling when urinating, pain in the abdominal region with possible fever or chills, or pain during vaginal intercourse. However, 40% of women with chlamydia have no symptoms at all. Men, on the other hand are much more likely to experience symptoms. Chlamydia in men may result in a watery or milky drip from the penis, an itchy feeling from inside the penis, a burning when urinating, or painful/swollen testicles.

Chlamydia is transmitted by direct contact with infected areas. This generally refers to genital-genital contact. However, there have been instances where oral-genital contact with an STD has resulted in transmission, such as gonorrhea of the throat, and so perhaps similar transmission is possible with chlamydia. The only guaranteed prevention measure is abstinence. However, when used properly, condoms, spermicide and dental dams can greatly reduce the risk of transmission.

Chlamydia is easily treated with penicillin. However, if it goes undetected, the long term consequence may be sterility. This would suggest that in addition to mass education regarding the symptoms, the importance of being tested for STDs to ensure early detection should be emphasized.

There are many other curable STDs which are as important as chlamydia in terms of transmission and long term effects if left untreated. However, for the purposes of the present study, attempts to understand the threat of curable STDs will be made in relation to chlamydia because of its current prevalence.

Incurable non-life threatening STDs. The herpes simplex virus (HSV) is presently the only disease in this category.¹ HSV has two subcategories, namely herpes simplex I (HS-I) which appears as cold sores around the mouth, and herpes simplex II (HS-II) which appears as blisters or lesions in the genital area. It has been estimated that up to 50 percent of the North American population is carrying at least one of the two types of the herpes virus (Kilby, 1986). The vast incidence of herpes is mainly due to the fact that people are unaware that facial cold sores are the active symptoms of HS-I, and thus carriers unknowingly transmit the virus to others.

Anyone, male or female, can contract genital herpes. However genital herpes is generally more frequently diagnosed in women due to the onset being accompanied by a very painful outbreak of blisters. Men, in contrast, tend to have less of an indication, and are thus less likely to seek medical attention and diagnosis.

Transmission of herpes occurs via contact with actively infected areas. It can be passed by oral-oral, genital-genital, or oral-genital contact. Signs such as tingling under the skin or raised areas are signs that an outbreak is going to occur, and these can be treated with creams to prevent or minimize a painful outbreak. Sexual activity, including kissing in the case of HS-I, should be abstained from during active

¹ It is debatable where or if hepatitis B should be included. It is preventable through immunization but is incurable with medicine once contracted. However, 90% of people who contract hepatitis B recover (thus self-curing), 9% are life-long carriers who may develop liver disease (thus non-curable, possibly life threatening), while the remaining 1% advance to death. Although hepatitis B can be transmitted sexually, most of the literature tends to not classify it as an STD. For the purposes of this paper that trend will be followed.

outbreaks. The use of condoms and dental dams that cover potentially infected areas are also good precautionary measures, especially since not everyone who is infected with herpes, particularly men, know it.

Incurable life threatening STDs. HIV and its associated disease states are often characterized by chronic illness, with death as a possible consequence (Zimmerman, 1989). As HIV is a relatively newly identified phenomenon in the medical world, much remains unknown, such as whether death is eminent in all cases. It is suspected that some individuals will carry HIV and not develop AIDS, but will be able to infect others with it (McKinney & Sprecher, 1989). The mean survival time for those who have been diagnosed with AIDS is thirteen months (Rodway & Wright, 1988).²

Anyone can contract HIV, although the focus has erroneously been on men, and in particular gay men. Many women are unaware that they are at risk for HIV infection. They are therefore unlikely to take precautionary measures, to recognize possible symptoms, or to get tested. Similarly, the medical community does not provide insightful information or awareness because they too have not seriously considered HIV incidence in women. The diagnostic symptoms that are published as common for AIDS victims are symptoms that are associated with men, while

² The mean survival time for women diagnosed with AIDS is significantly shorter, as symptoms that women display are different from those that men display and are thus often diagnosed incorrectly. Hence by the time that women are correctly diagnosed the mean survival time is six months as opposed to thirteen.

symptoms in women are more often attributed to other causes. Symptoms in women may include vaginal thrush, changes in menstruation cycles, changes in vaginal discharge and/or cervixes, hormonal changes which may show up as hot flashes, pelvic inflammatory disease, or bacterial pneumonia. Men on the other hand may develop skin or other cancers (Kaposi's sarcoma), have noticeable weight loss, prolonged periods of diarrhea, marked swelling in the glands (mainly neck, armpits or groin), persistent fever, mouth infections, persistent coughs, or a serious form of pneumonia.

HIV is transmitted through blood, semen, vaginal fluids and breast milk. Thus childbirth, nursing, blood transfusions, shared needles, and sexual activities which involve an exchange in bodily fluids are all ways in which HIV may be passed from one person to another. Prevention is aided by not sharing needles, and using condoms, spermicide, and dental dams during sexual activities.

Use of prevention strategies. Despite what appear to be relatively easy prevention behaviours, such as condom use and abstinence, changes in sexual behaviours usually involve complex interpersonal issues (Grieco, 1987). Despite the behavioral changes that have occurred during the sexual revolution, there is still little or no discussion within the family or peer groups about sexuality (Grieco, 1987), as the discussion of sex remains a taboo subject (Leonardo & Chrisler, 1992). Thus, discussion of STDs and their prevention with a partner is not always seen as a viable option. These taboos regarding sexuality and sex behaviours have to be eradicated

before STDs and their effective preventions can be openly dealt with.

Zutis (1989) found that the greater the number of partners a woman had, the greater the tendency for her to never or only sometimes use a condom with a new partner. It has also been found that despite a woman's fear of contracting an STD, her sexual behaviours were still filled with risks, such as not using condoms (Arafat & Allen, 1977; Leonardo & Chrisler, 1992). These studies suggest that neither greater sexual activity (and hence presumably openness), nor knowledge of one's own risk for acquiring an STD are enough to result in protected sexual contact.

A man's sexual needs are still socially defined to be more important than those of a woman (Leonardo & Chrisler, 1992). Thus women often give into men's negative attitudes toward condom use, based on alleged interference with men's sexual sensations (Grieco, 1987), despite the fact that this interference slows down male orgasm, thereby enhancing the sexual experience for women. Sherr and Strong (1992) found that some women, despite the fact that they perceived themselves as practising safe sex engaged in risky sexual behaviours.³ Indeed, in a sample of 153 women who attended an STD clinic, 74.3% of the women felt that they could not protect themselves from being infected with HIV, in the sense that they could not control the use of safer sexual practices.

The implications of sexual activity may be more salient to women than men,

³ Safe sex was defined as using a condom, reducing the number of sexual partners and/or having non-penetrative sex, while risky sex was defined as unprotected penetrative sex (Sherr & String, 1992).

given the simultaneous risks of pregnancy and STDs (Cochran & Peplau, 1991). Even today, women are seen by society as responsible for ensuring the sexual health of a couple (Leonardo & Chrisler, 1992). Relatedly, women visit their doctors more frequently and tend to be screened for STDs more often than men (Leonardo & Chrisler, 1992). It is ironic that the condom is put on by men, yet women are assumed to execute the protective role. It has been suggested that if women had more control over prophylactic use, safer sex would occur much more readily (Rosenberg & Gollub, 1992) as it would enable women to carry out their 'protective role' without the necessity for debate or discussion. A focus on women is needed to better understand how they do respond to the threat of contracting STDs given that they perceive themselves as having little control.

In sum, despite knowledge of the risk of acquiring STDs, preventive strategies such as the use of condoms are not readily adhered to. Reasons suggested for this lack of protective utilization are denial, discomfort, women having little control, and the feeling of helplessness caused by overwhelming worry. Strategies need to be implemented so that use of preventative measures becomes psychologically feasible and effective for women.

Social Attitudes to Sexuality

Despite the sexual revolution, society continues to hold strong taboos concerning the discussion of sexuality and sexual experiences (Coleman & Etchegoyen, 1992), thus making individuals, especially women, feel awkward and

inept in attempting to talk about it (McKinney & Sprecher, 1989). Young women, who are the least committed in terms of relationships and the most sexually curious, are the most vulnerable to STDs. However, young women are often reluctant to talk about safer sex with adults, who may be more likely to advise towards the uninteresting option of abstinence, rather than providing useful preventative information (Ostrov, Offer, Howard, Kaufman, & Meyer, 1985). Thus, to be able to effectively counsel, advise and inform young women, educators about STDs and people in the health profession need to be knowledgeable and sensitive to this age group's sexual beliefs, attitudes and behaviours (Ostrov, Offer, Howard, Kaufman, & Meyer, 1985), as opposed to focusing on traditional moral standards.

Associated with the traditional moral standards, is the double-standard in terms of the implications of sexuality, and by extension STDs, for both men and women. Heterosexual men do not have to hide their sexuality, as males are still perceived by society as naturally inclined, indeed driven to engage in casual sex, and are positively reinforced for these behaviours. Thus if a man contracts an STD it is more likely to be interpreted as 'experimenting' with a 'bad woman,' than as a reflection of his own 'bad' behaviour. In other words, STDs in men are viewed as a possible consequence to their expected sexual explorations.

Women, on the other hand, are still dichotomized by society as either being good (virginal) or bad (sexual) (Russo, 1987; Leonardo & Chrisler, 1992). Thus, women who contract an STD are themselves seen as 'bad' because they are viewed as

having been sexual. Historically, STDs have been thought of as a punishment against women for their 'deviant' sexual behaviours and promiscuity (Leonardo & Chrisler, 1992). Thus, it is more of a risk for females to divulge an STD infection, since rather than being reinforced for their sexual explorations they are more likely to be ostracized. These double standards are not keeping up with the sexual revolution, resulting in further stigmatization of sexually active women, which in turn has particularly negative implications for women with STDs. Thus women with curable STDs can have unreasonably harsh feelings about the situation and themselves due to the way society views STDs.

Support is not readily available for women with curable STDs, given that it is often difficult to talk to friends and family, and when support is sought reactions are either unpredictable, or expected to be based on negative stereotypes. Curable STD victims, for this very reason, may decide to come to terms with what has happened to them on their own and avoid telling anyone. Not having the opportunity to talk to others about the acquisition of STDs prohibits individuals from being reassured that they are not a 'bad' person despite the contraction, and limits discussions for future preventative behaviours.

Herpes has been portrayed by the media as a repulsive and revolting disease and thus feeds into the stigmatization of herpes sufferers (Houck & Abramson, 1986; Zimmerman, 1989). Genital herpes (HSII) has a social stigma attached to it that is not seen with HS-I, simply because of the directly sexual nature of the location of the

outbreaks (Rodway & Wright, 1988). Ironically, with the increasing occurrence of oral sex (Walsh, 1989) genital-oral transmission has made the two types of herpes virtually indistinguishable when tested. As a result, someone with HS-I herpes in the form of a cold sore may perform oral sex on a partner and infect them with what will be classed as HS-II herpes. Thus the stigmatization over HS-II herpes is only a result of its location and not the disease itself.

Being incurable, herpes sentences the victim to a lifetime of coping with negative societal views about the disease and the people who have it. Despite the fact that herpes has been around for a long time and has infected a high proportion of the population, it carries a very heavy social stigma. It is difficult to combat these views when the individual continues to deal with the personal shame and need for personal security bought with silence. As a result, while herpes has no preferences with respect to race, religion, sexuality, gender, or social class, its prevalence remains misunderstood. Carriers may even choose to not tell their partner from whom they contracted the disease out of fear of the anticipated responses (Rodway & Wright, 1988). While this seems justifiable in the case of herpes in that it is not curable and there is no eminent danger to persons who are infected, this withheld information may be responsible for perpetuating the proportions being infected.

With the lack of communication that exists surrounding individuals that are infected with herpes, the general population under-evaluates the risk involved, since they seldom hear of people they know being infected. Increased discussion with or

about individuals who have contracted an STD may provide individuals with a more realistic and less stigmatized frame of thinking, thus increasing their use of protective measures.

The social stigmatization of HIV, particularly AIDS, is overwhelming and results largely from a fear based on a lack of knowledge. It carries public, private, and personal reactions. Fears that HIV can be spread by hugging, holding hands, dry kissing, or any other 'touching' activities results in social isolation and physical rejection. The false belief that only gay men are at risk further impedes groups, such as women, from taking the disease seriously on a sexual level. Thus the perceptual threat of contracting HIV sexually from a non-gay man has been extremely low, therefore preventative measures in these instances have not been seen as necessary despite the realistic risk of consequences.

Although HIV is the most severe STD that a woman could contract, due to the fact that fewer women have been known to have HIV they may feel less threatened by the disease, and therefore be less likely to take precautionary measures. This suggested dysfunctional lack of fear may not only increase the possibility of contracting HIV, but also increase the negative consequences for women in terms of both being diagnosed and coping, if HIV is acquired.

Coping with the Threat of STDs

Coping with the threat of STDs occurs at two different levels. The first level involves societal responses in which institutions attempt to increase individuals'

knowledge and thereby decrease the prevalence of STD transmission and infection. The second level involves individual coping mechanisms in which the individual either chooses to use their awareness to adaptively adjust, or to ignore the information to avoid having to worry.

