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SOCIALLY DEFINED "PMS"

by

Lora J. Bertelsen
Master of Education, North Dakota State University, 1993

A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

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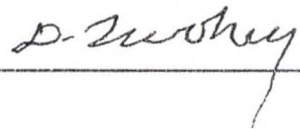
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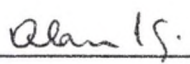
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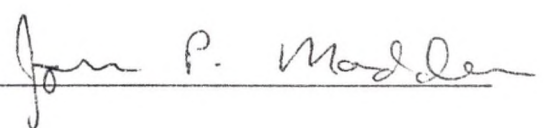
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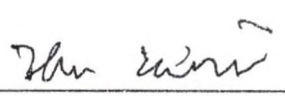


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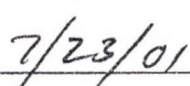




This dissertation meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.



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Department: Counseling

Degree: Doctor of Philosophy

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To My Father
Charles T. Bertelsen

ABSTRACT

No agreed upon definition for "PMS" exists. This study was designed to explore the conceptualizations of the expression "PMS" held by college students. It was hoped that results would inform not only assessment and treatment of premenstrual disorders, but also the debate regarding inclusion in future diagnostic and statistical manuals of the American Psychiatric Association.

Participants included 47 college students recruited from freshman English classes at a small university in the Midwestern United States. Thirty female and 17 male participants were primarily Caucasian (43), single (36), and heterosexual (45). Each participant completed an in-class essay, an adjective checklist, and a questionnaire. The study was conducted within a social constructionist paradigm using a qualitative design and methodology.

Content analysis of student essays indicated participants often associated PMS and bad biology. Women also associated PMS with having a bad day, unpleasant mood changes, and feeling like a victim. Men tended to focus on their own inconvenience, and expressed resentment over a perceived a double standard in which PMS was used by women as an excuse for bad behavior.

Sixty-eight percent of participants claimed to be in a close relationship with one or more persons they believed had PMS. Ninety-three percent of females reported they

believed they had PMS, yet only 20% reported seeking treatment. Participants most frequently selected “irritated”, “agitated”, and “annoyed” to describe a person with PMS.

It is argued that the expression PMS is used to describe not only the normal menstrual cycle, but also perceptions of luck, emotions, behaviors and social interactions. PMS is socially constructed in a such a way that women’s biology is problematic, abnormal, and overwhelmingly negative. In addition, the expression PMS is used so broadly that its usefulness as a descriptor is questioned.

Clinicians are encouraged to carefully identify what clients mean when they complain of PMS, and offer differential treatment options depending on their specific complaints. Authors of future editions of the Diagnostic and Statistical Manual of the American Psychiatric Association should take great care to differentiate between the broad and descriptively useless expression “PMS,” and the diagnostic criteria for Premenstrual Dysphoric Disorder.

CHAPTER I

INTRODUCTION

No agreed upon definition of premenstrual syndrome (PMS) exists (Figert, 1996; Golub, 1992; Rittenhouse, 1991; Rodin, 1992; Smith & Schiff, 1993). No agreement exists as to what symptoms or what level of symptom severity constitutes "PMS" (Chrisler & Levy, 1990; Figert, 1996; Golub, 1992; Rittenhouse, 1991; Rodin, 1992). In both research and popular literatures the terms "menstrual symptoms", "premenstrual symptoms", "premenstrual syndrome", "PMS", and "Premenstrual Dysphoric Disorder" are often used interchangeably. There is even a lack of consensus as to when "PMS" occurs in the menstrual cycle (Rodin, 1992).

Smith and Schiff (1993), editors of a medical guide for managing patients with premenstrual syndrome asserted that:

Literally dozens of papers include statements such as "the etiology of premenstrual syndrome is unknown" and "agreement on definition and criteria are needed." Clinicians, researchers, and patients have been confused and frustrated by the lack of consensus as to definition, diagnosis, etiology, and treatment (p. xi). The lack of a clear definition has made studies of "PMS" impossible to compare (Rodin, 1992).

Prevalence rate estimates of "PMS" reported in the popular press have ranged from five percent to 90%, with most articles estimating the percentage of women with

“PMS” to be between 30% to 60% (Chrisler & Levy, 1990). Gath, Osborn, Bungay, Iles, Day, Bond and Passingham (1987) found that 95% of their clinical research sample reported premenstrual symptoms, eight percent reported the symptoms interfered with functioning, and only two percent stated that symptoms seriously interfered with social or occupational functioning. It has appeared that a majority of reproductive age women experience some physical or psychological discomfort in association with the menstrual cycle. However, a very small percentage of women have reported experiencing a cluster of symptoms premenstrually which would be severe enough to be labeled as a premenstrual disorder (Golub, 1992; Raush & Parry, 1993; Severino & Moline, 1989).

Many causes are hypothesized, but reviews of the literature have not supported any one etiology (Severino & Moline, 1989). Over 50 treatments have been used for premenstrual symptoms, premenstrual syndrome, and Premenstrual Dysphoric Disorder, but none of them have been proven at this time (Severino & Moline, 1989). Articles in the popular press have offered conflicting recommendations for treatment (Chrisler & Levy, 1990). Placebo rates for medical treatments have been reported between 50 and 90% (Severino & Moline, 1989). Over 50% of women have reported some relief from the least intrusive treatment methods (e.g., change in diet and exercise) (Rausch & Parry, 1993).

Due to the lack of consensus on the definition, etiology, and treatment there has been disagreement on which discipline is best suited to research and treat a premenstrual syndrome (Rodin, 1992). Dalton (1999) argued that premenstrual syndrome (a concept she originally named) is a hormonal disease and should therefore be treated by endocrinologists. She also offered the opinion that premenstrual syndrome is not an issue

appropriate for psychologists (Dalton, 1999). In fact, the most recent version of her classic self-help manual, Once a Month, contained a chapter titled, “Highjacked by the Psychologists” (Dalton, 1999, p. 97). In the chapter she complained that the inclusion of a premenstrual disorder in the Diagnostic and Statistical Manual (APA, 1987, 1994) represented a “takeover by psychologists” (Dalton, 1999, p. 97). Actually, the American Psychiatric Association published the manual and primarily professionals with medical training wrote criteria. The American Psychological Association took an official stand against the inclusion of a premenstrual disorder in the manual of mental disorders (Figert, 1996).

Popular media characterizations of “women with PMS” have often reflected the stereotype of women as maladjusted, and have described women who break gender rules for a “good” woman (Chrisler & Levy, 1990). Frequent reference has been made to women with “raging hormones”, and have included chapter titles such as “Premenstrual Frenzy”, and “Taming the Shrew” (Chrisler & Levy, 1990, p. 96). In fact, a book of cartoons titled, P.M.S. Attacks: And Other Inconveniences of Life (Phillips, 1988), can be found in the humor section of national bookstores.

Dalton (1999) listed the potential dangers of a woman in her premenstrual phase to include marital breakdown, shoplifting, attempted suicide and homicide, alcoholic bouts, and child abuse. She also recommended that physicians who work with the elderly be trained in assessment of premenstrual syndrome, because of the danger that an elderly person’s caretaker may eventually “snap” due to premenstrual syndrome (Dalton, 1999, p. 29).

Premenstrual Dysphoric Disorder has been proposed as a diagnostic category in the research section of the American Psychiatric Association's Diagnostic and Statistical Manual, fourth edition (DSM-IV) (APA, 1994). It has also been listed in the main text of the manual as a depressive disorder. The purpose of this category has been to describe women who experience premenstrual symptoms that are severe enough to interfere with their daily functioning more months than not for a period of at least one year. The original placement of a premenstrual mental disorder in the DSM-III-R (1987) was the topic of considerable debate and the issue has not yet been resolved.

There is an ongoing debate as to whether something called PMS is a syndrome or normal physical changes experienced by most women (Nolen-Hoeksema, 1998). One of most common arguments against including a premenstrual disorder in the DSM-III-R (APA, 1987) was the potential stigmatization of women and menstruation with a diagnostic label. Nolen-Hoeksema (1998) stated, "When a person is suffering, he or she will often seek a label for that suffering, an explanation for the suffering, and a proven treatment to stop the suffering" (pg. viii). She warned that cultural and gender norms for what behaviors are acceptable and healthy determine what things are labeled psychological problems.

In her book Clashing Views, Nolen-Hoeksema (1998) presented the classic debate over the study by Rosenhan (1973) in which he argued that once a person is given a diagnostic label all of their subsequent behaviors are interpreted to validate the label. Rosenhan (1973) argued that psychiatric diagnosis places that problem within the individual, and ignores the person's environment. "Consequently, behaviors that are

stimulated by the environment are commonly misattributed to the patient's disorder" (Rosenhan, 1973, in Nolen-Hoeksema, 1998, p. 10).

The concern that women's normal cyclical functioning will be pathologized is relevant as long as there continues to be confusion in the definitions and language used to describe this complex phenomenon. If it is true that women are responding to impossible social conditions (Pugliesi, 1992) and chronic role strain (Johnson, 1987) by labeling their experience "PMS", then continuing the misuse of the term only continues the social problem. Considering the dangers of stigmatization, it is essential to understand why so many women are self-labeling with the medical sounding label "PMS". Rather than validating a label of "PMS," and continuing the stereotype that women are victims of raging hormones, Counseling Psychologists can work to change not only client responses, but also the social world.

The debate on the inclusion of a premenstrual disorder as a diagnostic category will not be resolved until there is a clear differentiation between the common expression "PMS" and Premenstrual Dysphoric Disorder. With a better understanding of how "PMS" is conceptualized by the general public, clinicians and researchers will be better able to contrast the popular use of the expression "PMS" with Premenstrual Dysphoric Disorder as defined in the DSM-IV.

To effectively understand and treat a clinically defined premenstrual disorder, or the socially defined "PMS" that large numbers of women are labeling themselves with, it is first necessary to differentiate between the two. It is the responsibility of researchers to clarify the definitions and to identify the bases of those definitions. Until we are able to clearly differentiate between a premenstrual disorder that results in clinically significant

distress, and the popular use of the expression “PMS”, we will not be able to effectively treat either problem.

Rather than combining all research in this area under the popular label “premenstrual syndrome”, or the acronym “PMS”, research could be divided more effectively into two areas: 1) premenstrual dysphoric disorder as defined by the DSM-IV, and; 2) premenstrual syndrome or PMS as it is socially defined in popular culture. Diagnostic criteria for a “Premenstrual Dysphoric Disorder” have been suggested by the American Psychiatric Association in the DSM-IV (APA, 1994). The missing element is a general public conceptualization of the expression “PMS”.

The research questions for this study included: 1) How is “PMS” conceptualized by college students; 2) What do college students mean when they use the expression “PMS”? and 3) What are the similarities and differences between the expression “PMS” and Premenstrual Dysphoric Disorder?

The results of this study will assist in understanding how “PMS” is conceptualized by a non-clinical sample of college students so that we can begin to differentiate between Premenstrual Dysphoric Disorder and the popularly used expression “PMS”. With these clearer definitions, research, assessment, and treatment appropriate for each group’s specific needs can be developed.

Ideally, a literature review provides the reader with a list of working definitions that assist the reader and writer to communicate efficiently. However, my primary reason for pursuing this line of research is the lack of definition and clarity in the terms used to describe premenstrual experiences. Although the research and varied definitions for premenstrual complaints are confusing, research up to this point has greatly contributed

to our understanding of the problem. The research base that currently exists has created the need to redefine the problems and be more specific in our language. As our understanding of problems associated with PMS (either accurately or inaccurately) changes, so do our definitions and the clarity with which we approach research.

In this study the term PMS has been used as a catchall term to describe popular culture and undefined reports of complaints associated (either accurately or in accurately) with the menstrual cycle. The term Premenstrual Dysphoric Disorder (PMDD) has been used to describe a person's experience that would meet the criteria set forth in the Diagnostic and Statistical Manual (DSM-IV) of the American Psychiatric Association (1994) for this diagnosis. I have chosen not to shorten the term Premenstrual Dysphoric Disorder to the acronym PMDD, but rather have used the complete name for the purpose of clarity in an area of study already riddled with miscommunication. The research of others has been reported using the author's original language as much as is reasonably possible.

The following literature review begins with a brief history of scientific inquiry into premenstrual complaints. This is followed by definitions of premenstrual symptoms, syndromes, and disorders which are provided to assist the reader in understanding the confusion in the research and popular literature. The debate surrounding the inclusion of premenstrual syndromes in the DSM-III-R and DSM-IV provides background and insight into the sociological and political significance of "PMS" as a diagnostic category. Research problems common to "premenstrual syndrome" ("PMS") are explored next to assist in understanding the various sources of confusion and need for clear definitions. Finally, an overview of the physiology of the normal menstrual cycle provides a broad

background of the menstrual cycle. The literature review concludes with a discussion of the symptoms, etiology, diagnosis, and treatment options identified for premenstrual disorders.

CHAPTER II

LITERATURE REVIEW

Hippocrates is reported to have described the connection between menstrual cycle phase, mood and behavior disorders (Severino & Moline, 1989). In the 1930's and 1940's, researchers were taking a broad look at physiological and psychological perspectives of premenstrual problems, and some work was done correlating premenstrual problems with other mood disorders (Severino & Moline, 1989). In the 1950's Katharina Dalton, an English physician, started researching and writing about premenstrual problems, and introduced the phrase "premenstrual syndrome", and the acronym "PMS". Also during the 1950's many hypotheses were tested and forms of treatment were attempted in order to provide relief from the symptoms (Severino and Moline, 1989).

Research on premenstrual experiences since the 1930's resulted in advances in the understanding of physical and psychological connections to health and wellness, as well as biological aspects of premenstrual disorders (Severino & Moline, 1989). However, Rodin (1992) asserted that even though there have been over 50 years of research into the changes that women experience over the menstrual cycle, there are many unanswered questions. Although some advances have been made in the physiological understanding of premenstrual disorders, some have argued that PMS is a social problem specific to

Western culture (Johnson, 1987). Caplan (1995) argued that labeling women's premenstrual experiences as a disorder leads to the stereotyping of women as mentally ill.

Names, Labels and Definitions

The names frequently used for a premenstrual disorder or syndrome in the medical and scientific literature before 1987 included premenstrual tension (PMT), premenstrual syndrome, and PMS. Since 1987, and the inclusion of diagnostic criteria in the American Psychiatric Association's Diagnostic and Statistical Manual, third revised edition (DSM-III-R) (APA, 1987) the names used for a premenstrual disorder have included Premenstrual Syndrome (PMS), Premenstrual Dysphoric Disorder, Periluteal Phase Dysphoric Disorder, and Late Luteal Phase Dysphoric Disorder (Figert, 1996).

A syndrome can be defined as "a group of signs and symptoms that occur together and characterize a particular abnormality" (Merriam-Webster's Collegiate Dictionary, 2000, p. 1192). A disorder can be defined as, "a disturbance in the function, structure, or both, resulting from a genetic or embryologic failure in development or from exogenous factors such as poison, trauma or disease" (Stedman, 1990, p. 456). A disease can be defined as, "an interruption, cessation, or disorder of body functions, systems, or organs (Stedman, 1990, p. 444). In Stedman's Medical Dictionary (1990) syndrome and disease are cross-referenced (pp. 444 & 1522).

Katharina Dalton, an English physician, with a colleague, first introduced the label premenstrual syndrome and acronym PMS in an article in the early 1950's (Dalton & Greene, 1953). The definition provided in the sixth and most recent edition of her book, Once a Month: Understanding and Treating PMS (Dalton, 1999) is as follows: "Premenstrual Syndrome is the recurrence of symptoms before menstruation with

complete absence of symptoms after menstruation” (p. 7). She states that in her definition specific symptoms are not listed because the symptoms vary and include the 150 different symptoms that she originally listed in her 1964 book, The Premenstrual Syndrome.

Dalton’s definition and requirements for the diagnosis of something she defines as a “disease” (p. 13) could easily describe normal premenstrual changes experienced by a majority of menstruating women.

Considering Dalton’s definition of PMS, critics who complain that normal cyclical changes occurring premenstrually are being pathologized have a good argument. Interestingly, Dalton states that, “There has been such a lack of a definition of PMS that in my 1984 book The Premenstrual Syndrome and Progesterone Therapy I insisted that PMS be defined at the beginning of every chapter” (Dalton, 1999, p. 7).

In a frequently used nursing handbook called Protocols for Nurse Practitioners in Gynecologic Settings (Hawkins, Roberto-Nichols, & Stanley-Haney, 1997), the definition of PMS is as follows: “PMS (Premenstrual Syndrome, also known as premenstrual tension, PMT) is a cluster of physical, emotional, and behavioral symptoms related to the menstrual cycle, developing or worsening during the luteal phase and clearing with the onset of menstrual flow”(p. 216). Again, this definition could be descriptive of normal menstrual cycle changes, or a debilitating disorder, depending on severity. The section is titled, “Premenstrual Syndrome (PMS)” and is followed by an asterisk. At the bottom of the page the asterisk is followed by the information, “Known as periluteal phase dysphoric disorder in DSM-IV diagnosis” (p. 216). Actually, the term periluteal phase dysphoric disorder is not in either the DSM-III-R or the DSM-IV, but was a name under consideration for the disorder (Figert, 1996).

A highly regarded medical text on women's health commonly used by physicians' assistants and physicians (Speroff, Blass & Kase, 1999) offered the following definition:

The simplest definition of the premenstrual syndrome (PMS) is a commonsense one: the cyclic appearance of one or more of a large constellation of symptoms (over 100) just prior to menses, *occurring to such a degree that lifestyle or work is affected* [Italics added], followed by a period of time entirely free of symptoms (p. 557).

This definition offers the added criteria that either lifestyle or work is affected.

Our Bodies, Ourselves (1992), a popular book on women's health for many years, offers the definition:

Premenstrual syndrome (PMS) is the development of a wide range of symptoms for several days before and sometimes during the first day of most or all of your periods. The symptoms then generally go away until at least ovulation.

Researchers have not all agreed on a definition of PMS. Some researchers include only symptoms that completely disappear postmenstrually whereas others include a severe premenstrual intensification of *symptoms that exist all month* [italics added] (p. 252).

This definition informed the reader that researchers do not agree on the timing of the symptoms, but allows for the possibility that PMS can occur throughout the entire menstrual cycle.

Consider the following comments by Christine Northrup (1998) from the alternative health and lifestyle literature:

A reductionist approach - looking for the chemical “cause” and “cure” - simply doesn’t work because the causes of PMS are multifactorial and must be approached holistically. The effects of the mind, emotions, diet, light, exercise, relationships, heredity, and childhood traumas must all be taken into account when treating PMS (p. 132).

Included within her book chapter on menstruation are sections describing how to “transform premenstrual rage” and the connection between PMS and codependence. Although she provided no research support, she confidently stated that there is a strong correlation between PMS and growing up in an alcoholic family. Regarding prevalence, she estimated that at least 60% of women suffer from “PMS”.

Due to the varying definitions of premenstrual complaints, it would seem valuable to consult “experts” in the development of the definitions and clarify this amorphous concept. A comprehensive book titled, Premenstrual Syndrome: A Clinician’s Guide, was written by Severino and Moline (1989) after the publication of the DSM-III-R (APA, 1987), but before the writing of the DSM-IV (APA, 1994). Included in the work group to develop criteria for the DSM-III-R were Severino (Psychiatrist) who was an appointed member, and Moline (Physiologist) who was an official advisor. They were both involved in the writing of the description, further development of diagnostic criteria, and the naming of a premenstrual syndrome or disorder for the DSM-IV (APA, 1994).

Severino and Moline (1989) cited their main objective for writing the book Premenstrual Syndrome: A Clinicians Guide was “clinician education” (p. viii). The preface of their book begins, “Premenstrual Syndrome (PMS)!” (p. vii) and the term PMS is used freely. Although the authors differentiated between Premenstrual Syndrome

(PMS) and the more severe Late Luteal Phase Dysphoric Disorder (more recently named Premenstrual Dysphoric Disorder), they continued to use the label “PMS” to describe all levels of severity of premenstrual complaints in the body of their text.

It seems inconsistent for professionals who helped write the DSM criteria to use the term PMS, rather than the formal language of the DSM-III-R (APA, 1987), Late Luteal Phase Dysphoric Disorder, that they were a part of creating. Unfortunately, the authors chose a title, and began its preface, with a label (“PMS”) that is not even listed in the DSM-III-R as a diagnostic possibility. Ironically, they state in the preface: “It is no wonder, then, that clinicians who see women for *PMS complaints* [italics added] are in a quandary. Lack of information and guidelines may lead to poor clinical care” (Severino & Moline, 1989, p. viii). If members of the DSM-III-R work group use language that is not concise, how will the average consumer or clinician decipher treatment options or service providers?

The text of the DSM-III-R (APA, 1987) and DSM-IV (APA, 1994) provided recommendations for diagnostic criteria for Late Luteal Phase Dysphoric Disorder, and Premenstrual Dysphoric Disorder, respectively. In the DSM-IV (APA, 1994) the first paragraph describing the Premenstrual Dysphoric Disorder reads as follows:

The essential features are symptoms such as markedly depressed mood, marked anxiety, marked affective lability, and decreased interest in activities. These symptoms have regularly occurred during the last week of the luteal phase in most menstrual cycles during the past year. The symptoms begin to remit within a few days of the onset of menses (the follicular phase) and are always absent in the week following menses (p. 715).

The second paragraph described symptoms required for a diagnosis, and the third paragraph described the required cyclical pattern of symptoms. Also in the DSM-IV (APA, 1994), Premenstrual Dysphoric Disorder is listed in the main text under, “Depressive Disorder Not Otherwise Specified” (p. 350). In this part of the manual a brief description similar to the quote above is followed by the qualifier, “These symptoms must be severe enough to markedly interfere with work, school, or usual activities and be entirely absent for at least one week postmenses” (p. 350).

If a person meets the DSM-IV criteria for Premenstrual Dysphoric Disorder clinicians are instructed to use the diagnosis of Depressive Disorder Not Otherwise Specified. Under the heading “Differential Diagnosis” clinicians are warned that Premenstrual Dysphoric Disorder “...differs from ‘premenstrual syndrome’ in its characteristic pattern of symptoms, their severity, and the resulting impairment” (p. 716). Authors also warned that the disorder should be distinguished from other mental disorders that are exacerbated premenstrually, as well as general medical conditions.

Due to the frequent use and misuse of the expression “PMS” in popular culture to describe everything from a single symptom at any time during the menstrual cycle to the severe distress encountered by some women premenstrually, the expression no longer has an essential scientific meaning. To develop accurate and separate definitions of PMS and Premenstrual Dysphoric Disorder will require an investigation of what people in general mean when they use the term. The medical, psychiatric, and psychological communities must adopt and consistently use a more specific label for a constellation of premenstrual symptoms that cause clinically significant distress. For the purpose of comparison, consider the diagnostic labels Clinical Depression and Anxiety Disorder. Feeling sad is

not clinical depression, and feeling worried is not an anxiety disorder. Similarly, having premenstrual symptoms that occur on a regular basis (PMS) is not Premenstrual Dysphoric Disorder.

Susan Faludi, in her popular book, Backlash (1991), provided readers with her opinion on the addition of Premenstrual Dysphoric Disorder to the DSM-III-R (1987). In one paragraph she stated; “Premenstrual dysphoric disorder’ was another one, a diagnosis that revived the long-discredited notion that PMS was a mental illness rather than a simple matter of endocrinology” (Faludi, 1991, p. 357). Faludi, like so many researchers and popular writers on this topic, erroneously equated the expression PMS with Premenstrual Dysphoric Disorder.

Proposed Psychiatric Diagnostic Criteria

The Diagnostic and Statistical Manual of Mental Disorders (DSM), which is published by the American Psychiatric Association, is recognized as the medical and mental health professional’s sourcebook for the diagnosis of mental disorders (Spitzer, Severino, & Williams, 1989). It provides researchers and practitioners with a common language and criteria from which to diagnose and treat mental disorders. An appendix to the book, “Criteria Sets and Axes Provided for Further Study” contains proposals for new categories that have been suggested for inclusion in the manual, but for which there is not sufficient information or research to warrant its inclusion as a mental disorder.

In 1985, a task force was organized to study the possibility of adding a category to the Diagnostic and Statistical Manual, Third Edition, Revised (DSM-III-R) (APA, 1987) for premenstrual symptoms that were psychological. The project occurred in cooperation with the National Institute of Mental Health (NIMH) and consisted of a broad range of

specialists in the area (Severino & Moline, 1989). The task force determined that there was not enough information to support the inclusion of Late Luteal Phase Dysphoric Disorder as an official category. Rather, it was listed in the appendix and designated as an area that needs further study.

The decision to include Premenstrual Syndromes in the DSM-III-R (APA, 1987) was cause for a great deal of debate, as the manual is considered the basic reference for mental health professionals. The decision was controversial, and is the topic of ongoing debate, even though criteria are only listed in the sections of the manuals dedicated to further study (Caplan, 1995; Figert, 1996).

Spitzer and colleagues (1989) commented that the debate over the inclusion of diagnostic criteria for Premenstrual Dysphoric Disorder was beneficial and served several purposes. Criteria of Premenstrual Dysphoric Disorder were developed carefully and with special attention to differential diagnosis, thus separating Premenstrual Dysphoric Disorder from other mood disorders (Severino & Moline, 1989) (See Table 2). In addition, the public debate revealed that many people have the misconception that the concept of “mental illness” means only psychological causes and treatment (Severino & Moline, 1989). Severino and Moline (1989) stated that a more accurate and current view of mental illness was a biopsychosocial model that emphasizes the combination of physical, social, and psychological processes involved in the cause and treatment of disorders.

