University women's experience with and perceptions of premenstrual syndrome.

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University Women's Experience with and Perceptions of Premenstrual Syndrome

by

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B.A., University of Windsor, 1995

A Master's Thesis
Submitted to the Faculty of Graduate Studies and Research Through the Department of Psychology in Partial Fulfillment of the Requirements for the Degree of Master of Arts at the University of Windsor

Windsor, Ontario, 1998
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ABSTRACT

The present investigation examined the relationship between women's self-reports of their experiences with Premenstrual Syndrome and several factors: beliefs about Premenstrual Syndrome, feminist ideology, and adherence to sex roles. One hundred and seventeen undergraduate women completed the questionnaire. Results indicated that feminists experienced more severe symptoms than non-feminists and that the stronger the belief in Premenstrual Syndrome the more severe the symptomatology. There was no effect of sex role orientation on symptomatology. In addition, all except the 16 women who were high in masculinity and low in femininity believed in the existence of Premenstrual Syndrome without skepticism. This subgroup reported similar symptomatology to the other groups, but their subjective interpretation of these symptoms indicated that they felt less negative about Premenstrual Syndrome symptoms than their cohorts. These results were especially true for the 12 self-identified feminists who also rated high in masculinity and low in femininity. Thus, the Premenstrual Syndrome construct appears to have become somewhat of a fact for most undergraduate women. The finding that a group of women, however small, is skeptical about Premenstrual Syndrome suggests that further research into its apparent prevalence is warranted.
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CHAPTER 1

Introduction

Since antiquity, men and women have been aware of menstruation, the most obvious manifestation of the female menstrual cycle (Unger & Crawford, 1992). Various meanings have been attached to menstruation, such as the idea that women were sacred and should be isolated from the community during that time of the month (Fausto-Sterling, 1986; Unger & Crawford, 1992). Although menstruation has been defined negatively by many cultures and religions (Unger & Crawford, 1992), some of these meanings have involved attributions regarding positive changes in the woman herself during menses, such as the notion that women are especially powerful when they are menstruating (Fausto-Sterling, 1986; Unger & Crawford, 1992).

In Western society, however, menstruation seems to have lost whatever positive associations may have existed in the past, and women have been left with a set of primarily negative symptoms attributed to menstruation. "That time of the month" has been blamed for the presumed monthly emotional lability and decreased work performance and energy which make women unsuitable for important jobs and higher education (Fausto-Sterling, 1986). In fact, one goal of the women's movement in the 1960s was to downplay the severity of the symptoms of menstruation and the possibility of a connection between the hormonal fluctuations of menstruation and any emotional or psychological effects (Fausto-Sterling, 1986; Unger & Crawford, 1992). Examination of both popular culture and scientific literature suggests that this goal was achieved. The menstruation portion of the menstrual cycle is no longer advanced as a reason for refusing women admission into various professions or for their presumed emotionality.
Ironically, however, recent advances in the understanding of the less visible components of the menstrual cycle seems to have created a new set of attributions associated not with menstruation itself, but with the portion of the cycle that occurs just prior to menstruation. In 1956, Dalton suggested that women were debilitated by the symptoms they suffered in the week before menstruation due to hormonal fluctuations. Dalton provided evidence that premenstrual women are prone to psychotic episodes, accidents, and abuse of their children and spouses. She christened this cluster of symptoms Premenstrual Tension Syndrome. Although it took some time to catch on, Premenstrual Syndrome, or PMS, had become a part of popular consciousness by the late 1980s, incorporating not only the syndrome itself, but also the notion that most women suffer from and are debilitated by it (Abplanalp, 1983; Fausto-Sterling, 1986; Gurevich, 1995). In 1982, for example, Premenstrual Syndrome was used as a successful defense in Britain when a woman who killed her boyfriend was found not guilty by reason of diminished responsibility due to Premenstrual Syndrome (Abplanalp, 1983). The uncritical acceptance of the existence of Premenstrual Syndrome in North America is also evidenced by jokes about it on t-shirts, radio, television, and among friends (Brooks-Gunn & Ruble, 1980; Chrisler & Levy, 1990; Unger & Crawford, 1992).

While researchers acknowledge the existence of hormonal changes during the premenstruum and the fact that these hormonal changes may have discernible emotional and physical effects on some women, the extent to which these symptoms may be legitimately described as a syndrome has been hotly debated. The medical definition of a syndrome is a cluster of certain symptoms that must occur invariably together whenever a particular set of circumstances occurs (Taber's Cyclopedic Medical Dictionary, 1996). Current research indicates that Premenstrual Syndrome may be characterized by the occurrence of various
emotional (e.g., depression, anger), behavioural (e.g., social withdrawal, crying, provoking fights), and somatic (e.g., headaches, backaches, cramps) symptoms occurring every month approximately one week before the onset of menses (e.g., Abplanalp, 1985). However, due to the variation in the occurrence and timing of these symptoms, critics of the Premenstrual Syndrome construct (e.g., Fausto-Sterling, 1986; Gurevich, 1995; Parlee, 1973, 1995) argue that Premenstrual Syndrome does not meet the criteria required for classification as a syndrome.

Those who support the existence of Premenstrual Syndrome counter-argue that there may be several different subtypes of Premenstrual Syndrome of varying intensity from mild to severe (e.g., Halbreich, Endicott, Schacht, & Nee, 1982). The results of research relying primarily on retrospective self-reports (Gurevich, 1995) indicate that most women experience severe negative emotional, somatic, and behavioural changes during the premenstruum (Brooks-Gunn, 1986). Conversely, critics rely on findings suggesting low prevalence (Fausto-Sterling, 1986), and/or the presence of life-enhancing as well as debilitating symptoms (Chrisler & Levy, 1990).

Regardless of its reality as a syndrome, researchers on both sides of the debate tend to agree that the individual woman's experience of premenstrual symptoms and the attribution of the label "syndrome" to these symptoms is influenced by extra-biological factors (Fausto-Sterling, 1986; Gurevich, 1995; Parlee, 1973, 1995). Some researchers have proposed models incorporating some of these factors. Within these ranks are several competing theories regarding the causes or correlates of Premenstrual Syndrome. Perhaps the most widely known is Koeske's attribution theory of Premenstrual Syndrome. Basing on Schacter and Singer's (1962) arousal theory of emotion, Koeske suggests that the notion of PMS has become a cultural fact and that women have learned to attribute negative feelings and behaviours
retroactively to consequences of the premenstrual phase despite the fact that often the 
behaviours have not taken place during the premenstruum (Koeske, 1980, 1983.) Similarly, 
several authors contend that women may use Premenstrual Syndrome as a coping mechanism 
which allows them to act-out their stress or aggression, then to later claim that it was a result 
of their Premenstrual Syndrome (Harrison, Rabkin, & Endicott, 1985; Mitchell, Woods, & 
Lentz, 1994). However, Koeske and Koeske (1975) conducted a study involving a scenario of 
a woman who was premenstrual or not and whose behaviour in various situations was 
reasonable or unreasonable (profound anger). They found that male and female “observers” 
do not accept the premenstruum as an excuse for bad behaviour and that observers assume 
that the behaviours are the result of a general trait (personality), not a specific state (the 
premenstruum). The effect was particularly strong when the behaviour was extremely 
inappropriate.

Several studies have been conducted regarding a model of Premenstrual Syndrome 
which has been described as “state-dependent” by several researchers (e.g., Barclay, Pettito, 
that women's self-reports of perceived social support varied according to their menstrual 
cycle phase. Their attitudes, mood, stress levels, and perceived social support were worse in 
their premenstrual phase than at any other time of the month even though the stress levels and 
social support had not actually changed. Similarly, Barclay et al. (1991) found that in memory 
tests given after a one-cycle delay from premenstruum to premenstruum, women with self-
reported Premenstrual Syndrome performed at lower levels of accuracy. The effect was 
especially strong when their depressed and angry moods were made salient to them with 
mood inventories.
McFarlane and Williams (1990) noted that some authors (e.g., Hamilton, Parry, Alagna, Blumenthal, & Herz, 1984; Shuttle & Redgrove, 1978) have attempted to explain these findings with an arousal theory of heightened sensory perception such that these self-reports of increased negative mood and physiological symptoms are real. The argument is that women's perception of their state-of-being is heightened, more sensitive, and therefore more accurate during the premenstruum than in other cycle phases. Women may have an increased sense of reality and may become more aware of sources of anger, sadness, and general negative affect so that all of their negative feelings over the last month become more salient during the premenstrual phase (Laws, 1983). This theory has not been tested empirically (McFarlane & Williams, 1990).

An alternative model is that Premenstrual Syndrome provides women with a danger-distress signal. McFarlane and Williams (1990) note that women with dysmenorrhea may look for evidence of an oncoming period in order to prepare for the concurrent pain. A corroborating suggestion that this perspective may be in operation for some women comes from Ruble's (1977) assertion that women who have had embarrassing accidents while menstruating, whose menarche was unexpected or frightening, or whose periods are a particular nuisance or uncomfortable are more likely to report having Premenstrual Syndrome.

Finally, Premenstrual Syndrome has been explained as a faulty coping mechanism for women who feel oppressed or stressed. In fact a review of the literature indicates that stress is the only factor that, whenever considered in research on Premenstrual Syndrome, has been unequivocally linked with reports of symptomatology and self-reports of Premenstrual Syndrome (e.g., Burrage & Schomer, 1993; Chandra & Chaturvedi, 1989; Clare, 1985; Dennerstein, Spencer-Gardner, & Burrows, 1984; Fontana & Pontari, 1994; Gise et al., 1990;

Additional evidence for Premenstrual Syndrome as a faulty coping mechanism comes from several studies in which it was found that symptoms may be alleviated through an improvement in coping strategies (e.g., Abplanalp, 1985; Dennerstein et al., 1984; Heilbrun & Reinert, 1988; Picone & Kirby, 1990.)

