SOCIAL WORKERS' KNOWLEDGE OF PREMENSTRUAL SYNDROME (PMS) AND PREMENSTRUAL DYSPHORIC DISORDER (PMDD): IMPLICATIONS FOR ASSESSMENT PRACTICES WITH MOTHERS

by

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Abstract

Some women experience premenstrual syndrome (PMS), and its more severe presentation as premenstrual dysphoric disorder (PMDD), which seriously limits their coping ability in daily life, including their parenting ability. Social workers routinely assess parenting ability, giving rise to the question, "How does the premenstrual knowledge of social workers influence whether and what they ask in their assessment practices with mothers?"

The heavily debated premenstrual literature rests on four approaches. After these perspectives, an enhanced biopsychosocial framework (BPS-*E*) is used to examine the premenstrual knowledge of social workers and their conversations about PMS/PMDD as they assess women's parenting. This exploratory study used a triangulated convergence design, generating data from both quantitative and qualitative methodologies. In the first phase, 521 social workers completed a Premenstrual Experience Knowledge Questionnaire (PEKQ) created for this research. In the qualitative phase, inspired by an interpretative phenomenological approach, 16 social workers described in interviews their premenstrual knowledge and its impact, if any, on their assessment practices with mothers.

Most social workers had limited knowledge of PMS/PMDD, most crucially a) the PMDD DSM-V classification, b) increased suicide attempts during the premenstruum, and c) the effectiveness of SSRI anti-depressants in moderating the symptoms of PMDD. Also, the greater the interference of social workers' own premenstrual symptoms on their daily living and the more premenstrual training they had received, the higher their premenstrual knowledge scores. Very few social workers in this study (5.1%) addressed premenstrual symptoms with their female clients. However, a statistically significant relationship existed in this sample between asking female clients about PMS/PMDD and social workers' (a) age, (b) premenstrual knowledge scores, (c) premenstrual training, and (d) the degree to which the premenstrual symptoms of female social workers interfered in their own daily living.

These results can direct social work education and practice. Not asking about PMS/PMDD symptoms could have negative outcomes, particularly in child protection, where the safety needs of children could remain unaddressed. Conversely, women who tell uninformed or disapproving social workers about their premenstrual symptoms might be further subjected to mother-blame, stigmatization, or punitive interventions.

Dedication

This dissertation is dedicated to my husband, Rob Gammie, who sadly passed away February 11, 2014.

He was my best friend - encouraging and inspiring me throughout the Ph.D. journey - lending his ear, his wisdom, his patience, and his unwavering love. I wish with all my heart that I could share my joy at having finally travelled the distance.

"Salutis" my love. I will raise a glass for us both. I miss you so very much, but I know that you are near.

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"The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires" (Ward, 1968, p. 16).

I have been grateful every day for my wonderful supervisor, Dr. Leslie Bella, who agreed to come out of retirement to guide and mentor me. She had faith in me and in the value of exploring women's premenstrual challenges. She has been *my* "great teacher who inspires". She taught me how to find the answers "from within". Even when I was sure the answers were locked securely away, she produced keys that opened yet another door. I am so appreciative that I was her "last" student. It has been an honour.

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Chapter One: Introduction

A critical advance in women's mental health has been the identification of mood disturbances during specific phases of reproductive life (Joffe & Greenfield, 2009). In some women, mood disorders, mood episodes, or affective instability co-occur with reproductive events or factors characterized by precipitous hormonal changes across the lifespan (Teatero, Mazmanian, & Sharma, 2014). For example, the effects of the menstrual cycle on the emotional state and cognitive functioning of some women have long been recognized (Farage, Osborn, & MacLean, 2008; Sacher, Okon-Singer, & Villringer, 2013). Menstrual disorders, with their adverse symptoms, are an important issue for many women of childbearing age (Mishell, 2005). However, the breadth of premenstrual symptomology and the diverse range of subjective experiences preclude the identification of a premenstrual experience common to all women.

Women readily acknowledge immense variability in menstrual experience - not only *among* women but also *within* their own experience (Reilly & Kremer, 1999). Marshall (1991) posited that the self is continuously created and recreated in a social interaction occurring "within and around" the body (p. 71). Further, the plurality of bodily experiences can be difficult to describe and compare. While some women have positive, healthy premenstrual experiences, other women have incapacitating symptoms.

Two types of premenstrual experiences, premenstrual syndrome (PMS) and the more severe premenstrual dysphoric disorder (PMDD), can interfere with women's daily functioning and seriously compromise their lives. According to Pearlstein and Steiner (2008), for each menstrual cycle, one in four women have emotional, behavioural, and physical premenstrual symptoms leading to disruption in interpersonal relationships and

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role functioning. Some women experiencing severe symptoms describe being "all consumed" by them, using such strong descriptors as "she devil", "raving lunatic", and "paranoid" (Slade, Haywood, & King, 2009, p. 137).

Parenting is usually a primary role for women in their reproductive years and as noted by Pearlstein and Steiner (2008), PMS and PMDD may disrupt parenting during the premenstruum. Robinson and Swindle (2000) found that 76% of women with problematic PMS had symptoms that "frequently" or "always" interfered in relationships with their children (p. 764).

Context of the Current Study

Researchers often initiate research because of their own experiences, seeking to embrace their own humanness as the basis for psychological understanding (Walsh, 1995). I have a particular interest in premenstrual experiences because of my own past challenges with difficult symptoms and because of the stories and struggles shared with me by colleagues and clients during the two and a half decades I worked in child protection services.

In 1985, I conducted an informal assessment through my employment as a child protection worker, of premenstrual syndrome prevalence in 41 women on four child welfare caseloads whose children had been permanently placed in the care of the government. A number of women shared their struggles with severe premenstrual symptoms, expressing despair and shame at not being able to cope during the time prior to menses. Others described overcompensating during non-premenstrual weeks for the havoc wreaked in relationships when PMS symptoms were rampant. Many women acknowledged this was their first conversation openly talking about PMS because of the associated stigma.

In 2002, Dr. Leslie Tutty (University of Calgary and RESOLVE Alberta), and I studied "The Impact of Premenstrual Syndrome on Women's Parenting", utilizing quantitative and qualitative methodologies. Over four years we interviewed 39 women who responded to posters displayed in public places throughout Calgary and area. Of the 39 women asked about contact with child protection services in their role as a parent, 12 (27%) acknowledged current or past involvement. The unpublished study suggested a link between the severity of women's total premenstrual symptoms, psychological symptoms, and their difficulties in parenting. The following vignettes are drawn from this study and illustrate periodic parenting challenges faced by two mothers with PMS/PMDD.

A 45-year old woman reflected on a previous Thanksgiving with her small children.

I remember one time when I had PMS. I don't know what set me off - I was stuffing a turkey and I got so mad I just grabbed the turkey and just threw it across the kitchen. I think it hit a bowl or something. We have Corel dishes and it hit the bowl and they just exploded! These poor kids must have been so scared. It just blew up and months later I was picking Corel pieces out of the window ledges and oh, it was awful. I can't even remember what happened and I don't know why I snapped but something must have set me off (Barry & Tutty, 2011, Transcript 4R-LB4, p. 10).

Another woman who was 29 years of age and a single mother of an 8-year old

boy recalled her parenting stresses during the premenstruum.

I struggle with the guilt thing. 'Cause often I do this retrospective and it's "Oh, it's the third day in a row we've sat around the house instead of having gone out somewhere." So for me, I suspect, I don't know that I've catalogued it this closely, (laughs), but I suspect that I over-correct, that I'm trying to compensate and instead of "Let's get back to normal," it's "These children have put up with me being crazy for two weeks, we better be really nice to them over here," and because I absolutely do struggle with the guilt thing, it's, "Oh, boy, poor kid," and, I suspect that I probably over-correct (Barry & Tutty, 2011, Transcript 8U-JC8, p. 8).

Several women who suffered from PMS/PMDD, and had had past involvement with child protection workers, described interventions ranging from intrusive and coercive apprehensions to a complete lack of discussion about premenstrual symptoms (Barry & Tutty, 2011). The following two vignettes illustrate how PMS/PMDD might be a factor when a mother is involved with child protection services. Firstly, a 36-year old single Aboriginal woman, with six children between the ages of 5 and 21 years, reported that during times of PMS she becomes so bloated with a backache that she wants to be left alone.

PMS makes stuff worse for me and I couldn't cope. I was kinda looking towards a Children's Cottage for her. Yes, I have been involved with child welfare and they did that guardianship thing. [Int: How did child welfare assist your family?] Well for one thing, they brought in a few counsellors, and I know they really stressed on me for the drinking. [Int: Do you believe PMS was a factor in child welfare being involved?] I have no idea, I can't say. [Int: Did a child welfare worker ever ask you about PMS?] No, they were just more, basically looking at I don't know, the alcohol I guess – they didn't look around at other issues (Barry & Tutty, 2011, Transcript 41U-JC1, p. 13).

Secondly, a 41-year old single Caucasian woman with children ages 19, 17, and 7 years, described herself as being a "highly stressed nut" during times of PMS and having "six or seven of me".

Well, my kids learned to distrust people a long time ago. They learned to distrust after the former head of psychiatry determined that I was emotionally unfit when we went to a few things there related to PMS. It was because of PMS. Well, for me, I went to him because it was affecting my parenting. Well, I'd strike out, or I'd yell, and I'd never - I'm not a bad parent, but being alone, a single parent, becoming exasperated, and not the best living circumstances. The same day I had to go to court to make sure they [child protection services] weren't going to send my children to a foster home; they allowed my brother and his wife to take them (Barry & Tutty, 2011, Transcript, 31U-CA1, p. 4).

O'Brien et al. (2011) claim that the impact of premenstrual disorders on women's lives and those of their families and work colleagues is under-recognized by the majority of medical personnel, lay people, and government/health organizations. Therefore, social workers' knowledge of the spectrum of women's premenstrual experiences is likely under-valued and the influence of that knowledge on assessments with mothers not understood. These two research endeavours, while not contributing data in the context of this thesis, inspired me to pursue research on premenstrual experiences and social work practice, leading to the following dissertation question, "How does the premenstrual knowledge of social workers influence whether and what they ask in their assessment practices with mothers?"

Purpose and Objectives of the Research

A study formally discovers and describes the meanings that human beings [social workers] create out of their encounters [assessments] with the world [women with premenstrual experiences] (Bruner, 1990). This cross-sectional exploratory study uses a triangulated methodology design to generate complementary data from both quantitative and qualitative methodologies. The quantitative component collected foundational data that was a springboard for the qualitative stage of the research. A self-administered questionnaire was created specifically for this research to determine how the variables (a) knowledge social workers have about the continuum of premenstrual experiences, and (b) social workers asking female clients about their premenstrual experiences, were related to the variables of participant sex, age, race, education, current social work position, years as a social worker, training on PMS/PMDD, whether they have had PMS/PMDD themselves, the degree to which PMS/PMDD interfered in their daily life, and whether they have lived with a woman who has had PMS. Subsequently, qualitative interviews were conducted with 16 social workers who had completed the self-administered questionnaire.

The analysis uses a blended methods research design, combining the strengths of two forms of research, explanatory and interpretative respectively. This combination balances a methodology sometimes perceived as more objective and scientific, with an interpretative methodology that considers the lived experience of women having PMS/PMDD and the understanding of this phenomenon by social workers. This study compares results, integrates the findings in a final analysis, and explores implications for practice as suggested by Creswell and Plano Clark (2007). The following sub-questions follow from the research question stated above.

- What do social workers know about women's premenstrual experiences? (quantitative and qualitative components)
- 2. Do mothers initiate discussions about their premenstrual symptoms with social workers? (qualitative component)
- Do social workers ask about premenstrual experiences as part of their assessments when interviewing mothers and if not, how do they account for this omission? (quantitative and qualitative components)
- 4. When social workers do ask questions about premenstrual experiences, what is the nature of the discussions? (qualitative component)
- 5. Does the premenstrual knowledge of social workers influence whether and what they ask mothers in assessments? (quantitative and qualitative components)
- 6. Do social workers find it appropriate to include premenstrual inquiry in assessments with mothers? (qualitative component)

The Significance of the Problem

This dissertation seeks to answer the research question, "How does the premenstrual knowledge of social workers influence whether and what they ask in their assessment practices with mothers?" Although interest in a particular topic usually inspires a research question, a research question must also pass the "So what?" test for usefulness and significance to social work practice or policy (Rubin & Babbie, 2008).

The issue of women's premenstrual experiences, in particular PMS and PMDD, has been neglected in the social work literature, despite the many women reporting symptoms that interfere with their personal wellbeing and relationships with others. Almost 30 years ago, social workers Siegel (1987) and Coughlin (1990) maintained that although social workers frequently worked with client systems affected by premenstrual syndromes, few social workers address the issue of premenstrual distress because little information has been available to guide their work. Coughlin (1990) called for social workers to recognize the premenstruum as a time of high stress for women and she advocated for greater social work education on premenstrual experiences. Siegel (1987) noted that PMS had been approached from physiological and psychiatric perspectives, but neither had established a hypothesis of cause, making it difficult for social workers to incorporate it in their work with women and their families. Siegel claimed social workers were unlikely to ask about PMS because they did not know enough about it and were not aware of the potential impact on women's parenting. Since then, with substantial research on PMS/PMDD published from biological, psychological, feminist, and social constructionist viewpoints, it is timely to research the knowledge base required of social workers.

Assessment is central to the practice of social work, regardless of one's theoretical orientation or work setting (Blake, 2010). In professional practice, the assessment process (taking into account a multiplicity of complex factors) is key to understanding the client (Blake, 2007). For some female clients, parenting is a

significant activity of daily living that may be disrupted by negative premenstrual experiences. Clinical reports have suggested, as a result of distressing premenstrual experiences, that role alteration may interrupt usual home routines, change discipline strategies, and disrupt roles (Cohler, Stott, & Musick, 1996; Gopfërt, Webster, & Seeman, 1996; Norris, 1983). Further systematic research is needed on the relationship between premenstrual experiences and women's parenting, but it is beyond the scope of this thesis. The focus here is social workers' knowledge about PMS/PMDD and the ways that knowledge is incorporated in their assessment practices with mothers.

Social workers assess mothers in both voluntary and involuntary contexts. An example of a voluntary context is a mother and her children in family therapy for the acting out behaviour of an identified child. An example of an involuntary context is a mother referred to child protection services for failing to meet a child's needs or posing a risk to the child. Parenting capacity assessments are conducted to determine (a) which children and families are in need of what kind of services, and (b) parental competencies specifically for custody and child protection purposes (White, 2005).

Parenting capacity is the ability to parent in a "good enough" manner over time (Conley, 2003, p. 16). Many parenting publications have attempted to define the threshold of "good enough" parenting; the threshold at which above it a parent is adequate and below it inadequate (Donald & Jureidini, 2004, p. 13). "Good enough parenting" was a term first used in 1953 by Winnicott (Ratnapalan & Batty, 2009), a physician who proposed that parents should not be judged against an unattainable standard of perfection. The concept was later brought into the field of child protection

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through the writing of Adcock and White (1985) and is now most used when referring to *minimal* parenting competence (Choate & Engstrom, 2014).

Social workers may assess mothers as unable to provide their children with "good enough" parenting, and make subsequent protection decisions about child safety. Although there is a lack of research on premenstrual distress and child maltreatment, it is possible that social workers who do not ask mothers about PMS/PMDD could make "false positive" assessments by overestimating risks to children during non-symptomatic weeks of the month. Unfortunately, this could result in children being apprehended and mothers and children being needlessly traumatized in response to the symptoms of a treatable condition not present all the time - with tragic consequences for all. Conversely, if safety or risk is assessed during the follicular phase of the menstrual cycle when premenstrual symptoms are not present, mothers could also be wrongly assessed as presenting no risk to their children, resulting in "false negative" conclusions with equally tragic potential.

I am not suggesting that all children of women with PMS/PMDD are necessarily at risk of abuse. However, for those mothers who struggle with their parenting during the premenstruum, is it possible that more knowledgeable child protection workers could assess and support mothers more effectively during times of premenstrual distress? Further, is it feasible that mothers and children could be better supported to remain together safely, without undue trauma to children and mothers?

There is also the possibility that knowledge of risks associated with PMS/PMDD might give child protection workers more reasons to be punitive in their work with mothers. Allegations of mother-bias and mother-blaming directed against child

protection workers have been raised by Swift (1995), Nixon (2009), and Scourfield (2003) and I appreciate that, at times, they are not without cause. The child protection system has patriarchal roots (Costin, 1996) and is entrenched in a medical model orientation (Clark, Clark, & Adamec, 2007; Payne, 2008). Given the imbalance in the power relationship between social workers and parents, knowledge of the risk factors associated with PMS/PMDD could be used to further blame mothers.

This research inquires into the current practices of assessing mothers' parenting in social work settings, including child protection services, with a very specific focus on PMS/PMDD. The objective of this dissertation research is to determine what social workers know about PMS/PMDD, whether they consistently ask mothers about their premenstrual experiences, and if not, to use the research results to provide important direction to social work education and practice. Because premenstrual experiences are *predictable* and present day treatments are more effective than they were when Siegel (1987) and Coughlin (1990) were writing, awareness and knowledge of PMS/PMDD can more accurately inform appropriate interventions. This research will address a significant gap in knowledge and research on PMS, parenting, and social work assessment practices with mothers.

Definition of Terms and Concept Analysis

We cannot express exactly what we mean unless we find the right words for it and that "naming" is an important place to begin (Sartori, 1984, p. 17). We need a name for the mere process of imparting the rule that *this* word means *this* thing - and the name marked out for it by the history of language is "definition" (Robinson, 1962, p. 48). Ordinary language philosophers have held that conceptual content is closely related to word meaning and the meaning of a word is its use in the language (Wittgenstein, 1953). Before proceeding further, the key concepts and terms foundational to this research will be defined.

Menstrual cycle. To avoid confusion, the menstrual cycle, by definition, begins on day one with the onset of the menstrual flow. The menstrual phase generally lasts four to six days and is followed by the *follicular phase* that continues to ovulation, typically between days seven and 14. *The luteal phase* begins at ovulation and continues until the onset of the menstrual flow between days 15 through 28 (Muizzuddin, Marenus, Schnittger, Sullivan, & Maes, 2005). The term menstruation refers to the shedding and discharging of the uterine lining (menstrual fluid) that occurs after a woman ovulates if she does not become pregnant (Weida, 2009). By definition, it is only in the luteal phase of the menstrual cycle that PMS and PMDD occur.

The word menstrual originates from the Latin word *menstrualis*, meaning monthly or having monthly courses (Ayto, 2005). Menses, in turn, relates to the Greek word *mene*, meaning moon (Lafleur Brooks & Lafleur Brooks, 2013).

Premenstruum. The premenstruum is defined as the four days before menses plus the first day of menses, and for symptoms at mid-cycle, defined as the five days closest to the middle of the menstrual cycle, including the midpoint (Stoddard, Dent, Shames, & Bernstein, 2007). For the purposes of this dissertation, premenstruum will be used as a noun describing the premenstrual time from ovulation (midpoint of the cycle) to the end of the first day of menstruation.

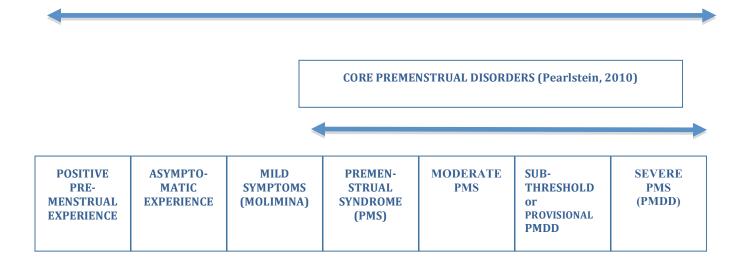
Continuum of women's premenstrual experiences. The topic of negative premenstrual experiences, and specifically PMS and PMDD, is a controversial one with

many scientists debating definitions, causes, functions, meanings, impacts, and its very existence. Disciplines wading into the discussions include medicine, psychology, philosophy, anthropology, and women's studies, all offering passionate and often contradictory perspectives. Researchers and scientists have struggled to consistently define the premenstrual period (Back, 1992; Johnson, 2001; Potter, Bouyer, & Trussell, 2009; Strother Radcliffe, 2002) but poorly defined variables have resulted in findings open to a variety of interpretations. Many studies use differing terminology such as "mild" (Firoozi, Kafi, Salehi, & Shirmohammadi, 2012, p. 36; Giannini, Price, & Giannini, 1985, p. 39; Takeda, Tasaka, Sakata, & Murata, 2006, p. 209), "moderate" (Firoozi et al., 2012, p. 36; Heinemann, Do Minh, Filonenko, & Uhl-Hochgräber, 2010, p. 60; Takeda et al., 2006, p. 209), "strong" (Oleson & Flocco, 1993, p. 907), "severe" (Firoozi et al., 2012, p. 36; Heinemann et al., 2010, p. 60; Steiner, MacDougall, & Brown, 2003, p. 203), or "high" (Mitchell, Woods, & Lentz, 1991, p. 89; Sveinsdóttir, 1998, p. 76), "medium" (Sveinsdóttir, 1998, p. 76), and "low" (Mitchell et al., 1991, p. 89; Sveinsdóttir, 1998, p. 76) to express the complexity and range of symptomatology, while others view PMS and PMDD as something that women simply "have" or "don't have".

In real life, distinctions between categories of any health disorder are blurred and "textbook" cases are rare (Landrine, 1988; Nurcombe & Gallagher, 1986). This is also relevant for the categories of PMS and PMDD. This dissertation avoids dualistic thinking that categorizes women at one end or another, recognizing instead that many women with mild and moderate symptoms are scattered along the continuum. While there is considerable debate in the medical literature about what constitutes premenstrual

syndrome (Johnson, 2001), premenstrual experiences are best viewed on a continuum (Cohen, 2000; Jones, Theodos, Canar, Sher, & Young, 2000; Yonkers, Pearlstein, & Rosenheck, 2003), as noted in Figure 1.1. At one end of the spectrum of premenstrual experiences are women reporting a vibrant and creative premenstrual experience with few troublesome symptoms. At the other extreme end are women with PMDD, now recognized as a distinct clinical entity (Endicott et al., 1999). All premenstrual experiences lie at or between the poles of this continuum, and all should be acknowledged and validated.

Figure 1.1. Continuum of Women's Premenstrual Experiences



Positive premenstrual experiences. Although the literature on PMS and PMDD has focused almost entirely on women with problematic experiences, there is evidence that between 5-15% of women have positive changes in the premenstruum (Reid, 2009). Positive premenstrual cycle changes are those associated with cleansing, strength, health, and fertility (Lee 2002); feelings of increased energy and activity (Sveinsdóttir, 1998);

and heightened sexual interest, dominance, and creativity (King & Ussher, 2013; Stewart, 1989).

Asymptomatic premenstruum. Asymptomatic cycles are those in which there is no premenstrual presence of mood or physical symptoms, no premenstrual interference with living, and low severity of mood/physical symptoms in the follicular phase (Smith, Schmidt, & Rubinow, 2003).

Mild premenstrual symptoms (molimina). Mild premenstrual symptoms are ones that are consistent with premenstrual syndrome but are not associated with functional impairment or significant distress (Association of Reproductive Health Professionals, 2008; Dickerson, Mazyck, & Hunter, 2003; Kessel, 2000; Strine, Chapman, & Ahluwalia, 2005; Yonkers, Pearlstein, & Rosenheck, 2003).

Premenstrual syndrome (PMS). Premenstrual syndrome (PMS) is the common lay term used by most women describing uncomfortable premenstrual experiences. Most women do not recognize the categories that denote the most severe premenstrual symptoms [PMDD, LLPDD]. To state the meaning of a term is to articulate the difference between those situations where we are inclined to use the word and those where we are inclined to refrain (Risjord, 2008). The semantic field for the term premenstrual syndrome includes other names such as "premenstrual tension" (PMT) (Frank, 1931, p. 1054), "late luteal phase dysphoric disorder" (LLPDD) (Spitzer, Severino, Williams, & Parry, 1989, p. 893), and "premenstrual dysphoric disorder" (PMDD) (Epperson, 2013, p. 248). These terms are often used interchangeably, although they differ in the severity of the symptoms identified. PMS and PMDD are not the same condition, but both are often used to refer to the same set of symptoms (Di Giulio & Reissing, 2006). This is particularly true of references in the literature prior to 1987, before the DSM-III-R introduced a classification acknowledging a more severe form of PMS called Late Luteal Premenstrual Dysphoric Disorder (LLPDD) (American Psychiatric Association, 1987), and PMDD (American Psychiatric Association, 1994).

The collective ambiguity about premenstrual syndrome definitions has been a controversial issue in the research, leading to confusion of meaning. The defectiveness of a concept actually results from its vagueness, so it is critical to seek greater conceptual clarity (Sartori, 1984). The denotation of a concept involves sorting out the membership to be included in the term of PMS - establishing boundaries regarding what is "in" and what is "out". The connotation of a concept refers to how it is informally understood by the greater society.