Finally, they asserted that the debate brought to the forefront the fear that adding the category to the DSM would stigmatize women. Severino and Moline (1989) stated

that women have special health care needs, and that those needs should not be overlooked or not treated because of the fear that the gains women have made will be undermined.

Advantages and Disadvantages of Diagnostic Categories

Tavris (1992) stated, "Like all psychological diagnosis, then, PMS cuts two ways: it validates women, but it also stigmatizes them." (p. 143). Tavris made the point that PMS, as popularly and broadly defined, was associated with the terms disorder, disease, and sickness, and something women are "suffering" from. She also made the point that researchers, the media, and women are confusing mood changes that are abnormal in some women with mood changes that are normal for people - men and women.

"Mercy! With so many symptoms, accounting for most of the possible range of human experience, who wouldn't have 'PMS?'" (Tavris, 1992, p. 136). As a result of the confusion in naming or defining premenstrual syndromes researchers have used terms like "true" or "clear-cut" to differentiate between women who have severe symptoms and those who have normal menstrual cycle symptoms (Tavris, 1992).

Advantages and Disadvantages of Labeling Mental Illness

Nolen-Hoeksema (1998) stated, "When a person is suffering, he or she will often seek a label for that suffering, an explanation for the suffering, and a proven treatment to stop the suffering" (pg. viii). She also stated that cultural and gender norms for what behaviors are acceptable and healthy determine what things are labeled psychological problems. In addition, she pointed out that psychological problems are often determined and labeled based on the sufferers' "feelings, thoughts, memories, and self-evaluations" (p. viii).

In her book Clashing Views, Nolen-Hoeksema (1998) presented the classic debate over the study by Rosenhan (1973) in which he argued that once a person is given a diagnostic label all of their subsequent behaviors are interpreted to validate the label. Rosenhan (1973) argued that psychiatric diagnosis places that problem within the individual, and ignores the person's environment. "Consequently, behaviors that are stimulated by the environment are commonly misattributed to the patient's disorder" (Rosenhan, 1973, in Nolen-Hoeksema, 1998, p. 10).

In debating the question of whether or not diagnostic labels hinder treatment, Spitzer (1975) argued for the appropriate use of diagnostic categories. He stated that the purpose of psychiatric diagnosis is "... to enable mental health professionals to (a) communicate with each other about the subject matter of their concern, (b) comprehend the pathological processes involved in psychiatric illness, and (c) control psychiatric disorders" (p. 29). He further stated, "Control consists of the ability to predict outcome, prevent the disorder from developing, and treat it once it has developed" (Spitzer, 1975, in Nolen-Hoeksema, 1998, pg. 29).

Spitzer (1975) explained that the research diagnostic criteria (RDC) system currently used in the Diagnostic and Statistical Manual has improved the reliability of psychiatric diagnoses. Spitzer (1975) admitted there were disadvantages to psychiatric diagnosis, but when used appropriately, they can be valuable. He compared psychiatric diagnosis to medical diagnosis, stating there were serious problems with both systems. However, the improvements in the DSM system (RDC) show promise for improved reliability.

There has been a great deal of controversy over whether a premenstrual disorder should be included in the DSM, making it an official diagnosis in the psychiatric and mental health literature. It has been argued that PMS is a combination of biological factors and should be treated as such (Wartik, 1995). Others argued that normal changes that occur with the menstrual cycle should not be labeled as a medical or psychiatric illness (Tavris, 1991). Many writers have stated that there is no agreement as to the etiology, or definition of PMS (Figert, 1996; Nolen-Hoeksema, 1998; Tavris, 1992). There is an ongoing debate as to whether something called PMS is a syndrome or normal physical changes experienced by most women (Nolen-Hoeksema, 1998).

Research Problems

The research on premenstrual symptoms, "PMS", and Premenstrual Dysphoric Disorder is very conflicting and confusing. There is a lack of consistency in the research methods and definition of terms, and consequently, frequent misunderstanding of what researchers are actually studying.

From my review of the literature it is evident that the term "PMS" is more often used by researchers, clinicians, and the general public to mean something different from the disorder described in the manual of the American Psychiatric Association. A major cause of the misunderstanding and mistreatment of premenstrual difficulties is confusion between the experience of premenstrual symptoms, experienced at any time of the menstrual cycle, and a syndrome (PMS) or disorder (Premenstrual Dysphoric Disorder).

Another problem is estimating the prevalence of PMS and Premenstrual Dysphoric Disorder, which is confused by the use of participant's retrospective reports of symptoms rather than current or prospective reporting. McFarlane (1988) found that

when women were asked to recall the symptoms they experienced in past menstrual cycles they recalled many symptoms. Even women who did not complain of PMS or Premenstrual Dysphoric Disorder would provide histories of symptoms in retrospect when asked to complete questionnaires.

Interestingly, much research has been conducted on participants who have neither PMS nor Premenstrual Dysphoric Disorder. Other research was conducted on participants who volunteer and self-label, but have not been diagnosed. It seems inaccurate at the very least for a researcher to say there is no support for a premenstrual disorder when they have not even included subjects with Premenstrual Dysphoric Disorder in their study. We do not study diabetes with patients who have never been diagnosed with diabetes, and then make claims about the etiology or treatment of diabetes.

In order to understand both PMS and Premenstrual Dysphoric Disorder, researchers need to study the experience of premenstrual symptoms separately from the study of Premenstrual Dysphoric Disorder. The confusion between women who experience premenstrual symptoms and women who experience these symptoms to the point of being unable to function creates problems in the research and treatment of the problem (Severino & Moline, 1989). Similarly, researchers should take care to monitor the phase of menstrual cycle that research subjects are in when they participate in the research. Controls should be built into the research design or participants scheduled during particular phases of her cycle (Severino & Moline, 1989).

Regarding prevalence, Northrup (1998) estimated that at least 60% of women suffer from PMS. In the Diagnostic and Statistical Manual, fourth edition (DSM-IV) (APA, 1994, p. 716), it is stated that 75% of women report minor premenstrual changes;

“premenstrual syndrome - variably defined” occurs in 20% to 50% of women; and three percent to five percent of women may meet diagnostic criteria for Premenstrual Dysphoric Disorder. Tavis also pointed out that researchers do not agree on what they are talking about. The prevalence of the “syndrome” has been reported to range from five percent (severely incapacitated) to 95% (experience some symptom at some time over their lives) of women (Tavis, 1992).

The American College of Obstetricians and Gynecologists Committee (Statement #66, January 1989) reported that 20% to 40% of women report that they experience premenstrual symptoms, and only five percent of women report that their symptoms severely impact their personal or work lives. Gath and colleagues (1987) asserted that 95% of women experience premenstrual symptoms and only a small percentage label them severe enough to disrupt their lives.

The prevalence of premenstrual symptoms, PMS and Premenstrual Dysphoric Disorder have been difficult to separate (Severino & Moline, 1989). When reading the research literature careful attention should be paid to which particular symptoms were considered, what criteria were used to diagnose, and whether a diagnosis was even made. In addition, a woman’s culture will likely determine how she labels symptoms and what things are culturally appropriate to talk about (Severino and Moline, 1989).

The Normal Menstrual Cycle

The menstrual cycle is also referred to as the reproductive cycle, and is characterized by predictable physical, physiological and endocrine system changes. The average length of a menstrual cycle is 28 days, but can vary between 26 and 32 days. The

menstrual cycle occurs in most women throughout the life span from puberty to menopause, except during pregnancy, breast feeding, or times of illness (Gannon, 1985).

There are three phases to the cycle, which include the follicular phase, ovulation, and the luteal phase. The follicular phase begins at the onset of menstruation and continues until ovulation. Ovulation occurs mid-cycle with the release of an egg or ovum. Ovulation is followed by the luteal phase, which lasts until the start of menstruation. The luteal phase is typically 14 days in duration, with the 5 to 7 days preceding menstruation referred to as the premenstrual or late luteal phase (Severino & Moline, 1989).

On the first day of menstruation there are fewer hormones present in a woman's body than at any other time in the cycle. This is also the start of the follicular phase and production of estrogen. The maturing follicle produces estrogen. Throughout the follicular phase the body produces increasing amounts of estrogen, which causes the uterine lining to grow and thicken so it can potentially provide nourishment for a fertilized egg. Around the 15th day of the cycle ovulation occurs. The egg is released from the ovaries and the body starts producing progesterone in addition to estrogen. Progesterone is produced by the ruptured follicle after the egg is released (Boston Women's Health Book Collective, 1992). During this luteal phase progesterone stimulates glands in the uterus, a process which functions to increase blood supply to the uterus. If the egg is not fertilized the remaining follicle produces estrogen and progesterone for about 12 days (Nazzaro, Lombard, & Horrobin, 1985). The amount produced decreases in the last few days, which causes the arteries of the uterus to close off. Because the lining is no longer nourished, it is shed causing the menstrual flow.

The menstrual cycle is very complex and its regulation depends upon the cooperation of the central nervous system and the pituitary-ovarian system. The interaction of these variables affects every process of the body, which are affected by a wide range of internal and external events. Within this complex model the central nervous system must integrate a large number of internal and external influences. The woman's environment, stress level, coping style, and personality variables can also impact her menstrual cycle. A combination of many variables could impact hormone levels, which could result in an impact on mood (Gannon, 1985).

The purpose of this overview of the normal menstrual cycle was to provide the reader with a basis for understanding the symptoms, etiology, assessment and treatment of Premenstrual Dysphoric Disorder. In the following section the symptoms associated with Premenstrual Dysphoric Disorder and "PMS" are explored.

Premenstrual Symptoms

Premenstrual symptoms usually occur between 5 and 7 days before the start of a woman's menstrual flow (Severino & Moline, 1989). Symptoms may be physical, emotional or behavioral and either appear or increase in severity during a woman's premenstrual phase. Premenstrual symptoms usually decrease or disappear after the onset of menstruation (Severino & Moline, 1989). Women may experience symptoms that are commonly considered "premenstrual symptoms" at any time during the menstrual cycle (i.e., headache, nausea, bloating). It is important to note that just because a woman experiences symptoms commonly associated with the menstrual cycle, this does not necessarily mean that she would receive a diagnosis of Premenstrual Dysphoric Disorder.

There has been a wide range of symptoms associated with premenstrual syndrome (PMS) in the professional and popular literature. Unfortunately, premenstrual symptoms and a premenstrual disorder have often been discussed as though interchangeable in both popular and academic writing. It is important to recognize that the experience of one or several symptoms premenstrually does not necessarily indicate the existence of a disorder (Severino & Moline, 1989). The experience of premenstrual symptoms is normal for menstruating women. If a woman experiences premenstrual symptoms to the severity that they interfere with normal daily functioning over an extended period of time (one year according to the DSM-IV) then a disorder or syndrome may be the appropriate label. Experiencing symptoms premenstrually that are severe enough to interfere with the ability to function is not normal, but has been estimated to occur in approximately 3% to 5% of women (APA, 1994).

There has been a great deal of debate on the attribution of symptoms to the premenstrual phase. Severino and Moline (1989) stated that more than 100 symptoms have been attributed to the premenstrual phase and that every woman's individual symptoms could vary in both type and severity from month to month. Severino and Moline (1989) caution that symptoms associated with PMS have been anecdotal reports, and their variance with the premenstrual phase has not been supported by methodologically sound research.

Table 1 illustrates some of the symptoms commonly associated with premenstrual disorders. The broad range of symptoms has been frequently attributed to an article published in 1977, written by Katharina Dalton, who was prolific in research and writing

Table 1

Symptoms Frequently Associated With Premenstrual Syndrome (PMS)

Psychological	Physical
Aggression	Proneness to accidents
Agitation	Acne
Anorexia	Asthma
Anxiety	Bloatedness
Confusion	Blurred vision
Contentiousness	Breast swelling
Crying bouts	Breast tenderness
Decreased alertness	Clumsiness
Decreased or increased libido	Constipation
Depression	Diarrhea
Diminished self-esteem	Diminished activity
Drowsiness	Diminished efficiency
Emotional liability	Diminished performance
Fatigue	Dizziness
Food craving	Epilepsy
Hopelessness	Finger swelling
Housebound	Flushes
Hypersomnia	Headache

Table 1 continued

Symptoms Frequently Associated With Premenstrual Syndrome (PMS)

Psychological	Physical
Impulsive behavior	Joint pain
Insomnia	Mastodynia
Irritability	Migraine
Lack of inspiration	Muscle pain
Lack of volition	Nausea
Lethargy	Edema
Loss of attention to appearance	Pain in lower abdomen
Loss of concentration	Pain in pelvic area
Loss of judgement	Poor coordination
Loss of self-control	Premenstrual dysmenorrhea
Moodiness	Puffiness
Pessimism	Sinusitis
Sadness	Skin lesions
Social isolation	Sore eyes
Suicidal ideation	Weakness
Tension	Weight increase (feeling of)
Violence	Weight increase (actual)

Note. Adapted from Premenstrual Syndrome: A Clinician's Guide, (p. 69), by S. K. Severino and M. L. Moline, 1989, New York: Guilford Press. Copyright 1989 by Guilford Press

about “premenstrual syndrome”. In the 1977 article, Dalton created a definition of “PMS” that included any symptom that varied in a regular manner over the menstrual cycle. Dalton’s contribution was positive because it raised awareness of premenstrual problems and expanded research in the area (Severino & Moline, 1989). The potential negative result was addressed by Jensvold (1996) who argued that Dalton’s 1977 article used a “waste basket” approach to defining symptoms of “PMS”. He characterized the approach as having “popular appeal, but that it contributed to a lack of clarity in conceptualizing menstrual cycle symptomology that still affects popular and professional thought today” (Jensvold, 1996, p. 149).

The wide variety of symptoms associated with the premenstrual phase has been one of the problems in diagnosing and researching PMS and Premenstrual Dysphoric Disorder. Another problem has been that many of the symptoms are indicative of other physical and psychological problems. The interchanging of terms and misunderstanding of the differences between women who experience premenstrual symptoms and women whose lives are seriously impaired by symptoms has created a problem in diagnosis and treatment.

Premenstrual symptoms have often been divided into two basic categories: physical and psychological. The most common psychological symptoms associated with premenstrual difficulties include depression, anger, anxiety, irritability and mood swings (Severino & Moline, 1989). Common physical symptoms include bloating, weight gain, headache, and breast tenderness (Harrison, 1985). Studies have seemed to indicate that psychological symptoms are more problematic than physical symptoms (Haskett, Steiner, Osmun, & Carroll, 1980).

The mood symptoms of Premenstrual Dysphoric Disorder are similar in severity to a Major Depressive Episode (Severino & Moline, 1989). However, Premenstrual Dysphoric Disorder is shorter in duration, usually lasting only during the luteal phase of a woman's cycle and then subsiding with the onset of menstruation. Severino and Moline (1989) emphasized that symptoms of Premenstrual Dysphoric Disorder do not occur in the same form during other phases of the woman's cycle. In addition, symptoms discontinue during the first two days of menstruation.

In order for a woman to receive a diagnosis of Premenstrual Dysphoric Disorder her symptoms must cause a serious impairment in her social or occupational functioning during the time she is experiencing symptoms and occur for a period of at least one year (APA, 1994). Because there has been so much overlap between the symptoms of Premenstrual Dysphoric Disorder and other affective and physical disorders, it is important to rule out other problems before making the diagnosis (Severino & Moline, 1989). Affective disorders that should be ruled out include Major Depression, Dysthymia, and Personality Disorders (Severino & Moline, 1989). Rausch and Parry (1993) also emphasized the importance of ruling out medical illnesses such as thyroid problems, hypoglycemia, and the exacerbation of other concerns by premenstrual stress.

This overview of premenstrual symptoms was provided to emphasize the difference between the normal experience of symptoms and changes premenstrually and the severe symptom clusters experienced by a small percentage of women. Next, the various etiologies proposed for PMS and Premenstrual Dysphoric Disorder are explored.

Etiology of Premenstrual Symptoms and Disorders

There have been many hypotheses about the cause of premenstrual symptoms and their severity in premenstrual syndrome and premenstrual dysphoric disorder, although current research is inconclusive. It appears that research methodology in the study of PMS and Premenstrual Dysphoric Disorder is only recently being refined to the point that the results of controlled and clearly delineated studies are becoming available. This section includes a review of the biological, psychological, and sociocultural etiologies, and concludes with the biopsychosocial model that is currently favored by researchers and clinicians.

Twin studies provided evidence for a genetic and biological link in both the experience of premenstrual symptoms (Condon, 1993) and in symptoms severe enough to warrant a diagnosis of PMS (Dalton, Dalton & Guthrie, 1987). In one study (Dalton, et al. 1987) subjects were recruited from a "PMS" clinic and included 15 pairs of monozygous twins, 16 pairs of dizygous twins, and 77 controls with female siblings. The participants completed prospective ratings of symptoms for three consecutive months and had a confirmed diagnosis of "PMS". The researchers found that 14 of the 15 monozygous twins both could be diagnosed with PMS. In the remaining pair, one of the twins reported the onset of PMS after the birth of a child, while the twin who did not report PMS had not had children. In the dizygous twins, 7 out of 16 twins both had PMS, and in the controls 38 out of 121 siblings had PMS. The concordance rate for monozygous twins was significant (94%) while the concordance rate for dizygous twins (44%) and sibling sets (31%) was not. The researchers concluded that a biological rather than psychological etiology was the key to PMS (Dalton, et al. 1987).

In another study, Condon (1993) examined 157 monozygous twins and 143 dizygous twins between the ages of 25 and 40 years. The subjects had not been diagnosed with PMS or PDD, but were selected from a twin registry. Subjects were asked to complete a retrospective questionnaire of premenstrual symptoms. The author reported that the global ratings of symptoms were positively correlated at 0.55 for monozygous twins and 0.28 for dizygous twins. He concluded that genetic factors substantially impacted ratings of premenstrual symptoms and that there is a genetic influence to PMS and Premenstrual Dysphoric Disorder.

Biological Hypotheses

The hypotheses for the etiology of premenstrual symptoms, PMS, and Premenstrual Dysphoric Disorder, have been almost as numerous as the reported symptoms. The most common biological explanations have included hormone imbalance, abnormality of prostaglandin metabolism, endogenous opiate abnormality, thyroid dysfunction, nutrition, and deficiency of neurotransmitters.

Hormonal Imbalance

Estrogen and Progesterone have been implicated in the etiology of premenstrual symptoms and Premenstrual Dysphoric Disorder because these hormones are present in large amounts in the premenstrual or luteal phase of the cycle (Sondheimer, 1993). The luteal phase of the menstrual cycle is when the ovaries are most active in producing hormones. The main hormones related to premenstrual symptoms are estrogen and progesterone. Estrogen builds up in the uterus during the first half of the menstrual cycle prior to ovulation. After ovulation the uterus starts building up progesterone in addition to the estrogen in order to prepare the body for a potential pregnancy (Nazzaro, et al. 1985).

Three ways that hormones have been implicated in the etiology of premenstrual symptoms include excessive estrogen, deficient progesterone, and an imbalance in the ratio between the two (i.e., high estrogen and low progesterone) (Severino & Moline, 1989). In two major reviews of the literature, authors concluded that neither excess estrogen nor deficient progesterone was the cause of premenstrual symptoms (Reid, 1989; Severino & Moline, 1989). The hypothesis regarding the imbalance or ratio of the hormones has received mixed reviews. Severino and Moline (1989) asserted there was a possibility that an improper ratio of the two hormones warranted further investigation as the cause of premenstrual symptoms. Reid (1989) asserted that some premenstrual symptoms were caused by circulating hormones, but emphasized that past researchers have not controlled for important variables and results were therefore inconclusive. It appears that hormone imbalance alone cannot cause or account for all premenstrual symptoms, PMS or Premenstrual Dysphoric Disorder.

Abnormality of Prostaglandin Metabolism

Prostaglandins have been implicated in causing premenstrual symptoms for several reasons (Severino & Moline, 1989). Prostaglandins are natural substances synthesized in the body that function to regulate smooth muscles (Golub, 1992). Prostaglandins increase in the luteal phase and decrease during menstruation. In addition, one type of prostaglandin (PGE1) appears to lessen the biological effects of prolactin, causing fluid retention, irritability, and depression (Severino & Moline, 1989). Although some research has supported the hypothesis that some physical premenstrual symptoms may be caused by the abnormal metabolism of prostaglandin, this etiology is controversial and has not been substantiated (Severino & Moline, 1989).

Endogenous Opiate Abnormality

Another hypothesis of the etiology of premenstrual symptoms has been an abnormality of endogenous opiates, or the beta-endorphin hypothesis. Beta-endorphins have actions similar to morphine and are endogenous opiate peptides regulated by changes in gonadal steroids (Severino & Moline, 1989). It has been hypothesized that an increase of beta-endorphin activity and then withdrawal of opiate activity produces symptoms in Premenstrual Dysphoric Disorder sufferers that are similar to withdrawal from narcotics (Sondheimer, 1993). Specific symptoms may include emotional lability, headaches, constipation, increased appetite, depression, and fatigue (Sondheimer, 1993). Severino and Moline (1989) cited methodological flaws in the research and contradictory findings that make the role of endogenous opiates in the etiology of premenstrual symptoms inconclusive.

Thyroid Dysfunction.

Thyroid Hypofunction has been implicated in premenstrual symptoms because there is a similarity between the symptoms experienced by individuals with thyroid problems and women with Premenstrual Dysphoric Disorder. The overlapping symptoms include weight gain, lethargy, fatigue, irritability, nervousness, and anxiety (Severino & Moline, 1989). At this time not enough evidence exists to determine if thyroid dysfunction is the cause of Premenstrual Dysphoric Disorder. However, authors have emphasized the value of ruling out hypothyroidism in women being assessed for Premenstrual Dysphoric Disorder (Severino & Moline, 1989; Sondheimer, 1993).

Nutrition and Vitamin Deficiencies

Many researchers and clinicians have implicated nutritional etiologies of Premenstrual Dysphoric Disorder, and it has been common for books on the subject to offer specific diets for people with Premenstrual Dysphoric Disorder (Harrison, 1985; Nazzaro, et. al. 1985; Severino & Moline, 1989). People with PMS and Premenstrual Dysphoric Disorder have often been directed to reduce their intake of sugar, caffeine and alcohol, and many sufferers have reported that they experience some relief of their symptoms using this method.

Deficiencies of vitamin B6, glucose intolerance, and magnesium deficiency have all been implicated as nutritional etiologies of premenstrual symptoms and Premenstrual Dysphoric Disorder. Vitamin B6 is important to the synthesis of serotonin, dopamine, and prostaglandins (Sondheimer, 1993). A deficiency in B6 can lead to a reduction in dopamine and serotonin, which both affect mood and behavior. Both stress and the presence of estrogen deplete vitamin B6, and women taking oral contraceptives who are given B6 supplements have reported a decrease in premenstrual symptoms. Glucose intolerance has been implicated because of PMS sufferers who complain of premenstrual cravings for food high in carbohydrates and chocolate (Sondheimer, 1993). A deficiency in magnesium has also been implicated in the etiology of Premenstrual Dysphoric Disorder. Differences in the blood magnesium levels of PMS patients have been shown to be lower than that of non-PMS controls (Sondheimer, 1993).

Sondheimer (1993) did not believe that diet is the cause of PMS. Rather, he asserted that people who are sensitive to hormonal changes may also be sensitive to the stimulant effects of caffeine, the rise in insulin after a sugar binge, and the effects of

alcohol. If a person is very sensitive to physical and emotional changes they may also be more sensitive to other stimuli. In his review of the literature, Sondheimer (1993) concluded that research on vitamin B6, glucose intolerance, and magnesium deficiencies in the etiology of PMS were not well controlled and often contradictory.

Deficiency of Neurotransmitters

Neurotransmitters have been implicated in the etiology of Premenstrual Dysphoric Disorder. The most common neurotransmitter implicated in Premenstrual Dysphoric Disorder is serotonin, particularly because of its connection to depression and carbohydrate cravings (Severino & Moline, 1989). Because of the overlap of symptoms between depression and Premenstrual Dysphoric Disorder, it has been hypothesized that women who experience premenstrual symptoms have lower levels of serotonin than women who do not (Severino & Moline, 1989). Most of the support for the serotonin deficiency etiology of Premenstrual Dysphoric Disorder has developed from research using fluoxetine (Prozac) to treat people experiencing Premenstrual Dysphoric Disorder. Well controlled, double-blind, randomized cross-over studies (Menkes, Taghavi, Mason & Howard, 1993; Wood, et. al 1992) as well as an open study (Brandenberg, Tuynman-Qua, Verheij, & Peplinkhuizen, 1993) assessing the efficacy of fluoxetine found significant improvement of symptoms of people diagnosed with Premenstrual Dysphoric Disorder. Authors asserted that their results supported the role of serotonin hypoactivity in the etiology of Premenstrual Dysphoric Disorder.