While several competing models have been proposed, it seems premature to propose them without the establishment of a few social factors relating to Premenstrual Syndrome. Therefore, the purpose of the present study was to explore some of these factors and their relation to the severity of the Premenstrual Syndrome symptoms that women report. Several specific factors appear to be implicated by past research. Three of these factors, explored in the proposed study, include internalization of cultural images about Premenstrual Syndrome, sex role orientation, and attitudes toward feminism.

**Cultural Images of Premenstrual Syndrome**

Premenstrual Syndrome appears to be a culture-bound, that is, Western culture-specific, phenomenon (Johnson, 1987). That is not to say that women in other cultures do not experience changes during the premenstrual phase. In fact, Gurevich (1995) reported a study conducted by the World Health Organization that found that women in all ten countries of inquiry (unspecified in Gurevich) reported physical and emotional changes during the week before menstruation. However, the women did not regard these symptoms as physically or emotionally debilitating or consider them to be a part of a Premenstrual Syndrome "package." This observation is consistent with Chandra and Chaturvedi (1989) and Johnson (1987) who noted that there is no mention of the term Premenstrual Syndrome, or a synonym for it, anywhere in the world other than in North America and in some European countries. Chandra
and Chaturvedi (1989) speculated that there may be no Premenstrual Syndrome in India due to long-standing practices that sanction women from all household duties and strenuous activity during the premenstrual and menstrual phases of the cycle. Pugliesi (1992) suggested that a similar supportive response operates in Latin America. Whatever the reasons, Premenstrual Syndrome as an accepted "female condition" exists at present only in the West.

The power of Western cultural stereotypes and popular beliefs about Premenstrual Syndrome to influence women's perceived experience of premenstrual symptoms was suggested by Parlee (1980) who undertook a series of three experiments to determine the influence of cultural beliefs on responses to retrospective questionnaires. All respondents completed questionnaires each day for three months and one retrospective questionnaire at the end of the three-month period concerning emotional, somatic, and behavioural experiences. All participants were naive to the menstrual cycle focus of the experiments and questions pertaining to cycle phase were embedded in the questionnaires.

The results indicated that while cyclic fluctuations in symptoms and moods were found on both the retrospective and prospective (day-to-day) measures, the direction differed. That is, women retrospectively reported that negative states such as depressed mood, fatigue, tension, anxiety, and confusion were worse in the premenstrual phase than in other cycle phases. However, the prospective reports indicated that women experienced significant positive changes or improvements in these qualities premenstrually.

Parlee (1973) theorized that retrospective questionnaires are not accurate measures of women's real experiences, but that they may be quite accurate measures of stereotypes about the psychological concomitants of menstruation. It is not known how or whether social beliefs and alleged stereotypes affect women's experiences directly, but these beliefs and stereotypes may influence women's reports of their premenstrual experiences if they have
been incorporated into the women's own belief systems. Support for this notion comes from studies conducted by Brooks, Ruble, and Clarke (1977) and Ruble (1977). In the Ruble (1977) study, women who were led to believe that they would start menstruating within a few days of completing a questionnaire (i.e., that they were premenstrual) reported a higher degree of distressing symptoms than those who were led to believe they were intermenstrual. In fact, all women completed the questionnaires during the intermenstrual cycle phase; hence, no differences should have been obtained. Similarly, in the study conducted by Brooks et al. (1977), when women were asked to rate themselves "as if" they were in a particular cycle phase, they reported more distressing symptoms when they answered as if they were premenstrual than in other cycle phases.

On the premise that demand characteristics may have confounded past research because the menstrual cycle focus was rarely hidden, Gallant, Popiel, Hoffman, Chakraborty, and Hamilton (1992) compared responses of experimentally aware and experimentally naive subjects on 10 Premenstrual Syndrome symptoms. While there was no main effect for awareness versus unawareness, experimentally naive participants who rated themselves as suffering Premenstrual Syndrome did not differ in mood and symptom variables from experimentally naive women who rated themselves as non-sufferers. Further, experimentally aware women who rated themselves as Premenstrual Syndrome-free reported more mood swings than experimentally naive women who described themselves as Premenstrual Syndrome-free. Thus, the literature seems to suggest that knowledge about and acceptance of the validity of cultural beliefs regarding Premenstrual Syndrome symptomatology may affect perceptions and experiences of the premenstruum. To date, however, a survey of the literature did not yield any research in which women were asked directly about their knowledge of and
attitudes about Premenstrual Syndrome as well as their own experiences. Therefore, one purpose of the present study was to undertake this task.

**Sex Role Orientation**

Dennerstein et al. (1984) noted that the relationship between experience of Premenstrual Syndrome and the degree of conformity to traditional female gender roles is unclear. Several studies have shown that women who are married (Corney & Stanton, 1991; Harrison, Endicott, Nee, Glick, & Rabkin, 1989; Kuczmierczyk, Labrum, & Johnson, 1992), with children (Corney & Stanton, 1991; Hunter et al., 1995; Kuczmierczyk et al., 1992), who have less post-secondary education (Harrison et al., 1989), who either do not work outside the home or who work outside the home part-time in traditionally female occupations, for example, subordinate positions (Hunter et al., 1995), and who are generally conservative (Schneider & Schneider-Duker, 1974) are more likely to suffer Premenstrual Syndrome than those who do not fit these categories. In addition, Mitchell et al. (1994) and Woods (1985) found that women who held relatively more traditional attitudes about women's roles, as measured by Spence and Helmreich's 15-item Attitudes Toward Women Scale, experienced more severe Premenstrual Syndrome symptoms than those with relatively less traditional attitudes. These findings are consistent with Gough (1975) who found that women with high femininity scores, as measured by the femininity subscale of the California Personality Inventory, reported the greatest premenstrual distress.

Other researchers, however, have found that women who are more highly educated (Gise et al., 1990; Hunter et al., 1995), and working outside the home especially in more traditionally male occupations and in positions of authority (Gise et al., 1990; Harrison et al., 1989) are more likely to suffer Premenstrual Syndrome. These findings are consistent with May (1976) and Peskin (1968) who found that women with low femininity scores, as
measured by the femininity subscale of the California Personality Inventory, experienced
greater distress than those who had high femininity scores.

Unfortunately, a bipolar scale of sex role orientation was used in only three of the
studies reviewed (i.e., Gough, 1975; May, 1976; Peskin, 1968). In the years since these
studies were conducted, it has been recognized and generally accepted that masculinity and
femininity are orthogonal and that any consideration of sex role must be conducted in this
manner. However, the findings of two of the studies using a bipolar scale were in conflict and
all are somewhat outdated.

Attitudes Toward Feminism

Given the efforts made by feminists in the 1960s to debunk the idea that menstruation
rendered women unfit for positions of responsibility, it would be logical to assume that the
feminist position on Premenstrual Syndrome would be one of unequivocal opposition.
However, there are at least two sides to the feminist position on Premenstrual Syndrome. One
side supports the labeling of premenstrual symptoms as a syndrome because such labeling is
perceived as beneficial to women; the other side believes that identification of another
"female condition" further oppresses women. Within the pro-Premenstrual Syndrome camp,
the "Premenstrual Syndrome is real" faction believes that Premenstrual Syndrome is real and
that to deny its existence is oppressive because women are then denied the professional
attention that they require, and the male-dominated medical establishment can maintain or re-
introduce the old argument that "it's all in their heads" (Fausto-Sterling, 1986). The
alternative pro-syndrome position is that regardless of its classification as a syndrome, the
social acceptance of Premenstrual Syndrome is beneficial to women (Gurevich, 1995)
because they are oppressed in their own homes and in the greater society. Societal values
prevent them from expressing their anger or dismay at this oppression because it is not
ladylike (Dan et al., 1980; Gurevich, 1995; Pugliesi, 1992). Premenstrual Syndrome, they argue, provides women a socially acceptable "safety valve." Once a month, women can express their anger with no repercussions because they can attribute it to Premenstrual Syndrome, thereby denying any responsibility (Johnson, 1987). Note that whether such strategies are effective coping strategies or ineffectual avoidant behaviours is not an issue for this faction. In addition, Harrison et al. (1985) and Hunter et al. (1995) noted that it may be more socially acceptable for a woman to think of her mood problems as a premenstrual phenomenon rather than as a generalized disorder or as symptoms of personal stresses and strains. Sampson (1988; cited in Corney & Stanton, 1991) suggests that Premenstrual Syndrome may be useful for women in simply making others realize that they are having life difficulties and could use some support.

Other feminists, the philosophical heirs to those who fought against the use of menstruation as a means of oppression in the 1960s, deny the validity of Premenstrual Syndrome, arguing that its existence is perpetuated by patriarchal values in society (Fausto-Sterling, 1986; Gurevich, 1995). Those who subscribe to this position contend that women have been made to believe that they suffer a debilitating disorder in order to keep them oppressed (Dan et al., 1980). These researchers argue that acceptance of Premenstrual Syndrome as a reality leads to a self-fulfilling prophecy: women who believe they suffer this "illness" will think that they lack the energy and emotional stability to handle demanding or traditionally male careers and so they will not try for them (Dan et al., 1980).

While these positions are divergent, all of them can be considered as feminist due to the focus on the empowerment of women. Indeed, Dan et al. (1980), Johnson (1987), and Laws (1983) succinctly summarized the paradox in the feminist debate over Premenstrual Syndrome with the statement that on the one hand, Premenstrual Syndrome as a recognized
illness keeps women in a lower status position by labeling them as inherently ill, but on the other hand, women should not be denied this escape from the stresses and strains of their daily lives.