Societal coping with the threat of STDs. Studies have found that both use of condoms (Arnold, 1972; as cited by Arafat & Allen, 1977; Gregory, 1994) and the interpretation of safer sex in general (Gregory, 1994) are more associated with preventing pregnancy, than preventing the transmission of STDs. Consistent with the lack of communication about STDs, parents are more apt to say things like "don't get pregnant" or "babies are big responsibilities" rather than "protect yourself from diseases." McKinney & Sprecher (1989) reported that although parents give restrictive messages to both males and females, they are more likely to do so with females. This could be either due to female vulnerability, or because pregnancy is seen as a much more serious consequence for girls.

Although being pregnant, young, and unmarried is seen as socially unacceptable, pregnancy itself is not. Thus it is more readily talked about, both the pros and the cons. STDs, on the other hand, are laden with stereotypes which imply promiscuity, uncleanness, and homophobia, and are thus generally not discussed. Rosenberg and Gollub (1992) have suggested that contraception and STD prevention messages should be combined to achieve a better balance between the importance of both issues to the sexually active population. An overemphasis on pregnancy

prevention may result in behaviours that are more likely to increase, rather than decrease, the risk of acquiring an STD. For example, the use of birth control pills, which is the most common form of pregnancy prevention, may result in a greater sense of security in participating in sexual behaviours without condoms, which would thus lead to a greater vulnerability for contracting an STD. In contrast, encouraging condom use would protect a woman from both an unwanted pregnancy and the risk of an STD.

Misinformation regarding the risk factors for STDs is another problem. For example, there seems to be a false belief conveyed in sex education that having a multitude of partners causes STDs, rather than simply increasing the risk of contracting them. Adolescents seem to misunderstand why they are being told to minimize the number of sexual partners they have (Leonardo & Chrisler, 1992), and therefore believe they are not at risk because of their infrequent, sporadic sexual behaviour (Grieco, 1987). However having sexual relations with 10 partners using condoms is probably safer than having sex with one partner without protection, as that one could have an STD. Thus, the moralistic attitudes being conveyed by the education system may be interfering with the provision of accurate and realistic information that will reduce the risk of contracting STDs.

Sex education also tends to form a picture of 'risk groups' to convey risky behaviours. The message therefore is to avoid STD infection by avoiding the risk group rather than the risky behaviours. In fact a 'risk group' approach may be a

destructive and dangerous concept when used in media, education or counselling. It not only stigmatizes women who already suffer societal exclusion, it also supports the incorrect notion that STD infection depends on who you are, rather than on what you do (AIDS Society, 1988). For example, Fluker (1983) reported that the average teenage female patient ignores appeals for safer sex because she does not regard herself as being promiscuous, and therefore does not fit into a high risk group. Sherr and Strong (1992) also found that women who have only had few partners or steady partners do not see messages which presumably relate to promiscuity as pertinent to them. This pattern suggests that the way in which the risk factors are expressed need to be modified in such a way that portrays everyone who is sexually active as 'at risk' for contracting STDs.

Individual coping with the threat of STDs. Coping responses generally have been found to remove a threat and/or lessen the fear that may be associated with a threat (Tanner, Hunt, & Eppright, 1991). In considering the possible contraction of STDs, decreasing the fear of the threat alone is not sufficient, as the ultimate goal should be to protect oneself.

Individual coping involves either problem-focused or emotion- focused strategies that occur in an attempt to reduce internal feelings of discomfort (Lazarus, 1984). Examples of problem-focused strategies for coping with the risk of contracting an STD would be responses such as always using condoms or abstaining from sexual behaviours, as these strategies are working towards minimizing the actual risk of

contraction. Alternatively, an example of a emotion-focused strategy for coping with the risk of contracting an STD would be responses such as saying that "I don't have to practice safe sex because I only have STD-free partners," as this strategy uses denial to minimize ones' fear, while maintaining the risk. Coping responses that reduce the level of fear without reducing the danger have been termed "maladaptive coping responses" (Rippetoe & Rogers, 1987; as cited in Tanner et al., 1991). Emotion-focused coping strategies under these specific circumstances are maladaptive, as they put the individual directly at risk.

It has been suggested that, to assess the probability and severity of personal threat, individuals weigh the probability-of-occurrence and the severity-of-threat information and compare these to their current behaviour (Tanner et al., 1991). Young women, however, tend to have the "it won't happen to me" attitude which would minimize perceptions of the probability-of-occurrence, thereby decreasing their perception of STDs as a personal threat. If this is so, finding a way to increase young women's perceptions of their personal probability-of-occurrence may be what is needed to make them use problem-focused methods of dealing with the risks, and thus decrease the spreading of STDs.

One strategy for increasing perceptions of personal risk may be to talk to or about STD victims. Greater discussion with, or about, real victims may demonstrate the diversity of those who acquire STDs, therefore demonstrating that the prototype of an STD victim does not reflect promiscuity, but rather that anyone is susceptible.

Thus, when a woman is assessing her own personal risk she would no longer be comparing herself to a prototype, which typically results in discrepancies and denial of vulnerability, thereby making her more likely to recognize that she, being sexually active, is also at risk. This realization could result in problem-focused coping that would decrease STD transmissions and increase use of preventative measures.

In sum, it may not be that women are generally ignorant of the risk of STDs but rather that they usually choose to use an emotion-focused coping strategy, denying their own personal risk, as opposed to a problem-focused coping strategy.

Coping with having STDs

The use of risk groups to delineate danger of STDs may not only have a detrimental impact on preventative behaviours, but as well, further stigmatize those who acquire an STD. As a result, when a woman is infected with an STD she will perceive herself negatively and will have a difficult time coping with and responding appropriately to the disease. Studies have shown that a diagnosis of an STD, curable or incurable, can result in psychological reactions and social problems such as anger, anxiety, depression, insomnia, lowered self-esteem, negative body image, feelings of isolation, feelings of loss of control, loss of appetite, feelings of guilt, and fewer satisfactory social relationships (Elias, 1972; Giard, 1971; Hart, 1975; Kite, 1971; as cited in Rodway & Wright, 1988; Leonardo & Chrisler, 1992; Houck & Abramson, 1986). Although education about the types of STDs and symptoms of STDs is extremely important from a prevention perspective, education to enhance greater

understanding of the psychosocial aspects of contracting an STD is also necessary to decrease the social stigmatization and help victims cope.

Houck and Abramson (1986) found that women with herpes experience more emotional disease-related stress than do women who have curable STDs. Women with herpes have also been found to have more interpersonal problems, such as fear of telling partners and greater restrictions on when they can participate in sexual relations, depending on when they have active symptoms (Houck & Abramson, 1986). Moreover, infected women may choose to remain in the relationship in which they were infected longer than planned (Rodway & Wright, 1988). This may either be out of a fear of rejection from future partners or for ethical reasons, in that the individual may not want to risk spreading the disease to someone else (Rodway & Wright, 1988).

Despite the research that points to possible psychological and social difficulties for individuals who have contracted an STD, Shaw and Rosenfeld (1987) found no difference between a female control group, female patients who were recently diagnosed with herpes, and female patients diagnosed with herpes six months earlier, in terms of coping and psychological functioning as measured by the Minnesota Multiphasic Personality Inventory (MMPI). The MMPI measures a variety of psychopathological features including depression, somatic preoccupation, anxiety, and social withdrawal. Shaw and Rosenfeld (1989) suggested that the devastating psychological consequences of herpes have been exaggerated by the media.

However, a closer look at the sexual experiences of the participants (mean age = 29.7) in the study reveals that the mean number of sexual partners was 13.5, with within group means ranging from 10.3 to 16.2. This seems quite high to be representative of all women. If the sample represents women who have had many sexual experiences, but not women who have had few sexual experiences, it is not surprising that they may cope better as they may see that their having had many partners (sexual self-schema) would be consistent with societies' attitudes about those who contract STDs (prototype schema). In particular, if these two schemas are similar, perhaps an individual can justify what has happened, and thus not suffer as much psychologically, and their ability to cope is heightened. In other words, if a person believes that promiscuity is the main characteristic of people who contract STDs, and they perceive themselves to be relatively promiscuous they will be able to justify contraction of an STD. However if this same person has had few partners, they may have difficulty in understanding how or why they have contracted an STD and thus have a more difficult time coping with it. Janoff-Bulman and Timko (1987) further suggest that this discrepancy between the two schemas will result in self-destructive behavioural responses as opposed to coping responses.

Taylor (1983) believes that to adjust to a disease⁴ one needs to be able to understand why an event occurred and gain a feeling of control over the event. This

⁴ Taylor (1983) was specifically referring to cancer patients in her discussions on coping. This discussion has been generalized to disease-related coping for the purposes of the present study.

again suggests that if the victims of STDs do not see themselves as part of a 'risk group' they will not expect to contract an STD and thus have a difficult time coping with an STD, as they were unable to avoid contraction. In contrast, women who view their behaviour as related to contraction may view problem-focused strategies as potentially effective. In particular, gaining a feeling of control with a curable disease would simply have to involve adjusting ones behaviour by taking preventative measures to decrease the probability of reoccurrence, thus using problem-focused coping mechanisms. However, gaining control over an incurable disease may not be as straightforward. Control is possible however, in that stress-management could minimize herpes outbreaks, and abstinence during active outbreaks will avoid transferring the disease back and forth between partners.

Individuals with HIV understandably experience immense emotion and anxiety concerning their disease and its stages. Discrimination against HIV infected individuals is based on fear of contracting the disease in a non-sexual manner, thus making an infected victim not only feel out of place but ostracised from society which results in social isolation and physical rejection. Having to deal with death as a possible consequence may initially impede the process of coping with the STD itself, making this level much more complex than the other two levels. However after the initial shock sets in, problem focused strategies such as raising money for research, speaking to public groups about the disease and informing others as to who is at risk for contracting the disease, can make the HIV victim feel that they are actively doing

something to help find cures, alleviating the social stigma that surrounds victims, inoculating against ineffective coping, and helping to prevent others from contracting the disease. It also actually involves attempts to remove the social stigma which may be contributing to their feelings.

In sum, society's reactions to STDs in general impedes victims' ability to come to terms with STD contractions and engage in effective coping strategies. While women who see their own behaviour as 'fitting' society's prototype of STD victims may have an easier time justifying and thus coping with the disease than women who see themselves as not fitting prototype may feel confusion because they do not fit into the 'risk group' yet are now labelled by society as if they did. Gaining control by using problem-focused coping strategies may greatly increase an STD victim's ability to adjust and deal with the contraction. Women who only use emotion-focused strategies in response to an STD contraction may not gain the same feeling of control and will not deal with the contraction as well as those women who use problem-focused strategies.

Description of Purpose and Hypotheses

The purpose of the present study was to assess the factors that affect the degree to which women effectively cope with the possibility or reality of contracting an STD. Women were focused upon in the present study because of the social stigmatization of, and the societal control over women's sexuality. Women are discouraged from being sexually active and are negatively labelled when they are.

Women are socialized to fear pregnancy, rather than STDs are, at least normatively, burdened with the responsibility for the health of the couple, and yet often have less control over sex, and are more likely to contract an STD than transmit one. Thus women should be an explicit focus of prevention, with their predispositions and concerns understood in and of themselves. University women were used as the sample for this study because the age group with the highest rate of STD contraction is from 20 to 24 years. Furthermore, entry into university is generally the point at which separation occurs from the family, thus giving these women their first true sense of 'freedom'. It was speculated that sexual activity would be relatively high at this time.

Due to the socialization of women to be nonsexual (if they are to be treated as 'good' women), it was expected that because of the sexual element which is involved in sexually transmitted diseases, the communication and thus the social support a woman may perceive herself as having would be minimal, thereby making her think it would be difficult for her to come to terms with an STD, especially if it is incurable. To assess how women felt they would manage with different types of STDs, the women in the study were randomly assigned to role-playing themselves as being diagnosed with one of the three different severities of STDs, namely, curable (chlamydia), incurable non-life threatening (HSII), and incurable life threatening

(AIDS).⁵ Role-playing was used to gain some insight as to how women perceive that they would respond to STDs and to assess the factors that are associated to these responses. Ideally this knowledge could be disseminated to young women so that preventative measures could increase, the social stigma surrounding STD contraction could decrease, and thus more effective coping strategies could be developed.

Sexual beliefs that the women hold about themselves (sexual self-schemas), were assessed by asking each participant if they viewed themselves as 'promiscuous'.⁶ It was expected that this perception would not necessarily reflect actual sexual behaviours as the interpretation of the word promiscuous may vary substantially from one woman to another, and thus reflect each woman differently. Although the purpose of assessing promiscuity was not to get at the distinction between 'bad' and 'good' women, when responding to the question on promiscuity the women may rate themselves on a scale of 'bad' versus 'good' by self-identifying with the 'sexual' roles defined by society. Thus women rating themselves as promiscuous may in fact be defining themselves as 'bad' using societal definitions and standards.

⁵ The final stage of HIV infection, AIDS, was chosen to be used in the present study, as it was necessary for the diseases representing the different severities of STDs to have symptoms. As HIV has been known to lay dormant within individuals without any symptoms for years, the decision was made to use AIDS as the incurable life threatening STD.