Severino and Moline (1989) stated that the relationship between serotonin and Premenstrual Dysphoric Disorder appears to be the most promising biological etiology advanced so far. Research has not yet explained the role of neurotransmitters in the

etiology of Premenstrual Dysphoric Disorder, but neurotransmitters are predicted to be key in future advancements in the biological etiology and treatment (Severino and Moline, 1989). More carefully controlled research is needed to investigate this relationship. In addition, this research may help differentiate between Premenstrual Dysphoric Disorder, anxiety disorders, and affective disorders and increase the possibility of more effectively treating each illness.

Psychological Etiology

Three commonly proposed psychological etiologies of premenstrual difficulties in the 1950's through the 1970's included personality traits, personality or mood states, and femininity, or acceptance of a woman's role (Gannon, 1985). During the 1980's, the psychological symptoms of a premenstrual disorder were reported as the most distressing in women (Abplanalp, 1983; Wood, 1985). Currently, psychological etiologies proposed for premenstrual difficulties are often related to attitudes toward menstruation, personality style and type, cognitive or coping style, and co-morbidity of other psychiatric diagnosis.

Parlee (1974) hypothesized that negative attitudes and expectations toward menstruation and the premenstrual phase contributed to the negative experience of premenstrual symptoms. Freeman, Schweizer, and Rickels (1995) used the Tridimensional Personality Questionnaire (TPQ) to assess personality characteristics in women with premenstrual difficulties and concluded that personality and PMS are independent of one another, although personality may influence the expression of symptoms.

Studies of locus of control and anger have explored differences between women who report premenstrual difficulties and those who do not. Severino and Moline (1989) stated that women who reported premenstrual difficulty showed a more external locus of control throughout the month, and that it became more pronounced during the premenstrual phase of their cycle. However, Smith and Thomas (1996) found no differences in locus of control, anger expression, and anger temperament between subjects who were and those who were not diagnosed with premenstrual dysphoric disorder.

Fontana and Badawy (1997) found that subjects who had premenstrual difficulties encountered more personal competency stressors premenstrually, as compared with postmenstrually. Postmenstrually, there was no difference between the experimental and control groups. It appeared that rather than considering the situation and reframing their perceptions, women with premenstrual difficulties became more stressed. The authors concluded that perceptually based coping processes were impaired for women who experienced premenstrual difficulties. In addition, the perceptual changes during the premenstrual phase may have made women feel as if they are not performing adequately when in fact their performance had not changed (Fontana & Badawy, 1997).

Cognitive behaviors and functioning have been proposed in the etiology of premenstrual difficulties. In a study using the Beck Depression Inventory, items endorsed premenstrually by women with premenstrual difficulties included: pessimism, sense of failure, dissatisfaction, guilt, self-dislike, and indecision (Keenan, Lindamer & Jong, 1992). The authors concluded that premenstrual dysphoria was more cognitive than vegetative in nature.

Bakhai and Halbreich (1993) estimated that approximately half of women who believe they have "PMS" actually have Axis I (i.e., clinical syndromes) or Axis II (i.e., personality disorders) psychiatric disorders. They suggested the possibility that the label "PMS" was more socially acceptable than being diagnosed with a major psychiatric disorder. They advise clinicians, when making diagnoses, to pay close attention to the specific symptoms, as well as the timing of the symptoms.

Severino and Moline (1989) pointed out that women who seek help for "PMS" very often have other psychiatric problems. They offered the explanation that this apparent co-occurrence may be due to the fact that before 1987 and the DSM-III-R there was no agreed upon diagnostic category for Premenstrual Dysphoric Disorder. The diagnostic criteria first appeared in 1987 in the DSM-III-R (American Psychiatric Association) and provided a common language and diagnostic criteria for differential diagnosis. Premenstrual symptoms or potential premenstrual disorders had never before been differentiated from depression and anxiety disorders.

It is very important to separate Premenstrual Dysphoric Disorder from other psychiatric disorders that are exacerbated premenstrually and inaccurately self-labeled. If someone has a psychiatric illness she may feel more depressed premenstrually, yet the symptoms do not go away within the first few days of menstruation. It is also possible for a woman to be diagnosed with both a mental illness and Premenstrual Dysphoric Disorder. This would be appropriate only if the symptoms experienced during the premenstrual phase are very different from those symptoms experienced in the psychiatric disorder (Severino & Moline, 1989). Chisholm, Jung, Cumming, Fox and Cumming (1990) proposed that there are two populations of women with premenstrual

difficulties: 1) those with "pure PMS"; and, 2) those with "premenstrual exacerbation of existing anxiety and depression".

DeJong and colleagues (1985) stated that it was important to rule out affective illness in women who complain of premenstrual difficulties. In this study 63% of the volunteers for a "PMS" study had a history of psychiatric illness, and only 58% of the volunteers who identified themselves as having premenstrual symptoms were later diagnosed with PMS or Premenstrual Dysphoric Disorder. Of the participants who received a diagnosis of PMS or Premenstrual Dysphoric Disorder, 45% had histories of psychiatric diagnosis. Severino and Moline (1989) pointed out that this did not necessarily mean those women with Premenstrual Dysphoric Disorder or PMS had higher than average rates of psychiatric illness. An alternative explanation was that women with psychiatric illness were more likely than average to volunteer for a study on "PMS" (Severino & Moline, 1989).

Severino and Moline (1989) concluded from their review of the literature that no one type of woman or group of personality factors accounted for the psychological etiology of premenstrual difficulties. Gannon (1985) stated that research on the psychological etiology has been primarily correlational, with the study of personality characteristics and menstrual cycle symptoms being most common. In addition, the research was most frequently conducted on normal samples and subjects who scored within normal range in psychological tests. Gannon (1985) noted from her review of the literature that there was very weak correlation between mental illness and the non-acceptance of the female role. She also asserted that overall, a psychological etiology has not been supported by research.

Sociocultural Etiology

Theories and hypotheses about the etiology of PMS can be found not only in the medical literature, but also in the disciplines of sociology, social work, nursing, anthropology, and psychology. The following is an overview of the sociocultural perspective of the etiology of PMS.

In a recent study investigating a college sample, 89% of the women believed they had "PMS", and only 11% did not believe they had "PMS" (Smith & Thomas, 1996). The discrepancy between the large percentage of women who believe they have "PMS" and the small percentage of women who would actually meet criteria for a premenstrual disorder suggests the expression "PMS" is used more frequently for something other than the clinical syndrome. One potential danger with this scenario was described by Caplan (1995) who stated, "Everyday kinds of harm include men's and women's dismissal and trivializing of women's legitimate concerns and grievances as 'just PMS'" (p. 148).

Johnson (1987), an anthropologist, argued that "PMS" is best understood from a sociocultural perspective. He stated that "PMS" is a phenomenon that is specific to Western culture (i.e., United States and Europe). He hypothesized that because women in Western culture are expected to be both productive (career) and reproductive (mother), they experience a conflict in gender role expectations that leads to the experience, or self-label, of "PMS".

It may appear that the documented research on "PMS" has been produced mainly in Westernized countries. However, the primary impetus cited by researchers in a recent epidemiological study in India (Chandra, Chaturvedi & Gururaj, 1994) was the lack of data regarding premenstrual difficulties for Indian women. Chandra and colleagues

(1994) described the development of an epidemiological approach to estimate prevalence of premenstrual symptoms and premenstrual syndrome in 2400 rural and urban Indian women (researchers used the criteria for Late Luteal Phase Dysphoric Disorder as defined in the DSM-III-R). In their paper the researchers discussed the problems of assessment and estimating prevalence of premenstrual symptoms and premenstrual syndrome in India. The fact that they studied this population implied that researchers in India believe women there experience some form of premenstrual problems.

One possible explanation for the lack of attention paid to research on premenstrual difficulties in non-Western cultures is that it may not be socially acceptable for women to discuss premenstrual complaints. In some cultures women may experience premenstrual symptoms, but explain them in a way that is very different from women in the Western countries studied. It is possible that PMS is a cross cultural phenomenon experienced by women world wide, and as the study of PMS in Western cultures progresses, researchers in other countries will follow suit. Alternately, as world economies and political systems change and non-Westernized countries become "Westernized," we may see the problem of PMS develop as the women assimilate and take on new roles.

From a sociological perspective, Pugliesi (1992) explored the popular literature on "PMS" from 1970 to 1990 with an interest in gender and emotions. She argued that giving something or someone the label "PMS" discounted a person's emotions and changed them into a medical problem. She asserted that people are either labeled or self-label with "PMS" when they break gender rules for the expression of emotion. One example of this is the social rule that women should not express anger. When she does

express anger she may be labeled with "PMS", rather than given the acknowledgment that she is, and has a right to be, angry.

Consider the term "on the rag" which was a familiar term in the 1970's to describe a woman who was menstruating. Women "on the rag" were considered hostile, angry, or "bitchy". Perhaps the expression "PMS" is the new explanation for women who behave in certain ways. It is interesting that the problem moved from the menstrual phase ("on the rag") to the premenstrual phase ("PMS") of the menstrual cycle in the course of the last 30 years. Considering this comparison, it would seem unlikely that the frequent use of the expression "PMS" to explain the behavior of self or others is a simple misuse of the medical term. It stands to reason that the use of the expression "PMS" functions in a way that is separate from the clinical diagnosis.

Biopsychosocial Perspective

There is a developing consensus that a combination of factors is responsible for Premenstrual Dysphoric Disorder (Harrison, 1985; Reid, 1989; Severino & Moline, 1989; Sondheimer, 1993). Severino and Moline (1989) described the biopsychosocial model of Premenstrual Dysphoric Disorder as a relationship between the biological, social and psychological factors of the individual. An individual with a problem in one factor (i.e., biological hormone imbalance) may or may not experience Premenstrual Dysphoric Disorder, depending on the other factors.

Keye (1989) described the biopsychosocial model applied to premenstrual syndrome to include a combination of the biological, psychological, and social situation specific to each individual woman. To fully understand premenstrual difficulties it is necessary to understand the interaction between biological events within an individual,

how their physical experience is interpreted, and subsequently, how it is labeled. In addition, the person's current social role, stress level, and psychological functioning will impact the experience, and should be considered in the etiology. A biological predisposition to premenstrual syndrome may or may not become apparent depending on the individual woman's circumstances (Keye, 1989).

Sondheimer (1993) concluded that PMS is a complex interaction of normal cyclic hormone changes, and underlying psychological, social and medical problems. He asserted that it was very unlikely that a single etiology would be found for premenstrual symptoms because the physical and psychological symptoms are so diverse. This combination of biology, psychology, and social world describes the biopsychosocial model for the etiology of Premenstrual Dysphoric Disorder that has been highlighted in the most current literature.

To summarize, the results of studies of biological etiologies have been inconclusive, as have been psychological and sociological explanations. It appears that PMS can best be understood from a combination of these causes, the biopsychosocial perspective. More research is needed to more clearly define the role of each aspect in the etiology of this diverse and complex set of symptoms. In the next section an overview of recommended assessment, diagnosis and treatment is provided.

Assessment and Diagnosis

The following section provides a brief summary of recommended components for the effective assessment and diagnosis of PMS and Premenstrual Dysphoric Disorder. The components of assessment that are discussed include an in-depth interview to include family history, medical and psychiatric histories, a complete medical examination, and

prospective daily ratings of symptoms over two or three menstrual cycles. In addition, Table 2 provides the diagnostic criteria for Premenstrual Dysphoric Disorder provided in the DSM-IV (APA, 1994).

Due to the diversity of symptoms of Premenstrual Dysphoric Disorder, the cyclical nature, and co-occurrence with other mental illness, it is very important to do a comprehensive assessment and diagnosis. Careful investigation of premenstrual symptoms and overall functioning is especially important in the assessment of PMS. It is important to rule out other medical and psychiatric illnesses (Rausch & Parry, 1993; Severino & Moline, 1989).

Severino and Moline (1989) recommend conducting an in-depth interview to gain a complete understanding of the client's symptoms. It is useful to have the client create a complete list of symptoms, when they occur, and how they impact her life. Particular attention should be paid to when the symptoms appeared and whether or not there were precipitating events (i.e., pregnancy, starting oral contraceptives). A family history of PMS, affective disorders, and addiction should be completed. The interview should also include a stress history, and her reasons for seeking help at this particular time.

Current life stressors may create problems that she attributes to "PMS", or her premenstrual symptoms may be exacerbated by current stress. The interview should include questions about coping strategies including whether or not she self-medicates (e.g., alcohol, food binges, and over-the-counter medications). Inquiring about coping strategies and clarifying what was helpful and what was not helpful will be important when developing an individualized treatment plan.

Table 2

Research Criteria for Premenstrual Dysphoric Disorder

A. In most menstrual cycles during the past year, five (or more) of the following began to remit within a few days after the onset of the follicular phase, and were absent in the week postmenses, with at least one of the symptoms being either (1), (2), (3), or (4):

1. markedly depressed mood, feelings of hopelessness, or self-deprecating thoughts
 2. marked anxiety, tension, feelings of being "keyed up", or "on edge"
 3. marked affective lability (e.g., feeling suddenly sad or tearful or increased sensitivity to rejection)
 4. persistent and marked anger or irritability or increased interpersonal conflicts
 5. decreased interest in usual activities (e.g., work, school, friends, hobbies)
 6. subjective sense of difficulty in concentrating
 7. lethargy, easy fatigability, or marked lack of energy
 8. marked change in appetite, overeating, or specific food cravings
 9. hypersomnia or insomnia
 10. a subjective sense of being overwhelmed or out of control
 11. other physical symptoms, such as breast tenderness or swelling, headaches, joint or muscle pain, a sensation of "bloating", weight gain
between ovulation and the onset of menses, and the follicular phase begins
-

Table 2 continued

Research Criteria for Premenstrual Dysphoric Disorder

with menses. In nonmenstruating females (e.g., those who have had a hysterectomy), the timing of luteal and follicular phases may require measurement of circulating reproductive hormones.

Note: In menstruating females, the luteal phase corresponds to the period

- B. The disturbance markedly interferes with work or school or with usual social activities and relationships with others (e.g., avoidance of social activities, decreased productivity and efficiency at work or school).
 - C. The disturbance is not merely an exacerbation of the symptoms of another disorder, such as Major Depressive Disorder, Panic Disorder, Dysthymic Disorder, or a Personality Disorder (although it may be superimposed on any of these disorders).
 - D. Criteria A, B, and C must be confirmed by prospective daily ratings during at least two consecutive symptomatic cycles. (The diagnosis may be made provisionally prior to this confirmation.)
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Note. From The Diagnostic and Statistical Manual, 4th ed., (pp. 717-718), by the American Psychiatric Association, 1994, Washington, D. C.: American Psychiatric Association. Copyright 1994 by the American Psychiatric Association.

A complete medical history, including a gynecological history, should be completed. Of particular importance are age of first menstruation, age of onset of premenstrual symptoms, current place in life cycle (e.g., adolescence, approaching menopause), regularity of cycles, surgeries, pregnancies, current use of oral

contraceptives, and any gynecological problems. In addition, a history of the client's general health should be documented with specific inquiry into thyroid problems, diabetes, and hypoglycemia. A medical exam is also necessary in order to rule out other physical illnesses and should include a complete physical, pelvic exam, and blood work (Severino & Moline, 1989).

A psychiatric history should be collected and include a personal history as well as a family history of mental illness, addictions, and premenstrual symptoms. This will assist in differential diagnosis and may be helpful if other family members have been successfully treated with medications. Addiction is important to assess because of the potential for using or developing an addiction in the process of self-medicating premenstrually. When completing a psychiatric history it is also important to consider the possibilities of Major Depression, Dysthymia, and Personality Disorder (Severino & Moline, 1989).

If a diagnosis of Premenstrual Dysphoric Disorder is not ruled out in the process of the interview, medical or psychiatric histories, or medical exam, Severino and Moline (1989) recommend giving the client a provisional diagnosis until daily prospective ratings are completed.

Prospective daily ratings of symptoms, their severity, and phase of the menstrual cycle should be documented by the client for a minimum of two months (Rausch & Parry, 1993), but preferably 3 months (Severino & Moline, 1989). Daily symptom checklists are available in many different formats (Harrison, 1985; Severino & Moline, 1989; Smith & Schiff, 1993) and should be provided for the client to complete. Daily rating forms should include a list of symptoms, a rating system for the severity of each

symptom, and a place to chart the menstrual cycle. A check mark or severity rating can be placed by each symptom for each day of the client's menstrual cycle. A follow-up interview should be scheduled after two to three months of prospective ratings have been completed. The rating forms should provide a clear picture of the symptoms and their timing within the menstrual cycle.

Severino and Moline (1989) recommend that if other medical and psychiatric illnesses are ruled out and the client has completed daily rating forms for two to three menstrual cycles, a diagnosis of Premenstrual Dysphoric Disorder can be rendered. However, it is important to note that the diagnostic criteria proposed in the DSM-IV (APA, 1994) for Premenstrual Dysphoric Disorder is currently located in the research section of the text, and is considered a category in need of further study. In addition, diagnosis requires that the symptoms have been present for at least one year and are severe enough to seriously disrupt the client's life.

In conclusion, a thorough assessment and diagnosis of Premenstrual Dysphoric Disorder should include an in-depth interview, a medical and psychiatric history, a medical examination, and prospective daily ratings of symptoms over at least two menstrual cycles. If the symptoms have occurred in most cycles over the course of one year, a diagnosis of Premenstrual Dysphoric Disorder may be applicable, although it is not an official category in the DSM-IV (APA, 1994). In the following section treatment options will be discussed.

Treatment

The research on treatment approaches for PMS has suffered from an unfortunate combination of low success rates and high placebo effect rates. The lack of consensus on

the etiology and definition of PMS may be at least partially responsible for the inability of researchers to develop more effective treatments. If women are using the label PMS to describe an increasingly broad range of experiences, and clinicians are attempting to treat the entire range of these experiences with one specific medication or treatment method, the lack of success is not surprising. The following is a brief overview of research on treatment approaches for PMS.

In their review, Severino and Moline (1989) reported that there were more than fifty treatment options that have been researched for the treatment of PMS. Caution was advised when evaluating treatment options and research as there has been a high placebo response rate (over 40% in some cases) in studies on the efficacy of treatments for PMS and Premenstrual Dysphoric Disorder (Rausch & Parry, 1993). What works for one woman or one symptom may not work for others. There are many problems in the research methodology, and a reader must be cautious in assessing the value or potential of each treatment (Severino & Moline, 1989).

Minimizing harm is an important consideration as many of the more intrusive treatments have serious side effects that could be worse than the original problem. Although none of the proposed treatments have yet to be proven effective, some studies have provided evidence of effectiveness for certain samples. This section will briefly describe some of the more common treatment methods and general impressions of their estimated efficacy. The approaches discussed will include the categories of lifestyle changes, group and individual counseling, and medical interventions.

Lifestyle Changes

Lifestyle changes have been recommended frequently in the popular as well as scientific literature. Common recommendations have included increased exercise, diet modifications, decreased caffeine intake, and reduced stress. Exercise has been suggested because of its tendency to improve mood and reduce stress (Severino & Moline, 1989). Other researchers have stated that exercise may reduce breast pain, fluid retention and stress, but not affective symptoms of PMS. They added that little data supports exercise as a treatment for "PMS", but it was a low risk intervention with other health benefits which may indirectly improve premenstrual symptoms (Rausch & Parry, 1993).

Dietary changes have also been recommended frequently to reduce premenstrual symptoms (Harrison, 1985; Rausch & Parry, 1993; Severino & Moline, 1989) and have even been implicated as a primary approach to treatment (Nazzaro, et al. 1985). Common recommendations have included eating smaller portions, but more frequent meals, and increased intake of complex carbohydrates. It is reasoned that this strategy will keep levels of blood sugar and energy in balance. People with premenstrual symptoms are encouraged to decrease intake of caffeine, sugar, and chocolate as they may increase irritability and create sleep difficulties. Again, there is no scientific research to support this treatment option. However, changing to a healthier diet has been described as a low risk intervention with potential benefits for overall health and wellness (Rausch & Parry, 1993; Severino & Moline, 1989).

Counseling and Education

Psycho-educational interventions and supportive counseling consist of educating the client about PMS and providing an opportunity for them to ask questions, discuss

their experience, and receive support in their distress. Often, simply knowing more about the problem and having their experience validated provides a sense of relief and control over the problem.

Success has been reported using cognitive-behavioral interventions (Blake, Salkovskis, Gath, Day, & Garrod, 1998; Kirkby, 1994). Cognitive behavior therapy is a particular method of psychotherapy that can include relaxation training, and assist the client in developing a new way of thinking and behaving in response to premenstrual symptoms (Rausch & Parry, 1993). Biofeedback and relaxation techniques have been promoted for the treatment of premenstrual symptoms, but again have not been supported by research (Severino & Moline, 1989). Blake (1994) found that women who participated in a coping skills program based on cognitive-behavioral principles reported reduced premenstrual symptoms immediately following the treatment as well as at a 9-month follow-up. Blake, et al. (1998) reported that women who received weekly sessions of individual cognitive-behavioral therapy reported a decrease in both physical and psychological symptoms and reduced impairment during the premenstrual phase.

Ulman (1993) described a model for group therapy for PMS. The purpose of this treatment is to help clients gain awareness of physical and emotional changes associated with their menstrual cycle, and to learn ways to better cope. It is hypothesized that if the client learns how her cycle of symptoms affects her life and interactions with others, she will feel more confident and able to deal with the symptoms.

Unfortunately, treatment outcome research on psychotherapy in general has been less than impressive, and treatment outcome studies of psychotherapy for the treatment of PMS have been no exception (Severino & Moline, 1989). It makes intuitive sense that,

like changes in lifestyle, psychotherapy and education may improve a client's overall health and functioning, and therefore will decrease premenstrual symptoms.

Medical Interventions

The final treatment category reviewed considers medical interventions. The medical interventions for the treatment of PMS are numerous and diverse, and research studies on their respective efficacy have been inconclusive (Severino & Moline, 1989). Medical interventions are more invasive than either lifestyle changes or psycho-education and should be used only if the client has not responded to either form of treatment, or in the case of emergency (e.g., client is a danger to herself or others during the premenstrual phase).

Keye (1989) stated that from the biopsychosocial perspective the treatment of premenstrual syndrome should be individualized for every different woman. He stated that because the factors are different for each woman there is no one standard approach that should be prescribed. Although some forms of treatment will work for a majority of women, it is necessary for the biological, psychological, and social characteristics of each woman to be taken into account when developing treatment plans.

Treatment approaches based on the hormone imbalance etiology of PMS provide relief of some symptoms for some women. Oral contraceptives are often prescribed as a first medicinal approach to treating PMS because they contain estrogen and progestins. It is hypothesized that they may serve to balance hormone levels that are implicated in the etiology of PMS (Severino & Moline, 1989). While some women report relief of symptoms while taking oral contraceptives, other women must discontinue use due to side effects such as fluid retention and depression (symptoms common to both PMS and

oral contraceptives). Rausch and Parry (1993) reported that studies on the use of hormone treatments were mixed and based mainly on uncontrolled studies. Side effects have been a problem and more controlled long-term research is needed.

Supplements of vitamin B6 are often recommended to women who take oral contraceptives to relieve these symptoms. No scientific evidence has supported the claim that vitamin B6 supplements improve premenstrual symptoms, and it is not as safe as is generally assumed as extremely high doses can be toxic (Severino & Moline, 1989).

Natural or synthetic progesterone are sometimes prescribed, although they are expensive and have not been proven effective beyond a placebo affect (Severino & Moline, 1989). Progesterone treatment appears to relieve symptoms for some women, while increasing the same symptoms in others (Severino & Moline, 1989). Similarly, Bromocriptine has been used to treat symptoms associated with an increase in prolactin, including fluid retention, irritability, and depression. Some controlled studies showed improvement of mood symptoms. However, common side effects experienced included nausea, vomiting, headache, and fatigue (Severino & Moline, 1989). Current research does not support the prolactin hypothesis of PMS or the use of bromocriptine (Rausch & Parry, 1993).

Neurotransmitters have been implicated in the etiology of PMS because of symptom overlap with Major Depression and Anxiety Disorder. Several studies using fluoxetine to treat PMS reported marked improvement and remission of symptoms in a majority of participants (Brandenburg et al. 1993; Menkes et al. 1993; Wood et al. 1992). A small number of women dropped out of one study (Menkes et al. 1993) because they were unable to tolerate the side effects. Nevertheless, Wood and colleagues (1992)

concluded that fluoxetine was very effective and well tolerated for the treatment of both the physical and psychological symptoms of PMS.

In order to treat the anxiety and irritability symptoms associated with PMS, anti-anxiety medications are sometimes prescribed. Alprazolam (Xanax) has been shown to give some relief of premenstrual symptoms of anxiety, tension, and insomnia (Rausch & Parry, 1993; Severino & Moline, 1989). Patients should be cautioned about potential side effects and the development of tolerance and associated withdrawal. Although promising, more research is needed on the long-term use of alprazolam in controlled studies (Rausch & Parry, 1993; Severino & Moline, 1989).

Schweizer and Rickels (1994) reported the successful use of Buspirone for the treatment of PMS and many other mental health problems. Buspirone is a new anxiolytic that came on the market in 1986. It is generally prescribed for the treatment of anxiety disorders, but it has also been shown to effectively treat depression (Schweizer & Rickels, 1994). Buspirone is typically well tolerated and has few reported side effects. In addition, there are no problems of tolerance or withdrawal. Because PMS often includes both anxiety and depression as prominent symptoms, Buspirone looks encouraging (Rausch & Parry, 1993; Schweizer & Rickels, 1994; Severino & Moline, 1989).