While feminist theoreticians have advanced these positions regarding Premenstrual Syndrome, the relationship between feminist beliefs and Premenstrual Syndrome-related symptoms has not been evaluated for women in general. It has been reported (e.g., Dennerstein et al., 1984; Mitchell et al., 1994) that women who subscribe more strongly to feminist principles experience relatively less severe symptoms than those who are less feminist, a finding consistent with the "traditional" feminist stance on menstruation and Premenstrual Syndrome. However, for female university students born after the demise of the various "menstruation myths" and coming of age with the "new" feminists, it is possible that Premenstrual Syndrome is perceived as empowering women by validating their unique physical characteristics. In this case, stronger feminist beliefs could be equated with stronger endorsement of the idea of Premenstrual Syndrome, and greater self-reported symptom severity.

Hypotheses

The purpose of the present study was to explore the relationships among women's self-reported Premenstrual Syndrome symptoms and their beliefs about Premenstrual Syndrome, their sex role orientation, and their attitudes toward feminism.

In terms of specific hypotheses, it was predicted that:

1. Premenstrual Syndrome symptomatology and belief in Premenstrual Syndrome would be positively correlated.

2. Premenstrual Syndrome symptomatology and feminism would be negatively correlated.
3. Women high in masculine sex role orientation but not in feminine sex role orientation would report significantly less severe Premenstrual Syndrome symptomatology than those who are high or low in both or high only in feminine sex role orientation.

4. Beliefs about Premenstrual Syndrome, sex role orientation, and attitudes toward feminism would be significant predictors of Premenstrual Syndrome symptomatology.
CHAPTER 2

Method

Participants

One hundred and sixteen female undergraduates were recruited from introductory psychology classes at the University of Windsor. Participants signed an informed consent form (Appendix A), were not required to include any identifying information, and were treated in accordance with CPA and APA ethical guidelines.

Measures

Menstrual Distress Questionnaire.

The Menstrual Distress Questionnaire (MDQ) is a retrospective questionnaire designed by Moos (1968; Appendix B.) Respondents rate on a 5-point Likert scale (1 = Not at All, 5 = Very Much) the extent to which they experience, on average, each of 46 symptoms during various menstrual cycle phases. In the present study, participants rated the extent to which they experience these symptoms only in the week before their periods. Moos and Leiderman's (1978) factor analysis of the MDQ yielded eight symptom clusters: pain, concentration, behaviour change, autonomic reactions, water retention, negative affect, positive arousal, and control. The split-half reliabilities for each of the eight factors were all significant and ranged from .74 to .98. Results based on the total scale were not determined. The MDQ has proved to be both reliable and valid in past research (Raja, Feehan, Stanton, & McGee, 1992; van der Ploeg & Lodder, 1993.)

Menstrual Joy Questionnaire.

Of the 46 items on the MDQ, only the five items on the arousal factor/subscale refer to positive changes. For that reason, it was decided to also administer the 10 items which comprise the Menstrual Joy Questionnaire (Chrisler, Johnston, Champagne, & Preston, 1994;
Appendix B.) The original MJQ sample (Chrisler et al., 1994) included 50 female psychology undergraduate students. No reliability or validity statistics were reported in Chrisler et al. (1994), and the scale does not appear to have been used in any subsequent published research. Despite these limitations, the inclusion of positive symptoms seemed warranted, given feminist arguments that the positive physical and emotional symptoms of the menstrual cycle have been systematically denied. In the present study, these items were interspersed with the MDQ items

Beliefs About Premenstrual Syndrome.

This questionnaire was designed by the author to assess participants' knowledge, attitudes, and beliefs about the popular cultural stereotypes that exist about Premenstrual Syndrome (Appendix B and C.) The Facts subscale consisted of 16 statements designed to measure participants' beliefs in various ideas about Premenstrual Syndrome that are supported by at least some researchers as factual, for example, "PMS is related to hormonal imbalance." The Context subscale consisted of three statements designed to measure participants' knowledge about the historical context of Premenstrual Syndrome, for example, "Before the 1980s, most people were not aware of PMS." The Meanings subscale consisted of seven statements designed to measure the symbolic meaning that Premenstrual Syndrome has for the participants, for example, "The label of PMS disempowers women." Last, the Behaviours subscale consisted of six statements designed to measure the respondents' beliefs about how various others should treat women with Premenstrual Syndrome, for example, "Women with PMS should not be allowed into executive positions." Each of the 32 statements on the questionnaire was rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree.)
Feminist Beliefs Scale.

The scale, designed by Fassinger (1994), has an overall alpha of .89 as tested on a sample of 117 male and female university undergraduates (Appendix B.) It contains 10 items rated on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree) pertaining to impressions of the women's movement and feminists themselves. The scale has been used extensively in other published research (e.g., Enns, 1987; Farber, 1993; O'Brien & Fassinger, 1993; as cited in Fassinger, 1994.)

Bem Sex Role Inventory.

The Bem Sex Role Inventory (BSRI; Bem, 1974) was designed to determine the sex role orientation of the participants (Appendix B.) The scale includes 60 adjectives rated on 7-point scales from 1 (Never or Almost Never True) to 7 (Always or Almost Always True). Twenty items pertain to socially desirable masculine behaviours (e.g., self-reliant, aggressive.) Twenty items pertain to socially desirable feminine traits (e.g., yielding, shy.) Finally twenty items are filler items (e.g., secretive, inefficient.) Respondents are asked to rate how true each of these items is about themselves based on how often they behave in this way. Bem (1974) reported acceptable psychometric properties (Masculinity $\alpha = .86$, Femininity $\alpha = .82$.) The scale is regarded as a standard measure of sex role orientation (Unger & Crawford, 1992.)

Personal Experience with Premenstrual Syndrome Scale.

This scale was designed by the researcher to determine the extent to which the participants had exposure to Premenstrual Syndrome, either through their own experience or that of others in their lives such as their mothers, sisters, or co-workers (Appendix B.) It also contains questions as to whether they had heard of Premenstrual Syndrome before completing this study, if they had ever been formally diagnosed with Premenstrual Syndrome, if they
were currently experiencing it, how often they experience it, and whether stress affects it.

Participants were also asked to indicate their age, sexual orientation, and whether or not they were feminists. Finally, an open-ended question solicited any comments about Premenstrual Syndrome that had not already been addressed in the questionnaire.

Procedure

Participants were recruited from Introductory Psychology classes and offered one bonus point toward their class mark as compensation for their time (approximately 45 minutes) if they chose to participate. They were told that the purpose of the study was to study their experiences with and perceptions of the menstrual cycle. Participants were tested in groups of about three to six in a small classroom in the Department of Psychology. They then signed the consent form and completed the questionnaire. Afterwards they were debriefed as to the true purpose of the experiment and the hypotheses and given the opportunity for group discussion of the study.
CHAPTER 3

Results

Pilot Data

Data from 32 undergraduate university women (average age of 22.15 years, range of 18 to 37) were collected and analyzed in order to determine whether modifications to the questionnaire were necessary before proceeding with further data collection. The criteria for an item to be considered problematic was that 50% or more of the responses loaded on one end of the scale and/or the entire range of possible responses was not used.

Examination of the frequency data indicated that most of the items elicited the full range of responses. For 14 of the items on the Beliefs About PMS scale (1, 3, 5, 7, 9, 13, 15, 16, 19, 23, 27, 28, 30, 31), two of the items on the Feminist Beliefs scale (7 and 9), and on all 14 of the positive (Arousal subscale) items on the Symptoms of PMS scale, only three or four of the five possible responses were endorsed and/or 50% or more of the endorsements loaded on one end of the scale. However, the decision was made to retain the Beliefs About PMS items on the basis that they reflected the expected endorsement of stereotypes about Premenstrual Syndrome. The decision was made to retain the Feminist Beliefs scale, unmodified, because it was a previously published questionnaire. The decision was made to retain the Symptoms of PMS scale, unmodified, based in part on the fact that most of the scale was a previously published questionnaire, and also in part on the possibility that the positive items were again eliciting the desired stereotyped responses. Thus, the decision was made to proceed to the experimental data collection with the original questionnaire. For this reason, the decision was also made to include the pilot data in the final sample. Therefore, the results reported from this point on include the data from the 32 women in the pilot study.
**Experimental Data**

**Participant Profile and Preliminary Analyses.**

The average age of the 117 undergraduate women who participated was 22.87 years with a range of 18 to 55. Data for one woman were dropped from the study because she responded to only half the questionnaire items. Thus, the final sample included 116 women.

With regard to sexuality, 110 women described themselves as exclusively heterosexual, one woman described herself as lesbian, two women described themselves as bisexual, and one woman described herself as "other" without explanation. Two women did not answer the question. In addition, 62 women described themselves as feminist, 47 women described themselves as not feminist, and seven women did not answer the question.

With regard to their menstrual cycle, 8.6% reported no pain at all, 20.7% reported slight pain, 31% reported some pain, 25.9% reported pain, and 12.9% reported very painful periods. One woman did not answer this question. In addition, two women said that they were generally not aware at all of their menstrual cycle phase, 14.7% reported slight awareness, 20.7% reported some awareness, 31.9% said that they were aware, and 30.2% reported that they were very aware. Finally, 10.3% described their periods as very irregular, 14.7% as slightly irregular, 16.4% as somewhat regular, 26.7% as regular, and 31% as very regular.