At the most basic level, premenstrual syndrome is a sufficient condition for being a *female* and being a *female* is a necessary condition for having premenstrual symptoms. I add the following properties in denoting premenstrual syndrome: (a) females or those who are on the spectrum of transgendered identity with female reproductive functioning, (b) menstruating, with "symptoms" from the time of ovulation to menstruation, (c) symptom-free from menstruation to ovulation, and (d) self-reported premenstrual syndrome. Premenstrual syndrome does not occur before puberty, during pregnancy, or after menopause (Cronje & Studd, 2002). It is also not dependent on the presence of monthly bleeds, as women who have undergone hysterectomies but have their ovaries can still suffer cyclical symptoms (Bäckström, Boyle, & Baird, 1981). PMS is distinguished from "normal" psychological and somatic premenstrual symptoms by its negative influence on daily functioning and level of distress. The diagnostic criteria published by the American College of Obstetricians and Gynecologists (ACOG) (2000) requires that:

- there be at least one emotional or physical symptom out of a list that includes breast tenderness; bloating/weight gain; headache; swelling of hand or feet; aches/pains; affective symptoms including depression, angry outbursts, irritability, anxiety, confusion, social withdrawal; poor concentration; sleep disturbance; or change in appetite.
- 2. the symptom(s) must resolve post-menses.
- the symptom(s) must be severe enough to interfere with social or work functioning.
- 4. there be prospective confirmation of the symptoms by daily ratings for two menstrual cycles (Pearlstein, 2010).

"Premenstrual" as a term has its origins in Latin when *pre*, meaning before was added to *menstrual*, meaning monthly (Partridge, 1966), recognizing a specific time before the period. The definition of a "syndrome", first used as a term in 1541, is both vague and variable but is usually defined as a concurrence or running together of constant patterns of abnormal signs or symptoms (Durham, 1962). Himsworth (1962) further stated, "A syndrome has, as its philosophical basis, not specific disease factors, but is a chain of physiologic processes, interference which, at any point, introduces the same impairment of bodily function" (p. i). **Core premenstrual disorders.** The current definition of PMS by ACOG (2000) meets the criteria of a "core" premenstrual disorder (O'Brien et al., 2011). Core premenstrual disorders, defined by experts from the International Society for Premenstrual Disorders (Kadian & O'Brien, 2012), include moderate-severe PMS and PMDD (and for the purposes of this study includes PMS, moderate PMS, sub-threshold PMDD, and PMDD).

Moderate premenstrual syndrome. Established criteria for moderate PMS requires women to report at least one of four core symptoms interfering at a moderate to severe level with their ability to function in at least one of the domains of work, social life activities, or relationships with family or coworkers (Steiner et al., 2003). These core symptoms are depressed mood, anxiety/tension, being teary, and anger/irritability.

Sub-threshold premenstrual dysphoric disorder. The World Health Organization's (WHO) Composite International Diagnostic Interview (M-CIDI) classifies sub-threshold disorders by assigning the diagnosis whenever persons fall one criterion short of mandatory criteria (Wittchen, Becker, Lieb, & Krause, 2002). In this dissertation, the term sub-threshold PMDD is used when a woman is one mandatory criterion short of meeting the DSM-V PMDD diagnostic criteria.

Premenstrual dysphoric disorder (PMDD). PMDD is a more severe form of premenstrual syndrome (Schiola, Lowin, Lindemann, Patel, & Endicott, 2011). PMDD differs from PMS in the intensity of symptoms, the predominance of mood disturbances, and in the significant functional impairment (Steiner et al., 2006).

The term "dysphoria" derives from the ancient Greek word *dysphoros* meaning difficult to bear (Stanghellini & Rosfort, 2013). Dysphoria, when defined as a symptom,

refers to a feeling state of unpleasant, nervous tenseness; a limitation of emotional resonance to hostile responses; and an increased readiness to act out aggressively (Berner, Musalek, & Walter, 1987, p. 97). Dysphoria is often accompanied by irritability, defined as oversensitivity leading to explosive and aggressive actions (Stanghellini & Rosfort, 2013).

Disorder is defined as existing on the boundary between the given natural world and the constructed social world, existing when a person's internal mechanisms fail to perform their functions and thus threaten a person's wellbeing (Wakefield, 1992). The DSM-V defines a mental disorder as a "clinically significant disturbance in cognition, emotion regulation, or behaviour that indicates a dysfunction in mental functioning that is usually associated with significant distress or disability in work, relationships, or other areas of functioning" (American Psychiatric Association, 2013, p. 20). The definition also states that expected reactions to common stressors are not mental disorders (Pomerantz, 2013).

PMDD describes a premenstrual physical or mental condition characterized by a state of unhappiness. The diagnosis of PMDD stipulates the number, character, and severity of symptoms with particular emphasis on, and requirement for, key psychological symptoms. Physical symptoms are not a major consideration.

Assessment. As a core skill in social work, assessment underpins all social work interventions (Crisp, Anderson, Orme, & Green Lister, 2003). It is a process involving the collection and analysis of information about people to better understand their situation and determine recommendations for any further professional intervention.

Parenting assessment. The parenting [capacity] assessment is an integral part of case management practice and is used to determine the ability of a parent [mother] to meet the emotional, physical, and developmental needs of her children. These assessments are complex examinations of the parenting environment and the fit between parent and child, with the safety of the child as paramount. Generally speaking, parenting assessments examine matters of physical and emotional safety, the ability to provide for a nurturing attachment, the capacity of the parent to change, and the ability of the parent to meet the standard of "good enough" parenting. The assessment can also include the ability of the parent to overcome many serious obstacles such as addictions, mental health, parenting deficits, and histories of trauma, and poverty (Choate, 2014).

Overview of Dissertation Chapters

This first chapter of the dissertation identified the problem of negative premenstrual experiences and its impact on parenting, described the research design, and clarified key concepts. Chapter Two explores PMS and PMDD by highlighting key aspects such as incidence, symptoms, historical perspectives, diagnostic classifications, etiology, responses to premenstrual experiences, treatment, and impact on functioning. Chapter Three addresses the contributions to the PMS/PMDD literature of four primary knowledge models. These approaches are considered with respect to their applicability to the field of social work in general and child protection services specifically - linking the relevance of a mother's premenstrual and parenting experiences to the assessment practices of social workers. A brief critique of these four knowledge bases serves to justify the selection of an enhanced biopsychosocial (BPS-*E*) framework for this dissertation. Chapter Four describes the methodology used in the study including the design from which the data has been derived, the sample, data collection methods, and instrumentation. Chapters Five and Six present the data from the quantitative and qualitative phases of the research respectively, as they relate to the sub-questions identified in Chapter One. In Chapter Seven, the findings are triangulated and interpreted through my analysis of the data. Chapter Eight examines research limitations, implications for social work practice and education, recommendations, and considerations for future research.

Chapter Two: Understanding PMS and PMDD

Incidence and Symptom Presentation

The luteal phase of the menstrual cycle is characterized by many physical, affective, and behavioural changes but not all women experience these changes as problematic (Santamaría & Lago, 2015). Many women experience positive premenstrual changes that include releasing tension, increased attractiveness, self-care, and sexual desire (King & Ussher, 2013). Lee (2002) found that women who had positive premenstrual experiences also reported being more in touch with their bodies, feeling cleansed, feeling connected to a natural cycle, feeling bonded to other women, being creative, feeling strong, and feeling feminine.

PMS is broadly defined as the constellation of symptoms occurring only during the luteal phase of a woman's menstrual cycle (Shulman, 2010), meaning they occur for up to 14 days before menses and subside with the onset of the menstrual period (Moline & Zendell, 2000; Rojnic Kuzman & Hotujac, 2007; Santamaría & Lago, 2015). Premenstrual symptoms typically begin between the ages of 25 and 35 years, during women's reproductive years (Dickerson et al., 2003; Epperson & Hantsoo, 2014).

Reports suggest that 85% of menstruating women experience one or more menstrual-related symptoms (American College of Obstetrics and Gynecology, 2000; Hamaideh, Al-Ashram, & Modallal, 2014) and 20-40% report PMS (Johnson, 1987; Pearlstein & Steiner, 2008; Sternfeld, Swindle, Chawla, Long, & Kennedy, 2002; Ugarriza, Klingner, & O'Brien, 1998). PMS is associated with *adverse* symptoms affecting physical and psychological wellbeing (Campagne & Campagne, 2007; Dennerstein, Lenert, Bäckström, & Heinemann, 2009; Mishell, 2005). Although most PMS symptoms tend to be perceived negatively by women, they are generally not clinically relevant and do not necessarily require a specific treatment (Santamaría & Lago, 2015).

PMDD is conceptualized as a more severe form of PMS (Adewuya, Loto, & Adewumi, 2008; Lin & Thompson, 2001; Meaden, Hartlage, & Cook-Kerr, 2005). It is a complex, chronic disorder affecting functioning and wellbeing in the psychological, neurological, and endocrine domains (Accortt, Bismark, Schneider, & Allen, 2011), but with a predominance of challenging emotional symptoms (Perez-López, Chedraui, Perez-Roncero, López-Baena, & Cuadros-López, 2009). Like PMS, PMDD has a symptom pattern linked to the menstrual cycle and characterized by pronounced symptoms in the late luteal phase, symptom remission during the menstrual flow, and a symptom-free period in the follicular phase of the cycle (Freeman, 2004). PMDD appears most often in a psychiatric context with the psychological, and specifically psychopathological aspects of the disorder, as the primary focus (Callaghan, Chacon, Coles, Botts, & Laraway, 2009).

Researchers suggest 3 to 9% of women suffer from PMDD to the degree that they are unable to cope with daily life (Angst, Sellaro, Merikangas, & Endicott, 2001; Freeman & Sondheimer, 2003). The average woman suffering from PMDD has symptoms seven to 14 days every month, amounting to a staggering 1,680 symptomatic days every decade (Freeman, 2001). Stoddard et al. (2007) concluded that with most women having between 400 and 500 menstrual cycles over their reproductive years, and with a conservative estimate of symptom duration of four to seven days, consistently symptomatic women may spend from four to 10 years of their lives in a state of compromised physical functioning and/or psychological wellbeing. In essence, women with PMDD who experience symptoms 14 days of every month are spending virtually half their reproductive life distressed and seriously impaired in their functioning.

Social workers must appreciate that many women are psychologically and psychiatrically impacted by PMDD. Given that 27.2% of reproductive-aged Canadian women are between 20 and 40 years of age (approximately 4,729,454 women) (Statistics Canada, 2011), a prevalence rate of 3-9% for PMDD (excluding PMS and sub-threshold PMDD diagnoses) conservatively suggests that between 141,883 and 425,651 Canadian women meet the criteria in the DSM for this mental disorder. This is slightly lower than the average incidence of other mood disorders, which affect about 10% of the population (Canadian Mental Health Association, n.d.). For Canadian women, the incidence of PMDD is higher than the prevalence rate of 2.1% for bipolar disorder (Schaffer, Cairney, Cheung, Veldhuizen, & Levitt, 2006) and 1% for schizophrenia (Schizophrenia Society of Canada, 2009). This prevalence has significant implications for the knowledge that social workers require in their practice.

The numerous symptoms linked with PMS/PMDD are a major impediment to diagnosis. More than 200 symptoms have been described in the literature, ranging from mild symptoms to those severe enough to interfere with daily life (Campagne & Campagne, 2007; Paula, 2007). The milder version known as PMS is not listed in the DSM, and there remains little consensus on formal PMS diagnostic criteria (Craner, 2014).

The physical symptoms of PMS most reported by women are bloating (Frackiewicz & Shiovitz, 1996; Panay, 2009; Yonkers, O'Brien, & Eriksson, 2008), abdominal pain and cramps (Wong & Khoo, 2011), fullness and tenderness of the breasts (Panay & Fenton, 2015; Steiner et al., 2006; Yonkers et al., 2008), headache (Panay, 2009; Steiner et al., 2006), edema in limbs (Feuerstein & Stein, 2002; Perez-López et al., 2009), joint and muscle pain (Bertone-Johnson et al., 2014; Craner, 2014; Santamaría & Lago, 2015; Witjes, Creinin, Sundström-Poromaa, Nguyen, & Korver, 2015), fatigue (Feuerstein & Stein, 2002, Rapkin et al., 1996; Tschudin, Bertea, & Zemp, 2010; Wong & Khoo, 2011), and acne (Stoddard et al., 2007).

The most common behavioural symptoms are increases in appetite and food intake (Braverman, 2007; Dickerson et al., 2003; Indusekhar, Usman, & O'Brien, 2007; Ko et al., 2015; Santamaría & Lago, 2015; Treloar, Heath, & Martin, 2002), sleep disturbances (Rapkin et al., 1996; Santamaría & Lago, 2015), poor concentration (Cortina, 2005; Rapkin et al., 1996; Santamaría & Lago, 2015), decreased interest (Santamaría & Lago, 2015), impulsivity (Howard, Mason, & Taghavi, 1994), and social withdrawal (Güler et al., 2015; Mortola, Girton, & Fischer, 1991; Rapkin et al., 1996; Santamaría & Lago, 2015).

The emotional/psychological symptoms women report most frequently are irritability (Eissa, 2010; Frackiewicz & Shiovitz, 1996; Panay & Fenton, 2015; Schmelzer et al., 2014; Tschudin et al., 2010; Yonkers, et al., 2008), anxiety (Craner, 2014; Güler et al., 2015; Mahon, Rohan, Nillni, & Zvolensky, 2015), tension (Frackiewicz & Shiovitz, 1996; Schmelzer et al., 2014), crying easily (Eissa, 2010; Yonkers et al., 2008), mood changes (Eissa, 2010; Frackiewicz & Shiovitz, 1996; Tschudin et al., 2010), depression (Güler et al., 2015; Halbreich & Endicott, 1985; Hurt et al., 1992; Panay & Fenton, 2015; Schmelzer et al., 2014; Yonkers et al., 2008), anger (Akyol, Arisoy, & Çayköylü, 2013; Feuerstein & Stein, 2002; Tschudin et al., 2010), confusion (Witjes et al., 2015), absentmindedness (Witjes et al., 2015), and loss of interest (Sigmon, Craner, Yoon, & Thorpe, 2012).

Women generally find the psychological and emotional symptoms most upsetting and disruptive to their functioning (Cronje & Studd, 2002; Hartlage & Arduino, 2002; Haywood, Slade, & King, 2007; Landen & Eriksson, 2003). The two most distressing symptoms reported by women with PMS and PMDD are irritability (Epperson & Hantsoo, 2014; Epperson et al., 2012; Eriksson, 1999; Pearlstein, Yonkers, Fayyad, & Gillespie, 2005; Steiner & Pearlstein, 2000), and dysphoria/mood lability (Epperson et al., 2012; Hartlage, Freels, Gotman, & Yonkers, 2012; Pearlstein et al., 2005; Steiner & Pearlstein, 2000). Women's premenstrual distress has been found to depend on both the intensity and number of the severe emotional symptoms (Warner & Bancroft, 1990).

The pattern of premenstrual symptoms is psychologically different from those experienced by individuals suffering from other acute or chronic illnesses (Oken, 2007), since symptoms are periodic. However, the impact of psychological factors on premenstrual distress has a burden comparable to that of major depressive disorder (Halbreich et al., 2003), and cannot be ignored clinically (Sigmon, Schartel, Hermann, Cassel, & Thorpe, 2009).

Research has shown that although physical and psychological symptoms of the menstrual cycle are correlated (Kiesner, 2009), these associations are variable, with some women demonstrating negative psychological changes and others either (a) not reacting, or (b) feeling positive about the same physical symptoms of the menstrual cycle (Kiesner & Pastore, 2010). Support has also been found for serious personality psychopathology

such as neuroticism and perfectionism in some patients seeking medical treatment for PMS (Eissa, 2010).

This raises the issue of personality vulnerability and mood changes related to the female reproductive cycle. Dispositional optimism, defined as the generalized expectancy for positive outcomes, has been found to be negatively associated with premenstrual dysphoria after controlling for the effects of social support (Fontaine & Seal, 1997). Results suggested further research is warranted into individual differences along the dimension of optimism versus pessimism in the reduction of mood-related premenstrual symptoms. Women with PMDD had greater impulsivity scores than did women with major depressive disorder, suggesting loss-of-impulse control as a potential diagnostic feature of PMDD (Cunningham, Yonkers, O'Brien, & Eriksson, 2009).

Some women struggle not only with negative premenstrual symptoms but also with the magnification of other medical problems brought on by PMS or PMDD (Panay & Fenton, 2015). Premenstrual exacerbation of physical conditions has been reported with respect to anemia and diabetes (Dickerson et al., 2003), migraine headaches (Hutchinson & Silberstein, 2008; Massachusetts General Hospital Centre for Women's Health, 2008), vaginitis (Lass-Flörl et al., 2001), hepatitis (Doyle, Ewald, & Ewald, 2007), acne (Tehrani & Dharmalingam, 2004), and asthma (Pereira-Vega et al., 2010). Clayton (2008) concluded that women with premenstrual-related problems were 2.5-3 times more likely to report insomnia, excessive sleepiness, pain, anxiety, and depression in the previous 12 months than women without premenstrual-related problems. Existing psychiatric diagnoses may worsen in cases of diagnosed depression (Accortt, Kogan, & Allen, 2013; Hartlage, Brandenburg, & Kravitz, 2004; Ko et al., 2013; Padhy et al., 2015; Pearlstein & Stone, 1998), bipolar disorder (Dias et al., 2011; Hendrick, Altshuler, & Burt, 1996; Wittchen et al., 2002), and panic disorders (Kaspi, Otto, Pollack, Eppinger, & Rosenbaum, 1994).

The prevalence of premenstrual symptoms and syndromes is consistent across many countries and regions (Halbreich et al., 2003) including Europe (Fontana & Palfai, 1994; Wittchen et al., 2002), the USA (Hartlage et al., 2012), China (Qiao et al., 2012), Japan (Takeda et al., 2006), and India (Banerjee, Roy, & Takkar, 2000). With respect to the accepted average premenstrual syndrome prevalence of 43-90%, the prevalence rates were comparable in Egypt (69%) (El-Defrawi, Lotfi, & Mahfouz, 1990) and were higher in Taiwan (80-90%) (Hsaio, Liu, Chen, & Hsieh, 2002) and Saudi Arabia (96.6%) (Balaha, El Monem Amr, Al Moghanum, & Al Muhaidab, 2010). The prevalence of PMS and PMDD among Jordanian women was 80.2% and 10.2% respectively which is higher than the incidence in most western literature (Hamaideh et al., 2014). Researchers who have compared PMDD rates in various countries with the 3-9% prevalence rates in the Western world, have found a comparable prevalence rate in Nigeria (6.1%) (Adewuya et al., 2008), with higher rates in Iran (12.9%) (Hariri, Moghaddem-Banaem, Bazi, Malehi, & Montazeri, 2013), and Croatia (17%) (Rojnic Kuzman & Hotujac, 2007). A high prevalence of both PMS and PMDD is also reported in Latin American countries (Bahamondes, Córdove-Egüez, Enrique Pons, & Shulman, 2007; Rasheed & Al-Sowielem, 2003).

The social workers responding in this thesis are from Canada and their clients are likely to have diverse racial and ethnic backgrounds. This international evidence suggests that women of diverse race and ethnicity are as likely to be affected by negative premenstrual experiences.

Historical Perspectives of Women's Menstrual and Premenstrual Experiences

To fully appreciate women's challenges with premenstrual experiences, the menstrual cycle and premenstruum must be understood in historical context. The notion of a single historian's truth must be queried (Jenkins, 1991). There is rarely *one* historical context because historical narratives are not objective, but reflect the subjective ideologies of individual historians (Garcia, 2008).

The early response of society to menstruating women has varied. Ancient philosopher Hippocrates (460-377 BC) stated that the reproductive tract governs the female psyche (Veith, 1965) and Aristotle (384-322 BC) believed females were naturally deficient given the biological anomaly of their reproductive processes (Freeland, 1994). Pliny, a philosopher living from AD 23-79, referred to menstruation as "this pernicious mischief", suggesting that menstruating women could turn wine sour, blight crops, and dull mirrors by their poisonous touch (Freeland, 1994, p. 145). Even going back to Greco-Roman times, traditional thought placed the "demonic" in the woman and specifically inside the womb (Faraone, 2011, p. 24).

Hippocrates described a cluster of conditions occurring prior to the onset of menstruation in which women might have suicidal thoughts and other severe symptoms (Htay & Aung, 2014). Another early reference to premenstrual symptoms may have been made in the second century A.D. when Soranus wrote his treatise for midwives and recognized women were tense right before their periods (Delaney, Lupton, & Toth, 1988). Stolberg (2000) stated that early physicians such as Friedrich Hoffmann linked periodic emotional and mental disturbances to menstruation and that Alexandre Brierre de Boismont found 20% of all women in his survey had serious psychological troubles in relation to menstruation. In 1864, the "true fits", as principally confined to the premenstruum, were mentioned (Braithwaite & Braithwaite, 1865, p. 47). In the 1800s, Icard maintained that the menstrual function could, by sympathy, create a mental condition varying from a simple moral malaise, a simple troubling of the soul, to actual insanity, a complete loss of reason, and modifying the acts of a woman from simple weakness to absolute irresponsibility (Russell, 1995).

The concepts of madness, hysteria, and menstruation have also been situated within the broader concept of neurosis (Duffin, 1999). In an early landmark study of women identified as neurotic, hormonal status was correctly identified by researchers in 94% of women's cycles based on an analysis of the emotional status and dreams noted in their diaries (Benedek & Rubenstein, 1939). Women were consistently perceived as more restless, irritable, fatigued, fearful, depressed, and hypersensitive to various stimuli during the premenstrual period than other phases of the menstrual cycle (Farage et al., 2008).

Between 1931 and 1994, negative premenstrual experiences were reconceptualized from a tension, to a syndrome, and finally to a disorder with an implied increase in both formalization and seriousness. In 1931, American gynecologist Robert Frank made the first medical attempt to define and classify premenstrual tension (PMT), characterizing it as a premenstrual feeling of indescribable tension, irritability, and a desire to find relief by "foolish and ill-considered actions" (Frank, 1931, p. 1054). Frank viewed the premenstrual phase of the cycle as a time of vulnerability, and premenstrual changes as symptoms of psychiatric illness (Ussher, 2006). The combination of physical and psychological symptoms was attributed to accumulations of the female sex hormone estrogen. While Frank (1931) viewed PMT as a dysfunction to be treated medically, feminist psychoanalyst Karen Horney (1931) asserted it was not a pathological process but rather a psychological response to anxiety associated with pregnancy, and frustration related to restrictions around the expression of female sexuality (Ussher, 2006).

British general practitioner Katherina Dalton put PMS on the professional radar in the 1950s with her untiring advocacy for women (Halbreich, 2006). Her theory of progesterone deficiency and progesterone as a treatment for PMS was based on considerable clinical experience but was never confirmed by accepted research practice.

Diagnostic Classifications and Criteria for Premenstrual Symptoms

Premenstrual syndrome (PMS) - International Classification of Diseases (ICD-10) and American College of Obstetricians and Gynecologists (ACOG). Premenstrual syndrome was given an International Classification of Diseases (ICD) diagnostic code by the World Health Organization (WHO) in 1982 (Lustyk & Gerrish, 2010). The International Classification of Diseases (ICD-10) places PMS under "Diseases of the genitourinary system: Pain and other conditions associated with female genital organs and menstrual cycle" and labels it as Premenstrual Tension Syndrome (World Health Organization, 2004, N94.3). Given that the ICD does not provide a minimum number of symptoms or functional impairment criteria required for a diagnosis of PMS, the American College of Obstetricians and Gynecologists (ACOG) published PMS diagnostic guidelines in 2000, combining both the National Institute of Mental Health (NIMH) criteria and supportive research evidence (Lustyk & Gerrish, 2010).

Accordingly, a diagnosis of PMS may be made if symptoms include at least one of the somatic and affective symptoms listed, with a calculated 30% increase in symptom reports during the six days preceding menses compared to days 5–10 post-menses (Lustyk & Gerrish, 2010). These symptom pattern/severity changes must be documented in a daily diary for two to three cycles for diagnosis. In addition, the severity of the change must result in some life impairment, with the magnitude of change having to be clinically meaningful and not simply a mathematical change that may be virtually imperceptible to the patient and therefore not a hindrance to them (Lustyk & Gerrish, 2010).

Late luteal phase dysphoric disorder (LLPDD)-DSM-III-R. In 1980, the category of "hysterical neurosis", which had been in the DSM-II (Shorter, 2013, p. 7), was not included in the release of the DSM-III. Symptoms were disassembled into a multiplicity of other diagnostic categories (Orr, 2000). When a premenstrual syndrome-related diagnosis for the DSM-III-R was suggested in 1983 at a National Institute of Mental Health (NIMH) conference. many feminists argued PMS was simply hysteria renamed and repackaged (Figert, 1996). In 1987, PMS was included as LLPDD in the DSM-III-R: one of the additional codes at the end of the manual (American Psychiatric Association, 1987). As an additional code, it lacked official status as a primary diagnosis and was not eligible for third party insurance reimbursement (Figert, 1995).