In summary, treatment should be prescribed starting with the least intrusive method. Lifestyle changes should be implemented first and could include education, diet changes, increased exercise, and potentially individual or group counseling. Rausch and Parry (1993) estimated that up to 50% of women treated for premenstrual symptoms experienced relief from the least intrusive treatments. In assessing the potential usefulness of medical and pharmaceutical treatments, it is important to remember that no

one etiology has been scientifically proven. In addition, no one treatment method or medication has been proven effective, and many are accompanied by side effects. Medical interventions should be used only if more conservative methods fail. An individualized treatment plan should address each woman's particular symptoms and needs and include biological, social and psychological interventions (Severino & Moline, 1989).

Summary of Literature Review

Lack of definition and confusion characterize the research and popular culture understanding of something called "PMS". The purpose of this extensive literature review was to provide the reader with enough knowledge of "PMS" and Premenstrual Dysphoric Disorder to be able to put this complex and confused problem into perspective.

The brief history of scientific inquiry into premenstrual complaints provided historical context for a problem that is only recently gaining a large amount of attention in both the public and scientific realms. Definitions of premenstrual symptoms, syndromes, and disorders were provided to assist the reader in identifying the confusion in the research and popular literatures.

Similarly, research problems common to "premenstrual syndrome" ("PMS") were explored to assist in understanding the various sources of confusion and need for clear definitions. The sociological and political significance of "PMS" as a diagnostic category is highlighted by the debate surrounding the inclusion of premenstrual syndromes in the DSM-III-R and DSM-IV.

Finally, an overview of the physiology of the normal menstrual cycle was intended to provide perspective into what is "normal" and prepare the reader for the

etiology overview. Symptoms, etiology, diagnosis, and treatment options for premenstrual symptoms and disorders were summarized to enhance understanding of the ways that “PMS” and Premenstrual Dysphoric Disorder are constructed in the medical community.

The purpose of this chapter was to provide the reader with a review of the literature relevant to this study. In the next chapter the methodology is described and provides detailed descriptions of the participants, materials, and procedures followed in carrying out this study. In addition, an explanation of the qualitative research paradigm used and the information gained from the pilot study are provided.

CHAPTER III

METHOD

This chapter contains a description of the participants, materials, and procedure used in this study. Rationale for selecting a qualitative paradigm for this study is presented and explored in more detail using a framework suggested by Denzin and Lincoln (1998). The five stages of inquiry include: The researcher's personal history and biases; the theoretical paradigm; research strategies and study design; methods of collection and analysis; and the art of interpretation. The final stage, the art of interpretation, will not be included in this chapter, but will instead be described in the final chapter, titled Discussion. This chapter concludes with a description of the pilot study and pilot study results; and includes the ways that it informed the design of the final project.

In concluding the chapter, trustworthiness is discussed as it relates to the design of this study. The chapter concludes with a description of the pilot study and the ways in which it informed the design of the final study.

Participants

Participants were recruited from freshman English classes at a small university in the Midwestern United States. Of approximately 90 students who completed in-class essays and were offered the opportunity to participate, 48 attended research sessions and completed a questionnaire and MAACL-R. One male respondent did not include his

essay in the packet and therefore, was not considered in the analysis. Thirty female and 17 male participants were included in the study. Respondents were primarily Caucasian (43), but included two international students and one Asian American student. Thirty-six respondents indicated they were single, 10 indicated they were currently in committed relationships, and one respondent did not indicate relationship status. Most participants indicated their sexual orientation as heterosexual (45), with one respondent indicating a gay identity and one respondent indicating a bisexual identity.

Materials

Each participant completed a two page in-class essay with the theme, "A Day In the Life of a Person With PMS". In addition, participants completed the Multiple Affect Adjective Checklist-Revised (MAACL-R), and a brief questionnaire as described below.

The MAACL-R consists of 132 adjectives that describe affect, and was developed to provide a measure of self-reported mood (Lubin & Zuckerman, 1965). Analysis of the checklist provides five basic scores that include anxiety, depression, hostility, positive affect, and sensation seeking. Each of these scales has a positive and negative sub-scale. In addition, it provides two summary scores for dysphoria and positive affect/sensation seeking. Rather than following the usual instructions for the checklist to check all the words that describe their own feelings, participants were asked to: "Check all the words that would describe the person that you wrote about in your essay 'A Day in the Life of A Person with PMS'."

The questionnaire asked participants for demographic information, as well as posing the following questions: 1) What do you think the expression "PMS" stands for? 2) Describe what you think PMS means, in your own words; 3) Please check the times of

the menstrual cycle that you think PMS occurs; 4) Have you ever been in a close personal relationship with someone you believed experienced a premenstrual syndrome or “PMS”? 5) Have you ever thought that you had a premenstrual syndrome or something that might be labeled “PMS”? 6) Have you ever been diagnosed with a menstrual problem, or sought treatment for premenstrual symptoms, a premenstrual syndrome, or “PMS” by a medical or psychological professional?

These questions were followed by the options “yes” and “does not apply to me,” as well as a request to “please explain.” It was hoped that their explanations would provide contextual information regarding their answers. The question regarding the time of the cycle was presented with four options participants could check including, during, just before, or just after “menstruation or period (bleeding),” or “during ovulation (middle of the cycle).” A visual aid was presented above the timing question and provided a representation of the menstrual cycle along a continuum from day one to day twenty-eight.

Procedure

Students were recruited from introductory college writing classes with the help of faculty in the English Department. Students in Freshman English classes were chosen because they were likely to be new to the college environment. It was assumed their essays would potentially reflect the attitudes of their earlier social environment (e.g., family and friends) rather than being formed by the culture of the academic setting. It was hoped that an English professor asking students to write an essay would reduce potential demand characteristics to produce scientific or medical sounding essays, and

subsequently provide a more honest projection of the popular concept "PMS" into their essay.

One male English Professor, one female graduate assistant, and one male graduate assistant agreed to assign an in-class narrative essay to the theme "A Day in the Life of a Person with PMS" in their freshman writing classes at a small university in the mid-western United States. Instructors agreed that the assignment was a legitimate and appropriate learning experience for their students regardless of whether or not the students decided to volunteer for the study. The essay assignment was designed to serve as a projective instrument. It was expected that participants would project their perceptions of PMS onto the person they were writing about in their narrative essay.

Each instructor agreed to use standardized instructions provided by the researcher when they introduced the assignment. The standardized instructions were as follows: "The essay should be typed, two pages minimum, and should be handed in at the end of the class period. The purpose of this assignment is to provide you practice in impromptu writing and credit will be given for your participation." If students asked instructors for a definition of PMS, they were instructed to reply, "Just write according to what you think it is."

After the essays were completed, evaluated by the instructors, and returned to the students, the researcher visited the classroom and offered students the opportunity to participate in a paid research opportunity utilizing their essay as part of the data. Each student was provided both a verbal and written invitation to participate in the study. They were informed that they could use their essay as part of the data, and should bring a copy to one of the research sessions. Students were provided a written invitation to participate

that included the specific times and locations of the research sessions. The voluntary and confidential nature of the study was stressed, and students were offered a \$5 honorarium if they chose to participate.

It was made clear to the students that participation in the research was voluntary and would in no way affect their grade in the course. Research sessions were held outside of the class in which they were recruited, and students signaled their interest in participation by attending the research session outside of class time. Instructors were asked to retreat to their offices or otherwise stay clear of research areas so they would not have information about which students participated. In this way, students were provided a confidential means of volunteering or declining the research opportunity. Instructors were not provided names of students who did or did not participate in the study.

Students who volunteered to participate were asked to attend a 30-minute research session outside of class. Of approximately 90 students who completed in-class essays, 48 attended research sessions and completed a questionnaire and MAACL-R. One male respondent did not include his essay in the packet and was not considered in the analysis. Of the 47 remaining participants, 30 female and 17 male were included in the study. Respondents were primarily Caucasian (43), but included two international students and one Asian American student.

At the research session participants were read standardized instructions and the informed consent form. They were asked for their informed consent and permission to use the data in future research and writing, which they gave by providing their signature. Students were asked for a copy of their essay, to complete the questionnaire, and to complete the MAACL-R with the instructions, "Check all the words that would describe

the person that you wrote about in your essay 'A Day in the Life of A Person with PMS'".

Students were provided unmarked envelopes in which to put their materials. They were asked to further ensure their confidentiality by removing identifying information from the materials that they submitted. Following completion of their participation, participants were debriefed regarding the purpose of the research and provided an overview of the confusion surrounding the definition of "PMS". Participants were provided the opportunity to ask questions and were encouraged to contact the researcher with any questions at any time after their participation had ended. A sign-up sheet was provided so students who were interested in the results could leave their name and address. Each participant was given a \$5 honorarium and dismissed.

Qualitative Methodology

A qualitative paradigm and methodology were selected for this study because it afforded the opportunity to explore the depth and participant's thick descriptions of the popular concept "PMS". My goal was to explore the descriptions and definitions assigned to "PMS" by people in the general public and to gain a better understanding of what they mean when they use this expression. My review of the literature convinced me that although there is extensive research concerning the topic, something is missing in the analysis. Within social interactions people are labeling women as having "PMS", or "PMSing", to the extent that there are greeting cards and humorous books chronicling this new adjective.

Denzin and Lincoln (1998) state that, "qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is

studied, and the situational constraints that shape inquiry” (p. 8). I believe that within Western culture, at this time in history, the expression “PMS” is a construction of popular culture as much as it is a medical diagnosis. I acknowledge my biases and the lenses I use when conceptualizing “PMS” and that my experience helps shape my inquiry and analysis. Situational constraints in this study of PMS include getting people to describe their personal experiences and interactions rather than reporting a socially acceptable or politically correct response. In addition, due to the lack of clear definition, people use the expression “PMS” to describe a wide range of experiences or self and others.

Qualitative research is an emergent process and can feel less linear and concrete than a traditional quantitative paradigm. Denzin and Lincoln (1998) describe the process of qualitative research in the following way: “The gendered, multiculturally situated researcher approaches the world with a set of ideas, a framework (theory, ontology) that specifies a set of questions (epistemology) that are then examined (methodology, analysis) in specific ways” (p. 23). In an effort to provide structure to the process I use Denzin and Lincoln’s (1998) outline for five phases or levels of activity. These levels include the researcher, theoretical paradigm, research design, methods of collection and analysis, and the art of interpretation. The first four levels will be addressed in this section while the fifth level will be approached in the final chapter called Discussion.

The Researcher

The first level of activity identified by Denzin and Lincoln (1998) is the researcher. In a qualitative research paradigm, the researcher is assumed to have biases and a perspective that is impacted by her research traditions, conception of self and others, and the ethics and politics of research (Denzin & Lincoln, 1998). This is very

different from the positivist paradigm of the researcher as objective observer. Qualitative research is a dialectic process between the researcher, her personal history and characteristics (including gender, social class, race and ethnicity), and the participants in the study (Denzin & Lincoln, 1998).

As a researcher I understand that I bring my history and personal characteristics to my analysis. As a white upper-middle-class woman in my mid-thirties pursuing an advanced degree in Psychology I recognize that both my interest and biases regarding PMS are influenced by my privileged life experience. Due to that privilege I have been able to focus my energy on improving my physical and psychological health, rather than physical survival or obtaining health related services. Raised in the United States in the late 1960's through the early 1980's, I recognize the western values and individualist world-view that influence my perspective.

Although my personal history includes a conservative mid-west upbringing, I was introduced to various forms of feminism in the late 1980's. Since that time I have worked actively as a feminist advocating for issues specific to women's psychological and physical health. My choice of PMS as a research topic was influenced by my passion as a feminist, commitment to women's health care, and interest in gender issues.

On a more personal level, I have labeled something in my own life experience as "PMS" for more than ten years. In the course of that experience and self-diagnosis I have sought medical, psychological, and non-traditional treatment for the condition. I do experience a real physical and emotional cycle of changes that has interfered with my life. I believe that many women do experience real physical or psychological menstrual cycle changes that impact them to the point of interfering with daily functioning.

In my attempts to get medical treatment for my symptoms I was amazed at the medical professionals who brushed my concerns off with the equivalent of “ain’t it awful,” and offered no relief other than a prescription for birth control pills and suggestions for changing my diet. Taking my cues from the medical “professionals” who I viewed as expert, I located the blame solidly within me, resigned myself to the fact that I must be overreacting, and tried to find others ways to “deal with it.” As a well-educated middle-class woman with a background in feminism, I was nonetheless easily intimidated by the tone taken by the medical professionals I saw. Given this, I wondered how women with less privilege and power felt and were responded to when describing symptoms of something they labeled “PMS”.

From my perspective as a counseling psychologist I ponder the models of depression among women as anger turned inward. I believe that medical knowledge is often “constructed” rather than “discovered.” I worry that medical doctors minimize women’s complaints, and consumers of medical services tend to trust the medical establishment to define and treat their bodies and their minds. My history and concerns led me to question what the expression PMS means when people use it in everyday communication with each other and within themselves. What is the usefulness of this expression and what role does it serve in the daily interactions of individuals?

The intersection of my personal experience with PMS and my feminist perspective on women’s health influenced my choice of both topic and paradigm. Just as my personal history impacts the way that I view the broad topic of PMS, it will influence my analysis of the empirical materials of this study.

Theoretical Paradigm

The second level of activity is defining the theoretical paradigm. Guba & Lincoln (1998) define paradigm "...as the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways" (p. 195).

This study was developed and completed within a constructivist philosophical perspective. "The constructivist paradigm assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and subject create understandings), and a naturalistic (in the natural world) set of methodological procedures" (Denzin & Lincoln, 1998, p. 27). Within this paradigm there is no objective reality, only meanings constructed by individuals. PMS can not be known through medical or psychiatric diagnosis as in the case of Premenstrual Dysphoric Disorder. We can only know PMS within the context of individual lives and within social interactions. The constructions extracted by the researcher are subject to revision as more information is integrated into the analysis and through dialogue regarding the constructions.

Social constructionism, labeled by Kenneth Gergen (1985), is one type of constructivism which focuses on social interaction (Schwandt, 1997). Social constructionists attempt to understand how individuals "recognize, produce, and reproduce social actions and how they come to share an intersubjective understanding of specific life circumstances" (Schwandt, 1997, p. 19).

Within a social constructionist paradigm it could be reasoned that the expression "PMS" has been constructed by individuals through their personal experiences and through interactions with others. In order to understand PMS, I will attempt to identify

the process of how meaning is constructed by the participants through their descriptions of thoughts, behaviors and feelings. An interpretation of their descriptions will be used to build an overarching definition and construction of PMS.

A relationship and interaction between researcher and the empirical material (epistemology) is expected and the researcher's biases and history admittedly influence the inquiry and analysis of empirical materials (Denzin & Lincoln, 1998). Previous research has contributed to a greater understanding of "PMS", yet there continues to be a problem in the assessment and treatment of this problem for the majority of individuals who say that they have something called "PMS". It is because of this that I suspect that PMS is constructed in ways different from our current understanding, and constructed in a way that eludes sufferers, researchers, and clinicians. With this research study I attempted to develop a definition of PMS that reflects popular culture conceptualizations.

Guba and Lincoln (1998) best express the goal of research from a constructivist paradigm:

The aim of inquiry is *understanding and reconstruction* of the constructions that people (including the inquirer) initially hold, aiming toward consensus but still open to new interpretations as information and sophistication improve. The criterion for progress is that over time, everyone formulates more informed and sophisticated constructions and becomes more aware of the content and meaning of competing constructions. Advocacy and activism are also key concepts in (sic) this view (p. 211).

Research Design

The third level of activity concerns research strategies and design. Included in this level are the purpose of the study, clearly defined research questions, and a description of the approach that will be used to get the answers (Denzin & Lincoln, 1998).

The purpose of this study is to explore the definitions and conceptualizations of the expression "PMS" as it is used in the general public. To effectively understand and treat a clinically defined premenstrual disorder, as opposed to the socially defined "PMS" that large numbers of women are labeling themselves with, it is first necessary to differentiate between the two. Diagnostic criteria for a "Premenstrual Dysphoric Disorder" have been suggested by the American Psychiatric Association in the DSM-IV (APA, 1994). The missing element is a general public conceptualization of the expression "PMS".

The research questions for this study included: 1) How is "PMS" conceptualized by college students; 2) What do college students mean when they use the expression "PMS"? and 3) What are the similarities and differences between the expression PMS and Premenstrual Dysphoric Disorder?

Empirical materials were collected from each participant using several methods. First, in order to gain access to stereotyped or subconscious biases participants were asked to write a narrative essay describing a day in the life of a person who was experiencing PMS. It was hoped that the essay, conducted in this naturalistic setting, would serve as a projective instrument in which participants could express their biases and unfiltered constructions of PMS. After completing their essays participants were

asked to complete a checklist that contained affect related adjectives (MAACL-R) in order to provide support in understanding essay constructions.

Second, in an effort to understand participants' beliefs, definitions, and personal experience of PMS, they were asked direct questions in the form of a questionnaire. In this questionnaire participants were also invited to provide self-report of contextual experiences that had been labeled "PMS".

These sources of information were combined to inform the analysis and construction of the concept "PMS". These three sources of information were analyzed by source type, and as a complete conceptual package considering each participant individually. As a qualitative researcher, within a social constructionist paradigm, I set out to create a construction or collection of constructions of the expression "PMS" by identifying the meanings that participants assigned to "PMS".

Methods of Collection and Analysis

The fourth level of activity is the identification of methods of collection and analysis. The first part of this section will include a description of the methods of analysis, as well as strategies for managing the empirical materials (Denzin & Lincoln, 1998). Methods of ensuring trustworthiness will then be discussed. Finally, the pilot study and the ways that it informed the larger study will be described.

Student Essays

A content analysis was conducted on the participant essays. Berg (1998) describes content analysis as an objective coding scheme that is applied to "artifacts of social communication" (p. 223). The researcher and two readers conducted an initial content analysis of all essays. One of the readers was a male doctoral student with an interest in

qualitative research. The other reader was a female psychologist who had used a qualitative methodology in previous research. Neither reader had previous education on PMS, other than a draft of the researcher's introductory chapter.

Readers received the following standard instructions: "Assume the writers of the essays projected their perceptions of PMS and people with PMS onto the main character in their essay. Circle emotions, behaviors, thoughts, physical symptoms, psychological symptoms, significant statements and responses elicited by significant others. Write themes, important concepts, and general impressions along the side of the paper."

The first step in the content analysis was for the researcher and readers to read each essay and make notes as directed in the standard instructions. Textual elements analyzed included descriptive words, phrases, and characters, and were included if they served to describe a person, action or experience related to "PMS".

As researcher, I then re-read each essay and extracted significant themes. These themes were then developed into broad themes that represented the essays as a group. The readers' initial content analyses were then consulted and integrated into the broad themes.

Through individual telephone conversations, readers were presented with the broad themes that had been extracted by the researcher. Readers were asked to compare their constructions with the themes extracted by the researcher, and to disagree or improve upon the researcher's analysis and themes. The researcher and readers discussed questions or differences in perspective in order to come to consensus regarding the construction of themes.

Finally, the researcher gathered all information from the context analysis to form possible constructions of PMS in order to begin to answer the research questions. The results of the content analysis were then combined with the other empirical materials collected (MAACL-R and questionnaire). As a final step, the readers were provided a written draft of the results and asked to respond with areas of agreement and disagreement.

Multiple Affect Adjective Checklist – Revised

The Multiple Affect Adjective Checklists (MAACL-R) were evaluated using a frequency count of adjectives for all participants. Frequency counts of adjectives were also completed separately for male and female participants. Each participant's MAACL-R was also considered in combination with his or her essay and questionnaire.

Questionnaires

The questionnaires provided demographic information as well as contextual empirical materials. The responses to short answer questions were evaluated in the following ways: 1) to assess actual knowledge of the original meaning of the acronym PMS; 2) to evaluate their definitions in their own words and compare against medical definitions; 3) to determine at what point in the menstrual cycle "PMS" was assumed to occur; 4) to further understand their experiences by asking specific contextual questions; 5) to compare male and female participant responses and constructions from the answers on my questionnaire.

Trustworthiness

Trustworthiness is "one set of *criteria* that have been offered for judging the quality or goodness of qualitative inquiry" (Schwandt, 1997, p. 164). Lincoln and Guba

(1985) developed four criteria to be used as measures of quality, or trustworthiness, in qualitative research. These criteria include credibility, transferability, dependability, and confirmability. Within each criterion, a set of procedures helps to guide the inquiry and analysis. Various methods of triangulation, as described below, were built into the inquiry in the study design in order to improve the trustworthiness of the study. Strategies were also employed during the analysis of empirical materials and will be discussed in the final chapter.

The first criterion, credibility, is parallel to the positivist concept of internal validity (Schwandt, 1997). Credibility addresses the ways in which the researcher provides “assurances of the fit between respondents’ views of their life ways and the inquirer’s reconstruction and representation of same” (Schwandt, 1997, p. 164). As methods of addressing credibility in the research design, triangulation was used by employing multiple methods and by obtaining the perspectives of outside readers for the essays.

Taylor and Bogdan (1984) describe triangulation as “the combination of methods or sources of data in a single study” (p. 68). Using triangulation, each method provides separate perspective on the same section of reality. Advantages of using multiple methods include a deeper and clearer understanding of the phenomenon under study, as well as providing a guard against researcher bias. “By combining several lines of sight, researchers obtain a better, more substantive picture of reality; a richer, more complete array of symbols and theoretical concepts; and a means of verifying many of these elements” (Berg, 1998, pp. 4-5). Triangulation was built into the design of this study in two distinct ways including multiple methods of data collection and multiple readers.

Multiple methods were used to collect empirical materials from each participant as one method of triangulation. Information was collected through a projective essay written as a class assignment prior to any contact with the researcher and without knowledge that the essays might become empirical materials. Materials were then collected directly by the researcher's directives to complete the MAACL-R as if they were describing the person they wrote about in their essay. Questionnaires asked participants to answer questions directly regarding their definitions of PMS, and contextually regarding their intra-personal and interpersonal experiences. Three separate documents provided three different vantage points from which to view each participant individually as well as in constructing PMS collectively.

The second method of triangulation built into the research design was the added perspectives and observations of outside readers for the participant essays. Three readers (researcher, one male reader, and one female reader) completed the initial content analysis of the essays. The readers were consulted as themes were constructed and their perspectives included in the final results.

Pilot Study

A pilot study was conducted to test the feasibility and mechanics of the writing assignment, and the effectiveness of the questionnaire. The process of completing the pilot study contributed greatly to the refinement of the final research design and were significant enough that both the pilot study and results are described in this section.

Participants for the pilot study were recruited from an advanced Psychology summer course at a mid-size university in the mid-western United States and were offered extra credit in the class for their participation. Participants were provided an

informed consent form to read and sign and another to keep for future reference. They were then instructed to write a two page written essay to the theme, "A Day in the Life of a Person with PMS", and asked to complete a questionnaire.

From experience gained in executing the pilot I learned that the questionnaire was not sufficient to gain answers to my research questions. In addition, the essays seemed to take a great deal of energy from the participants and time from the researcher. From the pilot study experience several changes were made in the questionnaire. The questionnaire was redesigned based on the process of the pilot study with the assistance of a mentor. Questions were framed in a way that solicited clearer information and more directly answered the research questions. The questionnaire format was changed to make questions easier to answer. Rather than being asked to answer questions by writing either "yes" or "no" in the space provided as in the pilot questionnaire, participants in the formal study were offered the choice of simply checking either, "yes" or "does not apply to me".

Three questions were added to the formal study questionnaire. The first question added directly addressed the research question with, "What do you think the expression "PMS" stands for?" The second question also directly addressed the research question, but encouraged the participant to express their personal perceptions of PMS, and stated, "Describe what you think PMS means, in your own words." The final question added related to participants' perceptions of what parts of the menstrual cycle were considered problematic. A continuum was presented to represent the days of the menstrual cycle and then the following directions were provided, "Please check the times of the menstrual cycle that you think PMS occurs."

The final thing that was changed from the pilot questionnaire to the main study questionnaire was the wording of the final question. In the pilot, the question read, "Have you ever sought treatment for premenstrual symptoms, a premenstrual syndrome, or "PMS"? In the main study that question was changed to, "Have you ever been diagnosed with a menstrual problem, or sought treatment for premenstrual symptoms, a premenstrual syndrome, or "PMS" by a medical or psychological professional?"

In addition to changes in the questionnaire a different approach to obtaining the essays was developed. I was not satisfied with the pilot essays and anticipated that students would put more effort into an actual class assignment completed in a college classroom. College English Professors were approached for their assistance in developing student essays as legitimate in-class writing assignments. It was hoped that students writing an essay for a professor in a classroom setting had the potential to produce more investment in the task and essays richer in depth and detail.

Results of the Pilot Study

Five participants completed the pilot study that included a questionnaire, and a two-page handwritten essay to the theme "A Day in the Life of a Person With PMS." Results of the pilot questionnaire are listed in Table 3. All participants of the pilot study identified themselves as female, Caucasian, heterosexual and either married or in committed relationships. The pilot essays revealed themes consistent with the non-pilot essays, which will be discussed in the following chapter, titled Results.