With regard to the Premenstrual Syndrome construct, 97.4% had heard of it and 88.8% knew of someone who has Premenstrual Syndrome. With regard to their personal experience with Premenstrual Syndrome, 89.7% reported that they had experienced at least some symptoms. In addition, while only one woman stated that she had been formally diagnosed as suffering from Premenstrual Syndrome by her psychiatrist, 63.8% believed that they suffered from Premenstrual Syndrome. Concurrently, 9.5% of women said that they had never experienced Premenstrual Syndrome, 9.5% reported that they had only experienced it a
couple of times in their lives, 17.2% a couple of times a year, 33.6% every other month, 27.6% every month, and three woman left the item blank. Furthermore, 66.4% of women reported that there were certain times when their Premenstrual Syndrome was worse and 13.8% said they had a medical condition that made the Premenstrual Syndrome worse (e.g., back injury, cysts on ovaries, etc.) with 3.4% reporting that they suffered endometriosis. In addition, 75.9% reported that stress made their premenstruum worse. Finally, 9.5% of women said that they were currently experiencing Premenstrual Syndrome.

With regard to the independent variables of interest, several chi-square tests were conducted. Prior to conducting chi-square using sex role orientation, each of the four groups were determined following the procedure of Bem (1974). The 20 items regarding masculinity were totaled then averaged by dividing by 20. The same procedure was employed for the femininity subscale. A high masculine-high feminine classification included participants whose masculinity and femininity subscales both averaged to 4.95 and above, low masculine-low feminine included participants whose masculinity and femininity subscales averaged to less than 4.95 each, low masculinity-high femininity included those whose masculinity average was less than 4.95, but whose femininity average was 4.95 and above, and, lastly, high masculine-low feminine individuals included those whose masculinity average was 4.95 and above, but whose femininity average was less than 4.95.

The significant chi-square test for sex role orientation reflected the fact that most women rated themselves as low masculine-high feminine (N = 43), followed by high masculine-high feminine (N = 36), then low masculine-low feminine (N = 20), and finally the fewest women were found in the high masculine-low feminine group (N = 17). χ²(3, N = 116) = 16.21, p < .001. There were significantly more low masculine-high feminine women in the group than low masculine-low feminine women and high masculine-low feminine
women. In addition, chi-square for self-defined feminism and having Premenstrual Syndrome or not indicated that significantly more feminists than non-feminists believed they suffered from Premenstrual Syndrome and that approximately an equal number of feminists and non-feminists believed they did not suffer from Premenstrual Syndrome, \( \chi^2 (1, N = 109) = 6.22, p < .05 \) (see Table 1 for the frequencies and percentages).

**Scale Integrity.**

Prior to analysis the 14 positively-worded statements (7, 8, 14, 17, 23, 26, 29, 35, 36, 40, 43, 44, 50, and 54) on the Symptoms of PMS scale were recoded so that higher scores indicated stronger negative symptoms. Reliability analyses were conducted on the eight factors/subscales identified in Moos (1968); reliability was also assessed for the Menstrual Joy Questionnaire (MJQ) items in combination with the Arousal subscale. These analyses yielded acceptable alpha levels for all scales (i.e., \( \alpha \geq .65 \)): Pain \( \alpha = .81 \), Concentration \( \alpha = .87 \), Behaviour Change \( \alpha = .79 \), Autonomic Reactions \( \alpha = .76 \), Water Retention \( \alpha = .65 \), Negative Affect \( \alpha = .89 \), Control \( \alpha = .78 \). The Arousal subscale by itself had an alpha of .67. In combination with the MJQ items, the Arousal subscale alpha increased to .86. Therefore, the Arousal subscale and the items from the Menstrual Joy Questionnaire, hereafter referred to as the Positive Arousal subscale, were combined in further analyses.

Factor analysis of the Beliefs About PMS scale items indicated that the actual factors did not correspond to the four a priori subscales (Facts, Context, Meanings, Behaviour) intended by the author. The seven-factor solution initially obtained was considered unacceptable for a 32-item questionnaire. An inter-item correlational analysis indicated that six items (3, 4, 5, 7, 9, 16) did not correlate significantly with other items, therefore they were not included in subsequent analyses. Results of a subsequent factor analysis yielded four
Table 1

Frequencies of Women Reporting Self-Defined Feminism and Having PMS or Not.

<table>
<thead>
<tr>
<th>Have PMS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N (%)</td>
</tr>
<tr>
<td>Yes</td>
<td>46 (42.2)</td>
</tr>
<tr>
<td>No</td>
<td>24 (22)</td>
</tr>
<tr>
<td>Total</td>
<td>70 (64.2)</td>
</tr>
</tbody>
</table>
factors (Appendix C.) The Social Construction factor included 16 items reflecting popular rather than empirically-based notions about the symptoms of Premenstrual Syndrome (e.g., "Women with PMS make irrational decisions"), and value judgments of women's behaviour (e.g., "It is wrong for women to use PMS as an excuse for bad behaviour") and how they should be treated (e.g., "Women who call in sick for PMS should have paid sick days"). The Belief in Symptoms factor included 6 physiological and emotional items with some empirical basis (e.g., "Women with PMS gain weight in the week before their period" and "Women with PMS feel depressed in the week before their period"). The Specialized Knowledge factor included 3 items that required a relatively sophisticated level of knowledge about Premenstrual Syndrome (e.g., "Before the 1980s, most people were not aware of PMS"). Finally, the Western Culture factor consisted of one item: "Only women from Western cultures experience PMS," as the factor analysis yielded an eigenvalue of 13.34 for this item alone.

Although the Cronbach alpha for Belief in Symptoms was .81, Social Construction and Specialized Knowledge alphas were .45 and .37, respectively. Given that the scale is in a very preliminary stage of development, these factors were not expected to be particularly reliable especially considering the small numbers of items in each subscale. For these reasons, the subscales were retained in subsequent analyses.

Prior to analysis of the Feminist Beliefs scale, items 2, 5, 7, and 9 were recoded such that a higher score represented stronger feminist beliefs. Cronbach's alpha for the total Feminist Beliefs scale was .77. T-tests also indicated that self-identified feminists held significantly stronger feminist beliefs ($M = 3.76$) according to the scale than self-identified non-feminists ($M = 3.18$), $t(107) = 6.15$, $p < .001$. 

A forced three-factor solution factor analysis on the Sex Role Orientation scale yielded factors similar to the published Bem Sex Role Inventory (BSRI; Bem, 1974). Factor 1 (eigenvalue = 8.87) absorbed most of the Masculinity items, Factor 2 (eigenvalue = 6.20) absorbed most of the Femininity items, and Factor 3 (eigenvalue = 3.88) absorbed most of the filler items. The Cronbach's alpha on the Masculinity subscale yielded was .85 and on the Femininity subscale, $\alpha = .76$. Therefore, the BSRI masculinity and femininity subscales were retained in their original form.

**Hypothesis Testing.**

The first hypothesis was that Premenstrual Syndrome symptomatology and belief in Premenstrual Syndrome would be positively correlated. Correlational analyses of the relationship between symptomatology and beliefs in the stereotypes about Premenstrual Syndrome were conducted using the factors obtained for both the Symptoms of PMS scale and the Beliefs About PMS scale (Table 2.) Examination of these results provided support for the hypothesis on three of the four factors.

Women who believed more strongly in the socially constructed symptoms, values, and treatment of women with Premenstrual Syndrome (Social Construction) also reported significantly more symptoms in terms of Behaviour, Pain, Negative Affect, and marginally more severe symptoms in the areas of Autonomic Reactions and Control. Women who believed more strongly in the symptoms of Premenstrual Syndrome that were somewhat supported empirically (Belief in Symptoms) also reported significantly more severe symptoms on all seven negative symptom categories. In contrast, women who more strongly believed that "Only women from Western cultures experience PMS" (Western Culture) reported significantly more Positive Arousal, significantly less negative Behaviour symptoms,
Table 2

Correlations between Beliefs About PMS factors and Symptoms of PMS factors.

<table>
<thead>
<tr>
<th>Symptoms of PMS</th>
<th>Social Construction</th>
<th>Belief in Symptoms</th>
<th>Special Knowledge</th>
<th>Western Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Arousal</td>
<td>-.07</td>
<td>-.13</td>
<td>-.08</td>
<td>.20*</td>
</tr>
<tr>
<td>Autonomic Reactions</td>
<td>.18#</td>
<td>.27***</td>
<td>.09</td>
<td>-.16</td>
</tr>
<tr>
<td>Behaviour</td>
<td>.21*</td>
<td>.31****</td>
<td>.08</td>
<td>-.19**</td>
</tr>
<tr>
<td>Concentration</td>
<td>.15</td>
<td>.35****</td>
<td>.03</td>
<td>-.12</td>
</tr>
<tr>
<td>Control</td>
<td>.18#</td>
<td>.18*</td>
<td>.03</td>
<td>-.17#</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>.26****</td>
<td>.48****</td>
<td>.08</td>
<td>-.12</td>
</tr>
<tr>
<td>Pain</td>
<td>.20*</td>
<td>.37****</td>
<td>.07</td>
<td>-.16#</td>
</tr>
<tr>
<td>Water Retention</td>
<td>.17</td>
<td>.30***</td>
<td>.13</td>
<td>-.03</td>
</tr>
</tbody>
</table>

#p < .10, *p < .05, **p < .01, ***p < .005, ****p < .001
and marginally less negative Control, and Pain symptoms. On the one factor which did not support the hypothesis, women who had more specialized knowledge about Premenstrual Syndrome (Special Knowledge) did not differ from women who had less specialized knowledge on any of symptomatological scales. However, analysis of the response frequencies for these items indicated a probable “floor” effect, in that most women lacked that specialized knowledge. Only nine women strongly agreed that “Before the 1980s, most people were not aware of PMS,” 28 women strongly agreed that “PMS is related to a hormonal imbalance,” and 10 women strongly agreed that “PMS has been used successfully as a defense against murder.”