⁶ The term promiscuous has been used only because a more suitable word could not be found. Although "having an indiscriminate number of casual sex partners" (Weber, 1984) is the meaning that was desired, the negative connotations that coincide were less than desirable. Thus it is noted that the author does not wish to convey any misinterpreted negative meanings through the use of this word.

Women were asked about their sexual behaviours to assess the extent to which they put themselves at risk. Coping with respect to the threat of contracting an STD was also assessed, as well as their knowledgeability about STDs and prevention. If the woman emotionally fears contracting an STD and reports engaging in minimal risky sexual behaviours, she would be considered to be engaging in problem-focused strategies a priori as she has decreased her risk of contracting an STD. In contrast, participating in risky sexual behaviours, and not acknowledging the risk of STDs, despite having knowledge about them, would be considered to be using emotion-focused coping in that the tension may be reduced yet the probability of contracting an STD is extremely high. This is particularly the case if the woman clearly knows about the behaviours that put people at risk for contracting STDs.

Participants' stereotypes towards women with STDs were assessed using an open-ended question asking about characteristics of STD contractors (Zanna, Haddock, & Esses, 1990); participants then rated the valence of each of the given characteristics to determine whether they viewed such women negatively. It was expected that the more knowledgeable a woman was, the less likely she would be to hold negative stereotypes towards women with STDs.

It has been suggested that a woman's difficulty in coping with STDs is a function of her perceptions of STDs being associated with 'bad' women, and that she herself was not 'bad'. If a woman believes this, then she should not perceive a need to respond to the threat of STDs. Moreover, she may have greater difficulty

understanding why she herself contracted an STD, and what she should do about it. Thus women who hold negative stereotypes of women with STDs are expected to use more emotion-focused coping strategies, while women who hold neutral or positive stereotypes are expected to use more problem-focused strategies.

Relatedly, it was further hypothesized that there would be an interaction between the stereotype the women hold towards women with STDs and their own sexual self-schema. Individuals who define themselves as more promiscuous are expected to view themselves as having an easier time coping with STDs, as they can see themselves taking control of what has happened by adopting problem-focused coping strategies. In contrast, women who do not view themselves as promiscuous are expected to be influenced by their stereotypes. Such women who have negative stereotypes about STD victims are not expected to use problem-focused coping strategies, because of their belief that STDs 'only happen to bad people' and thus should not have happened to them. Women who view STD victims negatively and who view their own behaviour as being inconsistent to the stereotype will not be able to legitimize why they would have contracted an STD.

Prior communication was assessed using questions concerning the degree to which women communicate with their friends, family, and partner(s) about sexual experiences and STDs. It was anticipated that the openness in communication about sexuality prior to contracting an STD would be related to the degree and type of coping after being diagnosed with an STD, and the responses that were anticipated

from significant others. Specifically, the more sexually open the women are prior to an STD contraction, the more they were expected to engage in problem-focused coping strategies such as communication.

How the women expect they would cope with one of the three STDs was also examined. In society, the stigmatization towards STDs becomes greater as the severity of the STDs increases, thus decreasing social support. Therefore, coping was expected to become more difficult as the severity increased, such that a woman with a curable STD (chlamydia) would cope better than a woman with an incurable non-life threatening STD (HSII), and a woman with an incurable non-life threatening STD (HSII) would cope better than a woman with an incurable life threatening STD (AIDS). It was thus expected that women who experience curable STDs will exhibit more problem-focused coping strategies and less emotion-focused coping strategies than women who contract incurable non-life threatening STDs, and that women who contract incurable non-life threatening STDs will show more problem-focused strategies and less emotion-focused coping responses than women who contract incurable life threatening STDs. In other words, as the severity of the STD increases, problem-focused coping responses decrease, and emotion-focused coping responses increase.

Expected responses to STDs were anticipated to be further affected by an interaction between the severity of STD that is diagnosed and a woman's self-defined level of promiscuity. Women who define themselves as less promiscuous will have a

difficult time understanding how they contracted an STD, no matter what severity of STD they were diagnosed with, and it will thus be more difficult for them to use problem-focused coping strategies whereas emotion-focused coping strategies will increase as the severity of the STD increases. In contrast, women who define themselves as more promiscuous will be able to 'justify' how they contracted an STD, as they can attribute it to their sexual behaviours. Thus, women who define themselves as more promiscuous are expected to show high levels of problem-focused coping strategies for a low severity STD, but this coping response will decrease as the severity of the STD increase.

One factor that inhibits the communication and thus the social support for STD victims is the anticipated responses from others. To the extent that a woman believes that she will be ridiculed and ostracized if she publicises the fact that she has an STD, she may have a more difficult time coming to terms with having an STD herself. To assess whether or not anticipated responses are related to the degree and type of coping used, women were asked how they expected friends, family and partners to react to them having an STD. It was expected that women who use problem-focused coping strategies would anticipate receiving supportive responses from significant others, while women who use emotion-focused strategies would anticipate a lack of support from significant others.

Method

Participants

Participants were recruited using sign up sheets, for an 'Intimate Relationship experiment' and by asking for voluntary participation in the classroom (see Appendix A for sign up sheet). Participants received an experimental credit for being in the study.

Participants were 150 women enrolled in Introductory Psychology at Carleton University. The modal age for participants was 19 (ranging from 18 to 53). The majority of the women (92.6%) reported being heterosexual (2% reported being bisexual, 2% reported being asexual, 0.7% reported being lesbian). Only 11 participants (7.3%) had had no sexual experiences at the time of the study and 18 participants (12%) had contracted an STD at some point in their lives. The mean number of sexual partners that the women had had was 6.09, with a modal score of 2.00.

Although most of the women were white, a sizeable proportion reported belonging to a minority ethnic group (16.7%). With respect to religion, the sample was primarily Christian (59.4%), while 4% reported being Jewish, 25.3% reported belonging to no religion, and 11.3% did not respond to the question.

Procedure

Most of the participants in the study (N=104) were asked to complete the questionnaire during class time. The remaining participants (N=46) were run in

small groups that ranged in size from one to six women. In all sessions, the questionnaire was explained and distributed by the same female experimenter. The experimenter informed the women that the study involved "personal questions regarding sexual feelings and behaviours as well as questions pertaining to sexually transmitted diseases." Informed consent forms were signed (see Appendix B) after which the questionnaires were distributed. The women were randomly assigned to receiving one of three questionnaire packages which differed only in terms of the STD scenario they were asked to respond to (see Appendix C for questionnaire).

Questions were asked concerning demographics, attitudes toward sex, stereotypes towards individuals who have contracted STDs, and the participants' sexual behaviours. All participants then received a scenario, asking them to mentally role-play a patient being diagnosed with an STD. The STDs diagnosed were one of three severities, including curable (chlamydia), incurable non-life threatening (herpes), and incurable life threatening (AIDS) STDs. Participants were then asked about their perceptions of how they would cope with this diagnosis. Finally, if the participant had previously contracted an STD, they were asked at the end of the questionnaire to identify which one(s) they had contracted. Questions were always given in the same order, regardless of the diagnostic condition.

Following their completion of the questionnaire, the women were given a written debriefing regarding the specific purpose of the study (see Appendix D) and a contact sheet with names and numbers of those involved with the study, as well as the

phone number for the STD clinic in Ottawa (see Appendix E).

Materials

Demographics. Age, length of time in a monogamous relationship, ethnic background and religious background were assessed using single open-ended questions. Sexual orientation and sexual preference were assessed by giving the women a fixed set of possible responses for each (i.e. lesbian, heterosexual, "I am attracted to women", "I am attracted to men") and asking them to mark the response that corresponded closest to the way they would describe themselves (see Appendix C).

Stereotypes about STD carriers. Stereotypes held by the women in the study regarding women who have STDs were assessed using an open-ended listing format which corresponded to the diagnostic scenario that they would respond to later in the questionnaire (i.e. chlamydia, herpes, AIDS). They were asked to list characteristics associated with "typical women who have" one of the three types of STDs (see Appendix C). Respondents then rated each of the characteristics they had listed using a 5-point scale ranging from -2 (very negative) to +2 (very positive). The mean of these ratings was calculated as an index of stereotype valence, such that high scores reflected perceptions of a positive stereotype of women with STDs while low scores reflected a negative stereotype.

Self-promiscuity. To assess whether or not the women perceived themselves as promiscuous they were asked to rate their agreement with the statement "I would

consider myself promiscuous" using an 11-point Likert scale ranging from 0 (strongly disagree) to 10 (strongly agree).

Personal sexual feelings and experiences. To assess the participants' prior feelings about their sexuality, they rated the extent to which they agreed with the statements "I enjoy my sexuality" and "I consider myself very sexually active" on 11-point Likert scales which ranged from 0 (strongly disagree) to 10 (strongly agree). Participants were also asked to state the total number of sexual partners they had had. Responses to these questions were not significantly correlated (correlations ranged from 0.18 to 0.29) and were therefore treated separately in all further analyses.

Riskiness of sexual behaviours. Participants were given a list of sexual behaviours which included both high risk (i.e. vaginal intercourse without a condom) and low risk behaviours (i.e. vaginal intercourse with a condom), and asked to indicate using a checklist format which behaviours they had engaged in within the last five years. The risk distinction between activities was based on a hierarchy of sexual behaviours developed by Brick, Charlton, Kunins, and Brown (1989). Items at the low end of the hierarchy were considered low risk while items at the upper end were considered high risk. The number of high risk and low risk behaviours were individually summed to obtain two scores reflecting high risk and low risk behaviours. Although these were found to be moderately related ($r = 0.49$), they were treated separately in all further analyses since the distinction between high and low risk behaviours was important in the study.

Concerns about contracting STDs. To assess the participants' concerns about contracting STDs, they rated the extent to which they agreed with the statements "I worry about contracting a sexually transmitted disease" and "Do you think that you could ever contract a sexually transmitted disease (STD)." Responses were given on 11-point Likert-type scales ranging from 0 (strongly disagree/no never) to 10 (strongly agree/yes definitely). Mean responses were calculated to indicate the STD concerns held by the participants, such that low scores reflected little concern while high scores reflected a greater degree of concern about STD contraction ($r=0.36$).

Knowledge about STDs. To assess respondents' knowledge about STDs and their prevention 18 questions were selected from Brick, Charlton, Kunins, and Brown's (1989) true or false questionnaire. Because many of the questions appeared to be assessments of opinion rather than knowledge, rather than using a true or false format, responses were given along 11-point Likert scales ranging from 0 (strongly disagree) to 10 (strongly agree). Thirteen of the questions resulted in modal responses at the extreme pole that was consistent with current medical knowledge regarding STDs. Only these questions were used as clear indicators of participants' knowledge. Appropriate questions were reversed so that a score of 10 reflected 'correct' response, and ratings were summed to create an index of knowledge which ranged from 0 to 130, with higher scores reflecting greater knowledge.

Prior communication about sexuality. To assess prior communication patterns concerning STDs and sexual experiences eight questions concerning communication

on these topics were asked. Each question was on an 11-point Likert-type scale that ranged from 0 (never talk about STDs) to 10 (frequently talk about STDs).

Examination of inter-item correlations revealed that the questions reflected three subscales. The first scale reflected "communication about STDs". This consisted of the three questions asking about the extent of communication about STDs with friends, partners, and family (Cronbach's $\alpha=0.71$). The second scale reflected "communication about sexual experiences," which consisted of two questions concerning the extent of communication with friends and with partners ($r=0.33$). Finally, the third scale reflected "communication with partners", and was comprised of two items asking about comfort in talking to their partner about 'STDs' and about 'sexual experiences' ($r=0.41$). The mean was calculated across the items in each of the subscales, such that low scores reflected a high degree of communication while high scores reflected a lesser degree of communication.

STD scenarios. After collecting the measures for the respondents' past behaviours and perceptions, participants were asked to read one of three scenarios that described themselves as being diagnosed with one of three severities of STDs (chlamydia, herpes, or AIDS)(see Appendix C). They were asked to imagine themselves in the scenarios by closing their eyes after each sentence and envision where they were, what they were feeling, and what they were thinking. They were asked to read the scenario twice, carefully, and then to answer the remaining questions that followed. Participants were asked to close their eyes so that they could

increase their ability to really imagine that what they were reading was really happening to them. They were asked to imagine themselves in the familiar setting of a doctors' office, to enhance the realism of the experience and the validity of their answers, in accordance to Greenberg and Eskew (1993).

Each of the scenarios began with a list of the symptoms associated with the respective STDs, and were described as what the respondent had been recently experiencing. Respondents were then asked to image that they had just seen their doctor who diagnosed them as having one of three STDs (chlamydia, herpes, or AIDS). Finally, the doctors information about the transmission and prognosis (i.e. curable, treatable, incurable) for the STD and the actions that should be taken were given. Thus, each scenario described the symptoms very specifically so to increase the realism in the participants role-playing, and each gave the information that would be given to a person actually diagnosed with the specific STDs.