The first question on the pilot questionnaire was, "Have you ever thought you had a premenstrual syndrome or something that might be labeled "PMS"? Four out of five

Table 3

Responses to Pilot Study Questionnaire

1. Have you ever thought that you had a premenstrual syndrome or something that might be labeled “PMS”?
 - a. Four out of five participants (all female) answered “yes”.
 - b. Three participants described negative mood.
 - c. One participant described both negative mood and physical symptoms.
 2. Have you ever sought treatment for premenstrual symptoms, a premenstrual syndrome, or “PMS”?
 - a. All pilot participants answered “no”.
 - b. This question was changed for the larger study to read, “Have you ever been diagnosed with a menstrual problem, or sought treatment for premenstrual symptoms, a premenstrual syndrome, or “PMS” by a medical professional?”
 3. Have you ever been in a close personal relationship with someone you believed experienced a premenstrual syndrome or “PMS”?
 - a. Two out of five pilot participants answered “yes”.
 - b. One pilot participant provided a description consistent with the theme of Mood Changes and Physical Discomfort that emerged in the main study questionnaire.
 - c. One pilot participant provided a description consistent with the theme of Bad Behavior that emerged in the main study questionnaire.
-

Table 3 continued

Responses to Pilot Study Questionnaire

4. Questions added to the questionnaire for the larger study:
 - a. What do you think the expression “PMS” stands for?
 - b. Describe what you think “PMS” means, in your own words.
 - c. Please check the times of the menstrual cycle that you think “PMS” occurs.
-

Note. Pilot consisted of 5 female participants and no male participants.

pilot participants answered “yes”, and indicated mood changes, crying, headaches and cramps as evidence of PMS.

In answer to the second question, “Have you ever sought treatment for premenstrual symptoms, a premenstrual syndrome, or “PMS”, all respondents answered “no”. However, one respondent contradicted herself in her explanation that she had approached her gynecologist for help.

The third and final question on the pilot questionnaire stated, “Have you ever been in a close personal relationship with someone you believed experienced a premenstrual syndrome or “PMS”? Two out of five pilot participants indicated they had been in a close personal relationship with someone they thought had PMS. Again, emotions and moods were mentioned as problems that writers associated with PMS.

Overall, answers to the pilot questionnaire data were consistent with the non-pilot questionnaire data. For example, four out of five pilot participants (all female) and 28 out of 30 female participants in the larger study indicated they believed they had PMS. In

addition, the explanations provided by participants included the same themes of Negative Moods and Physical Symptoms, as emerged from answers to this question in the larger study.

Two of five pilot participants reported they had been in a close relationship with someone they believed had PMS, compared to 32 out of 47 participants in the larger study. Explanations to this question again fit the themes that emerged in the larger study which included Mood Changes and Physical Discomfort and Bad Behavior. Finally, all pilot participants reported they had not sought medical or psychological treatment for symptoms, which is similar to the small number (5 in 47) of participants who reported seeking help in the larger study.

After completing the pilot study, several questions were added and improvements were made to the questionnaire format. These changes expanded the information gathered in order to more directly and fully answer the research questions (See Table 3).

Comparing the pilot essays with the main study essays it appeared that the basic content was similar. For example, themes that emerged in the pilot essays were consistent with the sub-themes of Physical Symptoms and Discomfort (under the main theme of Bad Biology), Heightened Sensitivity and Avoidance (under the main theme of A Very Bad Day), Emotions, Mood, and Associated Behaviors, and Victimization.

I was not satisfied with the quality of the pilot essays because they were less material than I expected from two handwritten pages. For the main study I requested that the English Professors require a two page typed essay, and this provided almost twice as much essay material. In addition, it appeared to me that participants were simply writing their stream of consciousness with the goal of filling the required pages. In redesigning

the essay to be completed as an actual assignment in a college writing class I anticipated students would exert more energy into the development of their essay. In addition, the in-class essay provided participants who may not have had any experience with the topic with more time and context with which to write. Another advantage to having the essays completed as a class assignment was that they were completed prior to researcher involvement, which therefore shortened data collection time.

Summary of Method

In this chapter a detailed description of the research process was provided. Participants, materials, and procedures followed in this research were discussed. Denzin and Lincoln's (1998) five stages of inquiry provided a framework for the qualitative research process. The researcher's background and biases and the constructivist paradigm were presented as they relate to this study of PMS. Research strategies and methods were then presented in detail.

Readers were provided an overview of trustworthiness in qualitative research. Measures taken to insure credibility through triangulation in the design of this study were described. Finally, a description of the pilot study and results were described including the ways that the exercise informed the design of the final research project. In the next chapter the results of the main study research analysis will be presented in detail.

CHAPTER IV

RESULTS

The purpose of this study was to explore definitions and conceptualizations of PMS as it is used by college students. The results of the three distinct methods of data collection provide answers to the research questions. First, a summary and analysis of the questionnaire data will be presented, followed by the results of the Multiple Affect Adjective Checklist-Revised (MAACL-R). Second, a content analysis of the narrative essays will provide thick descriptions (Geertz, 1973) and conceptualizations of PMS. The chapter concludes with a summary of the results.

Summary and Analysis of Questionnaires

A questionnaire was designed to gather both demographic and contextual information. The themes developed from the content analysis of the essays were used as a framework with which to analyze the answers to questions 2, 4, 5, and 6 on the questionnaire. No new themes emerged as a result of the content analysis of the answers to the questionnaire.

The responses to short answer questions were evaluated to assess actual knowledge of the acronym for PMS and to learn college student definitions of PMS in their own words. Also of interest was the question of timing and at what point in the menstrual cycle "PMS" was assumed to occur. Questions were developed in the hope that students would describe the contexts in which they had experiences with PMS. Finally,

male and female participant's responses on questionnaires were compared. In the following section each question on the questionnaire other than demographics are presented and results are summarized. Table 4 also provides a summary of the questionnaire results.

Question #1

In answer to the first question on the questionnaire, "What do you think the expression 'PMS' stands for," 12 male and 23 female participants responded, "premenstrual syndrome," which is the original base for the acronym. Several male participants offered the terms, "premenstrual something", "period menstrual syndrome", and "post menstrual syndrome".

Two female participants defined PMS as, "premenstrual symptoms", and one female participant offered "menstrual symptoms" (P38), supporting a definition of PMS that includes symptoms during menstruation, rather than before (pre) menstruation.

One female participant responded that PMS stands for an "excuse to be crabby" (P34), and two participants offered creative and descriptive bases for the acronym of PMS with, "People with Mean Streaks" (Male, P4), and "Pissed Moody State" (Female, P37).

Question #2

The second question on the questionnaire, "Describe what you think PMS means, in your own words," was designed to provide the opportunity for participants to take more liberty in their answers by being invited to use "their own words." It was hoped that this would take away the potential expectation of special or medical knowledge and allow participants to express their own perceptions of the term. Participants' answers to

Table 4

Responses to Questionnaire

1. What do you think the expression "PMS" stands for?
 - A. Seventy-one percent of males (n=12) and 77% of females (n=23) answered "premenstrual syndrome."
 2. Themes that emerged in response to the question, "Describe what you think "PMS" means, in your own words."
 - A. Mood Changes and Physical Discomfort
 - B. Biology and the Menstrual Cycle
 - C. Bad Behavior
 3. Please check the times of the menstrual cycle that you think "PMS" occurs.
 - A. Sixty-six percent of participants (n=31) answered, "just before."
 - B. Twenty-three percent of participants (n=11) indicated both "before" and "during" menstruation.
 - C. Six percent of participants (n=3) answered "during" menstruation.
 - D. Four percent of participants (n=2) located PMS, "before", "during" and "after" menstruation.
 4. Have you ever been in a close personal relationship with someone you believed experienced a premenstrual syndrome or "PMS"?
 - A. Sixty-eight percent of participants (n=32) answered "yes".
 - B. Themes emergent from written explanations included:
 - a. Mood Changes and Physical Discomfort
 - b. Bad Behavior
-

Table 4 continued

Responses to Questionnaire

5. Have you ever thought that you had a premenstrual syndrome or something that might be labeled "PMS"?
- A. Ninety-three percent of females (n=28) responded "yes".
 - B. Themes emergent from written explanations included:
 - a. Negative Moods
 - b. Physical Symptoms
6. Have you ever been diagnosed with a menstrual problem, or sought treatment for premenstrual symptoms, a premenstrual syndrome, or "PMS" by a medical or psychological professional?
- A. All male participants (n=17) answered "no".
 - B. Twenty percent of female participants (n=6) answered "yes".
 - C. Three of the six females who reported seeking treatment reported being on birth control pills to control cramps; one reported being treated with Depo-Provera, one reported using Midol, and one did not comment.
-

Note. Total N=47; Female N=30; Male N=17.

this question fell into three basic categories including Mood Changes and Physical Discomfort, Biology and the Menstrual Cycle, and Bad Behavior.

The category Mood Changes and Physical Discomfort was by far the strongest concept that emerged from this question. The most common characterization of this theme included a description of physical symptoms related to the menstrual cycle and the

resultant or accompanying mood changes. Less frequent, but also present, were descriptions of mood and physical symptoms separate from one another.

Some participants commented only on mood-state and provided statements such as, “PMS is being crabby, upset, depressed, etc.” (Male, P5), and “before a woman’s period she gets crabby and has emotional disturbances for some reason” (Male, P1). A female participant provided, “when every woman gets ‘the time of the month’ they all have feelings like this...angry, raging, depressed, moody” (P10).

Participant #21, a male, described a combination of discomfort and mood changes with, “A miserable condition of uncomfot (sic) which causes irritability.” Another male participant characterized PMS with, “pain, discomfort, irritable – wants to be comfortable and loved” (P2). A female participant answered, “The time before your period when you get cramps, feel bloated and sick making you crabby and irritable” (P25). And another female participant described, “PMS is a time when hormone levels in a woman’s body are very high. This can cause her to feel grouchy, irritated, bloated, and have a short temper” (P30). A female participant summarized PMS with, “it means a hormonal imbalance that expresses itself, for me, in roller coaster mood swings” (P13).

The theme of Biology and Menstruation included characterizations of women’s biology with descriptions of the normal menstrual cycle, and alternately of problematic biological function. Descriptions of normal biology and menstrual cycle included, “A state of being in a woman’s life before she releases menstrual blood from her body” (Male, P35) and “monthly cycle of blood being shed when an unfertilized egg passes out of the woman” (Male, P2).

Problematic biology was described through participant's statements which included, "A stage a woman goes through because her body is *acting up* [Italics added] and it affects her mood"(Male, P19), and "A *chemical imbalance* [Italics added] before the menstrual cycle begins that causes different syndromes; emotional and physical" (Male, P16).

Faulty hormones were the source of the problem for the following female participants. Participant #28 stated, "When a female body is going through its sexual stages, and hormones are going crazy." Another female participant stated, "I think PMS occurs before a females' cycle starts and their hormones are just out of whack" (P39). These definitions seem to indicate something basically wrong with women's biology, and therefore their physical and emotional health, due to this medical condition.

In the category Bad Behavior, both male and female participants described bad behaviors on the part of women with PMS. The tone of the male participants' remarks tended to be resentful toward women. One female participant made a resentful remark against men when she started her answer with her base for the acronym of PMS, "Putting up with men's shit!" (P33).

Several female participants perceived themselves as behaving badly. One participant described her bad behavior in relation to PMS in her own words as, "Pretty Mean and Snotty...well, I'm not ever very pleasant" (P24). Another female exclaimed, "Mood swings! Taking the little things that go wrong and blowing them way out of proportion. Taking your frustrations out on people that don't deserve it" (P34).

Male participant characterizations of PMS also focused on the women's bad behavior, and provided resentful accounts. This male participant succinctly described

PMS as, “having the right to be a bitch” (P45). Another male participant wrote, “it is when women start bitching for no reason. They get offended ten times as easy” (P32). Similarly, Participant #3, also male, stated, “when women get all pissed off at the world, bitching all the time about nothing and stuff like that.” Finally, in a subtle, yet telling statement, one male stated, “I’d say it is the time of the month when you least want to be near your girlfriend or any woman for that matter” (P15).

Question #3

In response to the request to, “please check the times of the menstrual cycle that you think PMS occurs,” 31 out of 47 participants identified PMS as occurring, “just before the menstrual cycle.” Male and female responses were similarly distributed. Three participants indicated PMS occurred only “during the menstrual cycle”, 12 participants indicated that PMS occurred both “before” and “during the menstrual cycle”, and two participants located PMS “just before”, “during”, and “just after menstruation.” For these last participants, “during ovulation” was the only time in which PMS did not occur.

Several participants contradicted their responses on this question with their descriptions of PMS in the previous question. Three female participants who checked “Just before the menstrual cycle”, indicated in answers to questions earlier in the questionnaire that PMS occurred during menstruation. For example, a female participant (P9) provided a description of PMS in her own words with, “It means ‘Stay away, I have my period,’” even though she checked “just before menstruation” in answer to the request to check the times of the menstrual cycle that you think PMS occurs.

Through the contradicting answers on the questionnaire it was clear there was confusion regarding when in a cycle PMS occurs. It appeared that the term PMS was so

all encompassing and confusing that even individual participants contradicted themselves from one question to the next.

Question #4

The question, "Have you ever been in a close personal relationship with someone you believed experienced a premenstrual syndrome or PMS," was answered in the affirmative for 32 out of 47 participants. Only 14 participants indicated they had not been in a close relationship with someone who they thought had PMS, and one participant did not answer. There was no significant difference by gender in the number of positive and negative responses to this question. Written responses to this question can be categorized into two familiar themes of Mood Changes and Physical Discomfort, and Bad Behavior.

The Mood Changes and Physical Symptoms theme was by far the most obvious theme that emerged from the answers to this question. These two seemingly different concepts were presented together in most of the responses associated with this theme. Participants frequently offered both mood changes and physical symptoms within their answer. For example, a male participant (P2) wrote, "Crying, cramping, sad, doesn't feel pretty, feels fat, bloated, wants chocolate and tea." Participant #26, a female, wrote, "very edgy, easily angered, cramps, bloating." Finally, another male participant stated, "She was very moody and did not feel well" (P21).

In addition to the responses that linked the physical discomfort with mood changes there were also several respondents who focused only on the mood changes that they perceived to accompany PMS. Participant #8, a female, stated, "My mother and sister get very edgy before their periods. Extreme mood swings from being happy to being angry the next minute." Another female participant described it this way: "My

sister doesn't really act herself. She's outgoing, energetic and always happy, but during this time she's not really those things" (P33).

The second theme that emerged from answers to this question was one of Bad Behavior. Both male and female participants expressed resentment with the person who had PMS, and seemed to perceive it as an excuse. Participant #13 expressed it this way: "My mom tells me all the time when she has PMS, and unfortunately, this is not always a bad way for her to get out of being unusually moody." Another female participant described her experience with PMS.

I have a lot of girlfriends that whenever they get their period they think they have to be crabby because "that's what girls are supposed to do." So, I kind of feel it is an easy excuse a lot of times. But there are unexplainable mood swings. (P34)

A male participant who is less compassionate and clearly inconvenienced by his girlfriend's PMS answered,

I believe I've witnessed PMS in almost all of my girlfriends. They get real moody and they get emotional about little, stupid things that you say and do. You can't have sex or anything. It becomes redundant and it affects me too.

In a resentful tone, another male participant stated, "My girlfriend uses it as an excuse when she gets witchy (sic) before her period" (P1). The majority of participants provided written comments in answer to this question. It appeared that men, as well as women, have a great deal to say about their experiences with PMS.

Another interesting pattern that emerged from responses to this question is the prevalence with which PMS is assumed to occur. Participants consistently identified one or more people they were in a close relationship with who experienced PMS. For some

participants it appeared that PMS occurred in every female that person was close to. PMS was often conceptualized as something that most females experience as a result of having a menstrual cycle. One participant stated, “most girls (friends) have this including me” (female, P28). Others stated, “my two best friends suffer from PMS as does my sister” (female, P17); and “most of my sisters and my daughter had or have problems with this” (female, P36).

A male participant also indicated PMS to be a common experience with, “many of my female friends go through it” (P32). Another male participant wrote, “my mom, sister, girlfriend, they get very moody and you do whatever possible to make them happy” (P19). Male Participant #16 stated, “my mother, sisters, and friends that are women.”

From these explanations it would seem that PMS is more common than not. It appeared that PMS is a catch-all term for all things associated with the menstrual cycle and could apply to all menstruating women.

Question #5

In response to the question, “Have you ever thought that you had a premenstrual syndrome or something that might be labeled “PMS”?, 28 of the 30 female participants responded “yes.” One female participant responded, “does not apply”, and one did not respond. PMS, as conceptualized by college women, is something that is so prevalent that almost everyone thinks they have it. In answering this question the majority of female participants either conceptualized PMS by negative moods, physical symptoms, or both. Two other participants provided social commentary that placed PMS in perspective

congruent with themes that emerged in answers to other questions and in the student essays.

Regarding the physical discomfort, this female participant (P11) stated, "I get really bad stomach cramps." Another reported, "I had cramps and aches" (P41). A third female participant stated, "When I know my period is coming I feel strange – sick somewhat and have major cravings for food" (P46).

Female participants who reported only mood changes included comments like, "All of a sudden, out of nowhere, I just got extremely depressed. I was bawling my eyes out for no reason and I was snaking out on everyone. Then the next day I got my period" (P12). Similarly, Participant #24 stated, "I get very moody – almost depressed. But as soon as the period starts I get over it." Finally, Participant #34 offered, "Moodswings! One minute I will feel completely content and full of life and the next minute I will be screaming at someone or just sitting there sad and depressed feeling."

Just as frequent were reports of the combination of physical discomfort and mood changes intermixed. Participant #47 stated, "I get cramps, bloated and feel just cranky and irritable." Similarly, Participant #7 reported, "I get cravings, feel bloated, have cramps, and mood swings."

In addition to the female responses there were several unexpected and interesting responses by male participants to the question, "Have you ever thought that you had a premenstrual syndrome or something that might be labeled "PMS"? Two male participants checked yes, thereby indicating they believed they had PMS. One participant commented, "Yeah, sure everybody gets crabby or hates the world one day, and it gets labeled as PMS" (#5). Another male offered, "It's my excuse when I have a bad day"

(P#2). He followed with, “Just kidding – I’ve never had PMS *that I know of*” [italics added]. He seemed to hold open the possibility that men can have PMS, and served to separate the definition of PMS from sex or gender.

Question #6

All male participants answered “does not apply to me” to the question, “Have you ever been diagnosed with a menstrual problem, or sought treatment for premenstrual symptoms, a premenstrual syndrome, or “PMS” by a medical or psychological professional.”

Out of 30 female participants, 6 indicated they had sought treatment for premenstrual symptoms or PMS. Three of the six reported being put on birth control pills to control cramps. “I used to get serious cramps. My doctor put me on a strong birth control and told me I have a tipped uterus” (P37). Another female participant offered, “When I was younger I was put on orthotrycyclin to regulate my cycle. I have taken the pill for over three years. It also lessens the intensity of my cramps and bleeding” (P27).

Another participant reported, “I take heavy doses of Midol” (P46), and another participant reported, “Depo-Provera works very well” (P36). When questionnaires, MAACL-R and essays for each of these six participants were examined they showed no pattern of differences from empirical materials collected from participants who reported they had not sought treatment for PMS.

Unfortunately, the question asked participants if they had sought treatment for a menstrual problem, premenstrual symptoms, or PMS, so it is difficult to determine whether or not these responses represent conceptualizations of PMS or simply premenstrual or premenstrual symptoms.

Multiple Affect Adjective Checklist-Revised

When asked to check all the adjectives that describe the person they wrote about in their essay on the Multiple Affect Adjective Checklist-Revised, the adjectives most frequently selected by all participants were “irritated”, “agitated”, and “annoyed”. In addition, approximately 71% of the male participants checked the adjective “aggressive,” and over 77% of females checked “impatient” as an adjective to describe the person in their essay.

For female participants the adjectives “complaining”, “miserable” and “gloomy” were the next most frequently selected to describe the person in their essay. “Complaining” and “impatient” were marked by 65% and 59% of the male participants respectively. The adjectives marked by a large percentage of male and female participants have negative connotations and accurately reflect the themes that emerged in the participant’s essays. Table 5 provides a summary of the adjectives selected on the MAACL – R for participants overall, and by gender.

Content Analysis of Student Essays

The purpose of this study was to explore definitions and conceptualizations of PMS as it is used in the general public. Through the narrative essays, participants provided descriptions of PMS as well as descriptions of interpersonal experiences that they described as driven by PMS. It was assumed that student perceptions and conceptualizations of PMS were projected through their stories and onto their main characters. In this section the reader is provided with a description of each theme that emerged through the content analysis of the student essays.

Table 5

Adjectives from the MAACL – R Selected by 50% or More of Either Male or Female Participants to Describe the Main Character in Their Essay

<u>Adjective</u>	<u>Gender</u>			
	<u>Female^a</u>		<u>Male^b</u>	
Impatient	23	77%	10	59%
Irritated	23	77%	12	71%
Agitated	22	73%	12	71%
Annoyed	22	73%	12	71%
Miserable	18	60%	8	47%
Complaining	17	57%	11	65%
Gloomy	17	57%	5	29%
Unsociable	15	50%	8	47%
Angry	15	50%	8	47%
Aggressive	8	27%	12	71%

Note. ^aFemale N=30; ^bMale N=17. Adjectives checked by less than 5% of all participants included amiable, satisfied, secure, soothed, steady, wilted, meek, safe, forlorn, tame, contrary, and contented.

The content of the essays can be categorized into six main themes, each consisting of several sub-themes. The main themes that emerged from the essays include Bad Biology; A Very Bad Day; Emotions, Moods, and Associated Behaviors; Victimization;

Table 6

Emergent Themes With Sub-themes From Content Analysis of Essays

<u>Themes and Sub-themes</u>	<u>Gender</u>			
	<u>Female^a</u>		<u>Male^b</u>	
	n	%	n	%
A. Bad Biology	27	90%	14	82%
1. Physical Symptoms and Discomfort	21	70%	13	76%
2. Menstruation	9	30%	5	29%
3. Medical Explanations	22	73%	5	29%
B. A Very Bad Day	27	90%	7	41%
1. Bad Luck	12	40%	4	24%
2. Heightened Sensitivity	12	40%	4	24%
3. Avoidance	13	43%	4	24%
C. Emotions, Mood, and Associated Behaviors	29	90%	9	53%
1. Unpredictable	6	20%	4	24%
2. Out of Control	7	23%	6	35%
3. Dangerous	4	13%	8	47%
D. Victimization	22	73%	8	47%
1. Women as Victim of PMS	12	40%	1	6%
2. Women as Victim of Men's Labels	11	37%	1	6%
3. Others as Victim of Women With PMS	4	13%	6	35%

Table 6 continued

Emergent Themes With Sub-themes From Content Analysis of Essays

<u>Themes and Sub-themes</u>	<u>Gender</u>			
	<u>Female^a</u>		<u>Male^b</u>	
	n	%	n	%
E. Privilege	13	43%	13	76%
1. Women Gaining Privilege	9	30%	5	29%
2. Men Losing Privilege	3	10%	6	35%
3. Double Standard	2	7%	4	24%
4. Breaking the Rules	8	27%	3	18%
F. Social Commentary	8	27%	9	53%

Note. ^aFemale N=30; ^bMale N=17. Percentages reflect the total number of participants whose essay included reference to each particular theme or sub-theme.

Privilege; and Social Commentary. These six themes and associated sub-themes are discussed in detail in this section, and are represented in Table 6.

Bad Biology

The first theme presented is that of Bad Biology, with sub-themes of Physical Symptoms and Discomfort, Menstruation, and Medical Explanations. This was one of the most extensively discussed themes that emerged through the essays. An overwhelming majority of women and men described symptoms within this theme.

Physical Symptoms and General Discomfort

A majority of both male and female participants associated PMS with physical pain and discomfort. Participants consistently associated PMS with physical symptoms that are normal and commonly associated with the menstrual cycle, particularly menstruation. It was frequently unclear whether the symptoms described were presumed to occur during menstruation or at other times in the cycle.

The most frequently described and distressing symptom these writers discussed was cramps. Participants also frequently described headaches, muscle aches, and bloating as physical symptoms they associated with PMS. While the men tended to focus on cramps and aches, the women provided a wider range and more detailed account of the physical symptoms they associated with PMS. In addition, there was a sense of general discomfort and desire to escape from the symptoms in both the male and females' essays.

A male participant (P15), locating PMS during menstruation, described the physical experience of PMS this way: "I woke up with the worst cramps I could ever imagine. They were so painful that I almost had to throw up. My old friend Mr. Period had come for his monthly visit and I didn't like it." Another male writer who located PMS during menstruation, characterized the physical discomfort of PMS with, "from what is said there is pain, bloating, aches, irritability" (P43).

Participant #17, a female, summarized PMS this way: "It can involve headaches, abdominal pain, mood swings, and back pains. It's just an all around bad feeling for the person experiencing it." Another female participant wrote, "It all starts with pain in her lower abdominal region. Sometimes, the pain is so intense that Julie stays in bed the entire day, but usually the pain ranges from mild to moderate cramping" (P30).