The second hypothesis, that Premenstrual Syndrome symptomatology and feminism would be negatively correlated, was directly contradicted. Correlational analyses of the Symptoms of PMS subscales with the Feminist Beliefs scale yielded non-significant results for all subscales. Comparison of women who rated themselves as feminists with those who rated themselves as non-feminists produced significant results, but in the direction opposite to that predicted. The findings indicated that, at least for some symptoms, self-identified feminists experience more severe symptomatologies than non-feminists. Feminists experienced significantly more severe Autonomic Reactions (M = 2.35 versus M = 1.99), t(106) = 2.13, p < .05, Negative Affect (M = 3.40 versus M = 2.94), t(106) = 2.19, p < .05, and Water Retention (M = 3.11 versus M = 2.66), t(106) = 2.25, p < .05, than non-feminists. No significant or marginally significant differences occurred for Positive Arousal, Behaviour, Concentration, Control, or Pain. Given these results, the decision was made to include self-defined feminism rather than the Feminist Beliefs scale in subsequent analyses.

The third hypothesis was that women high in masculine sex role orientation but not in feminine sex role orientation would report significantly less severe Premenstrual Syndrome
symptomatology than those who were high or low in both or high in only feminine sex role orientation. Analyses of variance were conducted for the effects of sex role orientation on each of the eight symptom subscales. None of the analyses were significant and the hypothesis was rejected.

Although the relationship between stress and Premenstrual Syndrome symptomatology was not the subject of theoretical conjecture or hypothesizing in the present study, the decision was made to explore such a relationship prior to conducting the regression analyses. T-tests indicated that, overall and not unexpectedly, women who reported that stress made their menstrual cycles worse also reported more negative symptomatology than those unaffected by stress. Specifically, women who were affected by stress reported significantly more Behavioural changes ($M = 2.77$) than those who were not affected ($M = 2.24$), $t(111) = 2.37, p < .05$. Similar marginally significant effects were observed for Concentration ($M = 2.22$ and $M = 1.85$, $t(109) = 1.81, p < .10$), Control ($M = 1.97$ and $M = 1.57$, $t(108) = 2.22, p < .05$), Negative Affect ($M = 3.35$ and $M = 2.58$, $t(110) = 3.22, p < .01$), and Pain ($M = 3.59$ and $M = 2.67$, $t(110) = 4.20, p < .001$). There were no significant effects of stress for Positive Arousal, Autonomic Reactivity, or Water Retention.

The fourth hypothesis was that beliefs about Premenstrual Syndrome, sex role orientation, and attitudes toward feminism would be significant predictors of Premenstrual Syndrome symptomatology. Consequent to the prior analysis, it was also expected that stress would be a significant predictor of Premenstrual Syndrome symptomatology. Multiple regression analyses were conducted on each of the Symptoms of PMS subscales to identify the relative strength of these variables as predictors (see Table 3). The results indicated that Belief in Symptoms accounted for significant variance and was related to more severe symptomatology on Autonomic Reactions, Behaviour, Concentration, Negative Affect,
Table 3

Multiple Regression Results: Beliefs About PMS Factors, Feminism, Sex Role Orientation, and Stress regressed on Symptoms Subscales.

<table>
<thead>
<tr>
<th>Symptoms Subscale</th>
<th>$R^2$</th>
<th>Variance Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Arousal</td>
<td>.0700</td>
<td>7%</td>
</tr>
<tr>
<td>Autonomic Reactions</td>
<td>.1769</td>
<td>17.69%</td>
</tr>
<tr>
<td>Behaviour</td>
<td>.2644</td>
<td>26.44%</td>
</tr>
<tr>
<td>Concentration</td>
<td>.1902</td>
<td>19.02%</td>
</tr>
<tr>
<td>Control</td>
<td>.1342</td>
<td>13.42%</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>.3483</td>
<td>34.83%</td>
</tr>
<tr>
<td>Pain</td>
<td>.2783</td>
<td>27.83%</td>
</tr>
<tr>
<td>Water Retention</td>
<td>.1741</td>
<td>17.41%</td>
</tr>
</tbody>
</table>

Note: $^a$ Belief in Symptoms is significant, $^b$ Self-defined Feminism is significant, $^c$ Western Culture is significant, $^d$ Stress is significant, $^e$ Femininity is significant.
Pain, and Water Retention. Self-defined feminism accounted for significant variance and was related to more severe symptomatology on Autonomic Reactions, Behaviour, Concentration, Control, Negative Affect, Pain, and Water Retention. Western Culture accounted for significant variance and was related to less severe symptomatology on Positive Arousal, Autonomic Reactions, Behaviour, Control, Negative Affect, and Pain. Stress accounted for significant variance and was related to more severe symptomatology on Behaviour, Control, Negative Affect, and Pain. Finally, stronger adherence to traditional femininity accounted for significant variance and was related to more severe Behaviour change. Masculinity, Special Knowledge, and Social Construction did not account for any of the variance on any of the eight symptom subscales.

**Exploratory Analyses.**

The hypothesized relationships in the present study were based on the assumption that feminism, sex role orientation, and beliefs about Premenstrual Syndrome were orthogonal variables, each of which would exert an effect on perceived symptomatology. A plausible alternative model is that beliefs about Premenstrual Syndrome mediate the relationship between feminism and sex role orientation, and experience of Premenstrual Syndrome symptomatology. In order to explore this possibility, 2 (self-professed feminism versus non-feminism) x 4 (high masculine-high feminine, high masculine-low feminine, low masculine-high feminine, low masculine-low feminine) analyses of variance were conducted on the four Beliefs About PMS factors (Social Construction, Belief in Symptoms, Specialized Knowledge, and Western Culture.)

Results of these analyses indicated no main or interaction effects for Social Construction or Specialized Knowledge. However, the analysis of variance for Western Culture indicated a significant main effect for feminists versus non-feminists, $F(1, 108) =$
4.56, $p < .05$, with self-identified feminists more likely to believe in this factor ($M = 1.69$) than non-feminists ($M = 1.26$). There was also a significant main effect for sex role, $F(3, 108) = 6.76, p < .05$. Women who most strongly believed that only Western women experienced Premenstrual Syndrome were women who scored high in masculinity, but low in femininity ($M = 2.13$), followed by women who were low in both ($M = 1.60$), then low masculine-high feminine women ($M = 1.38$), and lastly women who were high in both ($M = 1.31$; see Table 1 for the frequencies.) Post hoc Tukey hsd tests indicated that the true differences existed between the high masculine-low feminine group and the high-in-both and low masculine-high feminine groups.

Examination of the means that contributed to the significant main effects for feminism and sex role orientation suggests that the most “skeptical” group, those who were most likely to believe that Premenstrual Syndrome is limited to Western women, were high masculine-low feminine feminists. In fact, examination of the means for the marginally significant interaction ($F(1, 107) = 5.08, p < .10$) confirms this supposition. The belief that only Western women experience Premenstrual Syndrome was held most strongly by high masculine-low feminine feminists, followed by low masculine-low feminine non-feminists, low masculine-low feminine non-feminists, low masculine-high feminine feminists, high-in-both feminists, low masculine-high feminine non-feminists, high-in-both non-feminists, and lastly high masculine-low feminine non-feminists (see Table 4 for the means.) Post hoc Tukey hsd tests indicated that there were no true significant differences among the groups.

Finally, there was a marginally significant main effect for sex role on Belief in Symptoms, $F(3, 108) = 3.61, p < .10$. The strongest beliefs were exhibited by women who were low in both masculinity and femininity ($M = 3.83$), followed by women who were high in both ($M = 3.74$), then women who were low in masculinity, but high in femininity ($M = 3.57$),
Table 4

Mean responses on Beliefs About PMS factors by Sex Role Orientation.

<table>
<thead>
<tr>
<th>Belief About PMS</th>
<th>HiHi</th>
<th>HiMasc LoFem</th>
<th>HiFem LoMasc</th>
<th>LoLo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Construction</td>
<td>2.75</td>
<td>2.70</td>
<td>2.71</td>
<td>2.78</td>
</tr>
<tr>
<td>Belief in Symptoms</td>
<td>3.74</td>
<td>3.25</td>
<td>3.57</td>
<td>3.83</td>
</tr>
<tr>
<td>Special Knowledge</td>
<td>3.15</td>
<td>3.08</td>
<td>2.79</td>
<td>3.12</td>
</tr>
<tr>
<td>Western Culture</td>
<td>1.31</td>
<td>2.13</td>
<td>1.38</td>
<td>1.60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>16</td>
<td>37</td>
<td>20</td>
<td></td>
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</tbody>
</table>
then lastly by women who were high in masculinity, but low in femininity ($M = 3.25$.) Post hoc Tukey hsd tests indicated that the true differences occurred between the high masculine-low feminine group and the high-in-both and low-in-both groups. There was no main effect for feminism or any interaction effects.