In the health and mental health domains, LLPDD became the object of struggle for professional control over mental disorders among the various scientific, medical, and mental health fields. Bell's analysis of the medicalization of PMS referred to "points of contest" or competition among professionals interested in PMS within the larger process of medicalization (1987, p. 156). A profession is understood as an occupational group whose status and identity are defined by their ability to lay claim to, and control, specialized knowledge bases (Fook, 2002). Fook further suggested that both feminism and postmodernism must recognize the connection between knowledge and power and emphasized that the group controlling the way things are *seen* has the power to control the way things *are*.

Critics maintained the categorization of PMS symptoms in the DSM reflected the mental health elite's desire to strengthen the power of their profession (Caplan, 1995). Gynecologists, who considered PMS a biological disorder, thought psychiatrists were overstepping their professional boundaries (Figert, 1996). They argued that despite the emotional symptoms, PMS was a disorder related to women's reproduction, and should remain in the domain of the body rather than the mind. Some authors pointed out that patients suffering from other physical diseases that manifest themselves in emotional symptoms, such as thyroid disease (Caplan, 1992; Strother Radcliff, 2002) or diabetes (Tavris, 1992), would not be expected to seek psychiatric help. Concern was expressed about the pressure to develop a psychiatric category when a medical-gynecological diagnostic category already existed (Gallant & Hamilton, 1988). Many called for more stringent and better-researched medical diagnostic categories rather than the establishment of a psychiatric disorder (Caplan, McCurdy-Myers, & Gans, 1992). The debate became one over the "ownership" of PMS - and psychiatry ultimately won the battle.

The inclusion of PMS under the LLPDD diagnosis infuriated many feminists who accused supporters of making arbitrary decisions related to the abnormality of aspects of women's functioning, given that premenstrual syndrome [as LLPDD] was a condition only experienced by females. LLPDD was the result of a struggle for control over the definition of a "normal" and healthy woman. Anger was directed toward DSM authors who were perceived to be taking on the right to pronounce who was normal and who was not (Caplan, 1991). Caplan insisted that one of their most destructive pronouncements was that women's biology tends to make them psychiatrically disordered, notably in the form of premenstrual syndrome as psychopathology. The DSM-III-R attempted to impose a boundary around premenstrual syndrome [as LLPDD], implying a clear distinction between normal and abnormal.

Feminists contended that the inclusion of the disorder in the DSM reflected the destructive view that a woman's biology could unnecessarily pathologize her (Caplan et al., 1992) by medically marginalizing women's premenstrual experiences (Offman & Kleinplatz, 2004). Many feminists were concerned that psychiatry was turning women's discontent with patriarchy and their protests against the social order into mental symptoms of underlying pathology (Gilligan, 2004). The DSM was seen as a weapon to keep women in their place (Russell, 1995) and an excuse for denying women equality (Ehrenreich & English, 1978). Feminists feared that every woman could be labeled as psychiatrically ill every month (Figert, 1996; Keyser, 1986).

In response to those concerned about women being tarnished with the PMS/LLPDD label of psychiatric illness, pro-inclusion supporters argued the opposite. Because LLPDD was narrowly defined to include only women having severe psychological manifestations, they claimed that it would allow for distinctions among women who have PMS symptoms and those who do not. The psychiatric diagnosis of LLPDD was considered "justified" given that the majority of women's complaints to doctors are related to psychological symptoms (Spitzer, Gibbon, Skodol, Williams, & First, 1994). Many women responded positively to the language of PMS, feeling validated at last by the attention being paid to menstrual distress (Frank & Severino, 1995; Tavris, 1992), and empowered to play an important role in the medicalization process (Riessman, 1983).

Premenstrual dysphoric disorder (PMDD)-DSM-IV-TR. In 1994, LLPDD was renamed premenstrual dysphoric disorder (PMDD) in the DSM-IV-TR. The term changed from LLPDD to PMDD to avoid a misleading causal link between the etiology of the disorder and the normal hormonal changes of the luteal phase (Endicott et al., 1999). PMDD is considered a severe dysphoric form of premenstrual syndrome (De Berardis, Serroni, Salerno, & Ferro, 2007).

The American Psychiatric Association (1994) compromised by listing PMDD in the main manual under mood disorders as an example of a "depressive disorder not otherwise specified," while also including the proposed standardized criteria for it in Appendix B, as "criteria sets and axes provided for further study" (Kornstein, 2010, p. 11). Many insisted that enough research had been conducted to warrant its inclusion in the body of the manual.

Premenstrual dysphoric disorder (PMDD)-DSM-V. In preparation for the new version of the DSM-V released in 2013, all diagnoses and categories of mental disorders underwent scrutiny for potential revision (Stein, Phillips, Fulford, Sadler, & Kendler,

2010). The Mood Disorders Work Group for the DSM-V assembled a panel of experts in women's mental health to establish criteria for PMDD's inclusion in the DSM. They ultimately decided that inclusion of PMDD in the DSM would be predicated on (a) sufficient empirical evidence that the disorder is distinct from others; (b) antecedent validators such as familial aggregation or a presence in diverse populations; (c) environmental risk factors; (d) concurrent validators such as cognition and temperament, biological markers, and a certain comorbidity profile; and (e) predictive validity with respect to diagnostic stability, predictability, the course of the illness, and response to treatment.

Hartlage et al. (2012) were commissioned by the American Psychiatric Association to complete a secondary analysis of two data sets to study the symptoms associated with the PMDD diagnosis, and confirmed that the DSM-IV-TR included symptoms highly associated with a premenstrual disorder. Epperson et al. (2012) determined that current data supported the criteria for inclusion in the DSM-V. Pearlstein (2010) argued specifically that PMDD should be its own diagnostic classification outside of the appendix and included as a separate disorder in the body of the DSM.

Classification systems have previously kept PMS and depressive disorders distinct (Jones et al., 2000), but this changed with the release of the DSM-V (American Psychiatric Association, 2013). In the DSM-V, PMDD was moved to the section of "known mental illnesses", specifically "Depressive Disorders" (American Psychiatric Association, 2013; Craner, Sigmon, & McGillicuddy, 2014) with an emphasis on the biological underpinnings of psychological distress (Kinderman, Read, Moncrieff, & Bentall, 2013). The common feature of all these disorders is the presence of sad, empty, or irritable mood accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function (American Psychiatric Association, 2013).

The DSM-V (American Psychiatric Association, 2013, Figure 625.4 (N94.3)) sets out the following criteria for PMDD:

A. In most menstrual cycles during the past year, five (or more) of the following symptoms were present for most of the time during the last week of the luteal phase, start to improve within a few days after the onset of the follicular phase, and become minimal or absent in the week post-menses.

B. One (or more) of the following symptoms must be present:

- Marked affective lability (e.g. [mood swings] feeling suddenly sad or tearful or having increased sensitivity to rejection)
- 2. Marked irritability or anger or increased interpersonal conflicts
- Marked depressed mood, feelings of hopelessness, or self-deprecating thoughts
- 4. Marked anxiety, tension, feelings of being keyed up or on edge
- C. One (or more) of the following symptoms must additionally be present, to reach five total symptoms when combined with symptoms from Criteron B above.
 - 1. Decreased interest in usual activities (e.g., work, school, friends, hobbies)
 - 2. Subjective difficulty in concentrating
 - 3. Lethargy, easy fatigability, or marked lack of energy
 - 4. Marked change in appetite, overeating, or specific food cravings
 - 5. Hypersomnia or insomnia
 - 6. A sense of being overwhelmed or out of control

7. Physical symptoms, such as breast tenderness or swelling, headaches, joint or muscle pain, a sensation of "bloating," or weight gain

NOTE: The symptoms in Criteria A-C must have been met for most menstrual cycles that occurred in the preceding year.

- D. The symptoms are associated with clinically significant distress or interference with work, school, usual social activities, or relationships with others (e.g., avoidance of social activities; decreased productivity and efficiency at work, school, or home).
- E. The disturbance is not merely an exacerbation of the symptoms of another disorder, such as major depressive disorder, panic disorder, persistent depressive disorder (dysthymia), or a personality disorder (although it may co-occur with any of these disorders)
- F. Criteria A, B, and C must be confirmed by prospective daily ratings during at least two consecutive somatic cycles (Note: The diagnosis may be made provisionally prior to this confirmation.)
- G. The symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication, other treatment, or another medical condition (e.g., hyperthyroidism).

The official classification of PMDD in the DSM-V will likely result in increased detection and treatment of this condition, and a corresponding need for research on best practices for providers (Craner et al., 2014). The inclusion of PMDD in the DSM-V under Depressive Disorders has substantial benefits including the enhancing of both research and clinical care and the credibility of women who experience significant

monthly distress (Epperson et al., 2012). This change in status from a "criterion" to a "category" is perceived to provide greater legitimacy for the disorder.

Sub-threshold PMDD (Informal term of classification not in DSM). Women who meet standard diagnostic criteria, however it is defined, are not the only ones affected by premenstrual distress. Approximately 18-20% of women (Pearlstein & Steiner, 2008) have sub-threshold PMDD (one criterion short of diagnosis), despite experiencing severe symptoms that disrupt their ability to cope with daily living. The effect of separating some women with severe premenstrual syndrome from the rest leaves a large population of women with troublesome symptoms not considered to be of scientific interest (Picella, 2011). When researchers concentrate only on the one group that meets PMDD criteria as outlined in the DSM, the result is a distorted perception of PMS as a phenomenon, and a narrow picture of menstrual cycle changes (Bancroft 1993).

If research is constrained by having to adopt standard criteria, then models are being created that only explain one type of premenstrual distress, and are not applicable to women who experience other types or patterns of symptomatology (Ussher, 2009; 1996). It is likely that women with severe premenstrual syndrome are undercounted in epidemiological studies following DSM criteria, and that a substantial proportion of symptomatic women in the general population have premenstrual impairment and distress not meeting the criteria for PMDD (Halbreich et al., 2003). Narrowing the number of women to whom results can be generalized raises serious questions about the external validity of an entire body of interdisciplinary research that has increasingly restricted itself to a small fraction of women who suffer from only the most severe form of cyclic menstrual complaints (Picella, 2011). Their exclusion from treatment studies implicitly suggests that they do not need or are not deserving of treatment (Ussher, 2009). The minimal mandatory requirement of five symptoms for a diagnosis of PMDD may be too high and restrictive (Landen & Eriksson, 2003) and the numerical requirements are given precedence over clinically relevant symptoms (Di Giulio & Reissing, 2006).

Etiology

The following section focuses on the key contemporary, biological issues related to premenstrual experiences and may be more detailed than expected in a social work dissertation. However, given the controversies over the biological existence of PMS/PMDD, this detail is essential.

Biological factors are increasingly understood as the cause of PMDD (Adewuya et al., 2008; Farage et al., 2008). Researchers agree that normal hormonal fluctuations cause central biochemical events related to PMDD symptoms in predisposed women (Htay & Aung, 2014). The ability of reproductive hormones to impact brain functions related to psychological processes involves the interplay of several body systems, lending credibility to the view that PMS/PMDD are disorders founded in biochemical disturbances unmasked during the luteal phase of the menstrual cycle (Farage et al., 2008; Finocchi & Ferrari, 2011; Thys-Jacobs, 2006).

Over the past 20 years, PMS and PMDD research studies have generated data supporting two primary theories of etiology including (1) the hormonal imbalances of estrogen and progesterone (Ismail & O'Brien, 2006), and (2) the influence of ovarian hormones on central neurotransmitters of the brain, including serotonin (Ismail & O'Brien, 2006; Ozturk, Tanriverdi, & Erci, 2011). Hormonal imbalances of estrogen and progesterone. One theory is that premenstrual symptoms are generated by normal cyclic changes in the ovarian steroids of estrogen and progesterone caused by ovulation (Rapkin, 2003; Steiner & Born, 2000). Imbalances have been implicated in difficulties in both mental health and physiological functioning (Zittel, Lawrence, & Wodarski, 2002). Declines in both estrogen and progesterone levels have been found to reach baseline shortly before the onset of menstruation in the late luteal phase, followed by a repetition of the cycle (Farage et al., 2008). While some researchers have suspected that PMDD symptoms are due to the *ratio* of estrogen to progesterone (Segebladh, Borgström, Nyberg, Bixo, & Sundström-Poromaa, 2009), others have maintained that measuring hormone levels has no diagnostic value except to rule out other diagnoses (Johnson, 2004).

The influence of ovarian hormones on central neurotransmitters of the brain. The literature is approaching consensus that premenstrual symptoms result from *differential sensitivity* or *vulnerability* to the mood-perturbing effects of estrogen and progesterone fluctuations, rather than from an absolute increase or decrease in the hormones themselves (Cubeddu et al., 2011; Epperson & Hantsoo, 2014). Women with premenstrual syndrome appear to have an exaggerated form of the normal physiological premenstrual symptoms, suggesting such women are hypersensitive to their own normal hormonal changes (Epperson & Hantsoo, 2014; Halbreich, 2003; Halbreich & Monacelli, 2004; Ismail & O'Brien, 2006; Roca, Schmidt, Bloch, & Rubinow, 1996; Rubinow & Schmidt, 1995; Salamat, Ismail, & O'Brien, 2008; Thangaratinam, Ismail, & O'Brien, 2006). The etiology of a "differential sensitivity" is multifactorial and is, in part, genetically determined (Bahamondes et al., 2007; Jahanfar, Lye, & Krishnarajah, 2011; Rubinow & Schmidt, 2006).

Estrogen and progesterone levels of women with premenstrual symptoms have been found to be similar to those of control subjects but the *responses* of their central neurotransmitters to normal ovarian function were abnormal (Cubeddu et al., 2011; Kaur, Gonsalves, & Thacker, 2004; Schmidt, Nieman, Danaceau Adams, & Rubinow, 1998). Ovarian hormones interact with central neurotransmitters in the brain (Jungheim, Kenerson, Foyouzi-Yousefi, Allsworth, & Marquard, 2009) and are intrinsic to maintaining homeostasis in the body (Dienstfrey, 1991).

Researchers have found estrogen receptors throughout the brain, with estrogen affecting cyclic changes (Genazzani, Pluchino, Luisi, & Luisi, 2007; Woolley, Gould, Frankfurt, & McEwan, 1990). Much of the current research focuses on how the central nervous system's control of mood and emotion is impacted by changes in the brain and endocrine system throughout the menstrual cycle. The autonomic nervous system may be an important mechanism in mood cycling that parallels hormonal changes, especially during the premenstrual period (Kirsch & Geer, 1988). Since mood and behavioural symptoms are key features of PMS and PMDD, it is accepted that underlying mechanisms must involve the brain.

Increasing evidence supports the fundamental role of the *serotonin* neurotransmitter in the origination and development of PMDD (Epperson & Hantsoo, 2014; Jarvis, Lynch, & Morin, 2008; Nevatte et al., 2013; Thangaratinam et al., 2006; Yonkers et al., 2008). Many studies have identified various abnormalities in the serotonin system in women with PMS and PMDD (Mazza, 2011; Pearlstein & Steiner, 2008), including disturbed serotonergic conductivity (Agha-Hosseini et al., 2008). The study by Kikuchi et al. (2010) demonstrates a significant negative correlation between blood serotonin concentration and certain negative mood scores (tension-anxiety and fatigue) obtained from healthy women in the premenstrual phase. Reduced blood levels of serotonin and serotonin transmission in the brain appear to be linked to several symptoms of PMS and PMDD including poor impulse control, irritability, dysphoria, and appetite changes (Jarvis et al., 2008).

Estrogen can be a trigger for a serotonin receptor, increasing receptor numbers; post-synaptic responses; neurotransmitter transport and uptake; and influencing the regulation of mood, behaviour, and cognitive functions (Halbreich et al., 1995). Estrogen and progesterone may modulate the metabolism of serotonin (Luine & McEven, 1977). The involvement of the serotonin system in PMS and PMDD appears most probable given the link between the serotonin neurotransmitter and mood.

Other research indicates that some elements of progesterone interact with the GABA-A receptor (Case & Reid, 2001; Steiner et al., 2006). Women with PMS and PMDD differed from controls with respect to the responsiveness of this receptor (Epperson, Wisner, & Yamamoto, 1999). Several studies have suggested women with PMDD have decreased levels of GABA and decreased luteal phase sensitivity of the GABA receptor (Bäckström et al., 2003; Halbreich, 2003; Kurshan & Epperson, 2006; Sundström-Poromaa, Smith, & Gulinello, 2003). However, the extent to which women with PMS and PMDD have an abnormal production of GABA-A-modulating progesterone is a matter of controversy (Casper & Hearn, 1990; Casson, Hahn, Van Vugt,

& Reid, 1990; Cronje, Vashisht, & Studd, 2004) and it is still unclear whether modulation of GABA-A activity relieves symptoms (Schmidt, Grover, & Rubinow, 1993).

Neuroimaging studies have demonstrated that ovarian steroids modulate activity in brain regions and circuits involved in processes relevant to the symptoms of PMDD, including the functions of the prefrontal cortex, reward systems, and stress neurocircuitry (Berman et al., 1997; Dreher et al., 2007; Goldstein et al., 2005; Protopopescu et al., 2005). PMDD patients have shown greater prefrontal cerebellar activation than comparison subjects (Baller et al., 2013). Baller and colleagues also concluded that abnormal working memory activation in PMDD, specifically in the dorsolateral prefrontal cortex, is related to PMDD severity, symptoms, age at onset, and disease burden. Proton magnetic resonance spectroscopy has provided another indication of the relationship between PMDD and alternations in neuronal excitability. Women with PMDD do not show the normal cyclic decline in cortical GABA from a peak in the follicular phase to a trough in the late luteal phase as estrogen, progesterone, and ALLO increase (Epperson et al., 2002).

Researchers using MRIs are now documenting changes in the regional grey matter of the brain (Ashburner & Friston, 2000; Jeong, Ham, Yeo, Jung, & Joe, 2012). Jeong and colleagues used an established method of testing volumetric differences in the brain between women with PMDD and a healthy control group and found structural abnormalities among women with PMDD. These women had decreased gray matter density in the left parahippocampal gyrus and increased density in the left hippocampal gyrus compared to the controls. The hippocampus is known to play an important role in the formation of emotional memories and the detection of emotive stimuli (Van Elzakker, Fevurly, Breindel, & Spencer, 2008) and women with PMDD may experience a poor regulation of emotional processing, emotional memory, and self-regulation (Jeong et al., 2012).

Responses to Premenstrual Symptoms

Choi and Salmon (1995) researched how women cope with premenstrual issues and found that four primary coping responses were identified: (1) avoidance, particularly turning to cigarettes, alcohol, and food; (2) active coping strategies using cognition, including positive self-talk, finding out more about the condition, and talking with others; (3) active coping strategies using behavioural strategies such as exercise and socializing; and (4) resorting to external authority, such as physicians and social workers.

For some women, premenstrual symptoms and the exacerbation of life stress becomes unbearable and more than they can cope with. Women with PMS are at a greater risk of suicide in the premenstruum (Baca-García, Díaz-Sastre, de Leon, & Saiz-Ruiz, 2000; Baca-García, Sanchez Gonzáles, Gonzáles Díaz-Corralero, Gonzáles García, & de Leon, 1998; Çayköylü, Çapoglu, & Öztürk, 2004; Hong et al., 2012; Sarrigiannis, Mastrogiannakou, Gournas, & Perissaki, 2001; Saunders & Hawton, 2006; Stout & Steege, 1992; Wittchen et al., 2002). PMDD has been positively associated with suicidal ideation, plans, and attempts - independent of demographic covariates, social desirability, and psychiatric comorbidity (Pilver, Libby, & Hoff, 2013). Pilver and colleagues classified women as being (a) symptom free, (b) having moderate/severe PMS, or (c) having PMDD. They found correlations of suicidal *ideation* with these three respective categories of 13.3%, 22.0%, and 37.4%; suicidal *plans* of 4.6%, 7.6%, and 19.1%; and suicide *attempts* of 4.9%, 7.4%, and 16.2%. Yonkers, Pearlstein, and Rosenheck (2003) found that 24% of women with PMDD had suicidal thoughts, with 20% of the women having thoughts that lasted several days. Harvard Medical School (2009) found that 15% of women with severe premenstrual distress had actually attempted suicide.

MacKenzie and Popkin (1990) used uterine tissue to determine cycle phase and found female suicide victims clustered in the middle luteal phase. The criteria for PMDD requires women's functioning be seriously compromised by their symptoms, and research has demonstrated women with PMS and PMDD are, as the findings outlined above show, at greater risk of suicide during the luteal phase of their cycle than women without problematic premenstrual experiences.

A relationship may also exist between the menstrual cycle and self-cutting. Selfmutilation, as a means to relieve tension and enhance mood (Brain, Haines, & Williams, 1998), may explain some of the menstrual exacerbations in these behaviours (Saunders & Hawton, 2006). Alternatively, self-mutilation may allow for a regained sense of control often lacking for a woman with PMS (Weller, Weller, & Roizman, 1999).

Although PMS symptoms may be severe for some women, little is known about the factors that affect the patient's decision to seek treatment (Robinson & Swindle, 2000). Lete et al. (2010) found that only 18.7% of women with PMS and 25% of women with PMDD sought medical advice. This is comparable to Robinson and Swindle's study (2000) that found 15.7% of women with PMS had been treated for PMS. These women were characterized as being older, insured, participating in more physical activities, having more severe symptoms, and experiencing greater interference on all levels from PMS. Women who did not seek treatment appeared to be more embarrassed to discuss their premenstrual symptoms, were more fatalistic about their symptoms, and perceived symptoms as a sign of personal weakness.

Treatment and Management of Symptoms

Treatment goals for PMS should focus on ameliorating or eliminating symptoms to reduce their impact on activities and interpersonal relationships, and to minimize adverse effects of treatment (Dickerson et al., 2003). The primary consideration directing the selection of therapy should be the intensity and impact of premenstrual symptoms (Reid, 2009). Symptoms causing major disruption to quality of life rarely respond to lifestyle modification alone and efforts to push this approach often do nothing more than delay effective therapy (Reid, 2009). The majority of treatments investigated for mood-related disorders, and specifically for PMS/PMDD, are either functional (e.g., hormonal manipulations) or symptomatic (e.g., antidepressant therapy) (Halbreich, 2002; Halbreich et al., 1993; Mitwally, Kahn, & Halbreich, 2002).

The biological nature of this disorder makes drug therapy the most promising treatment (Cortina, 2005; Epperson & Hantsoo, 2014). Selective serotonin reuptake inhibitors (SSRIs) are well documented as significantly reducing the overall severity of symptoms of PMS or PMDD when compared with placebos (Epperson et al., 2012; Eriksson, 2014; Grady-Weliky, 2003; Halbreich, 2008; Hantsoo, Czarkowski, Child, Howes, & Epperson, 2014; Landen et al., 2001; Lovick, 2013; Pearlstein, 2002, 2003; Steiner et al., 1995; Wyatt, Dimmock, & O'Brien, 2002), improving both emotional and physical symptoms of PMDD and enhancing psychosocial functioning and overall quality of life (Jarvis et al., 2008). SSRIs can be effective when provided continuously, intermittently, semi-intermittently, or at the time of symptom-onset (Jarvis et al., 2008). SSRIs are the most effective type of antidepressant for addressing PMS/PMDD, with women with severe PMS or PMDD responding approximately seven times more than with other types of pharmaceuticals (Dimmock, Wyatt, Jones, et al., 2000; Wyatt et al., 2002).

Women not responding to neurotransmitter treatment strategies, including SSRIs, may benefit from ovulation suppression therapies (Di Carlo et al., 2001; Sundström, Nyberg, Bixo, Hammerback, & Bäckström, 2003). Suppression of ovulation can afford relief for women with severe and long lasting symptoms. A newer oral contraceptive preparation, *drospirenone* (marketed under Yaz or Yasmine), has been tested in both normal women and those with PMDD (De Berardis et al., 2007; Reid, 2009). In clinical trials, this contraceptive has offered relief from both physical and psychological manifestations of PMS and improved quality of life.¹

Non-pharmacological approaches may be a useful starting point for less severely affected individuals (Connolly, 2001). These include (a) changes in lifestyle (American College of Obstetricians and Gynecologists, 2000; Vigod, Frey, Soares, & Steiner, 2010), (b) exercise (Braverman, 2007; Girman, Lee, & Kligler, 2001; Stoddard et al., 2007), and (c) dietary modifications (Campagne & Campagne, 2007; Freeman, Stout, Endicott, & Spiers, 2002; Schaffner, Schrader, Meier, & Brattström, 2000; Quaranta, Buscaglia, Meroni, Colombo, & Cella, 2007; Thys-Jacobs, Starkey, Bernstein, & Tian, 1998; Wyatt, Dimmock, Jones, & O'Brien, 1999). Other alternative treatments include stress management, reflexology, massage therapy, biofeedback, acupuncture, light-therapy

¹ There have been concerns expressed about the risks of using Yasmin after the deaths of 23 Canadian women (Canadian Broadcasting Corporation (CBC), June 11, 2013).Canadian women (Canadian Broadcasting Corporation (CBC), June 11, 2013).

1995; Pearlstein & Steiner, 2000; Ussher et al., 2002), and narrative therapy (LaFrance & MacKenzie-Mohr, 2013; Ussher et al., 2002).