Coping. To examine how participants thought they would cope with an STD Lazarus and Folkman's (1984) Ways of Coping Scale was adapted to correspond to the STD role-playing scenario. Respondents rated the extent to which they thought they would use each of 74 coping strategies using scores from 1 (will not be used) to 4 (will use a great deal). A principle components factor analyses using a varimax rotation was conducted on the responses. Based on a scree test only the first four factors were used (see Appendix F). Based on factor loadings greater than 0.30, the first factor appeared to consist of 19 strategies reflecting "communicative" coping

strategies such as, "telling others", "letting feelings out", and "asking for advice" (Cronbach's $\alpha=0.83$). The second factor reflected a "cognitive distancing" strategy, and included 19 items such as "wishing", "praying", and "hoping for miracles" (Cronbach's $\alpha=0.83$). The third factor reflected "acceptance" of the diagnosis and consisted of 15 items such as, "believing what has happened" and "doubling efforts to deal with the diagnosis" (Cronbach's $\alpha=0.79$). The final factor reflected "denial" of the diagnosis and consisted of 14 items, such as "looking for the bright side", "turning to work to take my mind off of the diagnosis", and "refusing to think about it" (Cronbach's $\alpha=0.75$).

The mean responses to the items loading greater than 0.30 on each of the subscales was calculated to provide an assessment of each of the four coping behaviours, such that high scores reflected a greater deal of utilization while low scores reflected less utilization. None of the pairwise correlations for the four subscales were significant (correlations ranged from 0.03 to 0.28).

Anticipated social reactions. To examine personal reactions to having an STD as well as the anticipated reactions from partners, friends, and family as a result of an STD diagnoses, the women were asked to respond to four sets of questions. Three of the sets corresponded to the anticipated responses of partners, friends, and family. Nine possible responses for each source was rated along 11-point bipolar scales ranging from 0 (shocked, not at all surprised, overwhelmed, with pity, without disgust, without compassion, understandingly, without comfort, logically) to 10 (not

at all shocked, surprised, no reaction, without pity, with disgust, with compassion, without understanding, comforting, illogically). The final set included 10 possible self responses along 11-point bipolar scales ranging from 0 (not at all surprised, disappointed, unhappy, content, safe, emotional, shocked, proud, isolated by society) to 10 (yes very surprised, not disappointed, happy, sad, unsafe, unemotional, calm, ashamed, included in society).

The mean for each of the four sources was calculated, with relevant items reversed, to obtain a measure of the anticipated responses from friends, family, partners and oneself, to the diagnoses of an STD (Cronbach's alphas ranged from 0.71 to 0.81), such that high scores reflected positive reactions while low scores reflected negative reactions. The subscale for how friends were anticipated to respond was found to be negatively correlated with how the participant felt that she herself would respond ($r = -0.45$, $p < 0.05$), while the subscales for how partners and family were anticipated to respond were found to be moderately positively correlated ($r = 0.32$, $p < 0.05$). The remaining pairwise correlations were not significant (correlations ranged from -0.03 to 0.25).

Results

To assess the relationships between women's sexual feelings and behaviours and their perceptions of STDs, between their sexuality and STD feelings and prior sex-based communication, between their expected coping strategies with an STD and

the anticipated responses of friends, family, partners and self to an STD diagnosis, between prior sex-based communication and anticipated coping responses, and finally between prior sex-based communication and anticipated responses from self and significant others, a series of canonical analyses were conducted. Finally, to assess whether women's perceived coping with an STD contraction would vary as a function of the type of STD contracted, the stereotypes held towards women with STDs, and their self-defined level of promiscuity a series multivariate analyses of variance (MANOVAs) were conducted on the coping and anticipated response dimensions.

Women's Sexuality and Perceptions of STDs

Women's sexuality. For the most part, the women in this sample self-defined themselves as fairly nonpromiscuous ($\underline{M}=2.13$, $\underline{SD}=2.82$). Indeed, the number of sexual partners was in line with what would be expected for an average sample of university students ($\underline{M}=6.20$, $\underline{SD}=6.62$) and the women were relatively moderate in their levels of sexual activity both in terms of self report ($\underline{M}=5.01$, $\underline{SD}=3.68$) and their participation in high risk ($\underline{M}=2.31$, $\underline{SD}=1.31$) and low risk ($\underline{M}=4.04$, $\underline{SD}=2.13$) behaviours. Overall, their sexual enjoyment was rated quite high ($\underline{M}=8.47$, $\underline{SD}=1.85$).

In order to look at the relationship between the women's self-defined level of promiscuity, their participation in high risk and low risk behaviours, their sexual enjoyment, their level of sexual activity, and the total number of partners they have had a correlational matrix was constructed and examined (see Table 1). Interestingly,

women's self-defined level of promiscuity was neither significantly related to their self-reported sexual activity, nor the measures of their sexual feelings and experiences. However, there were significant relationships between participants' sexual feelings and experiences, and their sexual behaviours. Specifically, the more women reported enjoying their sexuality, the more likely they were to engage in low risk behaviours. Similarly, the more women considered themselves to be "very sexually active" and the more sexual partners they reported having in past years, the more they reported engaging in both high risk and low risk behaviours.

STD concerns. The women in the sample were moderately knowledgeable about STDs and preventative measures ($M=74.83$, $SD=9.44$), moderately concerned about STDs ($M=5.21$, $SD=3.16$), and fairly neutral in terms of having stereotypes of women with STDs ($M=-0.16$, $SD=0.44$).

In order to look at the relationship between the women's knowledge, concerns about STDs, and their stereotypes towards women with STDs, zero order correlations were examined. None of the correlations were significant (correlations ranged from -0.06 to 0.03).

Sexuality and STD beliefs. To assess the relationship between the women's sexuality and their beliefs and concerns about STDs, a canonical analysis was conducted between the two sets of variables (see Table 2). Only the first two canonical functions were significant with canonical correlations of 0.43 and 0.34, explaining 18.2% and 11.9% of the variance in the solutions respectively. A

Table 1

Interrelations Between Women's Sexual Feelings and Experiences

	2	3	4	5	6
1. Promiscuity	0.12	0.03	-0.07	0.13	0.23
2. High Risk Behaviours	--	0.49	0.29	0.44	0.32
3. Low Risk Behaviours	--	--	0.33	0.42	0.30
4. Sexual Enjoyment	--	--	--	0.25	0.12
5. Sexual Activity	--	--	--	--	0.31
6. Number of Partners	--	--	--	--	--

redundancy analysis indicated that the sexuality variables explained 2.9% of the variance in the STD variables on the first canonical function, and 2.8% on the second; STD beliefs explained 6.3% of the variance in the sexual feelings and experiences on the first canonical function, and 3.8% of the variance on the second. Based on the structure coefficients of 0.30 or greater, the first canonical function suggests that the greater women's self-definition as promiscuous, the greater the number of sexual partners but the less they define themselves as being sexually active, is associated with more concern about contracting STDs and less knowledge about them. The second canonical function further indicates that the more women engage in low risk sex, enjoy their sexuality, and consider themselves very sexually active, the more likely they are to be concerned about contracting STDs and the greater their knowledge about STDs, but the greater their likelihood of expressing negative stereotypes about women with STDs.

The association between sex communication and sexuality and STD beliefs. It was suggested that women's openness to discussing sexuality and STDs would be associated with greater sexuality more generally, indicating more of an understanding of sex-related issues such as STDs. There were three sets of communication used, including communication concerning STDs ($M=3.98$, $SD=2.43$), communication about sexual experiences ($M=5.00$, $SD=2.71$), and communication to partner(s) about sexual experiences and STDs ($M=2.41$, $SD=2.22$). Thus the women in the study appeared to be more open to discussing sexual experiences to friends, family

Table 2

Canonical Correlation Analysis for Predisposing Sexuality and Predisposing STDQuestions

	First Function	Second Function
Variables	Structure Coefficients	Structure Coefficients
STD Related set		
Concerned about STDs	0.82	0.52
Knowledgable	-0.61	0.63
Stereotypes	0.02	-0.54
Redundancy	6.3	3.8
Percentage of Variance	34.6	31.8
Sexuality set		
Promiscuity	0.73	0.28
Low Risk	-0.00	0.84
High Risk	0.13	0.16
Enjoy Sexuality	-0.17	0.39
Sexually Active	-0.32	0.60
Number of Partners	0.52	0.29
Redundancy	2.9	2.8
Percentage of Variance	15.9	23.6
Canonical Correlation	0.43	0.34
Rc'	0.18	0.12

and partners, and tended to discuss the issue of STDs less. It was surprising however, that they were even less able to openly discuss these sexual issues with their partner(s).

To assess the relationship between women's communication tendencies and the indicators of sexuality and STD perceptions, a canonical analysis was conducted, with the communication variables representing one canonical variate, and the sexuality and STD beliefs representing the other (see Table 3). Only the first canonical function was significant with a canonical correlation of 0.63, explaining 39.9% of the variance in the solution. A redundancy analysis indicated that the sexuality and STD variables explained 8.7% of the variance in the communication variables, while the communication variables explained 18.8% of the variance in the predisposing variables. Based on the structure coefficients of 0.30 or greater, it appears that women who engage in more sexual behaviours, enjoy their sexuality and consider themselves more sexually active and are more concerned about contracting an STD and are more knowledgeable about STDs and safer sex are more likely to express that they can talk about sexual issues openly.

Expected Responses to an STD Diagnosis

To assess the relationship between the dimensions of coping and the anticipated responses of self and others, a canonical analyses was conducted with the two sets of variables (see Table 4). The first set of variables, was comprised of four strategies of coping. These strategies consisted of communication, cognitive

Table 3

Canonical Correlation Analysis for the Predisposing Factors and Prior Communication

	First Function
Variables	Structure Coefficients
Sexuality and STD variables	
Promiscuity	0.17
Less risk behaviours	0.81
High risk behaviours	0.59
Enjoy sexuality	0.54
Sexually active	0.54
Number of partners	0.13
Concerned about STDs	0.38
Knowledgable	0.45
Stereotypes	0.02
Redundancy	8.7
Percentage of Variance	21.9
Communication dimensions	
Talk about sex	0.31
Talk about STDs	0.07
Talk with partners about sexual issues	-0.11
Redundancy	18.8
Percentage of Variance	47.2
Canonical Correlation	0.6
Rc'	0.4

Table 4

Canonical Correlation Analysis for Coping and Anticipated Responses

Variable	First Function
	Structure Coefficients
Coping set	
Communicative	0.47
Distancing	0.60
Acceptance	0.07
Denial	-0.59
Redundancy	6.8
% of Variance	23.4
Response set	
Partner	-0.05
Friends	0.78
Family	0.19
Self	-0.90
Redundancy	10.6
% of Variance	36.3
Canonical Correlation	0.54
Rc'	0.29

distancing, acceptance, and denial. Acceptance, which appeared to be the most common coping strategy ($M=3.12$, $SD=0.40$), involved coming to terms with the diagnosis and thinking of ways to deal with it, while communication, the next most common strategy ($M=2.67$, $SD=0.49$), involved items such as telling others and seeking counselling. Cognitive distancing was the third most used strategy ($M=2.57$, $SD=0.54$), and was defined as an attempt to have someone else solve the problem, and included items such as wishing and praying for miracles. Finally the least used of the four strategies was denial ($M=2.08$, $SD=0.44$), which included items such as avoiding the issue. The second set of variables included anticipated responses to an STD diagnosis from partners, friends, family, and the women themselves. In general, friends were anticipated to be the most supportive ($M=7.56$, $SD=1.29$), while partners ($M=5.15$, $SD=1.67$) and family ($M=5.61$, $SD=1.74$) were expected to be moderately supportive, and they themselves expected to not respond well to an STD diagnosis ($M=2.03$, $SD=1.11$). The first three of four canonical functions were found to be significant with canonical correlations of 0.54, 0.30, 0.26, explaining 29.2%, 8.7%, and 6.8% of the variance in the solutions respectively. Because the variance explained in the second and third functions was minimal, only the first function was considered further. For the first function, the redundancy analysis indicated that the anticipated response variables explained 10.6% of the variance in the coping variables, whereas the coping variables explained 6.8% of the variance in the anticipated response variables. Based on the structure coefficients greater than

0.30, this canonical function suggests that women who are more likely to use the cognitive distancing and communicative coping strategies as opposed to denial are more likely to expect themselves to react negatively to an STD diagnosis although they perceive that their friends would be supportive.

Effects of Sexuality and STD Beliefs on Coping and Anticipated Responses

In order to be able to assess whether there were any interactions between the type STD diagnosed in the scenarios, the stereotypes held about STD victims and the sexual self-schemas, on the types of coping and on the anticipated response, two MANOVAs were conducted.

For the purpose of conducting a MANOVA a median split was performed on women's self-defined level of promiscuity (Median=0.5).⁷ Thus, women who responded at zero were categorized as not seeing themselves as promiscuous (n=70), while women who responded above zero were categorized as seeing themselves as relatively promiscuous (n=70). Similarly, a median split was performed on the stereotype variable (Median=0) such that women who scored below zero were categorized as having a stereotype towards women with STDs (n=64), while women who scored equally to or greater than zero were not (n=86).