“Gut wrenching cramps” was a frequently used expression among female participants. The pain of cramps was described as severe and almost incapacitating for many participants. One participant described her physical pain in this way:

Your stomach feels as though it is tearing and turning inside out. You cover your head with your blankets and curl up in a ball to calm the gut wrenching cramps. You would rather die than get out of bed but you have to so you figure that if your day has to be this miserable you might as well share the feeling with the people around you. (P34)

Participant #18 described her constellation of symptoms with the following:

Once a month for about three days I suffer from a severe pain in my lower abdomen and lower back. My jeans barely button and sometimes I even have painful headaches that live in my temples on the side of my head. My breasts swell and are painful to the touch. These uncomfortable changes make me moody.

Through these essays it appeared that PMS was defined as moderate to severe physical pain. The extreme manner in which these physical symptoms were described may be a result of the participants' desire to make their essays more descriptive or interesting for their English Professors. Regardless of the reason, from the extent of physical symptoms reported in these essays it appeared that the reality of having a menstrual cycle might render women too sick or vulnerable to function in the world.

In addition to the physical symptoms and general distress, many participants described simply wanting to escape and seek comfort during PMS:

Day two had to be the worst! This is when the cramps started and I was sick to my stomach. I decided to skip classes, crawl into a comfy sweat suit, and go back to bed. I felt miserable, I was so crabby, and the headache was back. (P37)

Menstruation

Many participants described experiences that could locate PMS during menstruation. Some writers clearly located PMS during menstruation using terms like period, bleeding, and tampax. In many of the essays it was difficult to discern whether they were describing menstruation, or physical symptoms commonly associated with other times in the menstrual cycle. It appeared that a majority of participants conceptualized PMS as physical pain and discomfort associated with being a menstruating woman. The lack of clarity between PMS and menstruation is explored in the following paragraphs.

Participant #41, a female, clearly located PMS during menstruation:

Only four more days till the bleeding stops and aches go away and then another month will pass, when she can experience this all again. The gift of giving birth comes with great consequences, ones that many women including Sue, take in and handle going on with the rest of their lives without complaining for sympathy.

The following quote is by a female participant who described her experience in a way that made it difficult to differentiate between premenstrual and menstrual experiences.

The beginning of it all is no party let me tell you. You wake up in the morning with that happy monthly thing you have been missing so dearly from the last month. You carry your stomach to the bathroom with you just trying to ease the

horrible pains of cramps you are experiencing. For a description of these cramps, the only thing I can describe it as is someone crawling into your gut area and pulling on all your lower insides. While pulling on your insides, they are putting all of their weight against your lower back causing excruciating pain to that area also. (P46)

The following participant differentiated between PMS and menstruation, but informed the reader that she had PMS and her period at the same time.

Usually I will wake up in the middle of the night from a dead sleep having sharp pains in my lower abdomen and lower back. This is when I know that I am starting my menstrual cycle. Unfortunately I have my period and PMS at the same time. (P18)

One participant wrote an essay in first person and described herself as a 50-year-old woman.

Recently my life has been very drab, and depressing. I think I have PMS...

Ok, I knew this would happen sometime in my life. I just thought it would be a later time. When this all started it, just seem to hit me like a million rocks at once. I didn't expect it to be like this. Due to this I have felt bad about some things I do. I just seem to not have the pick-up-and-go I once had. I just seem to drag around all the time. I have a mild case of depression. My doctor said that I shouldn't worry about it. I worry about every and anything. (P42)

It is possible that this writer conceptualized PMS as symptoms of perimenopause or menopause. In addition to adding menopause to the list of experiences labeled PMS, the

end of this essay also indicated the potential minimization of her symptoms by her doctor.

Some writers seemed to conceptualize PMS as severe physical symptoms that accompany menstruation, and others described PMS as a menstrual cycle where the normal symptoms were particularly bad. One writer conceptualized PMS as the menopausal symptoms she had been expecting at some time in her life. From these examples one could argue that PMS was conceptualized as anything and everything having to do with having a menstrual cycle.

Medical Explanations

This theme related to the idea that PMS is related to bad biology or hormones and requires medication. A male writer, Participant #32, provided this characterization of PMS as something that needs to be medicated away:

This story is why I think someone should invent a drug that gets rid of PMS. It doesn't help anyone, it just starts fights and pisses more people off. I don't know why they haven't found one yet. It is just a natural function of the female body. They have drugs for other functions of the body, why not this one?

Many of the female participants' used medical language and explanations for PMS. However, the explanations tended to blend medical explanations with stereotypes, thereby adding legitimacy to their definitions. Some of the medical knowledge was fairly accurate, but the majority was incorrect and stereotyping, with an emphasis on hormones and pain medications.

In the following example the female writer started with a textbook explanation, and then added her analysis:

I went to a book I bought years ago at a garage sale of a withered old couple down the block. "Women's Body; An Owners Manual" declared that the period is, "the outward sign of the routine cycle of egg production and hormone change in the woman's body...some symptoms (noticeable 7 days before the start of the period) can include headaches, backache, nausea, breast tenderness, psychological tension..." Psychological tension? Could that be the infamous roller-coaster internal "tension" and external sensitivity known as PMS? There it was, proof that woman didn't go insane once a month, they just paid more for their periods than a gallon of blood and 10 to 20 tampax. (P13)

Another female writer, Participant #28, attempted a medical explanation, but went on to offer her opinion and stereotypes:

PMS, which stands for pre-menstrual syndrome, is something that *every female experiences* [italics added] about once a month for approximately one-week long. PMS has to do with the sexual organs in the female's body, but I'm not going to go into the details of what exactly happens. Many people don't even know exactly what it is, including me. I know the general idea, but I guess I don't really care as long as its in correct working order. When a female is crabby or on edge easily, people usually assume that she is PMSing. I have no clue why PMS causes females to be crabby, very emotional, and stressing about every little detail. It just does. Maybe because of the cramping going on through out the body or just the hormones that seems to be flowing very strongly during that time.

Later in her essay, this same participant went on to say,

PMS can be looked at in a positive way. It is how or the reason why we can have children to continue the world. It would be cool if something could be invented so females wouldn't have their periods until they want to have children....But I guess someone in the science department will probably come up with that soon, if not already because of all the advances we seem to be getting in everything.

This writer seemed to indicate that PMS, or maybe the menstrual cycle, was something that must be either medicated or eliminated. Participant #11 described a situation in which her functioning during the day was dependent on whether or not her medicine was working to combat the PMS.

You go downstairs to the kitchen, grab the bottle of Midol from the cupboard, and check the dosage just to remind yourself that, yes; you're definitely taking one too many. A glass of water, a couple of pills and you're good to go. Actually not really, because the medicine needs, what seems like, half the day to kick in anyway.... You putz around for a while; e-mailing, finishing up some homework, and making sure you have enough of "Midol the Miracle drug" to last all week. Finally, you decide that it's definitely time to curl up, literally, on the couch and watch a movie before you go to bed. Finally, at about 8:00 the medicine is definitely kicking in.

In addition to attempts at medical explanations and the necessity of medication to deal with what the participants described as PMS, there was also frequent mention of the role of faulty hormones. This theme also emerged through participant's definitions of the expression PMS on the questionnaire. For example, a female writer, Participant #39,

stated, "Sarah was so angry and her hormones were so out of whack, that she began to cry."

Several female participants described feeling guilty for their "hormones" and wanted to protect others from suffering. Participant #27 described it this way: "I try to not let these things bother me. I don't want other people to have to suffer because of my hormones." Another participant said almost the same thing: "After losing an uphill battle with my hormones I felt guilty for making innocent bystanders suffer my PMS's wrath" (P13).

It appeared that one conceptualization of the expression PMS was that of faulty biology, which included moderate to severe physical pain, "out of whack" hormones, and a desire to escape through medication and other comforts. It was not clear whether writers conceptualize PMS as occurring during menstruation, in association with a menstrual cycle, or if they are interchanging the expression PMS with menstruation. The physical symptoms and discomfort associated with PMS were so broad and encompassing that it was difficult to decipher.

PMS seemed to be defined as all things menstrual and something that every woman suffers from. Women were viewed as victims of bad hormones, and doing battle with their bodies as a result. The blending of medical explanations and stereotypes within the essays added legitimacy to these negative views of women and their biology. Menstruation was viewed as something that required medication, and women were considered "out of whack" due to having a menstrual cycle. In addition to feeling responsible for interpersonal conflict, women often reported a desire to protect others from their PMS, as well as a need to apologize for the associated emotions and behaviors.

The problem that I encountered in trying to describe this emerging theme may reflect a larger problem in the conceptualization of PMS. If PMS is defined so broadly to include every woman, then all women are bad as a result of their biology, or bad hormones. The combining of medical explanations with stereotypes adds to the power of this conceptualization in a way that is difficult to combat. Women appear to be victims not only of the physical symptoms that accompany menstruation, but of the emotions and behaviors that seem to be related. To add to this burden, women also report feeling responsible for conflict in their relationships. Simply put, women have bad biology and therefore feel and behave in ways that are, “out of whack”. Women have a responsibility to not burden others with their bad biology and must apologize when they do.

A Very Bad Day

This theme can be separated into the three sub-themes of Bad Luck, Heightened Sensitivity, and Avoidance. It appeared that PMS was conceptualized as a very bad day, which in some cases was due to bad luck. In other descriptions the bad day was due to a perceived heightened sensitivity resulting from PMS. In either case, a common result described through both the male and female participant’s essays, was a desire to isolate and avoid contact with people.

Bad Luck

Bad Luck was the most prominent aspect of this theme, and both men and women provided thick descriptions. Women were more likely than men to describe this phenomenon, but men’s detailed descriptions indicated clear conceptualizations. Many participants wrote essays characterizing women with PMS as having very bad luck or experiencing a really bad day. A few participants did not use the term PMS, but simply

described a day in the life of a person where everything seemed to go bad. Having a bad day and having PMS were clearly associated, although there were no consistent causal links identified by the writers.

Several female participants provided stories similar to many male essays in which everything that could go wrong went wrong during PMS. The main difference between the male and female essays was level of seriousness, with the male essays tending toward the humorous, and the female essays tending toward misery.

A female writer provided a complex and almost desperate description of her experience:

My boyfriend annoys me by caring and trying to help and make things better.

Nice people annoy me. Teachers piss me off by giving me an assignment to do.

Guys think I'm being a bitch. Nothing goes right. Nothing happens the way I want it to. It's evil. There is no cure. (P33)

A female participant (P9) described her experience with the following,

Nothing was going right at all. First, there isn't any hot water left, or shampoo, or soap. Then, to make matters worse, I step on a razor blade in the shower. My day was not starting off right at all. It was all because of PMS, too.

Participant #5 described a character named Michael, but made no other reference to the gender of the main character. The essay did not contain any reference to PMS, but simply described "Michael" having a terrible day.

I stubbed my toe as I stood up. I then bent down to look at the damage to my toe, and ended up hitting my head on the dresser...."OW, damn that hurt!" I said.

"What the hell else is going to go wrong today?"....I finally walked down the

stairs and flicked my brother off when I saw him smile at me. But as I was doing that, I didn't notice the shoe in the middle of the stair, and I tripped over it and hit my head against the wooden floor.

In another characterization of the bad day theme Participant #6, a male writer, offered the following:

She woke up and her hair was a mess and she stepped on and tripped over her Geography book and cursed....At the breakfast table she spilled her cereal all over and splashed some milk on her make-up. It began to run. Her day was not going well at all....It was time to go to work. On her way down Main Street someone cut her off and threw a rock up at her windshield and put a slight nick in it.

These writers clearly conceptualized PMS as having very bad luck. It appeared that everything that could go wrong would go wrong on certain days, and those days could be labeled PMS. Some of the characterizations read like a television situation comedy in which the actors engage in a great deal of physical comedy. The male essays tended to reveal more physical comedy and misfortune, whereas the female essays focused on the emotional stress of having such bad luck and miserable experiences.

Heightened Sensitivity

Female writers were more likely than male writers to describe a perceived heightened sensitivity. There was a sense of everything becoming amplified as a result of PMS. A female writer described her experience quite clearly:

The tiniest things piss me off. You accidentally bump into me in the hall; I give you the meanest glare I can get myself to make. I tear up a whole paper because I

made one simple spelling mistake. The phone ring sounds twice as loud.

Everything is louder. The steps feel twice as hard to climb. (P33)

This female writer used the term “impatient” to describe her experience of heightened sensitivity:

Another thing that is a problem during PMS is being impatient. Things that they would usually never notice always seem to enlarge themselves. It could be chomping of gum or someone talking too slow and not really stating an actual point to their whole story. Whatever it is, it bothers them. (P25)

Finally, this female participant described a heightened sensitivity, physical pain, and a desire to obtain comfort:

Ten minutes have gone by. I can't find a comfortable position in my chair, I'm getting really tired, am having major cramps, finding the littlest of things irritating, and the only thing I can think of is laying down in my pj's on the couch wrapped up in a warm blanket and watching a movie. (P7)

It appeared that a heightened sensitivity is recognized as a sign or symptom of PMS. Both male and female writers described being more sensitive to sounds, touch, and the comments of others while experiencing PMS. It was difficult to determine whether writers conceptualized the heightened sensitivity as increased by PMS, or if PMS was conceptualized as increasing sensitivity.

Avoidance

Avoiding people and wanting to isolate was another common characterization of women with PMS primarily by female, but also by male writers. Participant #1, a male

writer, characterized, "She sits in all of her classes without saying a word, she pouts at lunch, and she goes home early because 'she would rather be alone.'"

Another essay character had the following internal dialogue; "I felt bloated and I really didn't want to go to school....So I got dressed and neglected to fix my hair, hoping this would give my peers the idea that I didn't want to be bothered" (P#15). Later she thought to herself, "I had two more finals, and then I could escape to my bedroom where I would spend the rest of my weekend no doubt."

A female writer described herself, and PMS, as miserable. "Don't talk to me. Leave me alone. I hate the world....My body language tells everyone I'm sick, I'm miserable and to just leave me alone" (P33).

These writers indicated that PMS was a time to avoid all contact with people in an effort to either avoid interpersonal contact or engage in self-comforting behaviors (i.e., going to bed, or renting movies).

Emotions, Mood and Associated Behavior

General complaints of unpleasant mood swings and emotions were the most frequently presented symptom associated with PMS presented by both male and female participants. Mood swings were often characterized as sudden, and changes in emotions as unreasonable. Unpredictable behaviors and mood changes associated with PMS were sometimes described as dangerous or invoking fear.

This theme can be divided into three sub-themes, the third of which emerged for only male participants. The first two sub-themes, Unpredictable, and Out of Control, emerged from both the male and female essays. The third theme, Dangerous, emerged

primarily through the male's voices and included suggestions for coping with women who have PMS.

Unpredictable

The first sub-theme in the broader theme of Emotions, Moods, and Associated Behaviors, is Unpredictable. PMS was frequently characterized by the sense of mood changes and associated behaviors being unpredictable and unreasonable. A female writer, Participant #47, made a clear statement through the title of her essay, "Mood Swing Madness."

Another female participant located PMS during menstruation, and defined it simply with the following: "It's always on the first day of her period when she gets 'extremely bitchy', also known as PMS" (P12).

The following female participant provided a contrast between her friend with PMS and her friend without PMS in a way that clearly described what PMS is not:

Julie is usually a wonderful person. She is daring, supportive, loving, and trustworthy. Everyone she has met adores her. Julie does not have any enemies and she rarely complains about anything. These are Julie's regular days. There are three days every month that Julie turns into a completely different person. Her friends and family understand her personality change and accept it, but for Julie, those days are the longest of her life. Julie suffers from pre-menstrual syndrome, more commonly known as PMS. (P30)

Another female writer, Participant #27, declared,

PMS is not fun. It is one of the worst parts of being a woman. Mood swings, backaches, and cramps are some of the symptoms. I have to admit, I too, suffer

some of these. I also have been guilty of letting my *hormones* [italics added] get the best of me.

From the female participant's essays it appeared that all negative mood changes are unreasonable and unacceptable. It is reasonable that people who are experiencing pain and discomfort might also experience mood changes. These writers, however, tended to focus on the mood changes as unreasonable and something they wished they could control.

The male essays provided an even less sympathetic view of the unpredictable and seemingly unreasonable moods and behaviors of women assumed to have PMS. Participant #4 complained in his essay; "One minute she is really nice, the next minute she is all over you about the littlest things. You can never please a woman when she has PMS."

Participant #20, a male writer, graphically described the mood component of PMS with the following;

Then there's the emotions that you feel. It's like they're in overdrive on a hilly road and can't decide which gear to be in. You're never sure how you're going to feel. One minute happy the next raging pissed off.

In a hostile and unsympathetic description of a mood component to PMS, another male writer stated;

Now we've all heard about the horrors of P.M.S. We've heard of the mood swings, the outbursts of anger, the extreme moodiness and tendency to be temperamental with people around the person who has the P.M.S....I've also

heard about (and experienced) the women who get extremely moody and scream and bitch about little insignificant things. (P29)

Other male and female participants tended to focus on the behaviors that seemed driven by the mood component of PMS. Participant #34 expressed her opinion regarding the association between PMS and behavior with the following:

Most women don't realize or won't admit the way they are acting is from P.M.S. They think their actions are called for and well believed. There are *drugs* [italics added] out there to help with the mood swings but don't you think that if they really worked everyone would be on them and there would no longer be any crabby women around.

This writer indicated that women who display unpredictable moods and behaviors should be given a drug so that other people would not be inconvenienced by these "crabby women". In these essays, women's external situations tended to be minimized and their complaints considered unreasonable. Any unfavorable mood or behavior was blamed on the internal quality or problem labeled PMS.

Out of Control

Within the theme of Emotions, Moods, and Associated Behaviors, the second sub-theme that emerged is Out of Control. Both male and female participants provided characterizations of women with PMS as being out of control and powerless. Female writers expressed interpersonal conflict and felt guilty and the need to apologize for their behaviors or moods they associated with PMS.

Some participants described wanting to avoid people so they would not have to risk the interpersonal conflict that often developed during PMS. Feeling powerless and

out of control appeared to leave these writers vulnerable to creating discord in their close relationships.

The following participant described emotions, mood, and behaviors associated with PMS that seemed out of control in both she and her sister.

I can get a little emotional. I have been know to let little stupid things, like having to use this Macintosh instead of my usual IBM, bother me when it is PMS time. I try to not let these things bother me. I don't want other people to have to suffer because of my *hormones* [Italics added]. I try to make myself calm down so that I won't let my emotions get out of hand. I have seen a lot of arguments between family members because of PMS....I know that I could be one of those females that let her hormones control her moods. Luckily, I don't get moody enough to let them control me. I tend to get quiet, to keep myself from causing any arguments....My sister gets the kind of PMS you should fear. Her hormones control her. She gets raging! She is like Jackal and Hyde. One minute she is a sweetheart and you can talk or joke with her. The next second she is snapping at you and the joke that was just funny is not anymore. She has had huge fights with her boyfriends, both current and ex's, because her hormones are so bad. She even takes birth control pills, which are supposed to help with the moodiness, but they don't even take the edge off. I feel sorry for her, at times, because I know that it effects her relationships with her friends and our family. (P27)

Several female participants described experiences of PMS in which their mood seemed out of control and they felt powerless to effect change. In the following descriptions, the actor's dilemmas are described.

Sarah's entire day was a mess. The only person she would talk to was her best friend because she knew that she would go off on every one else because her fuse was so short. As the end of the last period of school Sarah was starting to feel somewhat balanced again. This ended quickly when behind her talking about her. Her head snapped around and she began yelling at and calling the girls nasty names. Her instructor heard her and sent her to the office. She was given one hour of detention after school because of her blow up. (Female, P39)

Participant #47 described,

My friends and teachers would just hate it when I came to school so crabby, and full of mood swings. I headed to school then hoping that my P.M.S. would control itself so I could have a decent day, boy I was wrong. (Female, P47)

Finally, the following participant provided a description of many aspect that were previously discussed including feeling out of control, physically sick, and wanting to avoid contact with other people.

I know it's starting when I snap at someone for no apparent reason. I feel bad, but at the same time I feel bad and for no reason. I don't really mean it, it just happens. It just comes out of my mouth before I can stop it. I don't laugh. Nothing can crack a smile on my face. My body language tells everyone I'm sick, I'm miserable and to just leave me alone. I look awful because I couldn't get myself to do my hair nice, or put make-up on. I throw on my most stupid clothes. I just don't care. No one else better care either. Don't start anything with me or something bad will happen to you. (Female, P33)

Considering the extent of the mood disturbances and the breadth with which they are described, it seems that any or all mood disturbances and unattractive behavior could be conceptualized as PMS. Many writers associated these descriptions with a person also experiencing some symptoms of the menstrual cycle, but other writers did not. Due to the essay instructions to write about a day in the life of a person with PMS, it can be assumed that emotions, moods, and behaviors described in the essays were related to or exacerbated by PMS.

Dangerous

Within the theme of Emotions, Moods, and Associated Behaviors, the third and final sub-theme of Dangerous emerged primarily for men. There was a frequent characterization in the male essays of women with PMS as dangerous and something to be feared. Male writers characterized their experiences with PMS using violent images including, "hellish", "the monthly monster is back in force", and "walking time-bomb" (P1); "vicious onslaught," "walk on egg shells," "all hell is going to break loose" (P45); and in capital letters, "BEWARE OF THE PMSING WOMAN!!" (P43).

A woman with PMS was described by a male writer (P20) as responding to someone who said she didn't look good with, "Ggggrrrr!! You just want to tear their head off and smash it on the ground..." Participant #23, also male, described a woman with PMS who was "shuddering with anger," and wanted to, "shove her breakfast down her mother's throat just to keep her from speaking." Yet another character in one of the male participant's essays behaved in a dangerous manner as his female character described, "On my way home I ran three people off the road and just about got in a head on collision" (P3).

Within this sub-theme, several male participants offered recommendations for dealing with these dangerous PMSing women. Participant #43 offered the following characterization of ways to cope with a woman with PMS: "A lot of men try to avoid their wives or daughters also during this time. Hoping not to feel the wrath of a PMSing woman." Participant #45 stated that if a guy doesn't do what he's told,

Boy you better get out of dodge because all hell is going to break loose. And it is going to fall right on top of you. After this terrifying attack takes place we must once again say that we are sorry and that it was all our fault again.

The characterizations of women with PMS by men are extremely negative and severe. Although the language used would typically indicate fear, these writers appeared to rather be expressing resentment. Perhaps this reflects an overreaction, on the part of men, to women who do not behave as expected.

Victimization

According to Merriam-Webster (2000), a victim is "one that is injured, destroyed, or sacrificed under any of various conditions <a ~ of cancer> <a ~ of the auto crash> <a murder ~>" (p. 1312). There was some overlap between this and the previous theme as writers described feeling like a victim of PMS driven mood and behaviors. The theme that emerged in this section is focused more on the perception of victimization, rather than the unpopular mood and behavior.

Within the theme of Victimization three gendered sub-themes emerged. The first two sub-themes were primarily female and include Women as Victim of PMS, and Women as Victim of Men's Labels. The third sub-theme, Men as Victim of Women With

PMS, emerged primarily the male essays. There was a sometimes subtle and sometimes direct expression of resentment that emerged in the second and third sub-themes.

Women as Victim of PMS

The first Victimization sub-theme, Women as Victim of PMS, emerged primarily through the female essays, but was also present in male essays. A common theme that emerged was that of victimization caused either directly or indirectly by PMS. Women described themselves as direct victims of PMS due to the physical suffering and mood changes. In addition to the descriptions of physical pain and discomfort described in previous sections, female participants who regarded themselves as victims of PMS described it as something to be survived as the next two quotes reveal:

Julie suffers from pre-menstrual syndrome, more commonly known as PMS.

There is no cure for it and Julie simply has to live through it. PMS causes Julie to become overly emotional, antagonistic, and irritable. Julie hates this time and wishes there were something she could do about it, but there isn't so she just tries to live through each day. (P30)

Participant #14, also female, provided:

But she will survive this tragic time for she already dealt with it for several years. She is strong enough to continue on and not murder males who do not understand what she is going through. And she knows soon it will be over and she will have another month before she has to deal with it again.

The conceptualizations that emerged in this theme are reminiscent of the expression the "curse" of menstruation that women were forced to endure due to Eve's misbehavior in the Garden of Eden. PMS was described by female participants as

something terrible to be survived. There is a sense of foreboding, as it was expected that the survival of this month's PMS would be required month after month with no relief.

Women As Victim of Men's Labels

The second Victimization sub-theme was, Women As Victim of Men's Labels. Women reported being not only the victim of PMS, but also of men's either accurate or inaccurate labeling their behaviors with the term PMS. Female writers expressed resentment and complained of men's lack of sensitivity to their physical and emotional pain. Many female writers described a wish that men could experience PMS.

She thinks to herself, why does this have to happen to me, men don't know how lucky they are. I wish that they could just once have to go through one day of PMS and maybe their opinion will change. (P41)

Another, more resentful, female participant stated:

Last, but most important, is the constant nagging of men asking them if they have PMS. That is the stupidest question ever, and as if it is any of their business. If guys only know what woman went through, then maybe they would understand. Until then, I think that they should learn to keep their mouths shut. After all, asking them this usually only ends up making them crabbiest. (P25)

Female participants expressed resentment at men who labeled them as having PMS regardless of whether or not they themselves claimed that label. It appeared that women wanted the term PMS to be reserved for women only, and that men who used the expression were always considered offensive.