Every woman has her own set of "normal" parameters for premenstrual experiences (Campagne & Campagne, 2007). The levels of hormones, substances that regulate neurotransmitters, and biochemical values have wide "normal" variations. When variations surpass the normal threshold, the effect on a woman ultimately depends upon her psychological resources and the sensitivities or resistances she may have developed (Campagne & Campagne, 2007).

Impact of Symptoms on Women's Quality of Life

The burden of illness associated with PMDD results from the severity of symptoms; the chronicity of the disorder; and the impairment in work, relationships, and activities (Freeman, 2005). Quality of life is generally considered critical to measures of life satisfaction and the overall outcome of health care (Melchert, 2015). The burden of PMDD on health-related quality of life has been found to be greater than back pain, similar to type 2 diabetes, hypertension, osteoarthritis, and rheumatoid arthritis (Yang et al., 2008). PMDD has a similar burden comparable to that of a major depressive disorder (Halbreich, Borenstein, Pearlstein, & Kahn, 2003; Yang et al., 2008).

Premenstrual symptoms are related to lower overall health status and are uniquely associated with significantly impaired overall mental health-related quality of life compared to other menstrual-related symptoms (Craner, 2014). The cyclical nature of these symptoms can cause women who suffer to underestimate or even discount the overall impact of negative symptoms in their lives (Lustyk & Gerrish, 2010).

In a study conducted by Rapaport, Clary, Fayyad, and Endicott (2005), women with PMDD reported a considerably lower quality of life, including health domains, compared to a community-normed sample and compared to individuals with several other mood and anxiety disorders. There is substantial evidence that PMDD is a clinically significant disorder with biological underpinnings different from those underlying other psychiatric disorders (Epperson & Hantsoo, 2014; Hartlage et al., 2012).

PMDD and moderate/severe PMS can have a negative impact in a range of other domains including daily activities at home, interpersonal relationships (Cortina, 2005; Dean & Borenstein, 2004; Dean, Borenstein, Knight, & Yonkers, 2006; Güler et al., 2015; Heinemann, Do Minh, Heinemann, Lindemann, & Filonenko, 2012; Kuczmierczyk, Labrum, & Johnson, 1992; Pearlstein, Halbreich, Batzar, Brown, & Steiner, 2000; Schmelzer et al., 2014), social activities (Bäckström & Buchwald, 2005; Campbell, Peterkin, O'Grady, & Sanson-Fisher, 1997; Freeman, 2003), leisure activities, sexual functioning, work and productivity (Ichino & Moretti, 2009; Takeda et al., 2006); and quality of life (Bäckström & Buchwald, 2005; Barnard, Frayne, Skinner, & Sullivan, 2003; Gianetto-Berruti & Feyles, 2002; Pilver, Desai, Kasl, & Bevy, 2011; Wallenstein et al., 2008; Yang, et al., 2008).

In her research on PMS and relationships, Ussher (2003) noted four major themes identified by women including (a) emotional reactivity, (b) a sensitized response to specific problems in relationships, (c) coping with PMS by avoiding relationships, and (d) self-pathologizing in relation to others. In Atwood's (1991) survey of 100 undergraduate psychology students, 45% of the women stated that their mood changes affected their interpersonal relationships. Pearlstein and colleagues (2000) found that among women diagnosed with PMDD, scores on the Social Adjustment Scale indicated less impairment during the follicular stage than the luteal stage.

Freeman et al. (2011) and Hylan, Sundell, and Judge (1999) found that PMS/PMDD interfered most in the family/home domain, with the most impactful symptoms being irritability, problems with sociability, and anxiety (Marean, Fox, Cumming, & Cumming, 1998). Women with PMDD are almost nine times more likely to report more than a week of impairment to partnership and family activities (Segebladh et al., 2009). Women have been reported to "vent" their symptoms on partners, close family, or children (Slade et al., 2009, p. 137). Notably, the DSM-V indicates for the first time that impairment in social functioning might be manifested in marital discord and problems with children, other family members, or friends (American Psychiatric Association, 2013). More women and their families are affected by the physical and psychological irregularities due to premenstrual symptoms than any other condition (Campagne & Campagne, 2007).

Impact of premenstrual symptoms on parenting. With the strain that premenstrual symptoms can place on interpersonal relationships (Freeman, 2005; Hylan et al., 1999; Kuczmierczyk et al., 1992; Lindow, 1991; Martorano, Morgan, & Fryer, 1994; Ornitz & Brown, 1993; Ussher & Perz, 2010), challenges in the parent-child relationship are frequent (Brown & Zimmer, 1986; Corney & Stanton, 1991; Halbreich et al., 2003; Robinson & Swindle, 2000; Ussher, 2003a; Ussher, 2004). In a study by Cortese and Brown (1989), "caring responsibilities", manifested through the established patriarchal roles of mothering and managing a home, were positioned as a source of premenstrual distress by most interviewees with dependent children. Children of mothers with severe PMS perceived the rearing practices of their mothers as poorer in comparison to mothers with few PMS symptoms in the areas of academic, social, recreational, demonstration of love, and personality development. This paralleled the perceptions of the mothers themselves who had severe PMS symptoms (Mohan & Grewal, 1990).

While many researchers comment on the adverse impact of premenstrual symptoms on parenting, only two substantive research studies could be located (Cortese & Brown, 1989; Mohan & Grewal, 1990). In 1986, Brown and Zimmer called for research on the effects of premenstrual syndrome on children, expressing concern about a group of women in their study who reported loss of control, child battering, self-injury, and accidents. There is a dirth of systematic research on premenstrual syndrome and child maltreatment, although several child abuse cases in which PMS/PMDD was used as a legal defence in court have been documented (Carney & Williams, 1983; Chrisler, 2002; Lewis, 1990; Solomon, 1995).

The unpublished study by this author and Dr. Leslie Tutty (2011), entitled *Premenstrual Syndrome and Its impact on Women's Parenting*, used a research design that included (a) the in-depth qualitative interviews of 39 women who self-identified as experiencing PMS, (b) the administration of the Parenting Stress Index (PSI) (Abidin, 1995) for parents with children under the age of 12 years and the Stress Inventory for Parents of Adolescents (SIPA) (Sheras, Abidin, & Konold, 1998) for parents with teenage children, (c) the administration of a PMS checklist, and d) a demographic information form. The results indicated that of 125 premenstrual reactions described by mothers toward their children, 25.6% said they were a "bitch", irritable, screaming and

yelling; 10.4% gave children inconsistent and unpredictable messages; 8.8% felt guilty after disciplining their child while experiencing PMS; 8% were tired, draggy, and depressed; 8% physically slapped, hit, spanked, or kicked their children; 7.2% worried or thought about physically harming their child; 5.6% worried about emotionally harming a child; 4% felt out of control; 4% were apologizing, and 1.6% personalized their child's actions – e.g., "You don't care about me" (Barry & Tutty, 2011). Some of the women described their premenstrual parenting experiences as follows:

I used to break my pots. I used to smack them so hard on my kitchen counters. But I kept thinking, "Hit the counter and not my kids," 'cause I didn't want to be my mother again. And it probably saved my kids. I'm sure if I ever got loose on my kids, I would have hurt them. I never hurt anybody - husband included- but I've broken a lot of things over the years instead of hitting my kids (Barry & Tutty, 2011, Transcript, 7R-LB7, p. 3).

When I have PMS - I've got way less resources than [normally], much more emotionally triggered. I have this gut reaction of adrenaline that gets triggered when this three-year old whines. So when there is whining and stuff, I have many fantasies of hurting my children (Barry & Tutty, Transcript, 8U-JC8, p. 10). I spanked him on his bum really hard and he started crying and I said, "I'll give you something to cry about," and I spanked him again on his bum. I remember feeling that I could just keep spanking and spanking him. I knew I wouldn't kill him or do something bizarre, but I didn't know if I could stop spanking him. [Interviewer: But you did stop.] I did, and then I held him tight. What kind of message is that sending to your child? You're screaming and spanking and then you're hugging him (Barry & Tutty, 2011, Transcript 3U-JC3, p. 10). I tend to be a bit scary and they become afraid of me. I'm just volatile. [Interviewer: So when you say you're telling her off for things, do you mean you're scolding her more?] No, screaming at her. Screaming at her is the word for it and she's got to plug her ears now all the time. "Mommy, why are you screaming at me, why are you yelling at me?" I also force her practically to eat the food and then she'll puke it up, mind you (Barry & Tutty, 2011, Transcript 14U-JC14, p. 10).

Susie would not sit on that toilet. And it drove me nuts! That's one of the things that I remember because it was either throw the potty or throw...her, and I took the potty - and there was pee in the potty so I remember - I didn't even clean it, it was so bad. I called my mother-in-law and said, "I can't do it today." (Barry & Tutty, 2011, Transcript 7R-LB7, p. 7).

Of the 39 women who participated, 10 (25.6%) reported having been involved ² with child protection services in their role as a parent. These results and the general acknowledgement in the literature of the impact of PMS/PMDD on parenting warrants more research on the extent of the relationship between premenstrual experiences and parenting difficulties. Further exploration on this association is beyond the scope of this

² Involvement with child protection services ranged from an initial investigative contact to having children placed permanently in care.

dissertation, but based on the admittedly limited research to date, it appears that a relationship does exist for some mothers.

Summary

It is now generally accepted that some women are more physiologically sensitive to the premenstrual hormonal shifts of estrogen and progesterone and that these biological reactions are associated with significant emotional and behavioural distress. PMS and the more severe PMDD are health conditions that have a moderate impact on approximately 40% of the female population and a debilitating impact for almost 10% of women. Women find their responses to premenstrual symptoms vary but many find themselves irritable, angry, and moody in their family relationships, particularly with children and partners. The most effective treatment to date appears to be the use of SSRIs, although alternative lifestyle changes can be helpful with less severe symptoms.

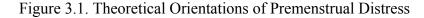
Chapter Three: Conceptual Frameworks of Premenstrual Knowledge Overview

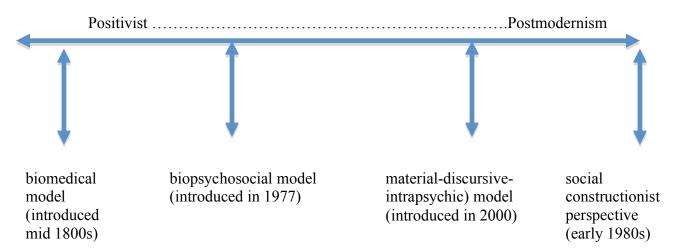
Epistemology, defined as the theory of knowledge, is "knowing what we know" or "thinking about how we think" (Dickerson, 2010, p. 349). In recent decades "knowledge" has become a value term in its own right, denoting something people strive to produce, strive to have recognized, to evaluate, rank, and transact (Camic, Gross, & Lamont, 2011; Ong & Collier, 2005; Strathern 2004). Within the field of mental health and social work education, numerous studies support the importance of providing social workers with appropriate and accurate information as a way to challenge their own negative attitudes and stereotypes (Eack & Newhill, 2008).

Knowledge of premenstrual experiences has always been a contested arena with multiple domains representing differing and controversial ideologies in popular, medical, and scientific publications (Figert, 1995). From the "social worlds" perspective, controversies occur when people from different social worlds hold disparate views about the way something should be defined, pursued, or created (Clarke, 1990; Strauss, 1978). The research on PMS and PMDD is characterized by diverse multidisciplinary positions, with researchers passionately debating the impact of these diagnoses on women individually and collectively.

This dissertation asks in part: "What is the knowledge social workers have about women's premenstrual experiences?" The primary ways of "knowing" about premenstrual symptomatology in the past century are through four dominant perspectives/models identified here as (a) the biomedical model, (b) the social constructionist perspective, (c) the material-discursive-intrapsychic (MDI) model, and (d) the biopsychosocial (BPS) model. In this chapter, these approaches are reviewed and critiqued with respect to their application both to premenstrual experiences and to assessments of women's parenting in order to justify why an *enhanced* biopsychosocial (BPS-*E*) framework, is more suitable for this dissertation's exploration of PMS/PMDD in the context of social work assessments of mothers.

The following diagram presents these four approaches on a positivist-postmodern continuum.





The first two perspectives to be discussed, biomedical and social constructionist, are considered in the context of their perceived dichotomous positions. Biological essentialists and biological determinists attribute gender roles solely to biology whereas social constructionists seek a complete explanation for gender roles in economic and political forces (Sayers, 1982). When applied to theoretical orientations related to PMS and PMDD, these contrasting positions identify quite different clear and urgent necessities in dealing with different aspects of the social realities of women's premenstrual distress (Gharajedaghi, 1983). The two positions are polarized, not only

with respect to epistemology and ontology, but also in the research assumptions and scientific methodologies supporting each perspective.

The Biomedical Model

The biomedical model and its application to premenstrual experiences. Prior to the 1970s, the primary epistemology of premenstrual syndrome was biomedical, with trained medical researchers concentrating only on organic approaches to premenstrual symptomatology, based on the ontological assumption that abnormality exists "out there". The epistemological assumption was that such an organic occurrence is pathological (Pilgrim, n.d.). PMS developed within a medical context of women's reproductive health (Nicolson, 1995; Rodin, 1992), particularly with the work of Frank (1931) and Dalton (1953, 1980, 1982).

When premenstrual symptoms were described using a biomedical model, the emphasis was typically on the physical complaints involving breasts, the abdomen, diarrhea, nausea, and headaches. Emotional symptoms such as irritability, depression, and anxiety were rarely the focus (Knaapen & Weisz, 2008). The separation of the human mind from its biological basis in the human body is attributed to Descartes (1596-1650) who defended a strict dualism between the physical and emotional (Pardeck & Yuen, 2001) based on the ontological assumption that the mind and body are distinct and separate entities.

A biomedical model applied to premenstrual syndrome constructs it as a medical problem requiring scientific research, diagnosis, and intervention (Parlee, 1992) and characterizes it using modernist, positivist assumptions. This model assumes that conditions can be progressively bettered by establishing reliable, universal, and

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generalizable knowledge developed through reason and scientific method (Ussher, 2000). Epistemologically, the premenstrual experience must be verified through the deductive methodology of the scientific method used in the natural sciences (Chalmers, 1976; O'Hear, 1989; Ussher, 2000). Knowledge about PMS/PMDD is generated through logical and rational methods, is empirically based, is created in a systematic manner, and seeks to identify causes (O'Brien, 1994; Pardeck & Yuen, 2001). This is still evident in medicine's continuing search for the "holy grail" of PMS – the pursuit of *one* single underlying cause or treatment (Ussher, 2009).

Scientific knowledge is the basis for the biomedical model and scientific discourse has dominated the practice of illness treatment and health care (Fairclough, 1992). The biomedical model relies on a positivist approach founded on the ontology that the things we experience are things that exist (Wainright, 1997). Empiricism requires that the data or facts must be observable and measurable (Alvesson & Skoldberg, 2009) with an emphasis on reliable and replicable research (Keat, 1979). This modernist orientation assumes the validity of masculine context-specific knowledge claims (Fawcett & Featherstone, 2000). Most biomedical research uses quantitative methodologies and is evidence-based in nature.

The challenge for positivist medical researchers has been that premenstrual distress defies easy measurement or verification. No biochemical tests are available to diagnose PMS [or PMDD] (Salamat et al., 2008) and x-rays cannot confirm or disconfirm the presence of the syndrome/disorder (Granger, Steinberg, & Gottleib, 1999). If a phenomenon cannot be objectively observed and measured using reliable, standardized techniques, then it cannot be "known" within a positivist paradigm (Ussher, 2009). As

symptoms of premenstrual syndrome are not visibly apparent to an observer, they have to be confirmed instead by subjective account.

With a lack of means to independently verify the existence of PMS or PMDD, an inordinate amount of attention has been given to developing reliable and valid standardized questionnaires to measure symptoms (Ussher, 2009, 1996). Questionnaires assume that "symptoms" can be categorized and classified in a dichotomous manner as existing or not...with the only notion being the degree of symptomatology (Ussher, 2000, p. 211).

The literature on using PMS symptom inventories to accurately identify cases of PMS (Picella, 2011) is conflicting. Self-report measures are almost exclusively used to determine women's premenstrual experiences, particularly PMS and PMDD, but with controversy about the reliability and accuracy of women's self-report. Many researchers (Deuster, Adera, & South-Paul, 1999; Endicott, Nee, Cohen, & Halbreich, 1986; Freeman, DeRubeis, & Rickels, 1996; Jacobs et al., 1995; Johnson, McChesney, & Bean, 1988; Moos, 1968; Mortola, Girton, Beck, & Yen, 1990; Steiner et al., 2003; Steiner, Haskett, & Carroll, 1980; Sveinsdóttir & Bäckström, 2000) have developed assessment instruments to measure premenstrual symptoms, but often without firmly establishing validity and reliability.

Some researchers have asked about women's symptoms for just one month (Gehlert, Song, Chang, & Hartlage, 2009), while others require symptom documentation for three months (Dalton, 1982). This avoids the inaccuracies of memory (Endicott & Halbreich, 1982) as well as incorrect symptom timing and amplification of symptom severity (Connolly, 2001; Hart, Coleman, & Russell, 1987; Rosen, Moghadam, & Endicott, 1990). The DSM-V requires that premenstrual symptoms be charted for at least two months before making a PMDD diagnosis (American Psychiatric Association, 2013).

While there is disagreement about the prospective or retrospective self-report of symptoms and the required duration of such recording, the accepted "gold standard" for confirming PMS and PMDD is the prospective daily recording of symptoms (Epperson & Hantsoo, 2014; Hart et al., 1987). However, this is a time consuming and difficult practice for physicians, patients (Craner et al., 2014), and researchers (Warner & Bancroft, 1990).

In clinical practice, it is often unrealistic to evaluate premenstrual symptoms over several months (Freeman, 2003). Retrospective methods have been shown to be quite reliable, particularly when asking about a woman's last cycle rather than a generic experience over a number of recent cycles (Logue & Moos, 1986; Warner & Bancroft, 1990). Some claim few differences in the accuracy of daily and retrospective reports with little evidence of retrospective symptom distortion (Ussher, 2009).

The biomedical model and its application to assessments of women's parenting. Social workers have had an historical interest in the medical model as a framework of practice, dating back to Mary Richmond's (1917) efforts to mirror the discourse of medicine in assessments using a social diagnosis approach (Healy, 2014). Social workers with a primarily biomedical knowledge of premenstrual distress tend to adopt a more traditional medical model approach to assessment that includes a thorough history of the client's current and past functioning, symptoms, problems, historical milestones, current and past treatment (Graybeal, 2001), and concludes with narrowly defined diagnostic impressions and treatment recommendations (Graybeal, 2001; Pardeck & Yuen, 2001). The assessment would typically have a strong focus on reproductive and/or psychiatric problems.

A social work assessment using a medical model will more likely address the bodily causes of PMS, seek objective validation of the syndrome to DSM-V standards and the prospective documentation of symptoms, and encourage mothers to obtain official diagnoses. Sub-threshold symptoms would not be considered and less emphasis would be given to the subjective experiences and narratives of the mother. The assessment would contextualize PMDD and parenting problems as deficits to be addressed likely through medical or psychiatric interventions. The assessment may include a medical referral for treatment, particularly SSRIs.

Ussher (2000) noted that within the discourse of positivism, a mother presenting with problems is implicitly positioned as passive. This passivity can be compounded in child protection work when workers have explicit mandates of power and control in assessment and investigation. In addition to observations, the assessment might include actuarial parenting capacity or risk assessment instruments to validate the assessment. A biomedical approach may reinforce traditional sex roles with the biological roles of childbearing, mechanistically resulting in women being assumed to be better at parenting than men (Sayers, 1982).

The medical model has dominated child abuse management since the 1960s (Lawrence, 2004), with medical experts often playing a pivotal role in defining and assessing what constitutes evidence of risk of harm and abuse (Healy, 2014). The child protection system is based on a medical model that has historically focused on a "child rescue" approach, sometimes at the cost of meaningful connections to family,

community, culture, or landscape (Bissell, Boyden, Cook, & Meyers, 2008). The current structure of traditional (medical model) social work assessment is dictated by government regulations reflecting the hegemony of the medical model in mental health practice (Graybeal, 2001). Although some would argue that the statutory mandate of child protection provides society with an objective and rational legal process through which to protect children for the betterment of all, it fails to appreciate that legislation is an instrument of social control that can further contribute to the social inequities of marginalized groups (Healy, 2014), including mothers.

The inadequacies of the biomedical model for studying premenstrual experiences in the context of assessing mothers. Advances in the understanding of the nature of disease and biomedical interventions have been critical to the improvement of people's lives and in this context biomedical discourse is well accepted (Healy, 2014). Although fundamental to the discipline of medicine for many years, the biomedical model categorizations and responses to mental illness constitute just one perspective among a plethora of ways to understand human experience (Glasby & Beresford, 2006). Biological reductionism occurs when systems are considered to consist only of molecules with chemical, biological, and physical properties (Beresford, 2010) and in which human behaviour is grasped primarily in terms of invariant features of human genetic endowment (Barker, 2004). This argument suggests that genetics alone can provide sufficient explanations for behaviour, regardless of other factors (Barker, 2004). Biological hegemony and its related priorities have caused narrow and often incorrect conceptualizations of women's health across the lifespan (Hankivsky, 2007). The reductionist belief that health problems are the result *only* of disordered biology conflicts with social work's holistic and systemic approaches (Healy, 2014).

Biomedicine's requirement that illness be identified through objective means has resulted in the de-legitimation of a host of other conditions including chronic illnesses, chronic pain, fibromyalgia, and vertigo (LaFrance & McKenzie-Mohr, 2013). LaFrance and McKenzie-Mohr note that while one response is to redouble efforts to locate pathophysiologies, the exclusive hold of the medical model for delineating the boundaries of legitimate knowledge must be questioned and other ways of knowing validated (Frank, 1995; Hare-Mustin & Marecek, 1997; Ussher, 2011). Other limitations of biomedical positivist research methodologies identified by Ussher (2005) include (a) the artificiality of controlled studies, (b) the limited number of variables studied at one time, (c) limitations of quantitative analysis, (d) individuals studied separately from cultural and historic factors, (e) individuals as the sole source of attention, and (f) predictive knowledge based only on cause and effect.

Traditional biomedical models of assessment and intervention have proven inadequate in connecting the social, cultural, and structural components of health outcomes (NASW, 2001; Healy, 2014). As well, the biomedical model does not adequately address differences and disparities in women's health within or across social groups (Burt Ruzek, Clarke, & Olesen, 1997). While the biomedical dimension of premenstrual distress must be considered, it neglects other relevant psychological and relationship/social factors, including larger macro concepts such as institutional power, disparities in health care and education, culture, economics, and gender bias. The complexity of PMS and PMDD warrants full holistic consideration of these factors as well as the reciprocal interaction among them. A model that cannot consider premenstrual experiences in a larger ecological context is simply too limiting and inadequate for the purposes of this research. The underlying social dynamics of what actually produces health for different groups of women is, unfortunately, not integral to the biomedical model as described above (Burt Ruzek et al., 1997).

Biomedical constructions of PMS and PMDD as negative premenstrual change function to reinforce self-policing associated with the reproductive body, leading to women pathologizing the premenstrual-self (Ussher & Perz, 2013b). The diagnostic principles of the biomedical explanation of human behaviour are overly deterministic. For these reasons, the understanding of premenstrual distress as it affects women's parenting is not well-served using a biomedical model.

The Social Constructionist Perspective

The social constructionist perspective and its application to premenstrual experiences. The social constructionist approach, in contrast, takes a critical stance towards the taken-for-granted knowledge generated by the biomedical model (Ussher, 2011). Social constructionists, many of whom are feminists, maintain that premenstrual changes are not biologically driven but socially learned. This reflects the epistemological assumption identified by Pilgrim (n.d.) that reality is only known via the ways we represent it and is based on the ontological assumption that disorders do not simply exist but are socially constructed.

Many social constructionists believe that over the past 70 years, women have been primed and indoctrinated to believe in and expect menstrual complications (Burr, 1995; Guidry-Grimes, 2007; Offman & Kleinplatz, 2004), impacting not only their beliefs about premenstrual emotionality and discomfort (Guidry-Grimes, 2007) but also how they learn about other aspects of their sexuality (Beausang & Razor, 2000). Many feminist researchers insist that PMS and PMDD are endemic to Western culture because of a socialization process that reinforces negative premenstrual experiences (Caplan et al., 1992; Dambhare, Wagh, & Dudhe, 2012; Hamaideh et al., 2014; Heinemann et al., 2012; Johnson, 1987; Koff & Rierdan, 1995).

Social constructionism challenges realist assumptions, arguing that subjectivity, behaviour, and the very meanings of "health" and "illness" are constructed within practice, language, relationships, and roles. Assessments draw on broader postmodern theories in critical psychology and psychiatry, in which the very concept of mental illness or madness is contested as a discursive construction regulating subjectivity and a disciplinary practice policing the population through pathologization (Fee, 2000).

All social constructionist approaches share the structuralist and post-structuralist premise that language is a dynamic form of social practice shaping social identities, social relations, and understandings of the world (Jorgensen & Phillips, 2002). Social constructionists contend that the discourse on mental illness guides psychological theory and practice, and thus the premenstrual diagnostic categories in the DSM (DSM III-R; DSM-IV-TR; DSM-V) are influenced by definitions of "normal" that stem from a partial and elite perspective and stereotypical notions of gender, race/ethnicity, and sexuality (Cermele, Daniels, & Anderson, 2001).