These analyses indicated a pattern in which high masculine-low feminine women differed consistently from the other three groups and, in fact, examination of the comparative rankings of the four groups on the 32 Beliefs About PMS items indicates that on 23 of the items, the high masculine-low feminine group was the most extreme. In all cases, their position was most consistent with relatively less belief in the symptoms (Table 5).
### Table 5

**Rank order for Sex Role Orientation on Beliefs About PMS.**

<table>
<thead>
<tr>
<th>Beliefs About PMS</th>
<th>Subscale and Item Number</th>
<th>High Masc-High Fem</th>
<th>High Masc-Low Fem</th>
<th>Low Masc-High Fem</th>
<th>Low Masc-Low Fem</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Construction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>3</td>
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<tr>
<td>18</td>
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<td><strong>Belief in Symptoms</strong></td>
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<td><strong>Western Culture</strong></td>
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<td>16</td>
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</tbody>
</table>
CHAPTER 4

Discussion

The results of the present study suggest that the concept of Premenstrual Syndrome is here to stay. Undergraduate women at the University of Windsor would seem to believe overwhelmingly in its reality as a “disease.” The facts that 113 of the 116 participants had heard of Premenstrual Syndrome, that 90% reported experiencing at least one symptom, and that 66% believed they have it, support this conclusion and are indicators of the pervasiveness of the Premenstrual Syndrome construct.

Further, self-identified feminists seem to be more convinced of its existence than non-feminists. Contrary to the second hypothesis of the present study and the findings of Dennerstein et al. (1984) and Mitchell et al. (1994), the experience of Premenstrual Syndrome was more prevalent among self-defined feminists than non-feminists. These findings were, however, consistent with the feminist perspectives that either Premenstrual Syndrome is real and we should help make life with the illness more comfortable (Fausto-Sterling, 1986), or that regardless of whether Premenstrual Syndrome is fact or fiction, women need an outlet to cope with their generalized and idiosyncratic stress (Gurevich, 1995.) It appears, then, that the “new” feminists at the University of Windsor who are now coming of age may have associated Premenstrual Syndrome with empowerment in terms of its validation of uniquely female physiological characteristics, rather than as invalidating and even oppressive (Dan et al., 1980.)

There did, however, appear to be a small proportion (n = 16; 7.5%) of the undergraduate women who seem to be at least somewhat skeptical of the Premenstrual Syndrome construct. The results of the exploratory analyses of the relationship between sex role orientation and belief in the stereotypes about Premenstrual Syndrome suggested that
high masculine-low feminine women may not have completely accepted the concept. There was some indication that this may have been especially true for women who concurrently identified themselves as feminists. However, the sample was too small to conduct this analysis reliably. These findings were not surprising considering notions of stereotypical masculine and feminine sex role orientation which, according to the Bem Sex Role Inventory (Bem, 1974) are associated with being analytical, acting as a leader, independence and assertiveness, and being yielding and compassionate, respectively. Thus, the high masculine-low feminine women may have reacted against the dependence implicit in acceptance of Premenstrual Syndrome. These characteristics may have facilitated their skepticism of Premenstrual Syndrome because they have a predisposition to critique information that is presented to them and not to “yield” to it. Furthermore, characteristics regarded as masculine are typically also regarded as strong and instrumental (Unger & Crawford, 1992.) The concept of Premenstrual Syndrome, interpreted as an oppressive and ineffective coping strategy (Fausto-Sterling, 1986; Gurevich, 1995), would therefore not conform to the self-image of high masculine-low feminine women who may want to see themselves and be seen by others as strong and instrumental.

Of this group of 16, the 12 (7%) high masculine-low feminine women who identified themselves as feminists believed even less in the stereotypes about Premenstrual Syndrome. In ideological terms, these women may represent the “anti-Premenstrual Syndrome” camp exemplified and supported by the assertions of Dan et al. (1980) and Gurevich (1995.) Unfortunately, the number of women in this group in the present study was too small to permit further reliable analyses.

Contrary to the third hypothesis, sex role orientation did not affect Premenstrual Syndrome symptomatology. These findings were contrary to the third hypothesis in the
present study and to past research in which a relatively masculine sex role orientation has been associated with more severe symptomatology in some studies (e.g., Gise et al., 1990; Hunter et al., 1995; May, 1976; Peskin, 1968.) Due to the lack of any effect, these results were also contrary to past research in which a relatively masculine sex role orientation was associated with less severe symptomatology (e.g., Gough, 1975; Mitchell et al., 1994; Woods, 1985.)

However, beliefs in the stereotypes about Premenstrual Syndrome did have a relatively consistent effect on symptomatology, a finding that was congruent with the first hypothesis in the present study and with the conjecture of several previous researchers (e.g., Gallant et al., 1992; Gurevich, 1995; McFarlane & Williams, 1990; Parlee, 1973, 1980.) Stronger beliefs in the stereotypes about Premenstrual Syndrome generally were associated with more severe symptomatology. It is interesting that where the findings were not significant across all subscales from the MDQ (Moos, 1968), the effects were specific to those subscales of the MDQ that the review of the literature indicated were the most widely discussed and are presumably those most associated with Premenstrual Syndrome by women in general: Behaviour, Negative Affect, and Pain. It should not be surprising, however, that stronger belief in the symptomatology (Belief in Symptoms empirically reported) would be associated with more severe symptomatology since it seems logical that one would not report symptoms if one did not believe in them. What was interesting, however, was the finding that belief in socially constructed symptoms (Social Construction of symptoms not necessarily empirically reported) were also associated with more severe symptomatology for all the subscales. This suggests that the women were not equipped with the knowledge necessary to distinguish between empirically supported symptoms and those that remain conjecture. This notion is consistent with those of several authors (e.g., Chrisler & Levy, 1990; McFarlane & Williams,
1990; Pugliesi, 1992) that the media tend to present research on Premenstrual Syndrome as factual without disclaimers or caveats even for research that is directly contradictory. A woman who thinks that she needs help may be, therefore, forced to consider all information as factual in the desperation to find an answer.

Finally, the finding that only belief that Western women alone experience Premenstrual Syndrome was associated with positive symptoms and less severe symptomatology suggests that this notion should be considered in future research on attitudes and beliefs about Premenstrual Syndrome. Furthermore, educating women on this matter may ease their suffering.

The predictive ability of belief in the stereotypes about Premenstrual Syndrome, feminism, sex role orientation, and stress indicated that these factors accounted for a relatively small portion of the variance in symptomatology. However, the findings indicated a pattern in that they accounted for a significant amount of variance for the MDQ subscales which seemed to have been mostly widely discussed in the review of the literature and, again, are presumably those most associated with Premenstrual Syndrome by women: Behaviour, Negative Affect, Pain, and Water Retention. Furthermore, very few of the predictors reliably accounted for symptomatology. However, the belief that only Western women suffer Premenstrual Syndrome, where significant, was associated with less severe symptomatology, but, unfortunately, few women agreed with the notion that only Western women experience Premenstrual Syndrome.

Feminism and stress, where significant, appeared to be associated with more severe symptomatology. The relationship between feminism and symptomatology was not surprising considering the findings from earlier analyses, neither was that between stress and symptomatology considering previous analyses and the literature review (e.g., Burrage &
Schomer, 1993; Chandra & Chaturvedi, 1989; Clare, 1985; Dennerstein, Spencer-Gardner, & Burrows, 1984; Fontana & Pontari, 1994; Gise et al., 1990; Hunter, Swann, & Ussher, 1995; Kuczmierczyk, Labrum, & Johnson, 1992; McFarlane & Williams, 1990, 1994; Metcalf, Braiden, & Livesey, 1992; Warner & Bancroft, 1990.) Sex role orientation generally did not account for any variance in symptomatology. Again, this was not surprising based on previous discussion. That in mind, perhaps the regression analyses in this study were somewhat premature and naive and should not have been expected to account for a considerable portion of the variance based on the earlier analyses. Perhaps other social factors must be considered in future research such as marital status and parity (e.g., Hunter, Swann, & Ussher, 1995; Woods, 1985.) In addition, based on the responses to the final open-ended question, other useful information may include questions regarding their exercise and eating habits, and whether or not they take the birth control pill. In fact, these have been implicated in past research to exert some influence in the experience of Premenstrual Syndrome symptoms (Parlee, 1973; Unger & Crawford, 1992.)

Other concerns included the small sample size which impeded the more complex analyses. In addition, the recruitment method may have eliminated some potential participants due to the mention of the menstrual cycle focus. The finding that over 70% of the women in the sample defined themselves as feminists is suggestive of a selection bias. In fact, in Fassinger’s (1994) normative sample less than half of the women were classified as feminists. Thus, perhaps feminists tended to more interested in this study upon recruitment, or perhaps which would constitute a selection bias, or optimistically, more women may feel free nowadays at the University of Windsor to identify themselves as feminists. It is also possible that feminism is on the rise.
Furthermore, the psychometric properties for two of the scales were less than optimal. The Beliefs About PMS scale was piloted in the current study and was not expected to be highly structurally sound. Indeed, for the most part, it was not. However, the Belief in Symptoms subscale demonstrated reliability and construct validity and is relatively acceptable as is. Reliability analyses were not possible for the single-item Western Culture subscale; however, construct validity was demonstrated for it as well, and the consistency with which this variable was significantly related to other variables suggests that it is also acceptable as is. The Social Construction and Special Knowledge subscales, on the other hand, presented with poor reliability and construct validity. The former 16-item subscale needs much future refining, whereas the three-item Special Knowledge subscale may prove acceptable with the addition of more items. Furthermore, the rank order suggests that some of these items should be recoded in future research due to the variation of high and low rank order within the Social Construction and Special Knowledge subscales. Perhaps rank ordering these items earlier in the analyses would have aided in this determination in a more timely manner.