Others As Victims of Women With PMS

The third and final Victimization sub-theme was, Others As Victim of Women With PMS. The victims described through this theme were overwhelmingly males, including romantic partners and family members. Through the voices of mostly male, and a few female participants, perspectives of victimization of others emerged. This sub-theme emerged for both genders, but the emotional energy expended is very different. This energy will be discussed at the end of this sub-theme.

A female participant (P27) implied that men were victims of PMS in her opening statement. "PMS. Most women suffer from some symptom of PMS. Backaches, bloating, cramps, and moodiness. If you are a man, you suffer in a completely different way."

The male writers used emotional language and more powerful descriptors in their presentation of concepts within this theme. A great deal of anger, resentment, and powerlessness was alluded through the following voices of male participants.

"PMS gives a woman an opportunity to say and think what they want without any repercussions and they usually take it out on men" (Male, P45). Participant #19, also male, described women with PMS as "extremely irritable and short tempered"...and that it seemed, "ok to be pissy all day and take their anger out on whoever is around."

Similarly, Participant #32 (male) described PMS this way: "For women they are constantly pissed off and taking it out on other people. For a couple of days no man wants to be around them because they are bitching about everything."

Participant #32 explained the victimization this way:

Men really hate it when women are PMSing. We always get bitched at for no apparent reason and are blamed for everything wrong that the woman notices.

Women seem to *enjoy taking it out on men* [italics added]. They don't bitch too much at other women, but instead go all out on men.

This writer implied that women with PMS were not only deliberate in their bad treatment of men, but even enjoyed it. Many male participants offered descriptions of behaviors the woman could control if she chose to. Women with PMS were sometimes characterized as purposefully cruel. Participant #1 provided the following characterization of a woman with PMS:

"What a terrible day!" she says, as she is talking to her female friends who also just happen to have PMS that very day. The whole group is like a walking time bomb that will explode the moment somebody who doesn't, "Understand their pain" enters the conversation about their morning of hell.

At the end of this essay, the woman's assumed true nature is revealed by this quote:

"Wow, I was quite the feisty one today. Good thing I have an excuse.' She dozes off smiling because tomorrow other unsuspecting victims will get to be her vents of anger. What a great day that will be" (P#1). This woman is characterized as being fully aware of using PMS as an excuse for bad behavior and plans to do it again.

From the men's accounts no matter what they did they were powerless to affect change in the female's mood or behavior. Some male participants characterized their own behavior as nice, sweet, and even going out of their way to be considerate of her discomfort. Participant #1 described an interaction between a male and female:

He decides he is going to be extra sweet today with the old, "Wow! You look so great today! I can't believe that I get to sit by somebody as beautiful as you!" as if

he isn't going to regret the first sentence enough, he adds, "I love what you did to your hair!"

She replied,

"My hair looks terrible! Can't you tell how snarly it is? I have had the worst day of my life! I couldn't find what to wear, my cereal was soggy, and to top it off I BROKE A NAIL!!!" Her eyes start to tear up and her face is reddening like a ripe tomato, "I can't believe this! All this has to happen when I have PMS!"

The male writer in the preceding essay stereotyped this female by describing her primary concerns as hairstyle and fingernails. Through this example he implied that women's behavior is unreasonable, while his behavior is well intended.

Another male writer described a lack of power to affect change:

She must be in another one of her moods. I hate when she gets this way. One minute she is really nice, the next minute she is all over you about the littlest things. You can never please a woman when she has PMS. (P4)

A few female writers confirmed some of the male sentiment as evidenced by the following writer. Through this female writer's description it appeared that PMS provided her license to behave badly and to treat others badly.

The first person you encounter for the day will get the meanest, ugliest glare they have ever seen in their lives. If they dare to say good morning they will probably get snapped at about how terrible day really is what a jerk they are for thinking other wise. Now depending what your agenda for the day is foretells how many friends you will have at the end of the week. P.M.S gives a woman the right to say

what ever she feels like saying and usually the meanest stuff is the easiest to say.

(Female, P34)

In the male essays they consistently characterized men as innocent and undeserving victims of women's bad behaviors. A male writer summarized this phenomenon with anger apparent with, "it really starts to piss men off, when they try to be nice and get bitched at for no reason: it can get to you" (P32). From the perspective of the male participants it appeared that men suffer as much or more than women with PMS.

A gender difference emerged through this theme and its sub-themes. It appeared as though women were primarily distressed by the experience of PMS itself, and secondarily distressed by the impact of their mood changes and behaviors on others. Men appeared to be most distressed, and often angry and resentful, at women's behaviors that were labeled PMS. Male writers tended to minimize women's physical pain and psychological discomfort resulting from the mood changes, and focused on women's perceived cruelty. Women acknowledged their physical pain, and focused on men's perceived cruelty. Female participants acknowledged the pain they caused others throughout the experience of PMS, but men did not.

Privilege

Merriam-Webster (2000) define the word "privileged" as, "not subject to the usual rules or penalties because of some special circumstance" (p. 925). Within the theme of privilege, participants provided conceptualizations of PMS being used as a way to take certain privileges. The privileges taken vary depending on the gender of the character in the essay. Four sub-themes emerged within the theme of Privilege. The first was Women

Gaining Privilege, the second was Men Losing Privilege, the third a Double Standard, and the fourth was Breaking the Rules.

Women Gaining Privilege

The first Privilege sub-theme was Women Gaining Privilege. Women described taking privileges not normally afforded women, attributing it to PMS. Through the male voices it appeared that women are a privileged group, and have access to that privilege by simply claiming the label PMS. In the following quote a female character in a male participant's essay gained special privileges due to PMS. In response to her bosses questioning, the woman replied in sobs,

No. I have had the worst day you can ever imagine. Some of your comments were totally unnecessary. I've been working here three years now, don't you think I know what I am doing? I was having a crappy enough day before I even arrived here, I don't need you to make it even worse. Maybe you should take some of my work load and hire another person, you know Helen just retired and she was your best worker. How do you think one person can do what she had done and the duties of another? (P6)

In this essay the boss responded by giving a compliment ("you're one of my best workers"), a raise, and a day off, because she started sobbing and confronted him. The scenario could have taken place any time of the month and the boss was expecting too much as he admits later in the essay. However, it is implied that this scenario is a reflection of the writer's conceptualization of PMS because of the assigned theme of the essay, "A day in the life of a person with PMS."

Another male participant (P45) resentfully characterized women as having privilege in the following way.

Having PMS gives you a reason to bitch and complain while getting away with it. You are allowed to stomp around with a pissed off frame of mind and expect that everyone will treat you special because you are not feeling well. PMS also allows you to have your way whenever you want it. It also lets you think that everyone else in the world is wrong and you are the only one who is right. PMS gives a woman an opportunity to say and think what they want without any repercussions and they usually take it out on men.

The privilege to behave badly was followed by yet another privilege, "...after a couple of days has gone by they can just say they are sorry and say they really did not mean that, but it was because they were not feeling well due to PMS" (P#45).

Female participants' essays also provided descriptions of women taking privileges. In the following female participant's essay the female character took a privilege not normally afforded a female, and the male character labeled the behavior PMS.

When Jessica got to school the teacher surprised the class with a pop quiz which she didn't know any of the questions...The boy who sat behind her started poking her with his pencil. She asked him nicely to stop, but he continued to jab her with the pencil. That was it. She was so fed up with everything that she screamed to him "KNOCK IT OFF". The boy, totally stunned by this, told her that she had PMS. Jessica hated that comment. So maybe she did, was that any reason for him to keep pestering her. (Female, P44)

In both the previous and the following scenarios, both the male and female characters were behaving badly, but only the female's behavior seemed to be cause for concern. In the following scenario, a second female character saved the first female character from her PMS inspired behavior.

All of Julie's friends know about her severe PMS syndromes so they try to be as nice as possible to neutralize the situation. However, on this particular day, altercation can not be avoided.... Julie waits at the corner for the walk light to change. Once it turns green she proceeds across the street. Today, however, Mr. Smith is late for work. He is impatient and is in too much of a hurry to wait for Julie to cross the street. Instead, he honks his horn at her. Julie is in no mood to be beeped at so she stops walking. Mr. Smith becomes even more upset. He even opens the door to yell at Julie. This sets Julie off. Soon, there is a screaming match in the street and the rest of traffic is blocked.... Luckily, Julie's Friend, Susie, saw the whole incidence. Susie quickly rushes to Julie to calm her and escort her the rest of the way to school. Once out of the street, Julie apologizes to Susie and thanks her for her help. Susie understands Julie's problem and knows how she feels. (Female, P30)

By behaving aggressively this female took a privilege stereotypically defined as male. Her friend caught her behaving this way and went to rescue her from her seemingly unacceptable behavior. The main character seemed to come to her senses, or come back to her feminine role, and apologized for her behavior.

A hockey player described her solution to the mood and physical changes in a way that is stereotypically masculine, and it appeared she was taking a male privilege using the excuse of PMS.

If I'm in a real pissy mood, hockey is like stress a reliever. You can take it all out on the puck, or your teammates. Not like I go after them, but these are the days that I usually play the roughest and most aggressive (P40).

Through this sub-theme of Women Gaining Privilege it appeared that PMS is conceptualized as a way that women are able to transcend feminine stereotypes and allowed more options in their behaviors. If the consequences of their non-stereotypical behaviors are too great, the expression PMS may serve to explain the behavior and provide an excuse.

Men Losing Privilege

The second Privilege sub-theme is, Men Losing Privilege. Several male writers wrote narratives describing questionable behaviors on the part of the male characters, but chose to focus on the unfavorable responses of the female characters. It appeared as though the female characters were willing to accept bad treatment for a majority of the time, but not during PMS. The label PMS was used, or blamed, when women changed their typical pattern and spoke out against being treated badly. Men in these scenarios lost privileges they had become accustomed to when the female had PMS.

Participant #32 (male) provided a thick description of an interaction between the narrator and a friend named Angela:

She gets made fun of because of how dense she is, so when she is PMSing she lashes out at the guys who do it, including her boyfriend. One time we were

actually being nice to her, talking with her and laughing with her instead of at her [italics added] and she just goes off when one joke is made about her. She starts yelling about how everyone is mean to her and we can all just go to hell and rot there. Out of nowhere she starts slapping people and screaming at Dan (her boyfriend) about how he never stands up for her and that he is just a typical male prick.

The writer implied that it was acceptable and normal for them to make fun of Angela, but not at all acceptable for Angela to react the way that she did in response.

In a similar example, Participant #29, also male, provided the following characterization of both men and women behaving badly, yet only women were called to task and labeled with “PMS”:

I’ve heard all about the cramps that women get and they complain to their husbands about and whine about all day long. I’ve heard about women who get pissed off at their husbands because *they don’t sympathize with them or make fun of them* [italics added].

This writer implied that it is acceptable for husbands to make fun of their wives, but not acceptable for women to be angry at that bad treatment. Male writers tended to be insensitive and self-centered in their approach to PMS and described themselves as suffering as much or more than women due to the treatment they received.

Double Standard

The third Privilege sub-theme was, Double Standard, and was described primarily by men. Several participants identified a double standard and expressed resentment at the

women whose bad behavior was sometimes excused with the expression PMS.

Participant #19 described the complexity of the problem this way:

I don't understand when a woman gets upset or bitchy the majority of guys will just blame it on PMS, they don't understand that women can be having a bad day or is just upset about something else, though it is PMS in some cases. I think guys should get a day where it's ok to be pissy all day and take their anger out on who ever is around. Wait, I don't know if that is such a good idea, there is enough angry women out there we don't need all the men being irritable once a month.

Participant #45 clearly described a double standard:

Now, on the other hand, it does not matter how a guy is feeling when he gets mad at another woman. What he says will be with him forever and she will always hold it against him. If he comes back and says, "I am sorry, I had the flu and was not feeling good at all. I never meant what I said." That still does not matter because he still said it and will never be forgiven. Yet at the same time men are just supposed to say, "Oh, it's ok honey, I know you are not feeling well." And if he does not say this he gets in even more trouble.

This would all not be such a big deal if men were allowed to have their times when they are also allowed to scream and yell without anything being held against them later. It turns into such a one-sided affair, when women may do and say whatever they wish and expect no one to be mad at them later, and if a man has a slip of the tongue once he is forever condemned.

This would all be so much easier if a woman on PMS was not so quick to take out the heavy ammunition against her male counterpart, because she is

bloated and feeling sick. Or if a guy was allowed to do the same every once in a while. If there was just something to even out the playing field things would be much easier and less tense all around. The double standard must be stopped if all is really to be well on the home front.

Finally, one female participant summarized the main concepts of this theme through a main character who contemplated numerous possibilities for the connection between privilege and PMS.

I discovered I didn't have a clear explanation of what PMS was. Whether it was a real or a thing concocted by bitter husbands as a subtle way to call their wives bitches....Another friend told me PMS was the time when woman could be as bitchy as they wanted to and have PMS as an excuse. My own mother had taught me it was when woman could get revenge on men for being the ones to bleed once a month. (P13)

These writers conceptualized PMS as an excuse that could be used by women to forgive bad behavior. In the former examples male writers complained that women had the excuse of PMS, while men had none. Rather than a monthly burden or curse, PMS was conceptualized by men as something that gave women power, and something that men could not lay claim to.

The latter example, written by a female participant, was complex because it presented the privilege of PMS from numerous angles. In her first example, PMS provided men alone with the privilege of calling their wives "bitches". In her second and third examples, PMS provided women alone with the privilege of being "bitchy", and of getting "revenge on men".

Regardless of the gender or the context it appeared that PMS was conceptualized as powerful enough to provide privilege to either males or females in a way that created a double standard. Male writers tended to perceive women as having a privilege in PMS that they themselves did not have. Women perceived men as having privilege that they could not have. The perceived double standard is complex and pervasive.

Breaking the Rules

The fourth Privilege sub-theme was Breaking the Rules. It appeared that women with PMS were perceived as breaking the rules for a good woman. Stereotyping and minimization of women was a frequent response by the men to the unpopular behavior of women.

Women were viewed as overreacting to PMS, as stated by a male participant (P45): "...usually during PMS women take things a little too far and get all bent out of shape for nothing." Participant #29, also male, described women with PMS as being, "extremely moody and scream and bitch about *little insignificant* [italics added] things."

Women's experiences are minimized as characterized by her outbursts when she "breaks a nail", her hair looks bad, or her cereal is soggy (P#1). Participant #1 stated: "Now I have to ask myself, is it really that bad? Maybe, but, I had nothing to do with those aches and pains so how come I get yelled at for it?"

In the following male's essay the participant drew a parallel between teenagers and women with PMS, thus depicting women with PMS as behaving in ways that are immature or childish. This participant described a time when his older sisters were responsible for his care.

I remember times that *I was being my persistently annoying self and they just could not handle me* [italics added]. Of course I don't want to leap to conclusions and say that it was PMS but as I look back I can identify other symptoms that my sisters had. They would cry and be in a down mood at times. I guess that because I was growing up with two much older sisters, that were in their teen-age years, this type of behavior was not uncommon and a poor indicator of the "time of the month." (P16)

The writer also implied that women should cheerfully take care of younger siblings, regardless of their behavior.

Women with PMS were also described as being childish as in this description by another male participant (P2): "Generally, they (women) seem to act the same, like sick children wanting nothing but attention and love."

Another way in which the contrast was drawn between a good woman and a woman with PMS was in an essay characterizing a mother who had PMS in an interaction with her children. Participant #21, a male writer, described a situation in which a mother's behavior alternates between irritable verbal outbreaks, and apologies complete with compensating behavior (sweet talk, apologies, and milk and cookies). In the essay the mother was the main character and the following interaction ensued.

"Will you just get away from me right now please." She yelled at her daughter, who was just trying to show her mom the flowers that she picked for her....

"...I am so sorry I got mad at you. Would you like me to bake you some cookies, or brownies maybe? You go watch TV for a while and I will bring you some cookies and a glass of milk."

“Billy stop bouncing that basketball right now before I take it away from you”....“I’m sorry Billy, would you like some cookies?”

Considering the stereotypes described by male writers, it would seem that women, due to their biology, overreact to normal situations and behave badly. It would also appear that women are prone to outbursts and overreactions to insignificant things. Women are characterized as childish and childlike, with no recognition of the external variables that may be impacting their behavior such as the pressure of taking care of young children.

Social Commentary

The final theme that emerged through the content analysis was Social Commentary. Given the assignment to write an in-class narrative essay to the theme, “A Day in the Life of a Person with PMS”, numerous students of College Freshman English instead took this as an opportunity to provide social commentary. This decision, as well as the content of their essays, indicated that PMS is a topic about which people have strong opinions. Interesting, male participants provided social commentary about twice as frequently as female participants.

Even though these comments may fit previously described themes, the way in which they were presented by the writers was unusual enough to warrant a separate theme. The entries contained in this section of the content analysis provided perhaps the most direct answer to my research question, “How is PMS conceptualized by people in general?”

A forthright male participant (P23) admitted: “I have bound myself to write a paper based solely on what I remember from middle school sex ed (sic), the media, and

prejudices..." With this statement he clearly indicated where his knowledge of PMS, and the knowledge of people in general, likely emerged.

Participant #35, also male, identified himself as Asian American and is likely a first generation immigrant to the United States. "This is not a thing we would openly discuss in our society, which is conservative and orthodox as far as these issues are concerned" (P35). This statement placed the concept of PMS in a cultural context and served as a reminder that what we define as problematic and what topics are open for discussion are at least partially determined by culture.

The following male participants provided simple definitions. "PMS may be the most common stereotypes when referring to an irritable woman" (P16), and "when someone is acting irritable or bitchy, they are usually said they have PMS" (P43).

Participant #43 indicated that in his definition even men could also have PMS: "Even sometimes guys are said to have PMS because they may act in this fashion. Some people believe guys can have PMS. Just because they are short fused, mean, or ornery."

A female writer, Participant #28, located the blame for PMS in women's biology and provided a confident description of common stereotypes of women in general with the following:

When a female is crabby or on edge easily, people usually assume that she is PMSing. I have no clue why PMS causes females to be crabby, very emotional, and stressing about every little detail. It just does. Maybe because of the cramping going on through out the body or just the hormones that seems to be flowing very strongly during that time.

The following female participant used her commentary to attempt to correct stereotypes of women and pointed to a double standard.

Before I go into detail about my three painful days with PMS, I would like to resolve some of the myths that men tie with PMS. When a girl is crabby, it doesn't mean that she has PMS or that it is her time of the month. I hear numerous men say, "Wow is she a bitch today. She must have PMS or it must be her time of the month!" When in fact, we girls may just be having a bad day, or maybe we got a bad score on a test. Men become upset or angry in these situations but they never get stereotyped for it so why do women? (P18)

Finally, Participant #43 stated simply, yet profoundly, that, "PMS has become one of those words that have kind of lost its meaning." This statement embodied my reason for pursuing this research project exploring the definitions and conceptualizations of PMS. If PMS has indeed "lost its meaning", what role is it playing in interactions between and within individuals?

Summary of Results

The purpose of this chapter was to provide a detailed description of the empirical materials collected and content analysis of the questionnaire data and essays. The questionnaire was designed to collect information regarding the participant's conceptualizations of PMS. Through the narrative essays it was hoped that participants would project their beliefs and conceptualizations of PMS.

The chapter began with a brief introduction which was followed by a summary and analysis of the questionnaire data. The questionnaire data was presented through a

detailed content analysis of the answers to each question. Next, the results of the Multiple Affect Adjective Checklist were presented for both men and women.

The content analysis of the narrative essays filled the remainder of the chapter and organized the information into the six main themes of Bad Biology; A Very Bad Day; Emotions, Moods, and Associated Behaviors; Victimization; Privilege; and Social Commentary. The six themes and associated sub-themes were presented in detail.

In the next chapter, titled Discussion, the results presented in this chapter will be interpreted and summarized in regard to the research and theory that were presented in the literature review.

CHAPTER V

DISCUSSION

The purpose of this study was to explore the definitions and conceptualizations of the expression “PMS” held by college students. I anticipated that the contents of the essays, MAACL-R, and questionnaire would illuminate the way in which college students conceptualize PMS. In addition, I expected the definitions and descriptions of someone with “PMS” to differ from diagnostic criteria for PMDD set forth in the DSM-IV (APA, 1994).

According to Denzin and Lincoln (1998), and in keeping with the format initiated in Chapter III, the art of interpretation serves as the fifth level of activity in qualitative research. This is a complex and time-consuming process because qualitative interpretations are constructed. “There is no single interpretive truth” (Denzin & Lincoln, 1998, p. 30).

Included in the activity of interpretation is the evaluation of the empirical materials, making sense of the themes and patterns, interpreting, writing and rewriting, culminating in a finished product or text. The goal is to distill a consensus construction that is more informed and sophisticated than previous constructions and more sophisticated than the construction originally held by the researcher (Denzin & Lincoln, 1998).

Individual student descriptions were used to form a more complete and sophisticated conceptualization and definition of PMS. Other information gained included stereotypes, values, and social commentary, which added context and perspective contributing to the college student construction of PMS.

No agreed upon definition for "PMS" exists, which creates confusion in the research and makes it impossible to compare studies. It was hoped that a clear definition of the phenomenon "PMS" could be developed and would help to differentiate between the public conceptualization of PMS and research criteria for Premenstrual Dysphoric Disorder or PMDD. This in turn was expected to better inform research, assessment, diagnosis, and treatment of premenstrual disorders, as well as inform the debate regarding inclusion in the body of future diagnostic and statistical manuals of the American Psychiatric Association.

This chapter includes a summary and interpretation of the analysis of the empirical materials collected. In the final section of this chapter, conclusions are provided; this section also includes limitations of the study and recommendations for future research.

Summary and Interpretations

Of the approximately 90 students who completed the in-class PMS essay assignment, 47 students chose to participate in the research and all were able to provide answers to questions on a questionnaire and complete a two-page written essay on the topic of PMS. Both male and female college students were familiar enough with the concept of PMS that they were able to provide opinions on numerous questions and even

write an essay on the topic. PMS appears to be a part of popular culture and not simply a medical or psychiatric construct.

On the Multiple Affect Adjective Checklist-Revised (Lubin & Zuckerman, 1965), the adjectives "irritated", "agitated", and "annoyed" were the most frequently indicated as describing the person the participants wrote about in their essay, "A Day In the Life of a Person With PMS". "Impatient," "complaining," and "miserable," were the next most common adjectives used, followed by "unsociable," and "angry."

Although every student participant expressed an opinion, there was confusion regarding what PMS actually was and when in a menstrual cycle it occurs. The timing of PMS in the menstrual cycle was also an important aspect of the college student conceptualizations that emerged from this study. Although a majority of participants identified PMS as occurring before menstruation on a specific question on the questionnaire, numerous participants contradicted themselves on other questions, or in their essays. PMS was conceptualized by some participants as something that occurred both before and during menstruation, by other participants as only during menstruation, and by still others, as happening before, during, and after menstruation.

From the answers on the questionnaire and conceptualizations presented in the essays, it appeared that the term PMS was so confusing and defined so broadly that even individual participants contradicted themselves from one question to the next, or one paragraph to another. Rather than illuminating a clear definition of PMS, the results of this study reflect the lack of definition and confusion of terms present in the academic and popular literatures.

In addition, the prevalence with which PMS was thought to occur was important information that emerged from the empirical materials. It appeared that, from the college students' perspective, all or most women have something called PMS. The prevalence estimates discussed in the literature review indicated from 5% (APA, 1994) to 95% (Gath, Osborn, Bungay, Iles, Day, Bond, and Passingham, 1987) of women have PMS. The results of this study seem to indicate prevalence rates closer to the highest estimate of 95%.

Twenty-eight out of 30 (93%) female participants indicated they believed they experienced something they called PMS. PMS, as conceptualized by college women, is something that is so prevalent that almost everyone thinks they experience it. However, out of 30 female participants, only six (20%) indicated they had sought treatment for premenstrual symptoms or PMS. It appeared that PMS is conceptualized as a common and often unpleasant experience for women, but not something that requires medical or psychological treatment.

In addition to the large majority of female participants who self-labeled as experiencing PMS, 32 out of 47 (68%) participants claimed to be in a close personal relationship with someone that they thought had PMS. These results suggest that PMS was perceived to be more common than not by the participants in this study.

Considering the responses from participants indicating extremely high prevalence rates, PMS symptoms occurring in any or all times in the menstrual cycle, and the common description of normal menstrual cycle symptoms, it seemed that normal menstrual cycle experiences have acquired the name PMS. However, through the

acquisition of this label, the menstrual cycle and accompanying discomfort have become abnormal and bad.

PMS was frequently described and defined as physical pain or discomfort associated with menstruation or the menstrual cycle. Both male and female participants consistently associated PMS with physical symptoms that are normal and commonly associated with the menstrual cycle, particularly menstruation. It was unclear whether writers meant to describe the symptoms as occurring during menstruation, or at any time in the cycle.

The expression PMS was also conceptualized as faulty biology, which included moderate to severe physical pain, "out of whack" hormones, and a desire to escape through medication and other comforts. It was not clear whether writers conceptualized PMS as occurring during menstruation, in association with a menstrual cycle, or if they are interchanging the expression PMS with menstruation. It was as if women's biology or experience of having a menstrual cycle was somehow aberrant or abnormal. Thus descriptions of "raging hormones," and hormones that were perceived to be "acting up" or "out of whack" were common.