To assess the effects of the type of STD and the schema consistency on

⁷ Although the rating of self-defined promiscuity is not behaviourally related to the other sexuality variables assessed in the study, it was chosen as it was women's self-perceptions and whether they self-define themselves in terms consistent with stereotypes of women who acquire STDs that was of interest to the study.

coping, a 3 (Diagnosis Status: infected with curable STD, infected with incurable non-life threatening STD, infected with incurable life threatening STD) by 2 (Self-Schema: promiscuous vs. not promiscuous) by 2 (Stereotype held for person with an STD: negative vs. neutral/positive) MANOVA on the four coping factors was conducted. There was a significant main effect for promiscuity (Pillais=0.095; $F(4,121)=3.17$, $p<0.05$). Follow-up univariate comparisons indicated that, contrary to expectations, women who see themselves as more promiscuous were significantly more likely to anticipate the use of denial coping behaviours ($M=2.17$) than women who do not see themselves as promiscuous ($M=2.00$) ($F(1,124)=0.03$, $p<0.05$) and significantly less likely to anticipate the use of acceptance coping strategies ($M=3.05$) than women who do not see themselves as promiscuous ($M=3.20$) ($F(1,124)=5.94$, $p<0.05$). None of the other univariate effects was significant.

There was also a significant main effect for the severity of STD that the role-playing diagnosis asked women to respond to (Pillais=0.177; $F(8,244)=6.58$, $p<.01$). Follow-up univariate analyses and comparisons indicated that women in the chlamydia and herpes conditions were significantly less likely to utilize communicative ($M=2.57$) ($F(2,124)=10.03$, $p<0.01$) and cognitive distancing coping strategies ($M=2.42$) ($F(2,124)=7.88$, $p<0.01$) and significantly more likely to use acceptance coping strategies ($M=3.17$) ($F(2,124)=3.23$, $p<0.05$) than women who were in the AIDS condition ($M=2.91$, 2.78 and 3.05 respectively). The differences between women diagnosed with chlamydia and herpes were not

significant. There were no other significant univariate effects.

There were no other significant multivariate main effects nor any significant interactions.

To assess the interactive effects of STD severity and schema consistency on anticipated reactions a 3 (STD Diagnosis Status) by 2 (Stereotype held for person with an STD) by 2 (Self-Schema) MANOVA was conducted on the four response dimensions.

There was a significant main effect for the type of STD that was given in the role-playing diagnosis (Pillais=0.107; $F(8,232)=3.48$, $p<0.01$). Follow-up univariate analyses and comparisons indicated that women in the chlamydia and herpes conditions anticipated that friends would be significantly less supportive ($M=7.46$) ($F(2,118)=7.13$, $p<0.01$) but that they themselves would feel more positive ($M=2.22$) ($F(2,118)=7.30$, $p<0.01$) than the women in the AIDS condition ($M=8.32$, 1.52 respectively). As before, there were no significant differences between women diagnosed with chlamydia and herpes. There were no other significant univariate effects.

There were no other significant multivariate main effects nor any significant interactions.

Prior Communication in Relation to Coping and Anticipated Responses

It was expected that if women in the study had engaged in communication about STDs and sexual experiences prior to the diagnostic scenario, they would be

more likely to be able to continue that communication afterwards as a method of gaining information and finding support, without expecting negative responses from others.

To assess the relationship between women's prior communication patterns and their coping strategies, a canonical analyses was conducted on the two sets of variables. There were no significant canonical functions.

Similarly, to assess the relationship between women's prior communication patterns and the anticipated responses, a canonical analyses was conducted on the two sets of variables. Once again, there were no significant canonical functions.

Discussion

The purpose of the present study was to explore women's perceptions of how they would cope with an STD contraction, and how psychosexual factors and beliefs about STDs are related to these perceived reactions.

Women's Sexuality and Perceptions of STDs

Women's individual perceptions of their promiscuity were of interest in the present study, as this would reflect their own self-definitions of whether or not they had adopted a perspective on self as a 'good' versus 'bad' women. Not surprisingly, the majority of the women in the present study did not define themselves as promiscuous. It was anticipated that these feelings of promiscuity would not necessarily be related to actual sexual behaviours as there are many different

interpretations of what constitutes promiscuity, and perceptions may vary as a function of personal factors, such as family sexual attitudes. As expected the relationship between self-defined promiscuity and sexual feelings, experiences and types of sexual behaviours were not significantly correlated. It is possible that some women are defining themselves as promiscuous on the basis of flirtation, or based on the number of different people they see rather than on the basis of sexual behaviour itself. Thus, it may be that due to strict socialization, some women who were merely flirtatious may have seen themselves as promiscuous, whereas others who may see the term 'promiscuous' as negatively loaded may not have self-defined themselves as such, despite being highly sexually active.

Society tends to direct messages warning against STDs at 'risk groups', which includes women who are 'promiscuous'. However, in that perceptions of promiscuity are not directly related to sexual behaviours, both women who do and do not have many partners may ignore the messages encouraging safer sex as they do not see that their behaviour puts them at risk. It is important that the society realizes the relationship between women's perceptions of their own sexuality and the reality of their sexual behaviours, so that appropriate communication is set up.

Although the labelling of their sexual behaviour was unrelated to the behaviours themselves, women's sexual feelings and actions were related. It was found that the more women reported enjoying their sexuality, the more likely they were to engage in low risk behaviours. As well, the more women considered

themselves to be sexual active and the more sexual partners they reported having had, the more they reported engaging in both high and low risk sexual behaviours. In all however, this sample was not overly sexually active. In comparison to Shaw and Rosenfeld's 1989 study, in which the mean number of sexual partners seemed to be quite high ($\bar{M}=13.5$), the present study may be more representative of the average level of sexual activity ($\bar{M}=6.2$).

As the fundamental focus of the study was centred on STDs an assessment of the relationship between the stereotypes women held towards women with STDs, their knowledge of STDs, and their concerns about contracting an STD was seen as important. In fact none of the three dimensions were correlated. It may be that the reported stereotypes of women with STDs are based on social constructions and norms, given that many of the women are unaware of knowing women with STDs. Moreover, women who one would think would know better than to stereotype (i.e. highly knowledgeable about STDs), may in fact view women who contract an STD as having been careless, and thus deserving of an STD contraction. Further research will be able to assess whether this is in fact reality.

Perceptions of the threat of STDs and ones' sexual behaviours were expected to be related. In particular, it was expected that women who perceived themselves as more promiscuous would be less likely to hold negative stereotypes towards women with STDs, as promiscuity is often seen as one of the negative stereotypes. It was also expected that women who were knowledgeable about STDs and preventative

measures would engage in sexual activities that had lower risks. Consistent with this, the pattern of relationships between these two sets of factors indicated that the greater women's self-definition as promiscuous, the greater the number of sexual partners they reported having, and the less they defined themselves as being sexually active was associated with more concerns about contracting STDs and less knowledge about them. This makes sense in that, it suggests that rather than having long term relationships in which women may be sexually active with fewer people, a woman who has many sporadic short term relationships, hence perhaps self-defining themselves as promiscuous, may not actually be engaging in sexual activities as often. Nonetheless, this pattern of sexual behaviour would be consistent with what would be expected of women who identify themselves as part of a high risk group, as that is the message that is given to the public (thus the concern), without having adequate knowledge of what constitutes high risk behaviours.

In contrast, a second pattern of interrelations identified among these variables indicated that the women who reported engaging in low risk sex, enjoying their sexuality, and who considered themselves very sexually active, were also more likely to be concerned about contracting STDs, but had greater knowledge about STDs, and expressed negative stereotypes about women with STDs. Thus, consistent with these expectations, it appears that women who were knowledgeable and concerned about STDs and were more likely to take precautions by engaging in low risk sexual activities, perhaps leading to an increased feeling of security and safety that allowed

them to be sexually active and enjoy their sexuality. It may also be that sexually active women who enjoy their sexuality felt more confident to assert the use of low risk sexual behaviours given their high concerns and knowledge regarding STDs. However it is surprising that these women, given that they are more knowledgeable about STDs, were also more likely to hold negative stereotypes towards women who do in fact have STDs. Perhaps it is because these women have concerns about STD contraction that they see women with STDs as potential threats (i.e. spreading STDs to others) and thus respond negatively towards them. Alternatively, it may also be that those women who are knowledgeable are familiar with and practice behaviours that reduce the risk of contracting STDs and therefore assume that women who do contract STDs have likely not taken precautions and hence are somewhat responsible (i.e. irresponsible) for having contracted the STD.

The Association Between Sex Communication and Sexuality and STD Beliefs

To obtain support and knowledge from others after an STD contraction, one has to be able to tell others of the contraction. However if a woman has a difficult time discussing topics on sexuality prior to a contraction, it is highly improbable that she will be able to divulge an STD contraction. Thus, the relationship between women's sexual communication patterns, and their perceptions of STDs and sexual experiences and feelings were examined. A relationship between prior communication, and perceptions of STDs and sexuality was found in that women who engaged in more sexual behaviours (both low and high risk), enjoyed their sexuality,

considered themselves more sexually active and as well were concerned about contracting an STD, and were more knowledgeable about STDs and safer sex were indeed more likely to express communicating openly with significant others about sexual issues. This is consistent with expectations in that women who are more sexually-oriented may feel most comfortable communicating about sexual issues; this may be associated with having greater knowledge of (and less stigma surrounding) sexual issues including STDs. Indeed such communication among women may be a consciousness raising experience in that both knowledge and concerns regarding STDs can be discussed and shared. Thus perhaps if society was more open to the discussion of sexual issues, more women would be concerned and knowledgeable about STDs. However, given that being sexually communicative does not appear to reduce the likelihood of high risk behaviours, future research should look into seeing what exactly it is that is being discussed. Perhaps both high and low risk sexual behaviours are talked about, while there is little talk of the negative consequences. To the extent that a woman feels that she would ostracized for having contracted an STD, it may be that any negative consequences that do occur are not be brought into the sexual discussions and thus are not seen as a realistic possibility.

Expected Responses to an STD Diagnosis

Due to the stigmatization of STD victims in society and the perception that women with STDs are 'bad', a women may not seek support from others because she is afraid of the reactions she will be faced with. To assess this possibility the

relationship between the anticipated responses and the coping strategies taken was examined. It was expected that women who anticipated supportive responses from others would be more likely to use communicative coping strategies.

Consistent to what was expected, women who anticipated that their friends would be supportive in the event of an STD contraction were more likely to use communication as a coping strategy, and as well were more likely to use cognitive distancing (i.e. praying or wishing), and less likely to use denial. Thus it appears that if women could be somehow encouraged to anticipate that friends will be supportive, they would be more willing to share the incidence of an STD contraction. This further results in increased awareness of the realistic risks that are associated with high risk sexual behaviours and promotes low risk sexual activities. Further research along these dimensions may prove beneficial in increasing preventative measures and decreasing the incidence of STDs.

Effects of Sexuality and STD Beliefs on Coping and Anticipated Responses

As the severity of an STD increases, so too does the societal stigmatization associated to the STD. Thus, it was expected that as the severity of STD increased the use of emotion-focused coping strategies would increase while the use of problem-focused coping strategies would decrease. It was further expected that women in the incurable life threatening condition would anticipate negative reactions from their partner, because their partner may be infected and/or losing someone close to them as a result. In contrast, supportive reactions may be anticipated from friends and family

because they would be dying and their friends and family will make the best for them in the little time that is left. However, for women in both the curable and incurable non-life threatening condition it was expected that they would anticipate relatively negative reactions from friends, family and partner(s) because people with STDs are viewed negatively by society.

To the extent that women who see themselves as promiscuous may be able to better understand contracting an STD by attributing it to their behaviour, it was expected that these women would anticipate engaging in more problem-focused coping strategies if diagnosed with an STD. Problem-focused strategies are activities that both alleviate internal tension, and work towards changing the problem, i.e. accepting what has happened so that you can work towards a solution, or searching for information that will help. In contrast, emotion-focused strategies are activities that decrease internal tension, but do nothing to help with the problem at hand, i.e. crying, or avoiding the issue. While there are differences between the two types of coping strategies they are not mutually exclusive (Foster, 1992). It was also expected that these women would expect themselves and others (friends, family, and partners) to react negatively and be less supportive because they would take responsibility for the STD by blaming themselves. On the other hand, women who do not see themselves as promiscuous were expected to engage in more emotion-focused strategies as they were expected to have a more difficult time thinking through and coming to terms with how they could have contracted an STD given their low risk

group status. These women were further expected to anticipate more supportive reactions for the contraction given that it could not possibly have been their own fault.

Similarly, as society in general has tended to look down on women with STDs it was expected that if a woman holds a negative stereotype of women with STDs and then she herself acquires one, she will have a more difficult time dealing with the diagnosis. As a result, she would be expected to use more emotion-focused coping strategies and less problem-focused strategies than a woman who does not hold negative stereotypes of women with STDs. As well women who hold negative stereotypes about women with STDs were expected to anticipate negative reactions from themselves and others in response to the contraction, as they will believe others think the way they do and respond negatively. Whereas women who do not have negative stereotypes towards women with STDs are expected to anticipate that they and others would be more positive and accepting of the diagnosis.