Furthermore, another look at the Feminist Beliefs Scale (Fassinger, 1994), bearing in mind the difference in analyses depending on whether responses from the scale or self-defined feminism were used, suggests that despite its relatively recent publication, it does not encompass a broad range of feminist perspectives. In hindsight, this scale may have been too focused on what may be considered a liberal feminist perspective in its emphasis on equality issues (see Unger & Crawford, 1992 for a discussion on various feminist perspectives.) This would render the scale virtually inapplicable to those who subscribe to other feminist perspectives such as radical, Marxist, or cultural feminism which focus more on women's unique characteristics rather than on just including them in the existing structure. Responses
to the open-ended question on the participants' definitions of feminism appeared to support this notion. A perusal of these responses indicated some focus on empowerment of women and recognizing that men and women may be different in some respects, but that these differences should be respected and not ignored.

Finally, directions for future research may involve a more qualitative methodology especially considering the fact that this study was based on the notion of a social construct rather than on universal fact. Social constructs, by definition, are laced with meaning (Unger & Crawford, 1992) and research regarding them should take this fact into account in the design and methodology. For example, future scales regarding the stereotypes about Premenstrual Syndrome, may be developed from interviews with a representative sample on their views about the concept, or determining major themes about it through Q-methodology.

These results are an important first step in identifying what the stereotypes about Premenstrual Syndrome involve and how they affect women's reports of Premenstrual Syndrome symptomatology, rather than by speculation as has been the case in the past. Important future research should be directed to developing a valid and reliable Beliefs About PMS scale analogous to similar published scales regarding attitudes and beliefs about AIDS.

The study can be viewed as an illustration of the acceptance and perpetuation of a social construct. The concept of Premenstrual Syndrome, while undeniably related to a biological phenomenon - menstruation - appears to be additionally influenced and perpetuated by pre-existing values in society and by unsubstantiated pre-existing notions about Premenstrual Syndrome. The finding that some - in fact, very few - women were skeptical about its existence supports this claim. However, regardless of whether Premenstrual Syndrome is a real "illness," the fact remains that for women who believe in it, their suffering is real. Future research may involve determining means through which to
lessen their suffering. Finally, we must work toward a conceptualization of Premenstrual Syndrome, and women’s health in general, that is empowering rather than based on disease and deficit.
References


Appendix A: Consent Form

Consent to Participate

Attitudes About PMS Study

This study is being conducted by Jessica Hamilton in partial fulfillment of the requirements for Master of Arts, under the supervision of Dr. Shelagh Towson, Associate Professor, Department of Psychology. The study is designed to determine university women’s attitudes and experiences regarding Premenstrual Syndrome (PMS). If you consent to participate you will be asked to complete several questionnaires regarding your general beliefs about PMS and related topics.

Completing the questionnaires will take approximately half an hour of your time, and you may be awarded course credit (as permitted by your instructor) toward the class from which you were recruited. Feel free to ask the experimenter any questions at any time. You may also choose not to answer any question(s) and you may withdraw from completing the questionnaire at any time without penalty or explanation. You will not be required to provide any identifying information that could be connected to your responses, so your responses will be kept confidential and anonymous.

If you have any questions or concerns now or after completing the questionnaire you may contact Jessica Hamilton at 253-3000, ext. 2218. You may also contact Dr. Shelagh Towson at ext. 2250. Ethical questions may be addressed to the Chair of that committee, Dr. Sylvia Voelker, ext. 2249. This research has been approved by the ethics committees of the Department of Psychology at the University of Windsor.

If you would like to participate in this research please complete the bottom portion of this form and return it to the experimenter. You may keep the top portion for your records. If you are interested, the results of this study will be available in the Department of Psychology after September 1998.

I have read the above information and consent to participate in the study on Attitudes About PMS.

Name ___________________________ Signature ___________________________

Date ___________________________

Course and Section Number ___________ Instructor’s Name for Course Credit ________________
Appendix B: Measures

Attitudes About PMS Study
Page 1

PART 1
SYMPTOMS OF PMS

Please answer the following portion of this survey according to the degree to which you experience these symptoms during the **week before your period**. There are no right or wrong answers. **Please try to answer each question as honestly as you can and do not dwell on any questions.** Remember that all your responses will be kept confidential and anonymous.

Please use the following rating key to respond to this portion of the survey.

<table>
<thead>
<tr>
<th>Not At All</th>
<th>Not Very Much</th>
<th>Neither</th>
<th>Somewhat, But Not A Lot</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

For each symptom, circle the number from 1 ("Not At All") to 5 ("Very Much") that you feel best describes your experience. Please use 3 ("Neither") as little as possible.

1. Muscle stiffness (P)  
2. Insomnia (CC)  
3. Lowered school or work performance (B)  
4. Dizziness, faintness (AU)  
5. Weight gain (WR)  
6. Crying (NA)  
7. Revolutionary zeal (MJQ)  
8. Affectionate (AR)  
9. Feelings of suffocation (CN)  
10. Headache (P)  
11. Forgetfulness (CC)  
12. Take naps, stay in bed (B)  
13. Cold sweats (AU)  
14. Self-confidence (MJQ)  
15. Skin disorders (WR)  
16. Loneliness (NA)
**Attitudes About PMS Study**  
**Page 2**

**PART 1**  
**SYMPTOMS OF PMS (cont'd)**

Please continue to use the following scale:

<table>
<thead>
<tr>
<th>17. Ordertliness (AR)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. Chest pains (CN)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Cramps (P)</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>20. Confusion (CC)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. Stay at home (B)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. Nausea, vomiting (AU)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. Euphoria (MJQ)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. Painful breasts (WR)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. Anxiety (NA)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. Excitement (AR)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. Ringing in the ears (CN)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. Backache (P)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29. Vibrant activity (MJQ)</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>30. Lowered judgment (CC)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31. Avoid social activities (B)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32. Hot flushes (AU)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33. Swelling (WR)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>34. Restlessness (NA)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35. Creativity (MJQ)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>36. Feelings of well-being (AR)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37. Heart pounding (CN)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38. Fatigue (P)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>
### PART 1
SYMPTOMS OF PMS (cont'd)

Please continue to use the following scale:

<table>
<thead>
<tr>
<th></th>
<th>Not At All 1</th>
<th>Not Very Much 2</th>
<th>Neither 3</th>
<th>Somewhat, But Not A Lot 4</th>
<th>Very Much 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>39. Difficulty concentrating (CC)</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>40. High spirits (MJQ)</td>
<td>1 2 3 4 5</td>
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<td>41. Decreased efficiency (B)</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>42. Irritability (NA)</td>
<td>1 2 3 4 5</td>
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<td>43. Sexual desire (MJQ)</td>
<td>1 2 3 4 5</td>
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<td>44. Bursts of energy, activity (AR)</td>
<td>1 2 3 4 5</td>
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<td>45. Numbness, tingling (CN)</td>
<td>1 2 3 4 5</td>
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<tr>
<td>46. General aches and pains (P)</td>
<td>1 2 3 4 5</td>
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<td>47. Distractible (CC)</td>
<td>1 2 3 4 5</td>
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<tr>
<td>48. Mood swings (NA)</td>
<td>1 2 3 4 5</td>
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<td></td>
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<tr>
<td>49. Blind spots, fuzzy vision (CN)</td>
<td>1 2 3 4 5</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>50. Intense concentration (MJQ)</td>
<td>1 2 3 4 5</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>51. Accidents (CC)</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>52. Depression (NA)</td>
<td>1 2 3 4 5</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>53. Lowered motor coordination (CC)</td>
<td>1 2 3 4 5</td>
<td></td>
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<td></td>
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<tr>
<td>54. Power (MJQ)</td>
<td>1 2 3 4 5</td>
<td></td>
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<tr>
<td>55. Tension (NA)</td>
<td>1 2 3 4 5</td>
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</tbody>
</table>

**Note.** AR = Arousal; AU = Autonomic Reactions; B = Behaviour; CC = Concentration; CN = Control; NA = Negative Affect; P = Pain; WR = Water Retention; MJQ = Menstrual Joy Questionnaire items.
ATTITUDES ABOUT PMS STUDY

PART 2
BELIEFS ABOUT PMS

On the following scale, please indicate the degree to which you agree or disagree with the following statements. Again, there are no right or wrong answers and your responses will be kept confidential and anonymous. Please try to answer as honestly as possible and do not dwell on any questions.

Please use the following rating key to respond to this group of statements.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

For each statement, circle the number from 1 ("Strongly Disagree") to 5 ("Strongly Agree") that you feel best describes your beliefs about Premenstrual Syndrome. Please use 3 ("Neither") as little as possible.

1. Only women from Western cultures experience PMS. (C) 1 2 3 4 5
2. Women with PMS have mood swings in the week before their period. (F) 1 2 3 4 5
3. The label of PMS disempowers women. (M) 1 2 3 4 5
4. Women with PMS feel anxious in the week before their period. (F) 1 2 3 4 5
5. Women who say they have PMS are just trying to avoid their responsibilities at home or at work. (M) 1 2 3 4 5
6. Women with PMS gain weight in the week before their period. (F) 1 2 3 4 5
7. Employers should be allowed to ask potential employees whether they suffer PMS. (B) 1 2 3 4 5
8. Women with PMS feel depressed in the week before their period. (F) 1 2 3 4 5
9. PMS allows women to behave in non-feminine ways. (M) 1 2 3 4 5
10. Women with PMS are irritable in the week before their period. (F) 1 2 3 4 5
11. Women with PMS get cramps in the week before their period. (F) 1 2 3 4 5
12. Women with PMS suffer a great deal physically. (F) 1 2 3 4 5
13. Before the 1980s, most people were not aware of PMS. (C) 1 2 3 4 5
14. PMS is related to a hormonal imbalance. (F) 1 2 3 4 5
15. PMS has been used successfully as a defence against murder. (C) 1 2 3 4 5
16. Women with PMS should be allowed disability pension. (B) 1 2 3 4 5
### Attitudes About PMS Study

**Page 5**

**PART 2**

**BELIEFS ABOUT PMS (cont'd)**

Please continue to use the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

17. Women with PMS suffer a great deal emotionally. (F)  
18. Stress is a major cause of PMS. (F)  
19. Women with PMS should not hold executive positions. (B)  
20. It is wrong for women to use PMS as an excuse for bad behavior. (M)  
21. Women with PMS suffer a great deal psychologically. (F)  
22. Women who call in sick for PMS should have paid sick days. (B)  
23. Women with PMS make irrational decisions. (F)  
24. Women who say they have PMS are just trying to avoid dealing directly with the "real" stresses in their lives. (M)  
25. Women who have PMS are more likely to be married than not. (F)  
26. The government should fund more research on PMS. (B)  
27. Women who work inside the home are more likely to experience PMS than women who work outside the home. (F)  
28. Women who have PMS should be allowed scheduled monthly time off from work. (B)  
29. Women should feel free to act in unfeminine ways once in a while. (M)  
30. Women who have children are more likely to experience PMS than women who do not have children. (F)  
31. Women who behave badly in the week before their periods should be excused for their behavior because they can't help it. (M)  
32. Most women suffer from PMS (even if they don't know it). (F)

**Note.** From the original subscales, B = Behaviour; C = Context; F = Facts; M = Meanings.
PART 3
FEMINIST BELIEFS SCALE

Please use the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. The leaders of the women's movement may be extreme, but they have the right idea.  