When the menstrual cycle deviates from the defined "normal" with respect to time of first period, length of time between cycles, duration, amount of flow, timing of cessation of cycles, and physiological and emotional accompaniments to all these events, and this deviation is problematized, the problem is socially constructed (Lorber & Moore, 2002). Women's perceptions about what happens in the premenstruum become more pathological when they are introduced to the diagnostic definition of PMDD (Nash & Chrisler, 1997). Associating premenstrual changes with a psychiatric diagnosis can affect the way otherwise gender-neutral emotions are interpreted (Nash & Chrisler, 1997).

Patriarchal values, which prescribe the roles and qualities of the "ideal woman," have resulted in the medicalization and pathologization of women's bodies. The category of PMDD demonstrates how patriarchal values, combined with the capitalist orientation of the pharmaceutical industry and the media, construct and pathologize women's regular experiences, subsequently shaping the concept of the premenstrual body as disordered and validating the need for pharmaceutical intervention and social control (Isreeli, 2010).

From a social constructionist perspective in Western culture, premenstrual syndrome serves the function of translating the ambiguous and conflicted status of a woman into a standardized idiom that makes her position meaningful (Johnson, 1987). Social constructionists have insisted that premenstrual syndrome and PMDD have become "safety valves" used by women to turn away from an expected role demand [that of being productive or reproductive]. PMS is seen as a vehicle for women to express legitimate discontent with the "enervating machine of the daily domestic grind", without betraying their "feminine" allure (Vines, 1993, p. 48).

Strategies of locating distress or deviancy in the womb or reproductive hormones dismiss legitimate anger or discontent, while ignoring the social and political inequalities implicated in symptoms of distress (Chesler, 1972; Penfold & Walker, 1984; Ussher,

1991). Some feminists insist that the main interest groups in the medicalization of PMS have been women themselves. Scientific facts are created in a social context and become embedded in popular beliefs (Oudshoorn, 1994).

Social constructionists argue that some women use premenstrual pain to resist the social expectations associated with being a "good" mother and wife. By using PMS this way, feminists argue that legitimate complaints are not taken seriously and women are effectively sabotaging any chance of addressing real life protest (Rodin, 1992). Social constructs of the female body are further defined through scientific research (Oudshoorn, 1994). Social constructionists maintain that the world of research is political and mirrors the societal power relations, denying many a voice in uncovering oppression.

Multiple premenstrual truths exist (Salsbury, 2010), as each woman has a unique premenstrual construction (Oudshoorn, 1994). Therefore, the distinction between ontology and epistemology is blurred, since what constitutes reality depends on a particular actor and her/his values (Guba & Lincoln, 1994). Constructions, as ontological elements of realities, are not absolutely true or correct in any sense, only more or less informed and sophisticated (Schwandt, 1994). Researchers are encouraged to shift from seeking one truth to researching how truths are produced or how things come to be seen as true (Everitt & Hardiker, 1996).

The social constructionist perspective and its application to the assessment of women's parenting. Social constructionism proceeds from the view that assessment involves the construction of meanings as distinct from the collection of objective facts (Hall, Juhila, Parton, & Pösö, 2003). Social constructionists treat the idea of assessment as problematic, being critical of the "taken-for-granted" social and political contexts of

assessment (Whittington, 2007). They maintain that that there is a patriarchal bias in the expectations of mothers' parenting, whereas cultural expectations of fathering are more ambiguous and less intensive (Johnston & Swanson, 2006).

Social constructionists express concern that mothers bear an unreasonable responsibility for the wellbeing of children. Mothers are expected not only to put the needs of the "sacred child" above their own individual needs but also to provide a level of nurturance and developmentally supportive activities that become all consuming (Johnston & Swanson, 2006, p. 510). The assumption seems to be that "good" mothers ought to cope (Davies, Collings, & Krane, 2003).

Feminists and social constructionists have looked critically at unrealistic expectations of maternal perfection in relation to the caring and rearing of children by mothers and those professionals coming into contact with them (Caplan, 2000; Featherstone, 1997). Parenting assessments focuses *solely* on the needs of children, which have been expanded beyond the physical to include emotional, psychological, and cognitive needs (Hays, 1996). The social construction of mothering intersects culturally with expanding notions of risks to children's wellbeing and increasing portrayals of mothers as risk factors in their children's lives (Romagnoli & Wall, 2012). This is because harm and risk of abuse are also social constructions, with definitions varying across time and place (Krane & Davies, 2000). Frequently, mothers who are not privileged by the dominant culture are set up for failure when faced with the social expectations of "good mothering" (DiLapi, 1989).

The legacy of individual pathologization, specifically in the form of motherblaming, has been well documented, both in case records and in face-to-face practices of psychologists, social workers, and counsellors (Caplan, 1989; Humphreys, 1994; Krane & Davies, 1995; Surrey, 1990). Social workers' assessments represent their construction of a narrative or story and may reflect the perspective of the social worker rather than the client (Hall et al., 2003). Rutman, Strega, Callaghan, & Dominelli (2002) found that social workers reflect Eurocentric middle-class values, including norms about "good" and "bad" parenting. Common social work constructions of good parenting are white middle-class norms which ignore the different experiences and perspectives on mothering in marginalized racial, class, and ethnic communities (p. 150).

Feminist analysts (Davies et al., 2003; Krane, 2003; Swift, 1995) have argued that social work practices in child protection work centre on scrutinizing maternal (in)capacities. Dominant discourses have constructed what defines risk, and what is to be done to reduce risk - without adequate evidence supporting these findings of risk (Scourfield & Welsh, 2003). Couched in such phrases as "the wellbeing of children", "support for families", and "least intrusive measures", an implicit focus on the mother actually drives child protection practice (Krane, 2003; Krane & Davies, 2000). Even with social workers' awareness of women's oppression, women's actions as mothers are still constructed as individual choices (Scourfield, 2001).

The social construction of motherhood also underpins encounters between mothers and health professionals (Baruch, 1981; Silverman, 1987; Strong & Dingwall, 2001). To understand mothering and its relationship to women's health, and to understand how women negotiate these contexts and experiences, requires an understanding of the socially constructed process of mothering (Varcoe & Doane, 2007). In standard social work assessment and intervention practices, the day-to-day subjective experiences of women as mothers are rarely taken into account. As a result, mothers may not receive the help they need as they care for their children (Davies, Krane, Collings, & Wexler, 2007). A social constructionist analysis provides opportunities for enhancing professional practice and accountability through a critical reflection about children's wellbeing and how it can be ensured through a constructive deployment of knowledge/power (D'Cruz, 2004). The meaning that people ascribe to a particular phenomenon, in this case "mothering", is dependent on the discourses portrayed within the culture (Francis-Connolly, 2003).

The inadequacies of the social constructionist perspective for studying premenstrual experiences in the context of assessing women's parenting. While the social constructionist position is valuable in establishing the importance of the psychological, social, cultural, and political in premenstrual experience, it fails to acknowledge the role of the material, physical body [in this case, the female body]. Excluding the biological determinants of health limits the applicability of this model to the study of PMS/PMDD in which biological causes have clearly been identified in the literature (Ross & Toner, 2004). Social constructionists tend to treat the body as mere fiction (Chadwick, 2006) and when attempting to think about bodies, they fail to engage with the real "flesh 'n bones body" (Keane & Rosengarten, 2002, p. 262). Postmodernism can be characterized by disembodiment (Probyn, 1987).

The claim by Delaney and colleagues (1976) that "feminists should deny any effects of menstruation and reconceptualize menstruation in solely positive terms" (p. 24) is absurd and disqualifies women whose bodily experience includes premenstrual

distress. Further, to suggest women would not experience a negative premenstrual experience if they were not socialized to expect it, is insulting and demeaning and ignores the vast amount of evidence on the biological component of PMS/PMDD. An extreme social constructionist position that does not address the biological determinants of health, risks silencing or invalidating the experiences of women who perceive connections between their health status and their biological state (Ross & Toner, 2004).

In light of the feminist social constructionists' insistence that women be recognized for their strength and competencies, it seems paradoxical that they imply that the character of women can be easily persuaded to readily accept pathology that is not their lived experience. Not only does a purely discursive view appear to deny fundamental aspects of the body in an attempt to reify the mind, it also functions to eradicate hard fought links across economic class and international borders between women, based on common experience often rooted in biological "sameness" (Heenan, 2004, p. 402).

With full appreciation of the first and second waves of the women's movements for the hard fought battles related to women's biology and subordination, feminist social constructionists must avoid becoming "moral guardians" by harshly judging the experiences of "Other" women. A social antagonism occurs when different identities mutually exclude each other (Jorgensen & Phillips, 2002). Although a subject has different identities [mother, woman, feminist, PMS sufferer], these do not have to relate antagonistically. Social constructionists have been accused of presenting women as a homogeneous group, making invisible the differences among women (Jorgensen & Phillips, 2002). Inherent in the concept of women's health is the paradoxical challenge that differences *among* women are often greater than the differences *between* women and, the implied binary opposite, men (Varcoe, Hankivsky, & Morrow, 2007). Foucault argued that oppositional discourses often extend the very relations of domination they are resisting (Rabinow 1984, cited in Fawcett & Featherstone, 2000).

A hardline social constructionist approach marginalizes and negates the subjectivity of women's premenstrual changes (Ussher, 2002). If researchers avoid studying certain aspects of women's experiences that may have biological components or perpetuate inequalities, they are reinforcing the dictum that some women's experiences are less relevant and not appropriate as subjects of serious study or research (Sayers, 1982). The social work profession needs to address the "bodiliness" of human behavior (Saleebey, 1992). Empowering women to expose and challenge the contribution of sexbased discrimination to their medical problems is often a step towards, but not sufficient for, achieving recovery (Ross & Toner, 2004).

On the other hand, it is erroneous for social constructionists to believe that mothers are never culpable for their behaviour, even in a patriarchal society. Despite an appreciation of a given mother's situation, workers must appraise how a woman's behaviour affects her children and their safety (Featherstone, 1997). Social workers must make judgments as to what constitutes "good enough" mothering in any particular case, but the statutory context of the practice of child protection emphasizes children's needs and interests. Though wholly legitimate, feminist concern with mother-blame should not result in exonerating women from any responsibility at all, as this would diminish women's sense of efficacy and agency altogether and endanger children (Burck & Speed, 1995).

A Summary of Two Dichotomous Models

As would be expected in two such polarized models or perspectives (biomedical and social constructionist), both of these positions can be accused of failing to consider the "Other". The dichotomous views about PMS and PMDD have not been healthy, representing extreme positions that hide the truth (Walker, 1995). The assumption of linearity has focused biomedical research efforts on the dichotomization of women into PMS sufferers and non-sufferers, and the pursuit of the single factor (Walker, 1995). Having to deny "one" truth in order to accept any tenets of another is unhelpful in attempting to approach PMS/PMDD holistically. The biomedical model is narrow and restrictive while the social constructionist perspective, by denying corporeality, throws the baby (bio) out with the bathwater (positivism).

The Material-Discursive-Intrapsychic (MDI) Model

The MDI model and its application to premenstrual experiences. Ussher (1991) found fault with the biomedical model, the biopsychosocial model, and the social constructionist perspective and, in the late 1990s, proposed the material-discursiveintrapsychic (MDI) model to understand women's premenstrual distress. The MDI model developed by Ussher (2000) is examined in this dissertation as a dialectic response in premenstrual knowledge production. This dialectic is related to the continuous tension at the level of the individual human experience between "having a body" and "being a body" (Berger & Luckmann, 1966; Billig et al., 1988).

Hegel's triadic logic model adapted by Spencer and Krauze (1996) conceptualizes dialectics using the terms thesis, antithesis, and synthesis. The "thesis" is the first aspect

of the triad, involving a thought or position that is initially affirmed but on reflection proves itself unsatisfactory and warranting of challenge (Spencer & Krauze, 1996). Ussher (2003b) objected to the hegemonic "truths" characterizing PMS/PMDD as (a) a bodily phenomenon, (b) a cause of women's problems, (c) something that can be objectively defined and measured, (d) a pathology to be eradicated, and (e) a disorder having one cause that can be treated by one factor. The thesis, in the context of premenstrual distress, is the biomedical/biopsychosocial model that Ussher relegates together under one positivist umbrella.

Whereas a dichotomy is characterized by two elements standing in direct, dynamic contradiction to one another, a dialectic response tries to resolve the apparent contradiction of two seemingly mutually exclusive positions [biomedical model and social constructionism]. This is done by first negating each of them, which Ussher (2000) does by personally rejecting biologically deterministic arguments, traditional psychological approaches, and extreme social constructionist perspectives. The "antithesis" position (Spencer & Krauze, 1996) of postmodernism, and specifically social-constructionism, fully negates the biomedical position, maintaining that all aspects of PMS/PMDD are social constructs ignoring biological etiology.

Dialectical thinking derives its dynamic of negation from its ability to reveal "contradictions" within almost any category or identity (Spencer & Krauze, 1996). In classical logic, this double negation ("A is not non-A") simply reinstates the original thesis. Through the negating process of *sublation*, this does not happen. It "overcomes and preserves" (or sublates) the stages of the thesis and antithesis to emerge as a higher rational unity (Spencer & Krauze, 1996). Dialectical thinking strives for a deeper and

more comprehensive understanding than can be captured by either side of the dichotomy (Fosha, 2004). Ussher appears to have emerged from this process with the MDI model, developed within a critical realist framework.

Dialectics honour the dynamic role of contrast in generating development (Neimeyer & Mahoney, 1995). The same triadic dialectic process can be applied when one considers the accompanying research methodologies in the MDI model in the vein of quantitative methodology (positivism) as the thesis, qualitative methodology as the antithesis (postmodern), and Ussher's utilization of either/and as determined by the research question being addressed.

In the MDI model, Ussher (2000) attempts to go beyond mainstream psychological approaches in which the body is portrayed only as the biological body (Stoppard, 2000). Three levels are posited (material, discursive, and intrapsychic) which in their *interaction*, produce experiences that come to be labeled as PMS or PMDD (Ussher, 2002). In the early development of Ussher's model (1997a), she created the material-discursive model but came to include the intrapsychic dimension in her 2000 publication.

The MDI model asserts that premenstrual syndromes/disorders result from an ongoing interaction between (a) material factors (changes in hormones or neurotransmitters, life stresses), (b) discursive factors (cultural constructions of reproduction and femininity), and (c) intrapsychic factors (modes of evaluating changes, expectations of self, and defence mechanisms) that combine to produce emotions and behaviours "positioned" as PMS by a woman or her family (King & Ussher, 2013).

The MDI model reframes premenstrual symptoms outside a pathological framework, seeking a more empowering approach than many others offered to women (Ussher, 2003b). It is an approach compatible with a critical feminist analysis of PMDD (Ussher, 2003b; Ussher, 2010) affirming the existence of reality (both physical and environmental) as a legitimate field of inquiry but also recognizing that its representations are characterized and mediated by culture, language, and political interests rooted in factors such as race, gender, and social class (Pilgrim & Rogers, 1997).

A premenstrual symptom will always have a material, a discursive, and an intrapsychic component; one cannot be separated from the other (Ussher, Hunter, & Cariss, 2002). At the same time, one is not privileged over another (Ussher, 2010). Thus the role of hormones, the endocrine system or physiological arousal, as well as the influence of social stressors, age, economic factors (Ussher, 1996), social institutions, and culture can be acknowledged and studied as "real" in the analyses of the etiology of PMS and PMDD. Symptoms or material factors are not conceptualized as independent entities existing separately from the historical or cultural context in which the woman lives (Ussher, 1996).

While the MDI model is an important development in moving away from an either/or of discourse or experience, culture or biology, mind or body, it retains [like the BPS model] the discrete nature of the domains or factors that must be related to one-another (Grace, 2010). The MDI model warrants a closer examination of these three key knowledge domains inherent in the naming.

Ussher (2000) stated that to talk of *materiality* is to talk of factors existing at a corporeal, societal, and institutional level. A material conceptualization of PMS/PMDD

includes (a) biological factors associated with psychological symptomatology such as hormones, neurotransmitters, or physiological arousal (Parry, 1994); (b) material factors institutionalizing the diagnosis and treatment of premenstrual experiences as PMS (Ussher, 2003b); (c) power-related inequalities in heterosexual relationships (Ussher, 2002b); (d) a previous history of abuse or trauma (Golding, Taylor, Menard, & King, 2000; Ussher, 2009); e) economics; and f) poverty (Ussher et al., 2002).

The term *material* embraces any non-reductionist account of physical being (Yardley, 1996) as the term "bio" and its bodily inference are perceived to be limiting. Key conceptual concerns include the medicalization and pathologization of female reproductive biological processes that, while normal in women, are perceived as abnormal and dysfunctional when compared to the implicit standard of biological normality signified by the male body (Stoppard, 1997; Nicolson, 1995; Ussher 1991). There are also many material consequences of experiencing or being treated for PMS, in terms of physical or psychological vulnerability, as well as powerlessness at an economic or societal level (Collins, 1991). Women's lives must be considered as well as women's bodies (Stoppard, 1997).

The *discursive* domain is based on the social constructionist premise that the individual self is not an isolated, autonomous entity but is in constant, dynamic interaction with the social world. Minds, selves, and identities are formed, negotiated, and reshaped in social interaction (Jorgensen & Phillips, 2002). Discursive psychology is more interested in people's active and creative use of discourse as a resource for accomplishing social actions in specific contexts of interaction (Jorgensen & Phillips, 2002).

The discursive factor in the MDI model considers social and linguistic domains – talk, visual representation, ideology, culture, and power (Ussher, 2002). Discursive factors include normality/abnormality, sickness/illness, femininity/masculinity, marital violence, heterosexual relationships, gendered experiences of distress, and women's bodies including hormones (Ussher, 2000). The feminist deconstruction of PMDD as a category or *discursive* construct that allows particular aspects of women's experience to be deemed "symptoms" is a necessary part of any attempt to understand the way in which women's reproductive bodies are positioned as dysfunctional (Ussher, 2003b). Ussher maintains that experts pathologizing women's psychological or bodily experiences (or their responses to the circumstances in their lives) must be disempowered as not having a satisfactory explanation for distress or unhappiness.

The MDI model examines the process by which women come to take up the position of PMDD [PMS] sufferer (Ussher, 2003b). Most relevant to such a discursive construction is an understanding of (a) PMS/PMDD (Ussher, Hunter, & Browne, 2000), (b) mental health and illness (Foucault, 1967; Ussher, 1991), and gender (Smith, 1988; Ussher, 1997b). PMS is considered a gendered illness; a discursively constructed phenomenon that has become an inappropriate source of attribution for a whole range of distress and dysfunction experienced by women (Caplan, 1995; Figert, 1995; Nicolson, 1995; Rittenhouse, 1991). Conformity to hegemonic constructions of femininity, within what has been described as a heterosexual matrix (Butler, 1990), puts women at risk of mental health problems (Stoppard, 2000), including PMS (Ussher, 2002b).

The *intrapsychic* domain of the MDI model includes those psychological factors that operate at the level of the individual and have been the focus of traditional-

psychological analysis. This includes the way women blame themselves for problems in relationships, and the psychological explanations for why this is so. It includes an analysis of such psychological defences as repression, denial, projection, or splitting and mechanisms for dealing with abuse, difficulty, and psychological pain. Specifically the focus is on the way women often blame themselves or their bodies for problems they experience. Intrapsychic factors include the impact/interpretation of previous experiences, psychological defences, current mood/well being, self-esteem and feelings of self-blame, attributions, ways of coping, the idealization of men, and the insecurity of not living without a man.

The MDI model and its application to assessments of women's parenting. In contrast to the many competing biomedical and psychological accounts of PMS where the focus of attention is on the individual woman (with aetiological theories exploring the way in which biological or psychosocial factors produce the symptoms within) (Bancroft, 1993; Gold & Gold, 1994), Ussher (2003a) argued that a systemic analysis positioning PMS as a relational issue is more appropriate. She found in her research that women did not talk about the experience or impact of symptoms at an individual level, but referred to PMS as an emotion or behaviour experienced and expressed in relation to others.

Premenstrual distress has been found to be strongly associated with women's social and relationship context (Ussher & Perz, 2010), in particular with overresponsibility, relationship dissatisfaction, and communication problems (Ussher, 2003a, 2004). The key feature determining whether an emotion or behaviour is positioned as PMS, is that it is at odds with idealized cultural and familial expectations of how a woman should feel or behave – being angry rather than calm; snapping, rather than tolerating; confronting issues, rather than letting things go; and being irrational, rather than in control (Ussher, 2003a).

A social worker taking an MDI approach engages the mother in an open conversation [like the social constructionist] without imposing any prior assumptions. The social worker assesses the client for her subjective understanding of the meaning of her PMS symptoms and not the specific causes of her premenstrual distress. Within a holistic model of health, the advice would be to feel these emotions, and to be with them, rather than split them off or repress them (Ussher, 2013b). With a material focus, the social worker invites a mother to discuss her premenstrual symptoms, and while validating her corporeal experiences, links those symptoms to what it means to be both a woman and a mother.

Women's accounts provide the most important source of knowledge about the experiences of individual women (Nicolson, 1995). This does not mean passive acceptance but is considered to be (a) the first step to acknowledging pain, distress, or anger; (b) working on the various causes of it; and (c) making changes to life to deal with issues that are associated with the problem (Ussher, 2013b). The argument Ussher and Perz (2013b) make is not that women can rid themselves of premenstrual emotions or feelings, but that they can come to understand them, learn to reduce them, or to live with them. They become part of being a woman, rather than a feared, hated, or medicalized "Other". A deepening awareness of the body and emotion can prevent women from experiencing the sense of panic and being overwhelmed that is so common in women's reports of PMDD (Ussher & Perz, 2013b).

Discussions of mental health circulating in Western culture draw on hegemonic constructions – the view that mood and emotions should always be stable and positive, and if not, pathology is implied (Ussher, 2003a). One would explore the challenges with a female client (politically, socially, and economically) around living with little economic power as a woman and mother and coping with the demands of children. Other discursive considerations might include her specific conceptualization of premenstrual distress; the discursive construction of women's madness; hormone blaming; motherhood as the centre of a woman's existence; and deconstructions of motherhood, femininity, and a woman's marital role.

The inadequacies of this dialectic model for studying premenstrual experiences in the context of assessing mothers. One of the most serious limitations of the MDI model lies in its inadequate response to the treatment of PMS/PMDD. King and Ussher (2012) simplistically maintain that once the materiality of premenstrual changes (physical and emotional), is acknowledged, women can resist cultural discourse that positions changes as inevitably negative. Ussher and Perz (2013) maintain that avoidance of stress and conflict, particularly relational demands and responsibilities, and caring for the self are the most appropriate ways to manage premenstrual symptoms. Self-care, as advocated by Bussell (1998), is considered to include a positive strategy of self-regulation, reflecting self-awareness of the negative impact of a diet high in caffeine, alcohol, fat, sugar, or carbohydrates on premenstrual emotions. Ussher and Perz further suggest that by self-monitoring, using behavioural coping strategies, and reframing symptoms as normal bodily changes, women can effectively reduce premenstrual distress.

Enlightened women appear to be expected to "rise above" challenging symptoms, with an implication that those women with premenstrual distress are "choosing" the negativity of their experience through their lack of self-efficacy. Although Ussher (2000) modified her initial position to acknowledge the corporeality of the body, she appears unwilling to consider treatment options that specifically target women's bodies and physiology. Ussher (2004) maintained, "The body, biology, cannot be ignored" (p. 427), but then goes on precisely to ignore it with respect to treatment. This failure to consider biological interventions makes this model problematic.

A central question in the philosophy of science is how concepts change under the impact of new ideas or new information (Posner, Strike, Hewson, & Gertzog, 1982). Their research involved determining when individuals find it reasonable to undertake a major reorganization of their current concepts or to replace one set of central concepts with another. They concluded that central concepts are likely to be rejected when they have been deemed to neglect a class of problems they appear to lack the capacity to solve.

While I embrace many of the general tenets of Ussher's MDI model, I experience a "disconnect" from my social work roots when contemplating how these three domains are labeled and conceptualized. I am unsettled by the words, symbols, and working practice inherent in the discipline of psychology. As stated by Postman and Weingartner (1971, p. 103), "A discipline is a way of knowing, and whatever is known is inseparable from its symbols (mostly words) in which the knowing is codified". Most fields have some subject matter-specific views concerning what counts as a successful explanation in the field (Posner et al., 1982). Learning may then be characterized as coming to experience disciplinary ways of knowing as they are represented by the disciplinary discourse (the complex of representations, tools, and activities of a discipline) through participation (Airey, 2006).

Most professions appear to have unique disciplinary discourse (the complexity of representations, tools, and activities of a discipline) made up of specialized spoken and written language and working practice. Northedge (2002) noted, "We encounter [words] embedded within discourse, and come to apprehend their meaning in the process of participating in the discourse which generates them" (p. 257). When one has discursive fluency in a given discipline, ways of knowing are unproblematic and become almost second nature (Airey & Linder, 2009). Each "semiotic domain" has its own specific "order of discourse" - that is a structured set of conventions associated with semiotic activity (including use of language) in a given social space (New London Group, 2000, p. 20).