Expected responses to STDs were anticipated to be further affected by an interaction between the severity of STD that is diagnosed and a woman's self-defined level of promiscuity. Women who defined themselves as less promiscuous were expected to have a difficult time understanding how they contracted an STD, no matter what severity of STD they were diagnosed with, and it will thus be more difficult for them to use problem-focused coping strategies whereas emotion-focused coping strategies were expected to increase as the severity of the STD increased. In

contrast, women who defined themselves as more promiscuous were expected to be able to 'justify' how they contracted an STD, as they could attribute it to their sexual behaviours. Thus, women who defined themselves as more promiscuous are expected to show high levels of problem-focused coping strategies for a low severity STD, but this coping response was expected to decrease as the severity of the STD increased.

Finally, it was hypothesized that there would be an interaction between the stereotype the women hold towards women with STDs and their own sexual self-schema. Women who defined themselves as more promiscuous were expected to view themselves as having an easier time coping with STDs, as they could see themselves taking control of what had happened by adopting problem-focused coping strategies. In contrast, women who did not view themselves as promiscuous were expected to be influenced by their stereotypes. Women who had negative stereotypes about STD victims were not expected to use problem-focused coping strategies, because of their belief that STDs 'only happen to bad people' and thus should not have happened to them. Women who viewed STD victims negatively and who viewed their own behaviour as being inconsistent to the stereotype will not be able to legitimize why they would have contracted an STD.

As expected, it was found that women in the curable and incurable but non-life threatening STD conditions were indeed more likely to anticipate using a problem-focused strategies (acceptance, e.g. dealing with the diagnosis and engaging in safer sex), than women in the incurable life threatening condition, who were more likely to

use both problem-focused (communication, e.g. searching for answers) and emotion-focused (cognitive-distancing, e.g. wishing for miracles) coping strategies. There were no differences in the use of the denial strategy, which tended to be used the least. It is interesting that for the less severe conditions the chosen problem-focused strategy would allow individuals to keep the diagnosis personal. In the case of AIDS, where life-expectancy is short, the choice of keeping the diagnosis personal has more serious consequences with respect to warning and/or notifying friends, family and partner(s). This is perhaps the reason that the problem-focused strategy of communication came out in the case of the most severe STD, as it was dealing with issues that had to be dealt with as a result of the problem.

Consistent with expectations, results indicated that the women felt they would be significantly less negative about the diagnosis when they were in either the curable or incurable non-life threatening conditions, than women who were in the incurable life threatening condition. This is understandable in that death is not the consequence in the less severe conditions. Also consistent with expectations was the finding that friends were anticipated to be less supportive for the curable and incurable non-life threatening conditions, and more supportive for women in the incurable life threatening condition. Partners and family members were not found to respond differently across the STD severities.

In contrast to what was expected, women who self-defined as more promiscuous were significantly more likely to anticipate denying and less likely to

anticipate accepting the STD diagnosis, thus using an emotion-focused as opposed to a problem-focused strategy for coping. It may be that these women think that if they are diagnosed with an STD, they would rather deny it because the behavioural changes that acceptance might entail would be too great. This would make sense given the earlier finding that self-perceptions of promiscuity were unrelated to actual behaviour; therefore if a woman who defines herself as promiscuous is not particularly sexually active, she may think that extreme precautionary measures, such as total abstinence, are necessary to be at lower risk. This would be consistent with the finding that these women also had the least knowledge.

There were no significant differences as a function of self-defined promiscuity on how they expected themselves and others to react to the diagnosis. The women generally expected themselves to react negatively, partners and family members to be somewhat neutral, and friends to be supportive. This may be because the women themselves self-blame as result of an STD contraction. However, while they expect their partners to be supportive, their partners may be self-concerned about acquiring the STD. Similarly families are expected to 'be there', families can also be very 'moralistic' and perhaps expected to respond in a stereotypical way. However friends are expected to be supportive; they are not at risk, and probably are the one's that have shared the most communication about sexual behaviours (or lack thereof).

In contrast to what was expected, there were no significant effects for women's positive/neutral vs. negative stereotypes of women who get STDs on either

the measures of anticipated coping or anticipated reactions. It is possible that stereotypes operate in a general context, but not within the specifics of one's own life where greater information is available (Deaux & Lewis, 1984).

The negative connotations that surround sexuality have been assumed to cause negative personal reactions to STDs, however there may also be individual coping differences between women on a more general basis. An assessment of general coping abilities with negative life events will help ensure that the negative reactions some women have to STDs, are specific to a sexually based problem, and not due to general individual coping abilities.

Prior Communication in Relation to Coping and Anticipated Responses

It was expected that if women in the study had engaged in communication about STDs and sexual experiences prior to the diagnostic scenario, they would be more likely to be able to continue that communication afterwards as a method of gaining information and finding support, without expecting negative responses from others. Thus women who had a high degree of communication on sexual issues were expected to use more problem-focused coping strategies such as communication, and expected to anticipate more support from significant others.

In contrast to what was expect there was no relationship found between prior communication and coping, nor between prior communication and anticipated responses. Perhaps, as discussed earlier, it is only the experiences and possibilities of risks that are talked about and not the actual negative consequences. Thus STD

victims may feel pressured to keep the realistic negative consequences silent regardless of their prior sexual communication patterns, out of fear of the social stigmatization.

Summary

While women's actual sexual behaviours, beliefs about STDs, and communication were inter-related, they did not predict responses to STDs. These responses were primarily affected by the severity of STD, in that in contrast to the acquisition of chlamydia and herpes in which women anticipated using a problem focused coping strategy (acceptance), women role-playing a diagnosis with AIDS anticipated using both emotion-focused (cognitive distancing) and a problem-focused (communication) coping strategies. Also, women who self-defined themselves as more promiscuous, independent of their sexual behaviours, were significantly more likely to anticipate denying and less likely to anticipate accepting the STD diagnosis, thus using an emotion-focused as opposed to a problem-focused strategy for coping.

As it was found that sexual communication is related to increased knowledge and concerns about STDs, and the practising of safer sex, women need to be encouraged to communicate openly about sexuality and STDs, so that knowledge about STDs can be spread, accurate concerns about STDs can be increased, and social stigmatization can be decreased. Seeing as women who expected friends to be more supportive were more likely to using the communicative coping strategy it appears that decreasing societal stigmatization may allow STD victims the freedom to tell

others of their contraction and thus gain the support that is needed in a society that has typically labelled these women as 'bad'.

This study suggests that anticipated reactions from significant others do play a role in how women cope with STDs. Future research recruiting individuals who actually have STDs will be necessary to find the true extent to which coping and societal reactions are related. Also, as the present study was to a great extent correlational, future research that varies other components, as severity was varied in the present study, can help determine causal directions of the findings thus determining the factors to be altered to increase preventative strategies and decrease the social stigmatization of STD victims.

Generalizability Issues

Role-playing techniques. One of the limitations of the present study was the use of scenarios to assess responses to STDs rather than using real responses to STDs. Thus the results may not incorporate as strong of an emotional and behavioural reaction as would be found in real-life situations. Thus, although the accuracy of the responses may not be exactly analogous to real circumstance reactions, there is evidence with respect to past research using role-playing that they may give a good indication of the patterns of how individuals would react to STD contractions.

Often when research is being conducted role-playing is employed in an attempt to understand behaviour. Role-playing involves asking an individual to use their

imagination to put themselves into a specific situation, either as their self or as another person, and having them react or respond as they would if they were really under those circumstances. Such a technique is very useful in that frequently the subjects that would be ideal for the study cannot be recruited due to financial, ethical and/or logistical reasons. Role-playing was used in the present study as a result of time constraints that would not allow for the recruitment of individuals who have actually been diagnosed with an curable or incurable non-life threatening STD, and due to the low probability of locating and recruiting women who had AIDS.

Role-playing however, does not come without drawbacks. Both the internal and external validity of studies that utilize role-playing to obtain behavioural data should be legitimately scrutinized by researchers. Is it reasonable to suggest that reactions, responses and behaviours being measured from an individual who is role-playing are in fact accurate? Can these responses be used to predict what people who are really in the role-played situation would do? Even more importantly, would the role-player react or respond the same way under these actual circumstances? These questions are not easily answered as there generally is a good reason for not using the ideal subjects in the first place, thus comparisons are hard to make between role-playing responses and real-life responses. With all these doubts and uncertainties is it worth using a role-playing technique at the expense of gathering inaccurate data?

Greenberg and Eskew (1993) believe that when certain conditions are met, role-playing can give a good indication as to what actual real-life responses may be

like. In order to learn about attitudes and behaviours they suggest that subjects be given a moderate to high level of involvement, by role-playing themselves in a somewhat familiar situation, and to have a low degree of response specificity. Under these conditions they predict that the role-playing reactions and responses will be of the highest validity possible because there exists a degree of realism in the subjects' experience. Too often however, researchers will take results from studies where role-playing has been used and overstate the conclusions that can be drawn from the data.

One way in which the role-playing method did alter the results of the present study is in relation to women's anticipation of long term effects. For example, it was somewhat surprising that differences between chlamydia and herpes were not evident. Perhaps the use of the written scenarios and role-playing elicited immediate feelings, rather than facilitating an assessment of long term effects; thus the women in the herpes condition may not have been considering the long term consequences and feelings, thus making their responses similar to the women in the chlamydia condition.

Sample breadth. The present study only examined women's responses because of the social stigmatization of, and the societal control over women's sexuality. Having done this, future research can now move forward to assess how men are coping with the threat of STDs, and how they deal with STD contractions. This would be an important step to take, in that the majority of women are heterosexual and thus contract STDs from male partners. Increasing preventative measures in both

men and women is required to make sexual expressions safer. Also, the present study assessed women in a university setting, and thus does not represent women in the same age group who have not completed at least one year post secondary education, nor does it represent older women. Less educated women may not be as knowledgeable about STD risks and preventions and may have fewer peers with whom they can discuss sexual issues as they are not surrounded by other students. Older women may also have fewer resources from which to learn about STDs and preventative measures, have more sexual experiences, and/or be more set in traditional ways of thinking in terms of stereotypes of women with STDs. Future studies may want to expand the characteristics of education and age, so that a broader picture of how women in general respond to STDs and the threat of contraction.

References

- AIDS Society (1988). Safer sex guidelines: A resource document for educators and counsellors. Report from the Canadian AIDS Society Consultation on Safer Sex.
- Arafat, I., & Allen, D. (1977). Venereal disease: college students' knowledge and attitudes. The Journal of Sex Research, 13, 223-230.
- Brick, P., Charlton, C., Kunins, H., Brown, S. (1989). Teaching safer sex. Toronto.
- Cochran, S., & Peplau, L.A. (1991). Sexual risk reduction behaviours among young heterosexual adults. Social Science and Medicine, 33, 25-36.
- Coleman, R., & Etchegoyen (1992). The psychodynamics of the STD clinic: Secrecy, splitting and isolation. British Journal of Medical Psychology, 65, 319-326.
- Deaux, K., & Lewis, L. (1984). Structure of gender stereotypes: Interrelationships among components and gender labels. Journal of Personality and Social Psychology, 46, 991-1004.
- Fluker, J. (1983). The perils of promiscuity. Journal of Psychosomatic Research, 27(2), 153-156.
- Foster, K. (1990). AIDS in women - United States. Morbidity and Mortality Weekly Report, 39(47), 845-846.
- Foster, M. (1992). Coping with depression: review and reformulation of Nolen-Hoeksema's response styles theory. Unpublished Comprehensive Paper, Carleton University, Ottawa ON.

- Greenberg, J., & Eskew, D.E. (1993). The role of role playing in organizational research. Journal of Management, 19(2), 221-241.
- Gregory, L. (1994). Knowledge and sexual practices in response to STDs and pregnancy. Unpublished Manuscript, Carleton University, Ottawa.
- Grieco, A. (1987). Cutting the risks for STDs. Medical Aspects of Human Sexuality, 21, 70-84.
- Hobart, C. (1992). How they handle it; young Canadians, sex, and AIDS. Youth & Society, 23, 411-433.
- Houck, E.L., & Abramson, P.R. (1986). Masturbatory guilt and the psychological consequences of sexually transmitted diseases among women. Journal of Research in Personality, 20, 267-275.
- Janoff-Bulman, R. & Timko, C. (1987). Coping with traumatic life events: The role of denial in light of people's assumptive worlds. In C.R. Snyder & C. Ford (Eds.), Coping with negative life events: clinical and social psychology perspectives. (pp135-159). New York:Plenium.
- Kilby, D. (1986). Herpes simplex virus. Manual of safe sex. Toronto.
- Lazarus, R.S. & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer Publishing Company.
- Leonardo, C., & Chrisler, J.C. (1992). Women and sexually transmitted diseases. Women & Health, 18, 1-15.