One possible interpretation is that women are experiencing more physical pain and emotional distress with the menstrual cycle than women experienced in the past. Women's bodies could be serving as barometers with which our high stress lifestyle and/or polluted environments are early indicators of the consequences for our emotional and physical well being.

From the results of this study, it appeared that PMS was conceptualized by college students as a catch all term for all things associated with the menstrual cycle. The

physical symptoms and discomfort associated with PMS were so broad and encompassing that it was difficult to develop a specific definition. The problem that I encountered in trying to describe this emerging theme, and define PMS, may reflect a larger problem in the conceptualization of PMS. As it is defined by this group of college students, PMS does not appear to be useful for describing a specific medical or psychological syndrome. It appeared that PMS is so broad and all encompassing that its utility as a descriptor is questionable.

If PMS is indeed a poor descriptor with diverse meanings, it could then also be argued that it is harmless. However, if an expression is a poor descriptor then it should be useless and subsequently its use should decline. The results of this study demonstrate just the opposite, the use of the expression PMS has become so common that 100% of this sample of college students were able to express strong opinions regarding the concept.

Whether the popularity of the expression reflects a true increase in physical menstrual problems, or a change in people's perceptions of women's biology, the problem remains. The use of the expression PMS is so common and so negative that women in general are perceived as "out of whack", and "acting up", due to the simple reality of the potential to have a menstrual cycle.

As a result of the broad use and acceptance of the term PMS, women are vulnerable to stereotyping, minimization, and discrimination due to the simple fact of their biological sex. Even at the end of the 20th Century, biology is destiny!

Within the essays, PMS was also conceptualized as a very bad day, which in some cases was due to bad luck. The male essays tended to reveal more physical comedy and misfortune, whereas the female essays focused on the emotional stress of having such bad

luck and miserable experiences. Female writers were more likely than male writers to describe a perceived heightened sensitivity. There was a sense of everything becoming amplified as a result of PMS. In either case, a common result described through both the male and female participants' essays was a desire to isolate and avoid contact with people.

PMS was frequently conceptualized as involving unfavorable or unpopular emotions, moods, and resultant behaviors. Unpredictable, Out of Control, and Dangerous were themes that emerged through the essays and questionnaire answers to describe the emotions, moods, and resultant behaviors associated with PMS. Unpredictable or unexplained moods were labeled PMS and thus attributed to internal characteristics of the woman. Considering the extent of the mood disturbances and the breadth with which they were described, it seemed that any or all mood disturbances and unattractive behaviors could be conceptualized as PMS.

Males voiced the perception of dangerousness in the emotional and behavioral actions of women with PMS. These characterizations of women with PMS by men were often extremely negative and severe. Although the language used typically indicated fear, these writers appeared to be expressing resentment. Perhaps this reflected an overreaction, on the part of men, to women who do not behave as expected.

In 1999, Katharina Dalton listed the dangers for women with PMS to include marital breakdown, attempted suicide and homicide, binge drinking, and child abuse. This broad list of social problems Dalton associated with women and PMS could as easily have their origin in problems such as lack of economic opportunities, or expectations of women as primary care giver and full-time employee. Or, as Figert

(1996) stated, "the pressure to 'have it all' (career and family) gets symbolically released once a month in her PMS" (p. 10). It could be argued that women have as many external demands and circumstances as men, but for women their responses are labeled PMS and the problem located within women's biology.

As Rosenhan (1973) argued in the classic debate over diagnostic labels, psychiatric diagnosis places the problem within the individual, and ignores the person's environment. External circumstances that might have impacted these women's experiences were minimized and their complaints or "bad behavior" explained with the internally located label PMS. Sadly, female writers expressed interpersonal conflict, guilt, and the need to apologize for their behaviors or moods they associated with PMS.

A conceptualization of PMS as resulting in victimization was prevalent and complex. PMS was viewed as something that created victims. Many women described feeling like victims of the physical pain and mood changes associated with menstruation. In the women's essays, the theme of victimization had a helpless and resigned tone. It was expected or accepted that mood swings, strong emotions, and some unpleasant behaviors were a part of being a menstruating female, and thus PMS. Just as common were the women who described feeling like victims of men's insensitivity to their pain, and labeling of any emotion or less than positive mood as PMS.

Men also claimed victim-hood, as they described being the victim of women with PMS. Common complaints were of women who behaved irrationally, had extreme mood swings, and took their frustration out on men. The male writers expressed anger, resentment, and a feeling of powerlessness in their descriptions of victimization.

A gender difference emerged through this theme of victimization. It appeared as though women were primarily distressed by the experience of PMS itself, and secondarily distressed by the impact of their mood changes and behaviors on others. Men appeared to be most distressed, and often angry and resentful, at women's behaviors that were labeled PMS. Male writers tended to minimize women's physical pain and psychological discomfort resulting from the mood changes, and focused on women's perceived cruelty. Women acknowledged their physical pain, and focused on men's perceived cruelty. Female participants acknowledged the pain they caused others throughout the experience of PMS, but men did not acknowledge the pain they caused others using the label PMS.

PMS was conceptualized in a way that provided privilege. In some of the narratives women were perceived as gaining privilege through use of the label PMS. In others, men expressed frustration at losing privilege to which they had become accustomed when a woman had PMS. Male writers complained of a double standard, in which they described PMS as something women exclusively could use to excuse their bad behavior. Men expressed resentment and jealousy at the perceived privilege and freedoms associated with PMS.

As discussed in Chapter II, Pugliesi (1992) described a different double standard where women were the losers. She asserted, "what is labeled as PMS is actually deviation from normative expectations regarding emotion" (p. 132). She also argued that social roles require women to be providers of nurturing and emotional support. Because of this, when women break the gendered rules for the expression of emotion it is more disruptive than when men do the same. Therefore, a double standard exists in which men's changes

in mood do not require explanation, but women's changes in mood are viewed as serious problems (Pugliesi, 1992).

Stereotypes of women as overreacting and concerned about trivial things were embodied in the male essays about women with PMS. From the male writer's characterizations it seemed that women, due to their biology, overreact to normal situations and behave badly. It also appeared that women are prone to outbursts and overreactions to insignificant things. Women were characterized as childish and childlike, with no recognition of the external variables that may be impacting their behavior such as the pressure of taking care of young children. Stereotyping and minimization of women was a frequent response by the men to the unpopular behavior of women.

According to some social scientists, if women's complaints get labeled PMS, circumstances are not changed, and women continue to be subjected to impossible social conditions (Pugliesi, 1992) and chronic role strain (Johnson, 1987). Caplan (1995) warned of the stigmatizing and stereotyping of women as mentally ill due to the broad acceptance of the label PMS. Figert (1996) stated,

On the one hand, women's health and menstrually related issues have historically either been ignored by physicians and scientists *or* women were told that any feelings or problems "are all in their heads." On the other hand, menstrually related problems have been defined or labeled as making women "crazy" or putting them "under the control of their raging hormones" (p. 102).

Through the participants' essays, I heard both men and women telling women that they are over-reacting and over-emotional. Women were not allowed external circumstances for their bad moods and bad behaviors. The act of characterizing female

behavior as an overreaction does a disservice to woman in several ways. First, by selecting minor and stereotypical problems such as breaking a nail, women's concerns are categorized as shallow and ridiculous. Second, if women's concerns are insignificant then they have no right to behave so badly. Finally, if women are reacting this extremely to insignificant things then they really are crazy and can not be trusted in the same way that men are trusted.

The final theme that emerged through the content analysis was that of social commentary. Numerous participants took the assignment from their English Professor and used it as an opportunity to provide commentary and editorial comments regarding the problem of PMS. This decision, along with the content of their essays, was significant. It reflected an interest in and desire to explain experiences and sometimes complaints regarding this broad and powerful thing called PMS. Numerous examples of this social commentary were provided in Chapter 4, but one particular statement provides a profound and clear summary of the problem with the expression PMS. Participant #43 stated simply, "PMS has become one of those words that have kind of lost its meaning."

Implications

One of the goals of this study was to compare and contrast college student definitions and conceptualizations of PMS with the proposed diagnostic criteria for Premenstrual Dysphoric Disorder published by the American Psychiatric Association (1994). The final portion of Summary and Interpretations will contain a detailed comparison and analysis. For your review, this proposed criteria are presented in Table 2, Chapter II of this study.

The proposed criteria for Premenstrual Dysphoric Disorder in the DSM-IV (APA, 1994) provide four separate criteria under letter headings of A, B, C, and D. In order for the diagnosis to be rendered, it is explained that a woman must meet each of these four criteria.

Under Criterion A of the DSM-IV, 11 examples of possible symptoms are listed. In order for Criterion A to be met, it is required that five or more of these symptoms be present most of the time only during the last week of the luteal phase, or the week before menstruation. In addition, these symptoms must begin to remit within a few days of menstruation, and symptoms must be absent in the week following menstruation.

In the current study, participants frequently reported varieties of the 11 symptoms in their student essays and questionnaires. They also described symptoms that occurred for several days before the onset of menstruation, and some writers described a vanishing of the symptoms with the onset of menstruation. However, the majority of participants confused the premenstrual phase with the menstrual phase of the cycle, and reported symptoms that occurred at various phases of the menstrual cycle.

In order to meet the requirements of Criterion B these premenstrual symptoms “markedly interfere” with an important aspect of the woman’s life, such as work performance, school performance, or relationships with others. The examples “avoidance of social activities, decreased productivity and efficiency at work or school” are provided.

Many participants in the current study described situations of conflict or discomfort within work and school settings and interpersonal relationships, and wanting to avoid social interaction was very common. However, very few participants described a situation in which their ability to function was markedly impaired, or which seriously

impacted their productivity at work or school. Participant characterizations were more commonly related to physical discomfort, feeling emotional, and worrying that their mood might negatively impact others.

Under Criterion C, it is specified that Premenstrual Dysphoric Disorder not be simply an exacerbation of an existing Personality Disorder. None of the participants described behavior that would constitute a Personality Disorder, but rather a cyclical pattern of unattractive or unsettling behavior and symptoms.

Finally, in Criterion D, it is required that Criteria A, B, and C be confirmed by two consecutive months of prospective daily ratings of symptoms. Participants in the current study frequently reported patterns of symptoms that repeated month after month, however; the majority of participants defined PMS as the experience of as few as one symptom, occurring one month, at any time of the month.

In summary, in contrast to the proposed diagnostic criteria, it appeared the expression PMS was used by college students to describe anything related to the menstrual cycle. Although many of the symptoms listed in the diagnostic criteria for Premenstrual Dysphoric Disorder were also used to describe PMS by the study participants, there were differences in the combination and number of symptoms, timing in the cycle, and level of impairment. College student conceptualizations ranged from a minimum of one symptom that had no impact on the woman's work, school, or relationships, to a monthly constellation of symptoms that interfered with the woman's functioning at work, school, or interpersonal relationships.

The proposed diagnostic criteria for Premenstrual Dysphoric Disorder are an attempt by the American Psychiatric Association to describe a narrow and specific

constellation of symptoms. College students use the expression PMS to do just the opposite; the definition is so broad that it no longer has meaning. If Premenstrual Dysphoric Disorder is included in future editions of the DSM writers should include an explanation that this disorder is not to be confused with the popular expressions premenstrual syndrome and PMS.

The results of this study and this comparison indicate the need for medical and psychological professionals to seriously assess client's complaints of PMS and to clearly differentiate what treatments are available for the symptoms being described. In addition, the writers of the next volume of the Diagnostic and Statistical Manual of the American Psychiatric Association should take care to not include PMS or premenstrual syndrome in the research or diagnostic criteria for Premenstrual Dysphoric Disorder. The terms "PMS" and associated "premenstrual syndrome" only serve to confuse practitioners and clients.

Another implication of this research is the danger that, like the label premenstrual syndrome and PMS, the new term Premenstrual Dysphoric Disorder and its' acronym PMDD will be adapted by the general public and popular press in such a way that it also loses its meaning.

One recent television commercial advertising the drug Sarafem for the treatment of "PMDD" innocently shows a woman becoming agitated when a shopping cart will not come free. Other images include women crying, and women expressing frustration when trying on pants that are too tight. These commercials and this representation of women with "PMDD" (Premenstrual Dysphoric Disorder) create two problems. First, normal experiences such as becoming agitated in the grocery store, expressing emotion through

crying, and expressing frustration at tight clothing, are in danger of becoming labeled by individual women and society as a mental illness. Second, the term Premenstrual Dysphoric Disorder and its accompanying acronym PMDD are in danger of losing their meaning and becoming just another word for PMS, a term that is so broad and encompassing it has lost its meaning.

Conclusions

Counseling Psychologists can work to change client responses to their internal attributions of PMS, as well as external labels, and their social worlds. If it is true that women are somehow using the expression PMS as a response to impossible social conditions (Pugliesi, 1992) or to chronic role strain (Johnson, 1987) then continuing its broad use continues the social problems. As Caplan (1995) warned, "everyday kinds of harm include men's and women's dismissal and trivializing of women's legitimate concerns and grievances as 'just PMS'" (p.148). Rather than accepting the label PMS and assuming we know what clients mean, Counseling Psychologists must actively explore what meaning that individual brings to that term.

Rather than reinforcing inaccurate stereotypes of women as irrational and "hormonal," Counseling Psychologists can confront not only clients, but also colleagues and students who make such mistakes in relation to PMS. Ideally, Counseling Psychologists would recommend a thorough assessment and evaluation for Premenstrual Dysphoric Disorder for clients who report premenstrual symptoms severe enough to interfere with their ability to function.

Alternately, for clients who report symptoms of PMS not severe enough to require assessment for Premenstrual Dysphoric Disorder, Counseling Psychologists could

intervene through the use of cognitive-behavioral and stress management strategies, and by motivating the client to make specific lifestyle and diet changes to decrease specific symptoms.

The danger of the broad and diverse definition of PMS is that rather than managing individual symptoms with the least intrusive methods of treatment, women may become overwhelmed by the “diagnosis” and disempowered. In addition, the vagueness of the expression PMS lends itself to victim blaming and to locating the problem within the context of being female. Being female then gets translated to being physically and emotionally flawed. With this self-perception, few females will advocate for appropriate treatment from medical and psychological professions. Without patient advocacy, medical and psychological treatment options will not have pressure to change and improve.

Limitations and Recommendations for Future Research *

It is important to remember that this study was designed to illuminate the experiences of college students in Freshman English classes. The participants in this study were recruited from Freshman English classes at a small rural liberal arts college in the North Central United States. All participants volunteered for the study and were paid a \$5 honorarium.

Out of approximately 90 students who completed two page in-class essays to the theme, “A Day In the Life of a Person With PMS,” 48 students attended research sessions and completed a questionnaire and MAACL-R. Of those 48, one participant did not include his essay with his research materials, therefore his data was not included in the analysis. Forty-seven participants’ materials were used as empirical materials in this

study. Approximately half of the students who wrote an in-class essay chose to volunteer for the study. A self-selection bias may have occurred with students who had experience with or opinions about PMS being more likely to participate. However, students were also offered \$5 for their participation, and may also have influenced self-selection.

It was expected that students enrolled in Freshman English courses would be somewhat new to the college environment and would express conceptualizations of PMS that were unaffected by their experiences in higher education. It is difficult to determine if this was true, and it would be interesting to see if this same study using college seniors or non-college samples would yield similar or different results.

In my questionnaire I attempted to delineate menstrual symptoms, premenstrual symptoms, and PMS, in an attempt to more clearly identify what the expression PMS was being used to describe. Unfortunately, one question on my questionnaire regarding whether or not participants had sought treatment for PMS included "menstrual problem," "premenstrual symptoms," "premenstrual syndrome," and "PMS". I now regret combining these terms, and the student responses were difficult to interpret with respect to conceptualizing PMS. An improvement to the question would have been to delete the terms "menstrual problem" and "premenstrual symptoms" and ask them only to respond if they had pursued treatment for "premenstrual syndrome" or "PMS".

Participants also seemed confused over definitions and failed to differentiate between menstruation, premenstrual symptoms, and PMS in their questionnaire answers and essays. One way to more concisely investigate these different terms would be to ask participants to match specific symptoms with only one specific category.

Another limitation of this study was that of the essay being a one-time expression of student perceptions. These essays can only be considered snapshots of the student's perceptions on the day and time of the writing of the essay. As a researcher, I had a very small amount of time with each participant, and no opportunity to call students back for clarification was built into my study design.

In retrospect, it would have been valuable to have the opportunity to talk with participants in order to better understand their conceptualizations. Member checking (Schwandt, 1997) would have potentially added to both the depth of the conceptualizations and the trustworthiness of the study results. Conducting interviews would possibly access college students' more direct beliefs and experiences of PMS. Engaging in a dialectical exchange may also provide the opportunity to clarify information and encourage more "thick description" of participants conceptualizations of PMS.

The results of this study provide support for the complaint that PMS is undefined, and used so broadly that it has become useless as a medical or psychological descriptor. Unfortunately, because it is used so broadly, the expression PMS may serve to perpetuate the stereotyping of women and minimization of their social worlds. More research is needed to explore the role that the expression PMS plays in the negotiation of relationships and social, especially gender, roles.

Future research should explore what attributions are given men when they display "PMS-like" emotional expression, moods changes, and behaviors. In order to more fully understand what purpose PMS actually serves, it will be important to explore potential gender role expectations, and what role it plays in interpersonal conflict, family conflict,

and women's careers. Men as well as women stand to benefit from PMS research focused on gender differences in the experience and expression of emotions.

In-class narrative essays were chosen as the means to collect student projections of people with PMS, and it was assumed that this assignment would free students from expectations of providing actual medical knowledge and increase their creative expression. Contained within the student essays are answers to numerous research questions. One of the greatest challenges of completing the content analysis was in staying focused on my original research purpose. Future content analysis could be conducted on these essays to explore women's internal attributions and cognition regarding PMS, the dynamics of family conflict related to PMS, and the utility of the expression PMS within relationships.

Another potential use of this essay data is to edit the essays, either eliminating reference to gender or creating two versions of each essay, one version with a male main character, and one version with a female main character. A new sample of participants could be asked to make attributions for the main character's behaviors, thereby potentially advancing the understanding of how gender and attributions interact in relation to PMS.

In future research separate groups of participants could be asked to write essays each on separate topics of menstrual symptoms, premenstrual symptoms, premenstrual syndrome or PMS. A comparative analysis of the essays regarding each topic could be conducted to assist in differentiating between the different concepts. This would potentially help provide differentiation between the terms, or support the finding of the current research that the terms are basically interchangeable.

Intervention and treatment is a final area of research that is implicated from the results of this study. Considering the finding in this study that an overwhelming majority of women believe they have PMS, and a large percentage of men complained of women with PMS, the development and testing of effective intervention and treatment should be a priority. Future research should test the effectiveness of education, skills training, and different types of psychotherapy for both men and women regarding the expression PMS, women's biology, and gender bias. Men's apparent "PMS-envy" could be studied in order to better understand men and emotions.

Summary of Discussion

The results of this study provide support for the argument that PMS is used to describe so many things and is so broad that, as a descriptor, its utility is questionable. However, the expression PMS is commonly used, and therefore must serve some purpose in intra-personal and interpersonal interactions.

In this study 93% of female participants reported they believed they had PMS, yet only 20% reported seeking treatment. Female participants complained of physical pain and discomfort, which was often relieved through the use of over-the-counter pain medications such as Midol. Although female participants frequently complained of mood changes, male participants were more likely than women to complain of the mood changes they associated with PMS, and to be most concerned with their own inconvenience in relation to females with PMS.

Judging from the results of this study, PMS is defined as the normal experience of menstrual cycle pain and discomfort, which is accompanied by mood changes. PMS is not defined as something that required medical or psychological attention, but rather

something to be dealt with as part of being female. Apparently, part of being female is to be cyclically "irritated," "agitated," and "annoyed," and to inconvenience others.

Women tended to see themselves as victims of biology and of men's insensitivity. Men tended to see themselves as victims of women with PMS. There was a perception that PMS gave women privilege and served as a double standard in which women were provided the excuse of "PMS." Men were especially sensitive to and unhappy with their own loss of privilege in relation to women with PMS.

Although it appeared that regardless of physical pain and discomfort, women had something to gain from using the excuse PMS. However, this short term privilege may be more than compensated for by the long term loss incurred by the stereotyping and minimizing of women because of their biology. The potential consequences to women in terms of gender equality in personal relationships and the workforce are tremendous.

The results of this study indicate a need for medical and psychological professionals to take women's complaints of PMS seriously, and to clearly assess what the woman means when using this expression. Differential treatment should be offered depending on the symptoms, and misconceptions of PMS should be explained. The authors of the future editions of the Diagnostic and Statistical Manual of the American Psychiatric Association should take great care to differentiate between the vague and useless expression "PMS" and the diagnostic criteria for Premenstrual Dysphoric Disorder.

APPENDICES

Appendix A

Consent Form

You are invited to participate in a study regarding people's conceptualizations of "PMS". Please listen and read along as the researcher reads this form to you. Ask any questions you have before agreeing to participate in this study.

Contacts and Questions:

The researcher conducting this study is Lora J. Bertelsen, a graduate student pursuing her Ph. D. in Counseling Psychology under the supervision of Dr. Cindy Juntunen-Smith, Department of Counseling. Contact numbers are found below. You may ask questions or share concerns with Lora J. Bertelsen at the time of the study, or with either of them at any time after your participation has ended. You will be offered a copy of this form to keep for your convenience.

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Procedures:

If you agree to participate, you will be asked to complete a checklist and questionnaire provided by the researcher. You will also be asked to provide the researcher with a copy of your essay on the topic, "A Day in the Life of a Person With PMS". When you have finished the tasks you will place your signed consent form in one envelope and the checklist, questionnaire and essay (with no names or identifying information) in a separate envelope.

Risks and Benefits of Participating in the Study:

The benefits to participating in this study are primarily indirect. You will be benefiting Psychology in general by expanding knowledge in the area of the interplay between physical and psychological health, as well as helping to inform the development of appropriate assessment and treatment of menstrual syndromes. On a personal level, you are likely to become more aware of your own perceptions of the expression "PMS" through your participation. In the debriefing, you will be provided information about premenstrual syndromes and the purpose of the study. If you would like to be informed of the results of this study you will have the opportunity to indicate this interest on a sign up sheet. In addition, if you would like more information, assessment, or treatment for "PMS" just approach the researcher and you will be provided a referral to the University Counseling Center or University Health Service. If at any time during the study you become uncomfortable and no longer wish to participate you may indicate this to the researcher and you will be excused.

Confidentiality:

Your signed consent form will be held separately from your checklist, questionnaire and essay. You will place the materials in an envelope yourself and can insure there is no identifying information included in your packet. Your English professor will not have access to any information regarding participation, nor data collected. No information that would identify any individual will be included in any report of the research results. The essays, checklists, questionnaires, and consent forms will be kept in a locked file cabinet to which only the researcher has access and stored for a period of three years, after which time they will be shredded and disposed of.

Voluntary Nature of the Study:

Your decision whether or not to participate in this study will not affect your current or future relations with Bemidji State University, the University of North Dakota, the Department of English, or the researcher, in any way. If you decide to participate you are free to withdraw your participation at any time without affecting those relationships.

Statement of Consent:

I have read and understand the above information and agree to participate in this study by completing a checklist, a questionnaire, and providing a copy of my essay, and submitting these materials to the researcher for use in this study.

Signature: _____

Date: _____

Appendix B

QUESTIONNAIRE

PLEASE ANSWER THE FOLLOWING QUESTIONS

(All answers will be kept in strict confidence)

1) What is your gender? female male transgendered other

2) What is your ethnic, racial or cultural heritage? (Please check all that apply)

American Indian Mexican -American International Student (What Country?) _____
 Caucasian African-American Asian-American Other? _____

3) What is your relationship or marital status?

single in a committed relationship

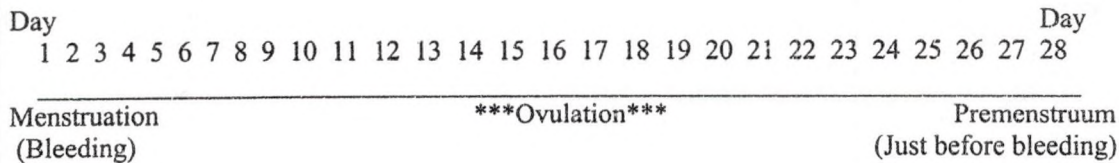
4) What is your sexual orientation?

heterosexual gay lesbian bisexual

5) What do you think the expression "PMS" stands for?

6) Describe what you think PMS means, in your own words:

The continuum below represents the menstrual cycle.



Appendix B

7) Please check the times of the menstrual cycle that you think PMS occurs:

- During menstruation or period (bleeding) Just after menstruation or period (bleeding)
 Just before menstruation or period (bleeding) During ovulation (middle of the cycle)

8) Have you ever been in a close personal relationship with someone you believed experienced a premenstrual syndrome or "PMS"?

- Yes Does not apply to me.

Please explain: _____

9) Have you ever thought that you had a premenstrual syndrome or something that might be labeled "PMS"?

- Yes Does not apply to me.

Please explain: _____

10) Have you ever been diagnosed with a menstrual problem, or sought treatment for premenstrual symptoms, a premenstrual syndrome, or "PMS" by a medical or psychological professional?

- Yes Does not apply to me.

Please explain: _____

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