The naming of the two professions of psychology and social work reflect the primary emphasis in our respective fields – the "psyche" versus "social". Mainstream psychology has traditionally focused on the individual, ignoring more "macro" and sociological factors (Adcock & Newbigging, 1990). It has been absent in addressing political issues and generally accepts the patriarchal ideology pervasive in health care (Nicolson & Ussher, 1992).

It is argued in this dissertation that the material and discursive domains fall logically within the "social" domain of social work. The functioning of discourse – discursive practice – is a social practice shaping the social world, with the concept of "social practice" considered in a dual perspective (Jorgensen & Phillips, 2002). On one

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hand, actions are concrete, individual, and context bound; but on the other hand, they are also institutionalized and socially anchored. Discursive practice reproduces or changes other dimensions of social practice just as other social dimensions shape the discursive dimension. Together, the discursive dimension and the other dimensions of social practice constitute our world. Although discursive psychology focuses on people's everyday practice, it constantly implicates larger societal structures on which people draw, or transform, in discursive practice (Jorgensen & Phillips, 2002). The politics of women's reproductive bodies involve a variety of different discourses reflecting influences in society. Politics, economics, institutional and gender bias, and culture are more readily conceptualized in social work as "social" factors, than material factors.

The profession of social work is unique in taking the stance that social and political actions are in the realm of responsibility (Buila, 2010). Social work has always differentiated itself from other professions because of its roots in social justice, equality, and fairness (Chechak, 2011). Social work is one of the few professions that attempts to influence broader social forces while attempting to capitalize on individual's capacities to adapt to that very milieu (Payne, 2006). The Canadian Association of Social Workers (CASW) reminds us that the profession of social work arose from the problems of inequalities and human relationship (Jennissen & Lundy, 2006). "Social" workers have always aspired to advocacy and social action.

For a social worker, a conceptual framework for understanding health in a social world, and PMS/PMDD knowledge in particular, *must* contain a reference to the term "social". Social work is rooted in a commitment to anti-oppressive practice and social action. From the "social", we have moved to include the interactions with biological and

psychological domains. Although social workers share a common knowledge base with the disciplines of sociology, psychology, or social psychology, *how* that knowledge is used and communicated using the discourse of social work is unique. Fundamental to the strategy of professionalization has been the development of an articulated distinctive knowledge and skills base. In the case of social work, this attribute is collectively known as "practice theory" and is a key means through which the identity of the profession known as "social work" is constructed, maintained, projected, and contested (McDonald & Jones, 2000).

The Biopsychosocial Model (BPS)

The BPS model and its application to premenstrual experiences. Social work practice has been guided by the biopsychosocial approach, one that has long informed social work theory and practice (Garland & Howard, 2009) and as Ashcroft (2011) notes, both curriculum and discourse as well. A BPS perspective is the model of choice by many for researching and addressing health related illness in social work practice (Boland-Prom & MacMullen, 2012; Dziegielewski, 2004; Zittel et al., 2002) and premenstrual disorders specifically (Craner, 2014; Hunter, 2007; Keye & Trunnell, 1986; Matsumoto, Asakura, & Hayashi, 2013; Price, Dimarzio, & Gardner, 1986; Ross & Toner, 2004; Walker, 1995,1997).

A BPS approach in women's health research is applicable to numerous health problems such as (a) chronic pelvic pain (Souza et al., 2011), (b) depression and cardiovascular diseases in women (Moller-Leimukler, 2010), (c) postpartum mood and anxiety disorders (Misri et al., 2012), (d) postmenopausal dispareunia (Kao et al., 2012), (e) pregnancy-related lumbo pelvic pain (Chang, Jensen, Yang, Lee, & Lai, 2012), and (f) PMS and PMDD (Matsumoto et al., 2013). At the Fourth World Conference on Women, held in Beijing in 1995, a definition of women's health was adopted that clearly embraced a BPS perspective (Ross & Toner, 2004).

In advancing his biopsychosocial tenets, Engel (1977) was critical of the biomedical model with respect to its duality of mind and body, excessive materialistic and reductionist orientation, and neutral position of the observer on the observed (Borrell-Carrió et al., 2004). The BPS model is based on the principles of general systems theory. In essence, general systems theory conceptualizes every being as comprised of component parts, which are themselves grouped into larger components beginning with sub-atomic particles, which are organized into atoms, which are further organized into molecules, and ultimately organized into the whole person. However, even above the level of the whole person, there are further hierarchies of which the person is a component, including family, community, society, and the biosphere (Engel, 1980).

Although biology plays a large role in predisposing women to severe PMS/PMDD, there is clear evidence for the interplay of biological and psychosocial factors in the onset and persistence of this disorder (Vigod & Steiner, 2013). Premenstrual symptoms can certainly impact a woman's psychological and social wellbeing (Lustyk & Gerrish, 2010) and conversely psychosocial and environmental factors often modify symptom expression (Matsumoto et al., 2013). It must be recognized that biological, psychological, and social factors *interact* to create and maintain a premenstrual problem (Campagne & Campagne, 2009; Shulman, 1991, Sigmon et al., 2009). An interactive BPS model provides greater explanatory power than other univariate and unidirectional theoretical perspectives (Walker, 1995).

Hunter (2007) highlighted the biopsychosocial interactions, describing how decreased serotonin levels in the premenstrual phase trigger and exacerbate emotional reactions for a woman, resulting in the self-doubt and increased anxiety that stem from social and cultural values of motherly perfection. Relationships can be both a source of support and stress, affecting the degree to which women can manage their PMS. Similarly, positive coping strategies can assist in giving women a greater sense of control while coping strategies that involve alcohol, binge eating, avoidance, or inappropriate aggression can negatively impact premenstrual symptoms and ultimately contribute to the destruction of self and relationships.

The biopsychosocial model and its application to assessments of women's parenting. Epstein (2014) credits Engel with insisting that the clinician-patient [client] relationship is the key determinant of an individual's health and response to treatment. Engel perceived a reciprocal relationship in which the client is profoundly influenced by the process of being studied and cared for, and in turn, influences the clinician. He broadened the "clinical gaze" to include (inter) subjective, psychological, and social data. Engel emphasized that the information of a client is not merely subjective, it is intersubjective and a product of the level of communication and trust in the clinical relationship (Epstein, 2014). Engel (1996, p. 429) noted,

The medium is dialogue, which at various levels includes communing (sharing experiences) as well as communicating (exchanging information). Hence, observation (outer viewing), introspection (inner viewing), and dialogue (interviewing) constitute a basic methodological triad.

A social worker using a biopsychosocial approach to assessment values a woman's subjective experience of PMS/PMDD, including her description of her premenstrual symptoms, her understanding of factors affecting PMS/PMDD, and her assessment of the impact of premenstrual experiences on the various domains in her life. The social worker appreciates the importance of the clinical relationship, and seeks to validate the mother's concerns and experiences. The social worker would likely encourage her to chart her symptoms for two months in order to understand any connections between symptoms, parenting stressors, and changes to the parent-child relationship.

A biopsychosocial approach to parenting acknowledges the changing developmental and family propensities through time (Byrne & Jones, 1998). A biopsychosocial conceptualization of parenting acknowledges that family and child factors [psychological] are embedded in a dynamic biological and social context that is central to understanding developmental trajectories of child adjustment (Calkins et al., 2013). At the centre of the model is the child and responsible caregivers, surrounded by the immediate family and school influences, formal helping systems, and the larger community (Byrne & Jones, 1998). Parental psychopathology and impaired parent–child relationships are seen to be among the primary risk factors for compromised child emotional and behavioural health (Cummings, Davies, & Campbell, 2000).

Treatment strategies would be multifaceted including changes to diet, exercise, relaxation, and other aspects of lifestyle; empowering the mother to make her own needs known in the premenstruum; referring her to a physician to assess the appropriateness of medication; and inviting her to consider cognitive-behavioural therapy (CBT) to manage difficult emotional symptoms and behaviour. A social worker would hold the mother accountable for her behaviour, and parenting strategies would be recommended to manage her behavior and gain greater control during times of PMS/PMDD.

Criticisms of the BPS model.

Failure to address the role of macro systemic influences in women's health.

Feminists have been critical of the biopsychosocial framework for its neglect of the highly gendered nature of medicine and its contribution to social inequalities (Plechner, 2000). Burt Ruzek et al. (1997) noted that the BPS model places women at the periphery of analysis, not at the centre as advocated by feminists. It also fails to consider how race, gender, as well as other social roles and rules, affect women's health (Ross & Toner, 2004). Women's health involves their emotional, social, and physical wellbeing and is determined by the social, political, and economic context of their lives, as well as by physiology (British Columbia Women's Hospital and Health Centre, 2010). The model is considered by some to be apolitical, naively optimistic, and ignores persistent conflicts between institutional imperatives and human needs (Gould, 1987).

Many attempts in conventional practice to use a BPS model neglect a broader conceptualization of what "social" actually represents (Barkley, 2009). However, I argue that it is not the model itself that precludes attention to significant macro variables such as gender, race, politics, power, institutional bias, and economics, but rather the failure of past BPS advocates to do so. All of these factors can be comprehensively addressed within the social domain of the BPS model, as will be further explored within this chapter.

Suls and Rothman (2004) noted that a BPS model can accommodate theories

about the impact of gender role socialization, sex-based discrimination [and other social determinants such as income, housing, and employment], and can be practically applied to the prevention and treatment of health conditions in women. In essence, it is possible to integrate insights from feminist models into a BPS model when conceptualizing maternal health and women's health. The BPS model is not static but rather, as noted by Suls and Rothman, a "work in progress" (2004, p. 121).

Unequal emphasis/treatment of the three domains in women's health. Although a BPS approach seems well suited to understand all aspects of premenstrual symptoms, the reality is more complex (Parlee, 1994). The BPS model conjures up different connotations for different disciplines, given the unique professional histories, identities, and skills of each. Disciplines may emphasize different domains within the model. For example, researchers trained in the medical model tend to concentrate on organic approaches to premenstrual symptomatology whereas non-medical researchers tend to pay more attention to contextual contributions to symptomatology such as a woman's life and social context (Parlee, 1994). Social scientists do not have the training to conduct medical tests, and medical researchers still tend to ignore women's sociocultural (contextual) issues.

Physicians, historically, have generally been less attentive to the emotional and social concerns of a patient, and social workers have been less inclined to explore a client's physical distress (Taylor, 2008). However, disciplinary "divides" are diminishing and theories are emerging that acknowledge a multifactorial BPS perspective of premenstrual experiences (Hunter, 2007). Although the profession of social work credits itself for using a BPS perspective in theory and practice, the "bio" is frequently

absent from the profession's knowing and doing (Saleebey, 1992). We need to address "the body's lumbering presence in the world" for if social workers are to be as loyal to the ecological view as they claim to be, they must fashion a knowledge base out of the reality that biology and society exist in continuing interaction (Cowan, 1986, p. 231). The body is present in social work theory but hard to find. It is invisible, taken for granted, unproblematized, and untheorized "for itself" (Cameron & McDermott, 2007, p. 5). Social workers have tended to filter out the biological aspects, leaving social workers more firmly committed to a psychosocial understanding – and leading to growing concern about the absence of the bio and the need to reclaim it (Cameron & McDermott, 2007).

While lip service is paid to an inclusive model recognizing the biological, psychological, and social domains, the literature is unclear whether that goal is achieved in practice by the traditional BPS model. In their application in traditional medicine, BPS models have not typically integrated variables specifically relevant to women's health or gender (Ross & Toner, 2004). Multifactorial models such as the BPS model have lead away from narrow, unidimensional thinking on PMS, but they still only offer a partial answer (Ussher, 1996). The BPS model applied to PMS/PMDD has been accused of maintaining a tradition of positivist science by viewing women as relatively passive organisms whereby biological, psychological, and social things happen *to* them (Walker, 1995). The equal emphasis and utilization of all three domains – biological, psychological, and social - by all practitioners is critical, regardless of their professional origin or training (Barkley, 1999).

Failure to meet the tests of a model. McLaren (1998) insists that the BPS model

fails to meet expectations when viewed as a model, despite Engel's insistence that it is one. Models range from prescriptive [stating what is expected in certain circumstances and implementing research into practice (Kettner, 1975)] to specific descriptions of a theoretical perspective (Kitson et al., 2008). Critics argue many models operate at the level of theory and are subject to quasi-scientific and pseudo philosophical viewpoints with little influence on research practice (Ghaemi, 2009; Pattanayak & Pattanayak, 2009). Models have a tendency to mislead us – exactly because they are models and not reality in the full sense of the word (Botha, 1989).

When conceptualized as a BPS *model*, it fails to meet the stringent criteria requiring a basis in well-formulated theory (McDonald & Jones, 2000). However, it is well recognized that the use of the term "biopsychosocial" does not necessarily indicate an adoption of the BPS *model*, but at a minimum, recognizes the value of the perspective (Suls & Rothman, 2004) and its relevance for health care (Fava & Offidani, 2010; Fava, Ruini, Tomba, & Wise, 2012; Wise, 2010).

Moving forward with an *enhanced* biopsychosocial (BPS-E) framework

The BPS-*E* framework proposed in this dissertation moves from a primarily explanatory model of "knowing", as stated by Weiss and Somma (2007), to include a greater emphasis on subjectivity and interpretation and more understanding of an individual's "being". While Engel encouraged such an emphasis in his writings, BPS researchers and practitioners have not necessarily complied.

The BPS-*E* includes engaging with both the first-person experience of the world as well as concrete phenomena that are open to empirical investigation. Understanding is a basic form of human existence. It is not about the way we know the world, but rather the way we are (Laverty, 2003). This involves moving beyond what can be perceived and experienced (Ibeka, 2013) by extending the position of individuals to that which can be including their position in culture, history, and the individual's life history (Thomas, Bracken, & Leudar, 2004).

While working under the umbrella philosophy of a biopsychosocial orientation, I propose an enhanced biopsychosocial (BPS-*E*) framework that addresses these three aforementioned shortcomings: (a) the accommodation of contemporary postmodern concepts of institutional power, oppression, gender bias, culture, and the political; (b) the equal treatment of biological, psychological, and social domains; and (c) the shift to a BPS-*E framework* rather than a model.

The BPS model, operationalized within the discipline of social work, has the capacity to include these factors within the biological, psychological, and social domains.³ As noted by Ross and Toner (2004), a BPS approach can accommodate theories about the impact of gender role socialization and sex-based discrimination as they are practically applied to the prevention and treatment of health conditions in women. The most useful elements of the biomedical and feminist models can be combined successfully into a single, more complete model of women's mental health (Ross & Toner, 2004). However, despite the *capacity* of the traditional BPS model to accommodate such macro variables, it is the intent in this dissertation to step away from the distractions and criticisms by delineating a more comprehensive, "enhanced" framework (BPS-*E*).

³ One of the challenges of the BPS approach is that there are multiple interpretations by various disciplines about what is included in the bio, psych, and social domains (Guillemin & Barnard, 2015).

By reconceptualizing the BPS-*E* as a framework, the restrictions associated with a model are relaxed. Conceptual frameworks provide maps for studying a phenomenon and are the most general forms of theoretical analysis (Schlager, 2007, 1999). Unlike models, frameworks do not have to have a blueprint for research or a plan for action – refuting the criticisms of the BPS model leveled by Pattanayak and Pattanayak (2009) and Ghaemi (2009). Frameworks direct attention to certain features by identifying important variables and relationships among them. However, they are *not* intended by themselves to explain or predict behavior or outcomes (Heikkila et al., 2012; Kitson et al., 2008; Schlager, 2007, 1999).

Within the BPS-*E* framework, theories of action do not need to be explicit, refuting the claims from Lothane (2009) that the biopsychosocial approach is a disguise for undisciplined eclecticism permitting the practitioner to do "anything", leading to anarchy. Practice is always contextual and the occasions and conditions for use of a framework should arise directly out of the contexts of each community (Brown et al., 1989), framed by the way that they [social worker and mother] and members of that community see the world.

In practice, individual clinicians structure their biopsychosocial formulations differently according to their thinking and the various theories from which they draw (MacDonald & Mikes-Liu, 2009). This conceptualization offers the freedom to *individualize* an understanding of PMS because biological, psychological, and social factors all interact uniquely in premenstrual symptomology (Jones et al., 2000; Kleinstäuber, Witthöft, & Hiller, 2012) and there is flexibility to pursue many modalities of treatment (Benning, 2015). A BPS-*E* approach to PMDD and PMS suggests that cyclical hormonal changes are acknowledged and interpreted in light of the expectations and the attitudes acquired in the process of socialization (Anson, 1999). The health of women involves their emotional, social, cultural, spiritual, and physical wellbeing and is influenced by social, political, and economic factors, as well as by a woman's biology (Cohen, 1998). The success of helping women rests on the development of a shared understanding of PMS and a holistic BPS approach (Hunter, 2007). There are increasingly consistent research findings validating clinically relevant biopsychosocial factors contributing to premenstrual symptomatic expressions, etiology, and effective treatment options (Matsumoto et al., 2013).

The biological domain. Insufficient attention has been paid to biological factors within the profession of social work, viewing them instead as within the domain of medicine (Cohen, 1988; Johnson, 1980; Saleebey, 1985). This view has resulted in social work's separation of physical from mental functions, despite contemporary knowledge of interactions between the body and the mind (Kandel, 1979). Social workers need knowledge about biological factors, which are defined as the physical structures and processes of the human body (Johnson et al., 1990). Knowledge of the body, with its neurochemical and neurophysiological correlates, is critical for social workers (Saleebey, 1985), with the proviso that it is not applied reductionalistically (Lewontin, Rose, & Kamin, 1984).

As noted by Benton (1991), biological insights can be incorporated into the work on PMS/PMDD without biological reductionism. In the BPS-*E* framework, relevant biological variables include age, sex, birth history, health problems, genetics, psychiatric history, medications, health care, relevant medical histories of other family members, and the woman's subjective experience of her premenstrual symptoms. Bodies are not unified, impermeable, stable objects, but changing, mysterious entities always being constituted and reconstituted in their relationships to others and to the environment in which they live (Rivera, 2008). As Merleau-Ponty wrote, the body "understands" and "inhabits" the world (1962, p. 139).

Biological research on PMS and PMDD has advanced steadily since the 1980s (Knappen & Weisz, 2008), with continued examination of what Benton (1991) referred to as the organic elements of bodily life. As humorously noted by Rose (2012), "Nowhere was the 'discursive turn' more problematic than when debates over the body seemed to deny any powers to the bloody thing itself". The option must exist to consider biology as "corporeality". We must address, "the reality of our fleshy nature and the possibilities and constraints that flow from it" (Rose, 2012, Abstract, paragraph 3) without it immediately signifying an empirical positivism. Bordo (1998) stated, "We need to get down and dirty with the body on the levels of its practices" (p. 91). Similarly, Ussher's tenets about the role of the body shifted in 2000, when she acknowledged that corporeality needed to be part of the research agenda on issues including sexuality, ethnicity, gender, health, and illness. Scholars are increasingly seeking approaches to corporeality that allow them to move beyond the focus on discourse to elements of corporeality that are not reducible to signification (Rivera, 2014).

The BPS-*E* framework accepts the "near consensus" of research, as previously stated in Chapter Two, establishing a physiological etiology of PMS and PMDD. To summarize this complex and evolving research, a large number of systems have been

found to be abnormal in women with PMS, pointing to a disrupted homeostasis in symptomatic women (Halbreich & Monacelli, 2004). PMS symptoms appear to be triggered in the luteal phase by ovulation-related changes in estrogen and progesterone hormones. These changes influence the central nervous systems and multiple other peripheral systems and processes, resulting in greater dysregulation and more severe symptoms.

The process of assisting mothers to make sense of their symptoms may include empirical investigation, but should also involve them in considering the *meaning* of the symptoms in their own lives. The symptoms are a perfectly valid and integral part of their experience of the world, with the clinical implication that interpreting the personal meaning of them may be helpful (Butler, Evans, Greaves, & Simpson, 2004). How meaning is lived by the woman being-in-the-world is therefore in every way connected to the things that surround her and to the "thing" [PMS/PMDD] that she lives through. By focusing on the meaning of an illness or disorder, greater possibilities exist for the conceptualization of health (Svenaeus, 2000).

Pain and distress are "real" and experienced individually, and yet vulnerability is not individual; its reality and effects partly structure the societies in which we live (Rivera, 2014). Postmodern feminism advocates that women must be acknowledged in their differences [including their experiences of their body] and a universal generalization to "all women" should be avoided (Damant et al., 2008). Each woman has a variable presentation of premenstrual symptoms and her unique narrative is essential for understanding and providing effective assistance.

Although corporeal vulnerability is intrinsic to being human, it is unequally

distributed not only across gender differences but also across ethnic/racial differences and geopolitical regions (Rivera, 2014). The BPS-*E* framework embraces the notion of interaction, with the biological domain affecting, and being affected by, the psychological and social domains. For example, diagnoses and the meanings associated with women's bodies have served to limit the social and political recognition of women as subjects (Budgeon, 2015).

Research has shown that women are often given short shrift in the physician's office and are often on the receiving end of paternalism; their symptoms and suffering being dismissed as minor or imaginary (Health & Medicine: Feminist perspectives, n.d). A hierarchy of diseases is said to exist, whereby "women's diseases" are viewed as less important because of the diffuse symptoms in various parts of the body seemingly without a known cause, compared to "men's diseases" that have clear-cut symptoms and are diseases of vital organs (Wong, n.d). There has been a tendency to view men's pain as "real" but women's pain as imaginary, a symptom of hypochondriasis, or some other mental disorder.

Feminists decry paternalism toward women in all its forms, firmly believing that women and men are intellectually equal and that they should be given comparable treatment and respect. It is important to note that not all physicians treat women paternalistically, and that sexism is not limited to male physicians. Female physicians can also be sexist in their treatment of female patients (Health & Medicine: Feminist perspectives, n.d.).

Endicott and colleagues (1999) emphasized that PMS/PMDD are real biological conditions for which women seek treatment, and for which effective treatment is

available. The goals of treatment in patients with PMDD are (a) symptom reduction, and (b) improvement in social and occupational functioning, leading to an enhanced quality of life (Bhatia & Bhatia, 2002). However, the decision-making process for health issues can be complex and confusing when the information available is either conflicting, selective or censored, unclear, lacking adequate evidence, or deeply rooted in personal beliefs and values (Brown, Carroll, Boon, & Marmoreo, 2002). Women have expressed their frustration and disappointment with the medical community's failure to provide balanced perspectives.

All available treatment options must be presented to women for their consideration, not merely alternatives congruent with the values of practitioners or the organizations they represent. Gathering and evaluating information assists women in weighing all the possible options to be considered in the decision-making process (Brown et al., 2002). As women proceed through the treatment decision-making process, health care professionals must be cognizant of how and what information they are sharing, and also of the specific needs and concerns of the women with whom they are sharing, and ultimately empowering (Brown et al., 2002). With respect to PMS and PMDD, the BPS-*E* framework supports the availability of information about all treatment modalities ranging from least intrusive life style changes, stress reduction, and cognitive therapy to pharmaceutical SSRI interventions. Inherent in the BPS-*E* framework is the assumption that women, after considering all available options, will select the treatment that is most appropriate for their circumstances.

The psychological domain. The *perception* of symptoms and the ability to *cope* with them is unique to each individual and shaped by past experiences and the interplay

of the central nervous system (Halbreich & Monacelli, 2004). The psychological domain in the BPS-*E* assessment includes factors related to thoughts, emotions, and behaviours including coping mechanisms and strategies, the unconscious, developmental life stages, thinking, problem solving, memory, perception, personality/temperament, psychiatric symptoms, cognition, and personal trauma.

Women's subjective evaluation and negotiation of premenstrual psychological and bodily changes must be acknowledged. The experience of physical symptoms is directly related to cognitive process (Gerrish, 2011). For women experiencing negative symptoms surrounding their menstrual cycle, both physiological and subjective appraisal processes play a role in the expression of their symptomatology (Haywood et al., 2007; Rapkin, 2003; Schmidt et al., 1998). Experiences [premenstrual] are subject to a process of appraisal that determines their overall impact within the context of an individual's awareness, again providing a specific process through which symptoms can be understood and ultimately regulated (Oken, 2007). A cognitive model of PMS/PMDD indicates some women may be particularly sensitive to changes during the menstrual cycle, and see them as beyond their control (Reading, 1992).

In research conducted in the UK and Australia, three interrelated processes of appraisal and coping were noted. These were (a) awareness of premenstrual changes in emotion, ability to cope, or reactivity to others; (b) expectations and perception of these changes; and (c) mode of response or coping (Ussher, 2002b). Warren and Baker (1992) noted that while stressors are universal, individual responses to them are unique (Warren & Baker, 1992). For some women, such an appraisal of premenstrual experiences results in feelings of shame. Shame is defined as chronic and persistent negative evaluation of self (Feinauer, Hilton, & Callahan, 2003). Herman (1997) stated, "Shame is a response to helplessness, the violation of bodily integrity, and the indignity suffered in the eyes of another person" (p. 53).