- Leventhal, G.S. (1970). Findings and theory in the study of fear and communication. In L.Berkowitz (Ed.), Advances in Experimental Social Psychology, 5, 119-186. New York: Academic Press.
- McKinney, K. & Sprecher, S. (1989). Human sexuality: The societal and interpersonal context. New Jersey: Ablex Publishing Corporation.
- Ostrov, J.D., Offer, D., Howard, K.I., Kaufman, B., & Meyer, H. (1985). Adolescent sexual behaviour. Medical Aspects of Human Sexuality, 19(5), 28-36.
- Peck, L.D. (1979). Public health and sexual promiscuity. Corrective and Social Psychiatry and Journal of Behaviour Technology Methods and Therapy, 25(3), 94-99.
- Rodway, M., & Wright, M. (1988). Sociopsychological aspects of sexually transmitted diseases. London England: Haworth Press.
- Rosenberg, M.J., & Gollub, E.L. (1992). Commentary: Methods women can use that may prevent sexually transmitted disease, including HIV. American Journal of Public Health, 82(11), 1473-1478.
- Russo, A. (1987). Conflicts and contradictions among feminists over issues of pornography and sexist freedom. Women's Studies International Forum, 10(2), 103-112.

- Shaw, J., & Rosenfeld, B.L. (1987). Psychological and sexual aspects of genital herpes in women. Journal of Psychosomatic Obstetrics and Gynaecology, 6, 101-109.
- Sherr, L. & Strong, C. (1992). Safe sex and women. Genitourinary Medicine, 68(1), 32-35.
- Tanner, J.F., Hunt, J.B., & Eppright, D.R. (1991). The protection motivation model: A normative model of fear appeals. Journal of Marketing, 55, 36-45.
- Taylor, S.E. (1983). Adjustment to threatening events: A theory of cognitive adaptation, American Psychologist, 38, 1161-1173.
- Walsh, R.H. (1989). Premarital sex among teenagers and young adults. In K. McKinney & S. Sprecher (Eds.), Human sexuality: The societal and interpersonal context (pp.162-186). New Jersey: Ablex Publishing Corporation.
- Weber, K. (1984). The globe modern dictionary. Globe/Modern Curriculum Press, Canada.
- Zanna, M.P., Haddock, G., & Esses, V.M. (1990). The nature of prejudice. Paper presented at the Nags Head Conference on Stereotypes and Intergroup Relations, Nags Head Conference Center, Kill Devil Hill, NC.

Zimmerman, R.S. (1989). AIDS: Social causes, patterns, cures and problems. In K. McKinney & S. Sprecher (Eds.), Human sexuality: The societal and interpersonal context. (pp.286-317). New Jersey: Ablex Publishing Corporation.

Zutis (1989). A cross sectional survey of STD prevention practises in women using the oral contraceptive pill. Toronto.

Appendix A

Announcement for Recruitment

PSYCHOLOGY 49.100

Experiment for Participation

Experiment Title: Intimate Behaviours

Experimenter's Name & Room #: Krista Warren, C571 Loeb

Experimenter's Phone Number: 788-2600, x2680

Location of Experiment: As indicated below.

Experiment Number: 93-123

Faculty Advisor: Dr. K. Matheson

BRIEF DESCRIPTION

This study involves filling out a questionnaire concerning your sexual attitudes, feelings, and behaviours, and answering questions concerning sexually transmitted diseases. The questionnaire and debriefing will take between 45 and 60 minutes to complete. Participants will receive 1 credit for this study.

FEMALE PARTICIPANTS ONLY

Appendix B
Consent Form

Research Title: Intimate Behaviours

Investigators: K. Warren & Dr. K. Matheson

I, the undersigned, understand that my participation in this study involves filling out a questionnaire concerning my sexual attitudes, feelings, and behaviours, and concerning sexually transmitted diseases. Any question that I am uncomfortable answering may be left blank.

I willingly consent to participate in this research and realize that my participation is entirely voluntary and that I can withdraw from the study at any time.

I also agree to permit the data that I generate in the study to be used in research publications or for teaching purposes, since my individual responses will be anonymous and will be kept strictly confidential.

Full Name (Print): _____

Signature: _____

Date: _____

Appendix C

Questionnaire

Please complete the following questionnaire. Read the questions slowly and carefully, and answer honestly. Your answers are completely confidential and anonymous. You do not have to answer any question that makes you feel uncomfortable, or that does not apply to you.

Age: _____

Sexual Orientation (Check one): Lesbian _____
 Heterosexual _____
 Bisexual _____
 Asexual _____

Sexual Preference (read all of the following and then choose the ONE that best describes you.)

- _____ I am attracted to women.
- _____ I am attracted to men.
- _____ I am attracted to both men & women.
- _____ I am attracted to neither men nor women.
- _____ I am attracted to individuals that make me happy (gender unimportant).

I am a member of a visible minority group: Yes _____ No _____

If yes, please specify which group: _____

Religious Background: _____

On a scale from 0 to 10 how strong are your religious beliefs?
 (0=not strong at all, 10=very strong) : _____

The number of female partners that you have had sexual experiences with
 (intercourse, oral sex) : _____

The number of male partners that you have had
 sexual experiences with (intercourse, oral sex): _____

How long have you presently been in a monogamous relationship?
 _____ Years and _____ Months

I enjoy my sexuality.

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

[illegible]

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

I HAVE:

- How frequently do you talk to your partner(s) about:**

0	1	2	3	4	5	6	7	8	9	10
Never										Frequently

[illegible]

How frequently do you talk to members of your family about:

- sexually transmitted diseases?

0	1	2	3	4	5	6	7	8	9	10
Never										Frequently

- your sexual experiences?

0	1	2	3	4	5	6	7	8	9	10
Never										Frequently

How frequently do you talk to your friends about:

- sexually transmitted diseases?

0	1	2	3	4	5	6	7	8	9	10
Never										Frequently

- your sexual experiences?

0	1	2	3	4	5	6	7	8	9	10
Never										Frequently

How often do you use condoms or dams during intercourse?

0	1	2	3	4	5	6	7	8	9	10
Never										Every Time

Why do you use condoms or dams with this frequency?

Check ALL that apply.

- ☐ don't feel that I need to
- ☐ to prevent pregnancy
- ☐ partner won't agree to it
- ☐ they decrease sensitivity
- ☐ I want to get pregnant
- ☐ they are hard to find
- ☐ taking birth control pills
- ☐ I am not at high risk
- ☐ they prolong pleasure
- ☐ to decrease chance of STDs
- ☐ adds excitement
- ☐ other(specify) _____

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

0	1	2	3	4	5	6	7	8	9	10
Strongly Disagree										Strongly Agree

Please provide a description of what you think typical women who contract chlamydia (a curable STD) may be like. Not all of the characteristics have to be negative. Your description should consist of a list of characteristics or, if necessary, short phrases which you think can be used to describe typical members of this group. Provide as many characteristics or short phrases as you think are necessary to convey an adequate impression of the kind of women who get chlamydia. Please be honest. Your responses will be kept strictly confidential.

TYPICAL WOMEN WHO CONTRACT CHLAMYDIA ARE:

Please go back over the list of characteristics that you have provided above and rate how positive or negative you think each is. If you think a characteristic is very positive, mark +2 beside it. If you think a characteristic is neutral, mark a zero beside it. If you think a characteristic is very negative, mark -2 beside it. Refer to the scale below.

-2	-1	0	+1	+2
Very Negative	Somewhat Negative	Neutral	Somewhat Positive	Very Positive

Please indicate the morals, values, and principles (e.g. social responsibility) that are held or not held by women who have chlamydia. Provide as many morals, values, and principles that you feel are necessary to convey your impression of women with chlamydia. Please be honest. Your responses will be kept strictly confidential.

TYPICAL WOMEN WITH CHLAMYDIA HOLD OR DO NOT HOLD THE FOLLOWING MORALS, VALUES, AND PRINCIPLES:

Please go back over the list of morals, values, or principles that are held or not held by women with chlamydia, that you have provided above. Decide for each statement whether it is positive or negative. If you think the moral, value, or principle is very positive mark +2 beside it. If you think the moral, value, or principle is neither positive nor neutral mark a zero beside it. If you think the moral, value, or principle is negative mark -2 beside it. Refer to the scale below.

-2	-1	0	+1	+2
Very Negative	Somewhat Negative	Neutral	Somewhat Positive	Very Positive

Please provide a list of feelings or emotions that YOU experience (e.g. proud, angry) when you see, meet or think about typical women who have chlamydia. Provide as many feelings or emotions as you believe are necessary to accurately convey your impression of the group and describe them adequately. Please be honest. Your responses will be kept strictly confidential.

TYPICAL WOMEN WITH CHLAMYDIA MAKE ME FEEL:

Please go back over the list of feelings or emotions you have provided above. Decide for each feeling or emotion whether it is a positive, negative or neutral response. If the emotion is very positive, mark a +2 beside it. If the emotion is neutral, mark a zero beside it. If the emotion is very negative, mark a -2 beside it. Give your immediate impression. Don't spend too much time on any one emotion. Refer to the scale below.

-2	-1	0	+1	+2
Very	Somewhat	Neutral	Somewhat	Very
Negative	Negative		Positive	Positive

Try to imagine yourself in the following scenario. Close your eyes after each sentence and envision yourself, where you are, what you are feeling, and what you are thinking. Read the scenario twice, carefully. When you have done this please answer the remaining questions that follow. (Each participant randomly received one scenario.)

SCENARIO #1

For the past few days you have had lower abdominal pain, vaginal bleeding, and unusual discharges. You decide that you should see your doctor. After examination and testing you are told that you have chlamydia. Chlamydia is a curable sexually transmitted disease that is spread by contact with infected areas. You are told that you will be treated with antibiotic drugs, however this does not immunize you from getting chlamydia again.

SCENARIO #2

For the past few days you have been experiencing severe vaginal pain and have what looks like a rash of blisters in the genital region. You decide that you should see your doctor. After examination and testing you are told that you have genital herpes. There is no known cure for genital herpes but there is a cream that provides some relief. You are told that you may have reoccurring outbreaks on and off for the rest of your life, and genital herpes is spread by contact with active outbreaks.

SCENARIO #3

In the past few months you have been experiencing menstrual cycles that are much shorter than what you are used to, and for the past few days you have been noticing unusual vaginal discharges, and have been experiencing hot flashes. You decide that you should see your doctor. After examination and testing you are told that you have AIDS. There is no known cure for AIDS, and the doctor informs you that the average life expectancy for women diagnosed with AIDS is six months. Together, you and your doctor determine that you must have acquired the disease through sexual contact with an infected person, as you have ruled out all other forms of transmission. You are told that changes in dietary intake, elimination of cigarettes and alcohol, and increasing exercise may extend your life expectancy.

As you head for home you think about what has happened and how you feel about it.

Please read the above again and make sure that you can imagine yourself in the scenario.

Women and STDs

8

0	1	2	3	4	5	6	7	8	9	10
Without									With	
Disgust									Disgust	
0	1	2	3	4	5	6	7	8	9	10
Without									With	
Compassion									Compassion	
0	1	2	3	4	5	6	7	8	9	10
Understandingly									Without	
									Understanding	
0	1	2	3	4	5	6	7	8	9	10
Without									Comfortingly	
Comfort										
0	1	2	3	4	5	6	7	8	9	10
Logically									Illogically	

Would you tell anyone in your family?

Yes _____

No _____

Why did you decide this? (Check all that apply)

- _____ they won't like me any more
- _____ embarrassing
- _____ they will respect my desire to keep this a secret
- _____ I need some comfort
- _____ it is too personal
- _____ they won't judge me
- _____ they will be scared to touch me
- _____ we don't keep secrets from each other
- _____ they might feel uncomfortable around me
- _____ they might tell others
- _____ it is none of their business
- _____ they have a right to know
- _____ other (specify)

2

of/de

2

PM-1 3½"x4" PHOTOGRAPHIC MICROCOPY TARGET
NBS 1010a ANSI/ISO #2 EQUIVALENT

PRECISIONSM RESOLUTION TARGETS

If you were to tell a member of your family, how do you think that member would respond?

Score each of the following using the scales below:

0	1	2	3	4	5	6	7	8	9	10
Shocked									Not at all	Shocked
0	1	2	3	4	5	6	7	8	9	10
Not at all									Surprised	Surprised
0	1	2	3	4	5	6	7	8	9	10
Overwhelmed									No reaction	No reaction
0	1	2	3	4	5	6	7	8	9	10
With Pity									Without Pity	Without Pity
0	1	2	3	4	5	6	7	8	9	10
Without Disgust									With Disgust	With Disgust
0	1	2	3	4	5	6	7	8	9	10
Without Compassion									With Compassion	With Compassion
0	1	2	3	4	5	6	7	8	9	10
Understandingly									Without Understanding	Without Understanding
0	1	2	3	4	5	6	7	8	9	10
Without Comfort									Comfortingly	Comfortingly
0	1	2	3	4	5	6	7	8	9	10
Logically									Illogically	Illogically

Yes

No

- ☐ they won't like me any more
- ☐ embarrassing
- ☐ they will respect my desire to keep this a secret
- ☐ I need some comfort
- ☐ it is too personal
- ☐ they won't judge me
- ☐ they will be scared to touch me
- ☐ we don't keep secrets from each other
- ☐ they might feel uncomfortable around me
- ☐ they might tell others
- ☐ it is none of their business
- ☐ they have a right to know
- ☐ other (specify)

Score each of the following using the scales below:

0	1	2	3	4	5	6	7	8	9	10
Shocked										Not at all Shocked

	0	1	2	3	4	5	6	7	8	9	10
Not at all Surprised	Surprised										

0	1	2	3	4	5	6	7	8	9	10
Overwhelmed									No reaction	

	0	1	2	3	4	5	6	7	8	9	10
With Pity											Without Pity

0 Without Disgust	1	2	3	4	5	6	7	8	9	10 With Disgust
0 Without Compassion	1	2	3	4	5	6	7	8	9	10 With Compassion
0 Understandingly	1	2	3	4	5	6	7	8	9	10 Without Understanding
0 Without Comfort	1	2	3	4	5	6	7	8	9	10 Comfortingly
0 Logically	1	2	3	4	5	6	7	8	9	10 Illogically

If this happened to you, would the diagnoses surprise you?