2. There are better ways for women to fight for equality than through the women's movement.  

3. More women would favour the women's movement if they knew more about it.  

4. The women's movement has positively influenced relationships between men and women.  

5. The women's movement is too radical and extreme in its views.  

6. The women's movement has made important gains in equal rights and political power for women.  

7. Feminists are too visionary for a practical world.  

8. Feminist principles should be adopted everywhere.  

9. Feminists are a menace to this nation and the world.  

10. I am overjoyed that women's liberation is finally happening in this country.
PART 4
SEX ROLE ORIENTATION SCALE

The following portion of this survey pertains to your personality. Please rate, using the following scale, how well each of the list of personality characteristics is true of you.

1 = Never or Almost Never True
2 = Usually Not True
3 = Sometimes But Infrequently True
4 = Occasionally True
5 = Often True
6 = Usually True
7 = Always or Almost Always True

For each characteristic in the list, enter the number from 1 ("Never or Almost Never True") to 7 ("Always or Almost Always True") onto the line on the right of the item that you feel best describes you.

1. Self-reliant (M)____ 21. Reliable ______ 41. Warm (F) _____
2. Yielding (F) ______ 22. Analytical (M)____ 42. Solemn ______
3. Helpful ________ 23. Sympathetic (F)_____ 43. Willing to take a stand (M)_____
4. Defends own beliefs (M) ______ 24. Jealous _______ 44. Tender (F) _____
5. Cheerful (F) ______ 25. Has leadership abilities (M)______ 45. Friendly ______
6. Moody _________ 26. Sensitive to needs of others (F) _______ 46. Aggressive (M)_____
7. Independent (M)____ 27. Truthful ________ 47. Gullible (F) ______
8. Shy (F) _________ 28. Willing to take risks (M) _________ 48. Inefficient ______
9. Conscientious (M)____ 29. Understanding (F)_______ 49. Acts as a leader (M)_____
10. Athletic (M) _____ 30. Secretive ________ 50. Childlike (F) ______
11. Affectionate (F)____ 31. Makes decisions easily (M)______ 51. Adaptable _______
12. Theatrical _______ 32. Compassionate (F)______ 52. Individualistic_______
Attitudes About PMS Study
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PART 4
SEX ROLE ORIENTATION SCALE (cont’d)

Please continue to use the following scale:
1 = Never or Almost Never True
2 = Usually Not True
3 = Sometimes But Infrequently True
4 = Occasionally True
5 = Often True
6 = Usually True
7 = Always or Almost Always True

13. Assertive (M) ______ 33. Sincere ______ 53. Does not use harsh language (F) ______
14. Flatterable (F) ______ 34. Self-sufficient (M) ______ 54. Unsystematic ______
15. Happy ______ 35. Eager to soothe hurt feelings (F) ______
16. Strong personality (M) ______ 36. Conceited ______ 56. Loves children (F) ______
17. Loyal (F) ______ 37. Dominant (M) ______ 57. Tactful ______
18. Unpredictable ______ 38. Soft-spoken (F) ______ 58. Ambitious (M) ______
19. Forceful (M) ______ 39. Likable ______ 59. Gentle (F) ______
20. Feminine (F) ______ 40. Masculine (M) ______ 60. Conventional ______

Note. M = Masculinity items, F = Femininity items, the rest are filler items.
PART 5
BACKGROUND INFORMATION

The following set of questions pertain to your personal experience with Premenstrual Syndrome and some background information about you.

1. How old are you? ______

2. What is your sexual orientation? (Check one)
   Heterosexual ______  Bi-Sexual ______
   Lesbian ______  Other ______

3. Do you consider yourself to be a feminist?  Yes ______  No ______
   What is your definition of a feminist?

4. Had you heard of Premenstrual Syndrome (PMS) before this study?  Yes ______  No ______

5. Do you know or have you ever known anyone with PMS?  Yes ______  No ______
   If yes, what was that woman's relationship to you (e.g., Mom, sister, friend, co-worker, etc.)? ______

6. How painful are your periods? (Please circle one)
   Not Painful At All  Slightly Painful  Somewhat Painful  Painful  Very Painful
   1 ______  2 ______  3 ______  4 ______  5 ______

7. When was your last period? _______________
   Approximately how many more days is it until your next period? ______
   How aware are you of the phase of your menstrual cycle you are in? (Please circle one)
   Not Aware  Slightly Aware  Somewhat Aware  Aware  Very Aware
   1 ______  2 ______  3 ______  4 ______  5 ______

8. How regular are your periods? (Please circle one)
   Very Irregular  Slightly Irregular  Somewhat Regular  Regular  Very Regular
   1 ______  2 ______  3 ______  4 ______  5 ______

9. Have you ever experienced any of the symptoms of PMS?  Yes ______  No ______
   If yes, which ones?

10. Have you ever been formally diagnosed with PMS? Yes ______  No ______
    If yes, by whom (i.e., was it a general practitioner, psychiatrist, psychologist, nurse, etc.)? ______

11. Do you believe you have PMS?  Yes ______  No ______
Approximately how often do you experience PMS? (Circle the number that best corresponds to you)

<table>
<thead>
<tr>
<th>Never</th>
<th>A Couple of Times In My Life</th>
<th>A Couple of Times A Year</th>
<th>Every Other Month</th>
<th>Every Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Are there certain times when it is worse than others? (Please check one)

Yes _____  No _____  I have never had PMS _____

If yes, when do you feel it is worse?

_________________________________________________________________________

Do you have a medical condition that makes menstruation or other menstrual cycle phases worse sometimes?  

Yes _____  No _____

If yes, what is the medical condition?

_________________________________________________________________________

Have you ever been diagnosed with endometriosis?  

Yes _____  No _____

Does stress make menstruation or other menstrual cycle phases worse sometimes?

Yes _____  No _____

Are you experiencing PMS at this time?

Yes _____  No _____

13. Please use this space to write any comments or opinions that you have about PMS that have not been addressed elsewhere in this questionnaire.

Thank you for participating!
Appendix C: Beliefs About PMS Factors

Social Construction

17. Women with PMS suffer a great deal emotionally.

18. Stress is a major cause of PMS.

19. Women with PMS should not hold executive positions.

20. It is wrong for women to use PMS as an excuse for bad behaviour.

21. Women with PMS suffer a great deal physiologically.

22. Women who call in sick for PMS should have paid sick days.

23. Women with PMS make irrational decisions.

24. Women who say they have PMS are just trying to avoid dealing directly with the "real" stresses in their lives.

25. Women who have PMS are more likely to be married than not.

26. The government should fund more research on PMS.

27. Women who work inside the home are more likely to experience PMS than women who work outside the home.

28. Women who have PMS should be allowed scheduled monthly time off from work.

29. Women should feel free to act in unfeminine ways once in a while.

30. Women who have children are more likely to experience PMS than women who do not have children.

31. Women who behave badly in the week before their periods should be excused for their behaviour because they can’t help it.

32. Most women suffer from PMS (even if they don’t know it).
Belief in Symptoms

2. Women with PMS have mood swings in the week before their period.
6. Women with PMS gain weight in the week before their period.
8. Women with PMS feel depressed in the week before their period.
10. Women with PMS are irritable in the week before their period.
11. Women with PMS get cramps in the week before their period.
12. Women with PMS suffer a great deal physically.

Special Knowledge

13. Before the 1980s, most people were not aware of PMS.
14. PMS is related to a hormonal imbalance.
15. PMS has been used successfully as a defense against murder.

Western Culture

1. Only women from Western cultures experience PMS.

Variables Dropped from Further Analysis

3. The label of PMS disempowers women.
4. Women with PMS have mood swings in the week before their period.
5. Women who say they have PMS are just trying to avoid their responsibilities at home or at work.
7. Employers should be allowed to ask potential employees whether they suffer PMS.
9. PMS allows women to behave in non-feminine ways.
16. Women with PMS should be allowed disability pension.
VITA AUCTORIS

Jessica Hamilton was born on October 23, 1971 in Windsor, Ontario. She graduated from General Amherst High School in Amherstburg, Ontario in 1990. She received her honours B.A. in 1995 from the University of Windsor. In 1996 she began graduate studies in the applied social psychology program at the University of Windsor, and will graduate with a Master’s degree in Fall 1998.