Many women with PMS/PMDD experience shame premenstrually (Ussher, 2004). Shame can be internalized, resulting in negative views and feelings about personal attributes or behaviour (Gilbert, 2000; Kaufman, 1989). Negative evaluations can include feeling tainted, unlovable, powerless, of no value, and/or defective (Frost, 2007). Shame requires an audience before whom deficiencies are revealed - if not an actual audience, then an internalized one, with the capacity to judge (Bartky, 1990). Shame often results in women hiding or concealing their premenstrual challenges. Some of the women in a study by Wisdom, Bruce, Saedi, Weis, and Green (2008) described themselves in dichotomous terms that separated their "real, authentic selves" from their "alternative selves" during bad episodes [such as PMS]. These alternate selves were seen as part of who they were, but were distinguished as parts that they did not like or were ashamed to show the world (Wisdom et al., 2008). For some women, cognitive and behavioural skills mediate the relationship between premenstrual stress and their environment, facilitating effective tension management (Billings & Moos, 1981; Matheny, 1983).

As noted in Chapter Two, there has been debate in the literature regarding the impact that a medical or DSM "diagnosis" has on women's identities. The BPS-*E* framework recognizes that women have individual responses to the meaning of a

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"diagnosis" and that all responses must be valued and respected. The validity of women's life experiences and women's own beliefs and experiences of health are critical (Cohen, 1998).

While some women may feel demeaned, objectified, and fearful that a PMS/PMDD diagnosis, associated with diminished competence, may be used to discriminate against them, other women are reassured that a diagnosis normalizes and legitimizes their experiences ("What I was feeling was not unusual"; "I was not crazy"), as well as offer hope for relief ("It is fixable"). Hartlage and colleagues (2014) maintain that without the psychiatric-disorder classification, women who are truly suffering may be discounted. Hartlage et al. further insist that women do not "choose" PMS or PMDD labels. They are *not* merely resisting or escaping distressing situations of gender oppression, but have very real conditions.

A diagnosis can transform individual distress to a shared experience, one understood as both credible and treatable (LaFrance & MacKenzie-Mohr, 2013). The assignment of a legitimate acronym can provide for individual women, solace in the validation of their condition (Bufanio, 2006). Endicott et al. (1999) maintained that many women whose lives are adversely affected by their premenstrual symptoms are relieved to find someone who knows what they are experiencing and takes them seriously. A diagnosis offers an exemption from blame, since distress and dysfunction are understood as an expression of illness (disruptions in the body-machine, not of personal failing). It also affords women the opportunity to defend their experiences and identities (LaFrance & MacKenzie-Mohr, 2013). The social domain. The impact of premenstrual symptoms on the social domain of women's lives is reported to be most problematic, particularly in the area of women's family relationships with partners and children. PMS and PMDD negatively affect the parenting of some mothers (Mohan & Grewal, 1990; Barry & Tutty, 2011), and conversely the physical symptoms and coping skills of a mother can be negatively impacted by PMS and the social aspects of stress, stigma, and stereotypes. This interactivity between all domains is a foundational feature of the BPS-*E* framework.

In the BPS-*E* framework the social domain is expanded beyond the relationships one has with others to include, as advocated by Guillemin and Barnard (2015), the role of professions, health care institutions, structures, policies, and social power relations in women's health. The social domain does not "accept" the dominant order and social discourse, but can afford the opportunity to examine the macro issues of gender, institutionalized power, subjectivity, difference, and resource disparity in relation to women's health. Saleebey (2001) noted that over the years, social work has been alert to subtle and complex interactions between persons and their environments. The attention paid to the environment and the interplay between elements of the environment and the individuals, families, and groups within it are thought to distinguish social work from other helping professions (Saleebey, 2001).

Gender and institutionalized power. Women's health has been an issue of fundamental importance to Canadians, largely due to the efforts of feminists in the women's health movements who educated women about their bodies and challenged conventional biomedical models (Lewin & Oleson, 1985; Todd, 1989). "Women account for 52 per cent of the Canadian population, and represent all age groups and sectors. For

this reason, women cannot be viewed as merely another population health group for, indeed, they cut across and encompass all population health groups" (Grant & Ballem, 2000, p. 3). "It is imperative that women's health research investigates how sex interacts with gender to create health conditions, situations, and problems that are unique, more prevalent, more serious, or have different risk factors or interventions for women" (Grant & Ballem, 2000, p. 3).

The "Otherness" of women has been expressed in medicine through sex or gender-neutral medical research that makes women invisible (Johnson, Fitzgerald, Salganicoff, Wood, & Goldstein, 2014). Setting health standards by the norms and values of men's hormones and physiology puts women at risk for missed opportunities for prevention, incorrect diagnoses, misinformed treatments, sickness, and even death (Davidson, Kitzinger, & Hunt, 2006; Olson, 1994; Spitzer, 2005; Johnson et al., 2014). As noted by Weisman (1997), "Gender is a fundamental social variable that affects individuals' social status, access to resources, experiences of health and illness, and interactions with the health care delivery system" (p. 182).

Women's health, however, is more than women's health research. It is policy that enhances the health of women by addressing social determinants such as income, education, structural inequality and power, race, ethnicity, culture, sexual orientation, violence/trauma, and environment (Grant & Ballem, 2000; Morris, 1999). As noted by Brodie and Bakker (2007), women must not be silent while women's voices in the policy process are being de-legitimized, gender-based agencies are being dismantled, and gender subjects are disappearing. Although Auerbach and Figert (1995) were cognizant that policy work is a difficult and messy enterprise (p.126), they cautioned academics and practitioners against complacency. These are necessary components of social policy thinking and reform (Brodie & Bakker, 2007) and as such, efforts must be made to hold federal governments accountable and to advocate for a recommitment to women's health and research.

Grant and Ballem (2000) noted that the Canadian government made a commitment to gender equity and to women's health through a series of documents that include: The Canadian Charter of Rights and Freedoms (Government of Canada, 1982), Setting the Stage for the Next Century: The Federal Plan for Gender Equality (Status of Women Canada, 1995), and Canada Health Council: Building on the Legacy, National Forum on Health (Health Canada, 1997). However, in 2013, Canadian women's health research unfortunately underwent significant funding cuts with the ending of Health Canada's Women's Health Contribution Program (WHCP). This action resulted in the closures of the Canadian Women's Health Network (CWHN) and four Centres of Excellence for Women's Health and other partner organizations in 2014 (Ford, 2014). A lack of available funding for women's health issues reflects a research agenda that does not value the needs and interests of women and further contributes to their invisibility. Government spending priorities represent a complex mixture of precedent, need, political pressure and influence, social values and political will (Brodie & Bakker, 2007). Brodie and Bakker emphasized that Canada does not even have a systematic process within government to evaluate budgets from a gender-sensitive perspective.

Accessibility to accurate premenstrual research and information. Access to information about the multiplicity of dimensions of women's health is essential in mobilizing political support for a broadened vision of contributions to all women's health

and wellbeing (Burt Ruzek et al., 1997). However, many women's health websites still maintain online publications in which PMS/PMDD information is either (a) non-existent (eg., Canadian Foundation for Women's Health (CFWH)⁴ (n.d.); National Women's Health Network (n.d.); Healthy Women, Informed; Empowered (n.d); (b) out of date and misinformed (eg., the value of progesterone, Walker, 1983); or (c) featuring articles that advocate only lifestyle and cognitive changes, with an apparent bias by "omission" of any articles citing the effectiveness of pharmaceuticals, particularly SSRIs (eg., Canadian Women's Health Network (CWHN), n.d). How is it that websites advocating for the health empowerment of women either do not address PMS/PMDD at all or do not present all treatment alternatives for women they presume to be capable and competent of making informed decisions? One can only speculate that the controversies and negative discourse that still surrounds PMS/PMDD are too "political" and best avoided, particularly by agencies depending on public funding.

Premenstrual discourse and narratives. LaFrance and MacKenzie-Mohr (2013) suggest that how we come to "know" cannot be divorced from the discourses arising from social, cultural, and political elements operating within any given time and place of knowledge construction. The BPS-*E* social domain attends to discursive practices through which language and texts are created, received, and interpreted. Svenaeus (2002) stated, "In language the projection of human understanding reaches its uttermost level of

⁴ "When you support CFWH, you are helping women through research into areas such as: in utero fetal health; preterm labour; safer pregnancies; post-partum depression; gestational diabetes; endometriosis; infertility; hysterectomy; safe delivery and newborn health better use of drugs during pregnancy; treatment of breast, ovarian, cervical and uterine cancers; menopause; vulvodynia and other vulvar diseases; sexuality; contraception; care and health of women throughout their lifespan" (CFWH, n.d.).

transparency. Through language we can think and talk about the world and make its meaningfulness lucid to ourselves and others" (p.126).

The BPS-*E* framework accommodates discourse and narratives as important forms of social practice, contributing to the constitution of the social world including social identities and social relations. It is partly through discursive practices in everyday life (processes of text production and consumption) that social and cultural reproduction and change take place (Jorgensen & Phillips, 2002). Discourse is a form of social practice that constitutes the social world and is constituted by other social practices (Jorgensen & Phillips, 2002). Underlying the term 'discourse' is the idea that language is structured according to the different patterns people's utterances when they take part in different domains of social life. Familiar examples include "medical discourse" and "political discourse" (Jorgensen & Phillips, 2002). By simultaneously drawing on discourse analysis, one engages in a disciplinary analysis of the relations between the discursive practice and the social practice (Jorgensen & Phillips, 2002).

Four themes of discourse of premenstrual distress emerged in Swann and Ussher's (1995) research.

- "Framing women: the biology of the female body discourse". Many of the women believed in the biological basis of the problems they experienced. A discourse of female reproductive biology permeated these accounts.
- 2. *"Wicked women; PMS, femininity and bad behaviour discourse"*. This theme focussed on how PMS is used to separate and signify "bad" or inappropriate conduct. Aspects of behaviour and experience incongruent with archetypal notions of femininity were attributed to the menstrual cycle. This is consistent

with a century old discourse of female pathology related to the womb and menstruation (Ussher, 1989).

- 3. *"The other woman: a dualist discourse"*. Use of the discursive category of PMS and the discourse of female biology to frame experience allows women to separate this experience from their "normal" selves. This, in turn, allows them to retain their feminine identity, and possibly to cope for the rest of the menstrual cycle.
- 4. "Embodied meaning: contextualizing self-diagnosis discourse". Discourses of femininity and reproductive biology frame women's experiences, often trivializing anger and rendering the experiences meaningless (Parlee, 1991). Such a strategy locates the blame for women's problems firmly within themselves and their bodies [PMS/PMDD] rather than onto anything external such as a violent partner, poverty, and abusive father things over which it is harder for them to have any control.

"Otherness" is often expressed through stereotyping and disparaging sex and gender differences. Stereotypes reflect the knowledge, beliefs, and expectations associated with a particular group [premenstrual women] (Hamilton & Sherman, 1994; Mackie & Smith, 1998). Women with PMS are stereotypically portrayed in popular culture as frenzied, raging beasts; menstrual monsters prone to rapid mood swings and crying spells; bloated and swollen from water retention; craving chocolate; out of control, and likely at any moment to turn violent (Chrisler, Rose, Dutch, Sklarsky, & Grant, 2006). Fausto-Sterling (1992) highlighted a supply-and-demand concept of PMS, maintaining it acts as a valid currency in fortifying sex difference by providing a "syndrome" in which men and women can acknowledge difference, and subsequently tighten or loosen the "safety valve" on gender maintenance and power dynamics. This supplies PMS with a high cultural currency value and provides an explanation for sex differences.

Premenstrual distress has been sensationalized and ridiculed in all forms of media. Premenstrual syndrome has a connotation in the popular culture of driving women crazy once per month (Figert, 2005). Women are portrayed as subject to their raging hormones in jokes, greeting cards, television shows, advertisements for premenstrual medication (Chrisler & Levy, 1990; Pugliesi, 1992), and most recently in social media.

Stereotypes such as these are very influential; they represent what most people think and, even when the beliefs are not based in reality, they can be powerful forces in judgments of the self and others (Marván, Islas, Vela, Chrisler, & Warren, 2008). Stereotypes perpetuate myths of women as incapable and shame those who legitimately suffer. Myths and stereotypes (and the countervailing attempts to neutralize and contradict these stereotypes) have further compromised dispassionate observation and replaced inquiry with verbal and written attacks: either *every* woman has PMS, or *no* woman has PMS (Rubinow & Schmidt, 1995).

Does the discursive practice reproduce the order of discourse and thus contribute to the maintenance of the status quo in the social practice or has the order of discourse been transformed, thereby contributing to social change? If one starts with an *order* of discourse rather than a *single* discourse, the interplay between the discourses becomes an important focal point in the analysis (Jorgensen & Phillips, 2002). It is in this *interplay* that the social consequences become most apparent: when two or more discourses in the same area present different understandings of the world, the researcher can begin to ask about the consequences of accepting one understanding over the other. Discursive change – and thus social and cultural change – takes place as elements of existing discourses are considered to form new interdiscursive mixes (Jorgensen & Phillips, 2002). Interdiscursivity, as well as the constantly changing interdiscursive relations in texts, is central to an understanding of the process of social change (Jianguo, 2011).

How is the larger oppressive and destructive PMS and PMDD discourse destabilized while still acknowledging the value of medical diagnoses for some women? Oppression is a comprehensive experience touching all aspects of a person's life and affecting both public and private spheres (Balbo, 1987). Oppression targets people's sense of self – who they are (Dominelli, 2002).

The terms of PMS and PMDD have opened up a space for discourse that acknowledges the distress of women desperate for answers about their own bodies (Bufanio, 2006). By conceptualizing premenstrual distress within the BPS-*E* framework, social workers and other professionals have a responsibility to challenge the negative *collective* discourse that ridicules women and their competence while facilitating a serious discourse about the legitimation of *personal and subjective* distress, including the impact of PMS and PMDD on relationships.

Otherness, difference, and culture. Like the differences in opportunity between males and females, inequalities in the "opportunity structure" are clearly evident between males and females and between groups of women (Benoit & Shumka, 2009, p. 12). Health determinants such as poverty, stigma, and/or marginalization can, in combination,

give rise to specific health disadvantages for certain groups of people (Benoit et al., 2009).

Increasingly, researchers are exploring how certain practices in the dominant health care system marginalize particular ethnocultural groups (Johnson, Bottoroff, & Browne, 2004). Stereotypical descriptions of the health care practices of different racial and ethnocultural groups illustrate the tendency to essentialize or stereotype behaviours, values, and beliefs in ways that ignore individuality and diversity contexts (Anderson & Reimer Kirkham, 1998). Culturalism, racism, and "Othering" are overlapping processes that reproduce and reinforce positions of domination and subordination, particularly when health care is provided by members of the dominant group to members of a typically subordinated or marginalized group (Razack, 1998).

Those who have had negative experiences in the health care system are less likely to re-enter the health system and seek appropriate health care (Bowes, 1993). Rather than looking at the barriers inherent in the system that impact women's experiences (such as a lack of female health care providers, limited clinic hours, rigid appointment or treatment schedules, lack of translation services, and limited time spent with patients), Johnson (2004) found women of different cultures were negatively perceived to be less responsible, less motivated, more resistant, and less competent in their communication skills.

Culture is at the heart of those human activities that concern how we know, understand, and make sense of things (Bracken & Thomas, 2005). Culture includes language, history, religion, social and family structures, and imposes different meanings on knowledge about self and the world. "People already in tenuous positions on the social and economic ladder are the very ones most likely to be further disadvantaged by diagnosis" (Duffy et al., 2002, p. 372). Aboriginal, Inuit, and Métis are some of Canada's most vulnerable populations with respect to health (Benoit & Shumka, 2009). Further, Aboriginal women in Canada are at a greater disadvantage compared to other women, which research has found to be partly associated with systematic discrimination against Aboriginal peoples in Canadian society (Browne, 2007; Edmonds, 2001; Morris, 1999). Low socioeconomic status and lower levels of education place Aboriginal women at greater risk in the health system. Aboriginal women, and women who live in rural areas, often experience additional health inequities due to geographic location, and a lack of economic, social, and health resources (Benoit et al., 2009).

Although social and political inequities are routinely at the root of people's distress, these are often eclipsed when suffering and challenge are understood as a psychiatric (LaFrance & McKenzie-Mohr, 2013) or concealable illness. LaFrance and McKenzie-Mohr suggest that clinicians and researchers should augment diagnoses with descriptors such as "impacted by the consequences or poverty" or "the damage done by discrimination/demeaning treatment" as a way of recognizing larger systemic determinants as well (p. 135).

"Unlike a bone fracture, 'mental illness' cannot be directly observed and without tangible evidence of pathology, sufferers and their suffering are often regarded with skepticism. Psychiatric diagnoses do not correspond to clearly identifiable, real objects" (LaFrance & McKenzie-Mohr, 2013, p. 130). When an already marginalized woman is further diagnosed with a condition that is perceived to lack legitimacy, she may experience a compounded "double whammy" of suspicion because of her race/culture and perceived somatic illness. Pilver, Desai, Kasl, and Levy (2011) found that perceived racial discrimination was significantly associated with the lifetime prevalence of PMDD, suggesting that being in a minority can contribute to women's experiences of PMDD.

Certain illnesses [PMS/PMDD] have associated meanings beyond the biomedical, with the illness becoming a metaphor for characteristics attributed to the person (Sontag, 1978). This is particularly true for contested illnesses where sufferers claim to have a specific disease not recognized or understood by physicians (Dumit, 2006). These illnesses highlight the tension between lay and medical knowledge with respect to the cultural legitimization of [PMS/PMDD] symptoms and suffering. Physicians, the public, and sometimes even sufferers themselves, question the authenticity of the symptoms and the mental stability of the sufferer.

Contested illness sufferers are burdened by the cultural meaning of a medically invisible condition in an era of high-tech biomedicine (Barker, 2005; Brown, 2007; Kroll-Smith & Floyd 1997). In reality, this becomes one of the most important characteristics of these illnesses, affecting access to diagnoses and health care, the response of others to one's problem, and the very identity of the sufferer (Conrad & Barker, 2010). Tension arises primarily from women's needs to manage information about any failing that might discredit them (Waterhouse & McGhee, 2009).

The differences in the legitimacy afforded various forms of distress/illness [PMS, PMDD] can be an issue for those who suffer, and also for professionals who work with them. Even when 'mental illness' is accepted as a biomedical condition, stigma persists (LaFrance & McKenzie-Mohr, 2013). "De-legitimization intensifies suffering. Indeed, it re-creates suffering in a wholly other mode, illegitimate suffering" (Kleinman, 1995, p.

181-182). As stated by LaFrance and Mohr (2013), "We must work diligently to legitimize people's distress and challenges by keeping visible the clear links between the social conditions of people's lives and suffering" (p. 136).

The BPS-*E* framework and the assessment of women's parenting. The relationship with a woman having PMS/PMDD should be a process of active, reflexive negotiation with symptomatology; current life events and lifestyle; and cultural, medical, or psychological ideas about premenstrual experiences (Ussher, 2000). The idea of starting "broad" in the assessment with the nature of the experience and related problems through information gathering is recommended (Hunter et al., 1995; Nowakowski, Haynes, & Parry, 2007). The subjective narrative is critical and social workers should consider the cluster of influences and their dynamic relations to appreciate the full complexity of premenstrual distress (Nowakowski et al., 2007).

The BPS-*E* framework acknowledges that motherhood is central to contemporary gendered expectations for many women (Ridgeway & Correll, 2004). Caring for others [parenting], is generally perceived as central to feminine subjectivity, and as such, is a gendered process (Hollway, 2006). Idealized constructions of motherhood, so strongly embedded and cherished in Western society, serve to obscure the possibility that life as a mother may be depressing (Stoppard, 2000), or at the very least, challenging.

Women often feel inadequate in the role of mother because of cultural and selfimposed expectations. PMS and PMDD can exacerbate these feelings during times of premenstrual distress. When mothers behave in ways other than that perceived to be "correct", they risk losing others' respect for their "valuable" self, interfering with their ability to belong (Wisdom et al., 2008, paragraph 21). Many women carry the burden of societal disapproval, either because they do not fit society's idealized view of motherhood or because they behave in ways that are not considered appropriate for mothers (Jackson & Mannix, 2004). Mother-blaming has been called a serious and pervasive problem (Caplan & Hall-McCorquodale, 1985) and is a term that describes mothers being held responsible for the actions, behaviour, health, and wellbeing of their children (Jackson & Mannix, 2004). It also describes situations where women are blamed for their own predicaments, such as being abandoned, living in poverty (Jackson 2000), or ill health. Jackson and Mannix (2004) noted that for some women, blame is experienced as a burden that is placed on them by others and, on occasion, it is something with which they burden themselves. Women's narratives reveal that the burden of blame takes its toll on women and might be experienced as guilt, feelings of inadequacy, anger, and self-blame (Jackson & Mannix, 2004).

Child protection systems create a class of individuals that are potentially stigmatized as failed parents from whom their children have to be protected and in some cases removed. Social workers must be cognizant of the inherent power in their role as assessors and the power of the systems they represent. Self-reflection must be ongoing to guard against responding punitively to mothers when the target of intervention should be an oppressive system insensitive to the needs of mothers and children. The BPS-*E* framework encourages advocacy in the ongoing fight for social justice for those mothers who are vulnerable and marginalized.

However, it would be naïve to maintain that all mothers provide adequate care and a safe environment for their children. The BPS-*E* framework also recognizes that some women are not able to meet the basic needs of their children. Postmodern feminists point out that the interests of mothers and children do not always coincide. Featherstone and Trinder (1997) stated, "This is not to argue that women do not often fight for their children's wellbeing, but there is a problem in assuming that they always do, and there is a further problem in developing policies that assume they will (p. 153).

Although some children who are exposed to poor-quality parenting early in life develop symptoms of psychopathology over time, many others do not. It has become increasingly clear that child development and adjustment cannot be understood without taking into account both genes and environment as well as the relationship between them (Calkins et al., 2013).

A social worker conducting an assessment may also include premenstrual selfmonitoring (retrospective or prospective) with respect to symptoms, diet, and stresses, and may involve the use of premenstrual actuarial instruments to measure symptomology and distress. During the assessment, the social worker considers how the various findings interrelate. For instance, the mother's biological symptoms of premenstrual distress may worsen with the stresses of being a single mother without a strong social network. Guilt at not being a "good enough" mother may exacerbate her anxiety, making her even more distressed. When combined with feminist framings that embed personal experience within one's social and political context, narrative practice can open space to challenge stigma, legitimize people's pain, defend their identities, and find creative solutions for positive change in their lives (LaFrance & McKenzie-Mohr, 2013). When PMS/PMDD symptoms impact the ability of a mother to meet the needs of her children, information on all treatment alternatives must be provided to the mothers, including the value of medication, such as an SSRI antidepressant. The social worker must model a collaborative treatment approach, empowering the mother in the decision making process.

Mothers as initiators of premenstrual conversations with social workers. The stigma associated with PMS/PMDD may cause some mothers to keep such information secret, fearing that their problematic premenstrual symptoms reflect mental incompetence. The stigmatized woman may find she feels unsure how "normals" will identify and receive her (Barker, 1948), if her illness becomes known. Encounters between stigmatized individuals and "normal" individuals make for "anxious unanchored interaction" (Goffman, 1963, p. 29). The result is interaction-uneasiness for both parties.

Individuals who are in contact with mental health services may experience stigma, which Thornicroft (2007) maintains consists of three elements: (1) problems of knowledge (ignorance), (b) problems of negative attitudes (prejudice), and (c) problems of behaviour (discrimination). Negative stereotypes act as a powerful deterrent for women disclosing premenstrual distress lest they be alienated. Women may be reluctant to share personal information and be "fully known" for fear of judgment and repercussions. Any cue in the environment that makes negative stereotypes salient can elicit "stereotype threat". This emerges in situations where negative stereotypes call into question one's abilities (Shapiro & Aronson, 2013) prompting anxiety and often a decision to "self-silence".

Some women might hesitate to disclose PMS to social workers if they perceive the information may be used against them (Mooney-Somers, Perz, & Ussher, 2008). Disclosure is a double-edged sword: social support may be lost by disclosing (Hays, Turner, & Coates, 1992) with the potential for rejection, discrimination, and emotional distress for others (Greene, 2000). On the other hand, by not disclosing, a mother can deprive herself of important support to assist in her coping and wellbeing.

Disclosure is a complex process, involving far more than client acquiescence (or resistance) to Freud's dictum to reveal all that comes to mind (Farber, Berano, & Copobianco, 2004). Self-disclosure is defined as an instance of openly sharing personal information about oneself including non-obvious aspects of the self such as thoughts, feelings, experiences [including illnesses and disorders], and attitudes (Van Servellen, 2009). An intricate pattern of decision-making emerges, influenced by implicit philosophical ideas regarding the value of being fully known; by the conflict between "doing the work I signed up for" as a client and averting emotional pain; by the desire to unburden oneself of secrets; by beliefs about the negative clinical consequences of secret-keeping; by individual tolerance for shame; by the mediating effects of a strong alliance and the anticipation of approval; and by expectations of emotional, cognitive, and interpersonal benefits of disclosure (Farber et al., 2004). Much of the contemporary self-disclosure literature can be traced to the seminal work of Jourard (1971), who focused on the general question of "Who reveals what to whom?"