[illegible]

How do you think you would feel after this diagnosis?

0	1	2	3	4	5	6	7	8	9	10
disappointed									Not disappointed	
0	1	2	3	4	5	6	7	8	9	10
unhappy									happy	
0	1	2	3	4	5	6	7	8	9	10
content									sad	

0	1	2	3	4	5	6	7	8	9	10
safe										unsafe
0	1	2	3	4	5	6	7	8	9	10
emotional										unemotional
0	1	2	3	4	5	6	7	8	9	10
shocked										calm
0	1	2	3	4	5	6	7	8	9	10
proud										ashamed
0	1	2	3	4	5	6	7	8	9	10
isolated by society										included in society

Would you have any more questions about this disease that you have acquired?

Yes _____

No _____

Would you use any of the following as sources in your search for knowledge? Score each of the following using the scale below:

0	1	2	3	4	5	6	7	8	9	10
Not at all										Definitely
Likely to use										Likely to use

- _____ library
- _____ medical professional
- _____ teachers
- _____ peers
- _____ family
- _____ partner

Do you believe/trust the results that the doctor has given you? Yes _____

No _____

Please read each item below and indicate, using the following rating scale the likelihood that you would perform each of the following behaviours, following your diagnosis.

- 1 = Will Not Use
- 2 = Will Use Somewhat
- 3 = Will Use Quite a Bit
- 4 = Will Use a Great Deal

- ___ I will concentrate on what I have to do next--the next step.
- ___ I will try to analyze the diagnosis in order to understand it better.
- ___ I will turn to work or a substitute activity to take my mind off the diagnosis.
- ___ I think that time will make a difference in the way I feel--the only thing to do is wait.
- ___ I will find a bright side to the diagnosis.
- ___ Try to get the doctor to change his or her mind.
- ___ Talk to someone to find out about the situation.
- ___ Criticize or lecture myself.
- ___ I will tell others what I am going through.
- ___ Hope a miracle will happen.
- ___ Blame the diagnosis on fate; sometimes I just have bad luck.
- ___ Go on as if nothing has happened.
- ___ Keep my feelings to myself.
- ___ Look for the silver lining, so to speak; try to look on the bright side of things.
- ___ Sleep more than usual.
- ___ Express anger to the person who caused the problem.

- 1 = Will Not Be Used
- 2 = Will Use Somewhat
- 3 = Will Use Quite a Bit
- 4 = Will Use a Great Deal

- ___ Accept sympathy and understanding from someone.
- ___ Tell myself things that help me to feel better.
- ___ Try to forget the whole thing.
- ___ Get counselling.
- ___ Change or grow as a person from the experience.
- ___ Wait to see what will happen before telling anyone.
- ___ Apologize or do something to make up with myself.
- ___ Make a plan of action to deal with the diagnosis.
- ___ Accept what has happened.
- ___ Let my feelings out somehow.
- ___ Realize I brought the problem on myself.
- ___ Talk to someone who could do something concrete to help me deal with the diagnosis.
- ___ Get away from my feelings; try to rest or take a vacation and forget.
- ___ Try to make myself feel better by eating, drinking, smoking, or using drugs.
- ___ Take a big chance or do something very risky.
- ___ Try not to act with vengeance.
- ___ Find new faith.
- ___ Maintain my pride and keep a stiff upper lip.

- 1 = Will Not Be Used
- 2 = Will Use Somewhat
- 3 = Will Use Quite a Bit
- 4 = Will Use a Great Deal

- ___ Rediscover what is important in life.
- ___ Avoid being with people in general.
- ___ Don't let it get to me; refuse to think too much about it.
- ___ Ask a relative or a friend for advice.
- ___ Keep others from knowing how bad things are.
- ___ Make light of the situation; refuse to get too serious about it.
- ___ Talk to someone about how I am feeling.
- ___ Tell everyone what has happened.
- ___ Take it out on other people.
- ___ Draw on my past experiences for strength; I was in a similar situation before.
- ___ I know what has to be done to deal with this, so I double my efforts to get things back to normal.
- ___ Refuse to believe that it has happened.
- ___ Make a promise to myself that things will be different next time.
- ___ Come up with a couple of different solutions as to how to come to terms with myself.
- ___ Accept it, since it has already happened.
- ___ Try to keep my feelings from interfering with other things too much.
- ___ Wish that I could change what has happened or how I feel.

- 1 = Will Not Be Used
- 2 = Will Use Somewhat
- 3 = Will Use Quite a Bit
- 4 = Will Use a Great Deal

- ☐ Change something about myself.
- ☐ Daydream or imagine a better time or place than the one I am in.
- ☐ Wish that the situation will go away or somehow be over.
- ☐ Have fantasies or wish about how things might change.
- ☐ Pray.
- ☐ Wish to die.
- ☐ Prepare myself for the worst reactions.
- ☐ Go over in my mind what I will say or do.
- ☐ Think about how a person I admire would handle this situation and use that as a model.
- ☐ Try to see things from other peoples' point of view.
- ☐ Remind myself how much worse things could be.
- ☐ Jog or exercise.
- ☐ Try something entirely different from any of the above.
- ☐ Decrease personal contact with individuals.
- ☐ Become more selective about partners.
- ☐ Wash more regularly.
- ☐ Use precautions when touching other people.
- ☐ Engage in safer sex.
- ☐ Change the frequency of my sexual activity.
- ☐ Find other physical activities.

- 1 = Will Not Be Used
- 2 = Will Use Somewhat
- 3 = Will Use Quite a Bit
- 4 = Will Use a Great Deal

_____ Do something which I don't think will help, but at least I will be doing something.

_____ Diet.

_____ Inform past partners.

Have you ever been diagnosed with a sexually transmitted disease?

Yes ____ - Please continue.

No ____ - Thank you for completing this questionnaire. Please close the questionnaire, and bring it to the experimenter where you will be given a written debriefing.

If Yes:

What sexually transmitted disease(s) were you diagnosed with?

How long ago were you diagnosed?

Were your answers to this questionnaire a reflection of your own personal experience? Yes ____

No ____

If your responses WERE a reflection of your own experience, in what sense?

If your responses WERE NOT a reflection of your own experience, why not?

Thank you for completing this questionnaire. Please close the questionnaire and bring it to the experimenter where you will be given a written debriefing.

Appendix D

Debriefing

The purpose of the present study is to assess the factors that affect the degree to which women effectively cope with the possibility or reality of contracting an STD. Each of you were given a scenario in which you were diagnosed with one of three severities of STDs. The lowest severity of STDs is curable, in which case you would have been diagnosed with chlamydia, the most prevalent curable STD at present. The next STD severity, namely genital herpes, is incurable and non-life threatening. Approximately 50% of the North American population carries the herpes virus. The greatest STD severity is incurable and life threatening, namely AIDS. It is common for women to erroneously consider themselves invulnerable to the HIV virus and consequently AIDS. HIV is generally associated to men, and thus the symptoms which are looked for are generally not the ones that are typical for women. A changing menstrual cycle, hot flashes, and changes in vaginal discharges are some of the common symptoms in women that are overlooked, because they are also fairly normal health problems for women. All of these STDs are preventable to some degree. Enclosed you will find pamphlets on these diseases, their symptoms, how they are transferred, and information on prevention.

Unfortunately, discussion about sexuality, especially women's sexuality is still considered a taboo subject in society, thus STDs are not talked about either. As a result, victims of STDs do not feel comfortable talking about their disease and hence

may not be as informed as they could be and may feel isolated despite the great incidence of STDs, thus they may have a harder time coping. This silence also creates stereotypes about who gets STDs, as the diversity of people who do get them is hidden. Anyone can contract STDs; it is not a function of cleanliness, sexuality, class, race, or gender. Safer sex is the best preventative measure for those who are sexually active. If people could talk about this subject, not only would the stigmatization of STD victims decrease, but also the awareness that all sexually active individuals are at risk, regardless of who you are or how many partners you have had, would increase.

The questionnaire you filled out assessed communication, knowledge, and behavioural and emotional coping with respect to STDs, your stereotype of women with STDs, and your perception of your own sexual behaviour. It is hoped that the data obtained from your participation in this study will further our understanding with respect to how women cope with STDs.

Thank you for your time, and if you have any further questions please do not hesitate to ask.

Appendix E

Contact Sheet

Should you have any concerns about your participation in this study you are welcome to discuss them with:

Krista Warren (Student researcher; 788-2600, x1434)

Dr. Kim Matheson (Faculty researcher; 788-2600, x7513)

Dr. Lise Paquet (Chair, Department of Psychology Ethics Committee; 788-2600, x2692)

Dr. Bill Jones (Chair, Department of Psychology; 788-2600, x2648).

If you would like more information on: sexually transmitted diseases, how to be tested, how to protect yourself and your partner, or how to cope with an STD or the risk of contracting an STD, you may also wish to contact:

Health Services
6th Floor Unicentre
788-6674

Sexual Health Centre (STD Clinic)
179 Clarence St., Ottawa
234-4641

Counselling & Student Life Services
5th Floor Unicentre
788-6600

Sexual Health Information Line
563-2437 or 1-800-267-7432

Interval House of Ottawa
24 hour help line
234-5181

Appendix F

Factor 1 - Communication

Measures	Loadings
I will tell others what I am going through.	0.71
Talk to someone about how I am feeling.	0.65
Keep my feelings to myself.	-0.63
Let my feelings out somehow.	0.62
Ask a relative or a friend for advice.	0.58
Tell everyone what has happened.	0.56
Get counselling.	0.55
Talk to someone who could do something concrete to help me deal with the diagnosis.	0.48
Tell myself things that help me to feel better.	0.47
Rediscover what is important in life.	0.46
Find new faith.	0.43
Talk to someone to find out about the situation.	0.42
Think about how a person I admire would handle this situation and use that as a model.	0.41
Keep others from knowing how bad things are.	-0.41
Try to see things from other people's point of view.	0.37
Accept sympathy and understanding from someone.	0.36
Wait to see what will happen before telling anyone.	-0.36
Make a promise to myself that things will be different next time.	-0.35
Inform past partners.	0.31

Factor 2 - Cognitive Distancing

Measures	Loadings
Have fantasies or wish about how things might change.	0.66
Daydream or imagine a better time or place than the one I am in.	0.66
Wish that the situation will go away or somehow be over.	0.60
Do something which I don't think will help, but at least I will be doing something.	0.58
Wish that I could change what has happened or how I feel.	0.58
Find other physical activities.	0.55
Change something about myself.	0.55
Change the frequency of my sexual activity.	0.51
Wash more regularly.	0.46
Criticize or lecture myself.	0.45
Go over in my mind what I will say or do.	0.45
Hope a miracle will happen.	0.44
Pray.	0.41
Wish to die.	0.41
Get away from my feelings; try to rest or take a vacation and forget.	0.41
Prepare myself for the worst reactions.	0.39
Become more selective about partners.	0.38
Take a big chance or do something very risky.	0.31
Try something entirely different from any of the above.	0.31

Factor 3 - Acceptance

Measures	Loadings
Try to keep my feelings from interfering with other things too much.	0.60
Refuse to believe that it has happened.	-0.55
Maintain my pride and keep a stiff upper lip.	0.53
Take it out on other people.	-0.51
I know what has to be done to deal with this, so I double my efforts to get things back to normal.	0.49
Decrease personal contact with individuals.	-0.48
Blame the diagnosis on fate; sometimes I just have bad luck.	-0.48
I will concentrate on what I have to do next - the next step.	0.47
Accept what has happened.	0.47
I will try to analyze the diagnosis in order to understand it better.	0.45
Accept it, since it has already happened.	0.45
Change or grow as a person from the experience.	0.45
Make a plan of action to deal with the diagnosis.	0.44
Try to make myself feel better by eating, drinking, smoking, or using drugs.	-0.41
Engage in safer sex.	0.37

Factor 4 - Denial

Measures	Loadings
I will find a bright side to the diagnosis.	0.66
Look for the silver lining, so to speak; try to look on the bright side of things.	0.51
I will turn to work or a substitute activity to take my mind off the diagnosis.	0.50
Draw on my past experiences for strength; I was in a similar situation before.	0.50
Apologize or do something to make up with myself.	0.47
I think that time will make a difference in the way I feel--the only thing to do is wait.	0.47
Don't let it get to me; refuse to think too much about it.	0.45
Make light of the situation; refuse to get too serious about it.	0.44
Try to get the doctor to change his or her mind.	0.44
Remind myself how much worse things could be.	0.44
Try to forget the whole thing.	0.43
Jog or exercise.	0.42
Go on as if nothing has happened.	0.42
Sleep more than usual.	0.30

END

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