The concept of impression management (Davies & Allen, 2007) refers to the activities in which individuals engage in order to accomplish a particular presentation of self (Dingwall, 1976). When an individual [mother] appears in the presence of others [social workers] there will usually be some reason for her to mobilize her activity [discussion of PMS/PMDD] that will convey an impression [good mother] that it is in her interests to convey (Goffman, 1959). In a study examining the encounters mentally ill mothers have with professionals, the theme of being a "good" or "bad" mother was very

prominent (Davies & Allen, 2007). This was relevant in the women's construction of themselves as "good mothers", in their talk with the researcher, and in their accounts of their encounters with health and social care professionals. If a woman perceives a societal norm regarding "good" mothering, she will produce an account of her decision-making to acknowledge this, justifying her behaviour whether or not it conforms to the norm. Many mothers with mental health problems prefer to be constructed as "ill" rather than as a "bad mother" (Davies & Allen, 2007).

The formality of a therapeutic relationship can also pose a barrier to client disclosure, but the power differential in a "mother-child protection" relationship further jeopardizes distrust. Mothers have the least power, while child protection workers occupy positions of great authority. Parents' perceptions of powerlessness have been associated with the inherent hierarchal power structures within the child welfare system (Bundy Fazioli, Briar-Lawson, & Hardiman, 2009). Child protection systems create a class of individuals who are potentially stigmatized as failed parents from whom their children have to be protected and in some cases removed.

Research suggests that individuals vary in their tendencies to disclose personally distressing information across time and situations. This variable, known as "distress disclosure", significantly affects the extent of client disclosure (Kahn, Achter & Shambaugh, 2001). Client failure to disclose certain issues may stem from quite disparate circumstances, but it is generally attributed to conscious inhibition, typically a function of shame and/or a fear of addressing certain thoughts and feelings (Hill, Thompson, Cogar, & Denman, 1993; Kelly, 1998). One could assume that meeting with a child protection worker would exemplify a situation of distress.

These findings partially confirm Stiles' (1987, 1995) "fever" model of disclosure in which people tend to disclose more ("unburden themselves") when they are psychologically distressed, and do so to relieve the distress. This integrates with crisis theory as people are more inclined to lower their defences and share information during times of crisis. Relief emerged as the strongest felt emotion following disclosure. Although clients may feel anxious and vulnerable before and during discussions of intimate or previously secret material, they often experience relief, pride, safety, and a sense of authenticity following their disclosures (Farber et al., 2004). Research indicates that "emotional suppression, denial, detachment, self-blame, and self-isolation, may result in more impaired functioning than coping involving disclosure and support-seeking behaviour" (Rosenthal, Hall, Palm, Batten, & Follette, 2005, p. 29).

Culture may also be a significant predictor of self-disclosure. Chen (1995) suggested that culture may be relevant in determining both the nature of what is disclosed [PMS/PMDD] and the depth of information disclosed [the impact of severity on family life]. One widely accepted premise among intercultural communication scholars is that individualistic and low-context cultures that communicate more directly offer more selfdisclosure or personal information when communicating than collectivistic and highcontext cultures, who communicate more indirectly (Chen, 1995).

With respect to the likelihood of conversation about sensitive topics such as PMS/PMDD, Aboriginal populations likely fall into the collectivistic and high-context culture described by Chen (1995), characterized by less self-disclosure. Other considerations impacting discussions of premenstrual distress and parenting with Aboriginal mothers would be (a) the "sixties scoop" of Aboriginal children, (b) the continuation of ongoing cultural genocide (Alston-O'Connor, 2010), and (c) the resultant distrust. Aboriginal mothers have very real and legitimate reasons for not disclosing.

In a study of First Nations, Métis, and Inuit populations, the rate of child maltreatment-related investigations involving First Nations children was higher than the rate of investigations involving non-Aboriginal children. In 2008, for every 1,000 First Nations children there were 140.6 child maltreatment-related investigations compared to 33.5 investigations for every 1,000 non-Aboriginal children. Social workers have a responsibility to look beyond individual risk factors and to change society's foundational inequalities and constraints (Canadian Association of Social Workers (CASW), 2005). Effective social work practice must respect the self-determination of Aboriginal women to control discussion of those aspects of their health to social workers, particularly those in positions of authority. Further, social workers should become knowledgeable about Aboriginal perspectives and how they are reflected in traditional and urban Aboriginal culture (Alston-O'Connor, 2010).

Social workers initiating premenstrual conversations in their assessments with mothers. Meetings of social workers and mothers do not take place in a context-free setting apart from society, but, as noted by Svenaeus (2000), are *part* of the social structure and reality. The context of communicating about women's health and the body is often characterized by tension and discomfort. A more holistic conception of health as a state of being-in-the-world (Babrow & Mattson, 2011) is enhanced by open communication.

Some clinicians hesitate to ask about sensitive subjects and this may apply to discussions of PMS as well. Some of the relevant barriers to inquiries and disclosures of

abuse include (a) discomfort with personal topics (Merrill, Laux, & Thornby, 1990), (b) concern about client embarrassment (Mitchell, Grindel, & Laurenzano, 1996; Pruitt & Kappius, 1992; Sugg & Inui, 1992), (c) time constraints (Mitchell et al., 1996; Sugg & Inui, 1992), (d) lack of training and confidence (Briere & Zaidi, 1989; Merrill et al., 1990), (e) clinician beliefs about the reliability of client accounts (Briere & Zaidi, 1989; Read & Fraser, 1998), (f) clinician's sex (Agar, 1998; Little & Hamby, 1996), (g) client's sex (Lab, Feigenbaum, & De Silva, 2000; Read & Fraser, 1998), and (h) clinician's age (Pruitt & Kappius, 1992).

In a study by Diaz-Caneja and Johnson (2004), women receiving mental health services (including those whose children were in foster care) concluded that discussions about mothering did not take place because professionals rarely asked for details about women's social and family lives and their experiences of parenting. This was consistent with the premise "*If you don't say, they don't ask*". Gustavsson (1995) confirmed that the process of preparing practitioners to *not* ask questions begins early, especially in semi-authoritarian settings such as child protection. She maintains it is not unusual for students to report that experienced workers wish they had not asked a client a particular question, as client disclosures sometimes force the worker to take action. It is likely workers do not ask about PMS because either (a) they are not knowledgeable or aware of the possible impact on women's parenting, or (b) their beliefs and attitudes influence whether or not they raise the topic.

Studies show that personal beliefs influence the processes by which individuals seek out, store, and interpret relevant information (Kahneman, Slovic, & Tversky, 1990). People selectively (a) seek out information that confirms their beliefs; (b) look for evidence that confirms, rather than disproves their views; and (c) adopt different critical standards for quality of information depending on whether it confirms or challenges their views. Investigators found a lack of consistency among physicians regarding their attitudes and beliefs about the etiology, diagnosis, and treatment of mild to severe premenstrual symptoms (Hill, Greenberg, Holzman, & Schulkin, 2001). Because persons regard as salient those aspects consistent with their overall attitudes (Beckstead 2003), workers may respond differently to clients if they perceive PMS as physiological rather than a social construction that could be corrected by modified thinking. Hill and colleagues (2001) found physicians' attitudes and beliefs about premenstrual syndrome and depression played a key role in diagnosing and treating patients.

Many clients depend on a therapist's active role in engaging with difficult material (Farber et al., 2004) so it is important that they develop the necessary confidence and skills to do so. Linell and Bredmar (1996) identified highly complex ways that midwives manage sensitive topics when talking to expectant mothers. These include indirectness and distancing, institutional routines (e.g., completing forms), and depersonalizing topics (Hall & Slembrouck, 2009). Similarly, Peräkylä and Vehvilfinen (2003) showed how questioning in AIDS counselling can make the delivery of threatening questions less problematic by establishing a distance between the question, the questioner, and the recipient of the question. Such literature may have value in its application to the discussion of premenstrual experiences.

Research on self-disclosure in the counselling (helping) relationship is extensive and focuses on the issue of counsellor disclosure, as it influences both the client's perceptions and evaluations of the counsellor and the client's attitudinal and behavioural willingness to disclose (Hendrick, 1987). The "use of self" is understood as being centred in a core that has been defined and self-shaped by personal history and psychological and emotional experiences. It includes such elements as communication skills, insight, self-awareness, values and beliefs, biases, attitudes, openness, genuineness, warmth and a non-judgmental stance (Mandell, 2008). The nature of relationship is recognized as critical to the helping process (Shulman, 1991). The sharing of personal thoughts and feelings by workers is a skill correlated highly with developing a good working relationship and effective helping as perceived by clients (Shulman, 1978).

Social work has teetered between emphases on the correction of internal landscapes of individuals or families, and insistence on improving social environments in which individuals are located (Rossiter, 2000). Resistance to oppression can occur at both personal and structural levels and can be undertaken both by individuals and groups (Dominelli, 2002). Social work has been implicated in oppressive processes by fostering relations of dominance consistent with supporting the status quo (Dominelli, 2002). Unjust policies and procedures need to be exposed and non-oppressive alternatives put in place. The power of such ideology is particularly evident in social workers' neglect of men in cases involving parenting and the care of children. Contemporary studies of the culture of child protection work show that gendered constructions of women are mainstream organizing principles (Scourfield, 2003). Dominelli (2002) referred to it as "best-intentioned paternalism" (p. 143).

Clearly, child protection as a government institution is a system of social control, and not readily amenable to change. Social workers need to be better trained in antioppressive, gendered practice, particularly in cases where power differences are inherent in the relationship, such as in child protection services.

Summary

This chapter reviewed the four primary models in the literature that conceptualize premenstrual experiences, outlining the tenets and limitations of each, as they relate to assessing the premenstrual experiences of mothers. The discussion justified the development of the BPS-*E* as a more suitable lens through which to examine women's premenstrual distress, parenting challenges, and social work practice at the point of intersection. It affords an analysis using the biological, psychological, and social domains, with the latter accommodating a challenge to the dominant order and societal discourses related to women's reproduction and mothering.

Chapter Four: Methodology

This research seeks to answer the question: "How does the premenstrual knowledge of social workers influence whether and what they ask in their assessment practices with mothers?" This chapter sets out the methodological strategy used to answer this question. It begins by describing and justifying the rationale for the overall design and methodology, followed by an explanation of the methodological strategies. The chapter is organized into two sections, addressing quantitative and qualitative methodologies in turn.

Research Design Rationale

Several researchers have pointed to the need for a thoughtful combination of qualitative and quantitative components when combining methodologies (Chesney & Ozer, 1995; Stanton & Gallant, 1995). This cross-sectional exploratory study uses a triangulated convergence design to generate complementary data from both quantitative and qualitative methodologies. One type of evidence does not tell the entire story. Together, an analysis of the combined data sets provides a more complete picture by suggesting trends and generalizations as well as in-depth knowledge of individual participants (Creswell & Plano Clark, 2007).

Blended research methodologies fall on a continuum from separate and distinct to fully integrated methods, with partially blended designs occurring along the spectrum. This study used a partially blended sequential equal status design, as advocated by Leech and Onwuegbuzie (2009), with the quantitative and qualitative elements each being conducted in their entirety before being analyzed together at the data interpretation stage. The foundational quantitative data served as a springboard for the qualitative stage of the research. The qualitative data enhanced and enriched the descriptive statistics and analysis. Both components were given equal attention throughout the study, with equal value in answering the research question.

This design was selected because it was the best means with which to answer the research question and was consistent with the principles of the enhanced biopsychosocial (BPS-*E*) framework. A blended methods strategy is not aligned with either positivist or social constructionist models, sidestepping the forced-choice dichotomy noted by Creswell and Plano Clark (2007). Instead, like the BPS-*E* approach, it is a methodology born of both.

Research Design

The quantitative component.

Intent. The quantitative component of this study addressed two aspects of the research question: (1) What do social workers know about women's premenstrual experiences? and (2) Do they ask about premenstrual experiences in their assessments with mothers? This research drew from the existing medical and psychological bodies of knowledge about women's premenstrual experiences, which is contained in the literature reviewed in the previous two chapters. I ascertained and quantified the extent to which social workers possess this knowledge about women's premenstrual experiences and whether they ask about PMS.

Measures and data collection. Data on social workers' knowledge about women's premenstrual experiences was assessed using a self-administered questionnaire based on the literature and specifically created for this dissertation. A self-administered questionnaire has the advantages of (a) flexibility in asking about many dimensions of a topic (Marshall, 2005), (b) cost-effectiveness (Jack & Clarke, 1998), (c) the capacity to cover a widely dispersed population (Meadows, 2003), (d) ease of administration (Burns et al., 2008), and (e) avoidance of interviewer bias (Meadows, 2003).

Questionnaire design. This questionnaire gathered data about the knowledge social workers had about women's premenstrual experiences and whether they asked about women's PMS in their assessments. An existing, suitable measure could not be found, necessitating the design of a questionnaire for this research. The resultant PEKQ (see Appendix A) consists of three distinct sections focusing on (a) the knowledge social workers have about premenstrual experiences; (b) the demographic and professional information of participants, including whether they ask women about PMS in their assessments; and (c) their interest in participating in a follow-up qualitative interview.

In designing the questionnaire, the information most critical to the dissertation was placed at the beginning lest respondents' interests wane or they fail to complete the entire questionnaire. The questionnaire has clear instructions, including the length of time anticipated to fill it out, which was estimated at 10 minutes.

Part A. Although the term "questionnaire" suggests a collection of questions, the PEKQ actually consists of a series of 20 statements that Rubin and Babbie (2014) indicate is most useful in determining the extent to which respondents hold a perspective. The continuous variable being measured at an interval scale was the *knowledge (biological, psychological, and social)* social workers had while the dichotomous dependent variable was *whether they ask about PMS in their assessment practices with mothers*. Questionnaire items were selected based on their validation in the PMS/PMDD literature.

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With respect to assessing the reliability and validity of the PEKQ knowledge questionnaire, the Kuder-Richardson Formula 20 (KR-20) was used to determine how all the items in the questionnaire related to each of the other items as well as the sub-item to the total items (Abdullah, 2014). This procedure is preferred to Cronbach's alpha, which should not be used when variables are dichotomous. The KR-20 has the advantage of analyzing internal consistency and reliability for both dichotomous and continuous variables. With respect to the PEKQ items, the KR-20 coefficient of reliability value was .616. Although some researchers maintain that acceptable values should be greater than or equal to .70, a lower reliability coefficient may be acceptable for measures with fewer items because in general, the KR-20 will underestimate the actual reliability of test scores (Crocker & Algina, 1986; Furr & Bacharach, 2014).

The 20 PEKQ items were assigned to one of three domains in the BPS-*E* framework as noted in Table 4.1. Eleven social work professionals who would not be involved in the study were asked to do the same independently to confirm this assignment. This process resulted in consensus on 15 of the 20 items, but disagreement on five items. When these five items were re-evaluated, two items (*Question 9: Women tend to exaggerate how PMS affects them in a negative way; and Question 15: 3 to 9% of women have such severe PMS that they are not able to cope with daily life)* were moved from the social domain to the psychological domain.

Table 4.1

PEKQ Items by Domain Category, Correct Response, and Literature Reference

Item & Domain Category	Questionnaire Item	Correct Response (T/F)	Literature References
1 BIO	PMS generally starts when a woman is over the age of 45 years.	F	Chapter 2: p. 22
2 BIO	When women have PMS, the causes are mainly related to their biology.	Т	Chapter 2: pp. 40-45; 47-49
3 SOC	Usually, only women in Western cultures have severe PMS symptoms	F	Chapter 2: p. 28
4 BIO	For some women, distressing PMS symptoms can last up to two weeks per month.	Т	Chapter 2: p. 23
5 SOC	Women have problems with PMS only because they have been socialized to expect symptoms.	F	Chapter 2: pp. 40-45
6 PSY	There is a psychiatric category in the DSM for severe PMS.	Т	Chapter 2: pp. 35-39
7 PSY	Suicide occurs more in women with severe PMS in the last two weeks before their period than in women without symptoms.	Т	Chapter 2: pp. 45-46
8 BIO	Severe PMS can be confirmed with a blood test.	F	Chapter 3: p. 59
9 PSY	Women tend to exaggerate how PMS affects them in a negative way.	F	Chapter 2: p. 49
10 PSY	Premenstrual Dysphoric Disorder (PMDD) is a term for women with physical symptoms only.	F	Chapter 2: pp. 35-39
11 BIO	There are over 150 different types of PMS symptoms.	Т	Chapter 2: p. 24
12 SOC	Women with severe PMS find their work and family lives most affected.	Т	Chapter 2: p. 51
13 SOC	Premenstrual symptoms in women have been described as far back as 300 BC in the writings of Hippocrates and Aristotle.	Т	Chapter 2: p. 29

14 PSY	Some women feel positive before they get their period.	Т	Chapter 1: p.14 Chapter 2: p. 22
151	they get then period.		Chapter 2. p. 22
15	3 to 9% of women have such severe	Т	Chapter 2: p. 23
PSY	PMS that they are not able to cope		
	with daily life.		
16	The physical symptoms of PMS	F	Chapter 2: p. 26
BIO	usually bother women more than the		
	emotional symptoms.		
17	The most effective treatment for	Т	Chapter 2: pp. 47-48
BIO	severe PMS is SSRI anti-depressants.		1 11
18	Most women with severe PMS do not	F	Chapter 3: pp. 104;
SOC	feel stigmatized because symptoms		118-119
	are a normal part of menstruation.		
19	Some women with severe PMS have	Т	Chapter 2: pp. 51-54
SOC	problems parenting their children.		
20	Physical illnesses and headaches can	Т	Chapter 2: p. 27
BIO	get worse when a woman has PMS.		

Predetermined response categories of "true", "false" and "don't know" were used to measure the knowledge of respondents. The correct answers for each item are noted in Table 4.1. Because these response categories are mutually exclusive but not ordered, they are nominal variables. A participant must analyze the statement, determine whether it is accurate, and mark an answer. This questionnaire is about premenstrual knowledge and thus akin to a series of exam questions that are "right" or "wrong" rather than a matter of attitudes or opinions.

Table 4.2.

Categories, Types of Data, Number of Responses, and % of Total Responses of Ten Factors/Variables of Participant Information

Category of variable	Variable	Type of Data	Response rate <i>n out of 521</i>	% of total responses
Participant characteristics				
	Age Sex	Ordinal Nominal	518 514	99.4% 98.7%

	Race	Nominal	515	98.9%
Professional				
characteristics				
	Education	Nominal	517	99.2%
	Current social	Nominal	518	99.4%
	work position			
	Years as a	Ordinal	514	98.7%
	social worker			
	Training on	Nominal	512	98.3%
	PMS/PMDD			
Premenstrual				
characteristics	TT 1 1	NT · 1	470	00 (0/
	Has had	Nominal	472	90.6%
	PMS/PMDD	Oudin al	450	72 20/
	Degree to which PMS	Ordinal	450	73.3%
	interfered			
	Has lived with	Nominal	186	35.7%
	someone with	Nommai	180	55.770
	PMS/PMDD			
Premenstrual				
knowledge				
momenge	Knowledge	Continuous	515	98.9%
	score on the	Continuoub	010	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	PEKQ			
Inquiries about	x			
PMS/PMDD				
	Whether social	Nominal	508	97.5%
	workers asks			
	about			
	PMS/PMDD in			
	practice			

Although some researchers question the use of a "don't know" response resulting in more non-committal answers (Hawkins & Coney, 1981; Williams, 2003), "don't know" responses can actually enhance accuracy and reduce guessing (Poe, Seeman, McCaughlin, Mehl, & Dietz, 1988). Including a "don't know" option can result in more accurate response distributions (Poe et al., 1988). For the purposes of this research about social workers' knowledge of women's premenstrual experiences, the "I don't know" response option was included.

Part B. The second part of the PEKQ sought the following information about the participant: sex⁵, race, ⁶ current social work position, whether the social worker had lived with a woman having PMS, and whether training on PMS had been taken. Two contingency questions were directed to women only and asked (a) whether they had had PMS, and (b) the degree to which it interfered in their daily living. A final checkpoint on the questionnaire allowed participants to indicate whether they were interested in participating in a follow-up in-depth interview and if so, they were requested to provide their name, email address, phone number, city, and province for further contact.

All of the research documents including the PEKQ, the accompanying Research Information Cover Sheet, the Interview Research Participation Consent Form, and the Summarized Research Proposal for the qualitative interviews were assessed using the Flesch-Kincaide Readability Formula (1948) to ensure readability for all participants (see Appendices A, B, C, and D respectively). This formula assesses readability based on the average number of syllables per word and the average number of words per sentence. Vocabulary and sentence length predicts the level of difficulty of a text and the estimated

⁵ Sex has long been considered a factor linked to the health of males and females but until recently sex has been conflated with the idea of gender in health research and therefore analyzed relatively uncritically (Benoit & Shumka, 2009). It is generally agreed that sex is a biological construct based on one's sex chromosomes (that is, XX = female, XY = male) and manifested in one's anatomy, physiology, and hormones, and that these attributes tend to be more or less constant across societies (Phillips, 2005).

⁶ Race is acknowledged as a social construct, but was used to address diversity in place of origin, cultural identification, and ethnic group membership.

grade level required by a participant to understand it (DuBay, 2004). Because some social workers might have only a high school education, none of the written materials exceeded a grade 12 reading level. The reading ease of the PEKQ ranged from an "easy" score of 78 for item #4 (*For some women, distressing PMS symptoms can last up to two weeks per month*), to a "difficult" score of 26 for Item #17, (*The most effective treatment for severe PMS is SSRI anti-depressants.*) The grade level of items ranged from grade 5 for *Item #3, (Usually only women living in Western cultures have severe PMS symptoms*) to a grade 12 level for eight of the items including for example, Item #18, (*Most women with severe PMS do not feel stigmatized because symptoms are a normal part of menstruation*).

After the PEKQ and accompanying forms had been designed, an ethics application was submitted to The Interdisciplinary Committee on Ethics in Human Research (ICEHR) for approval to proceed with data collection (Appendix E). After some slight modifications, approval was received (Appendix F).

Questionnaire administration. Before administering the questionnaire to the target sample, a pilot was conducted with eight individuals with similar characteristics to the target group. This strategy helped ascertain whether the answers given by respondents were consistent with what was being measured (Fowler Jr. & Cosenza, 2009). No significant modifications were required.

The Internet was the primary means used to promote the study, recruit the sample, and to distribute and receive the questionnaires. The Internet is increasingly used to survey the public (Couper, 2000). As stated by Markham (1998), "We are at a juncture of the technological age where we have the potential to move more of our everyday lives to various information spaces" (p. 227). The advantages of using the Internet included (a) eliminating costs associated with printing and mailing the survey instruments (Cobanoglu, Warde, & Moreo, 2001; Mann & Stewart, 2002); (b) having questionnaires returned in an electronic format (Kaplowitz, Hadlock, & Levine, 2004); (c) accessing individuals in locations that previously would have made their participation impractical (Mann & Stewart, 2000); and (d) automated data collection, reducing researcher time and effort (Wright, 2005).

Data collection began in January 2013. The PEKQ and the Research Information Cover Sheet were disseminated via email. A consent form was not required because consent was implicit in the return of a questionnaire. Data collection utilized an automated SurveyMonkey program (SurveyMonkey, n.d) to receive the questionnaire responses. Respondents submitted their answers to the questionnaire by clicking a "submit" button embedded in the web form. Data from each questionnaire was entered into SPSS Statistics (Versions 21-23) for analysis. Data collection closed in November 2013.

Sample recruitment. Because the research seeks to determine the knowledge social workers have about premenstrual experiences, the unit of analysis for the study was individuals who identified themselves as Canadian social workers. The original intent was to use a universal sampling strategy in which delegated child protection workers in each province/territory would have an equal opportunity to participate. A covering letter, copies of the summarized research proposal, and the ethics approval were sent to representatives in each of nine provincial/territorial Ministries of Children's

Services ⁷ (see Appendices B, C, and F respectively).

Only three provincial/territorial Ministries (Newfoundland, Saskatchewan, and the Yukon) allowed circulation of the research questionnaire to their staff. Most of the other six jurisdictions took four to six months to formally decline their participation, generally citing worker stress and overwhelmed child protection systems as reasons for refusal. Unfortunately, the questionnaires received from social workers within the three participating Ministries amounted to less than 20% of the desired sample size of 500 responses, necessitating an expanded recruitment strategy.

As a result of this low response, a further request was made to ICEHR (see Appendix G) to (1) expand the scope of the sample from child protection workers more broadly (i.e., working outside of child protection services); (2) expand the scope of the sample to all social work students rather than only university students from Ph.D., MSW, and fourth year BSW students; (3) modify the type of assessment considered from only "risk" parenting assessments to all practice assessments with mothers; and (4) broaden recruitment strategies to include advertisements in social work magazines or newsletters, popular social media sites, and email databases. The ICEHR approved these requests (see Appendix H) but with a caveat that university instructors not administer the questionnaire directly to students, because of the power inherent in an instructor-student

⁷ The four remaining provincial/territorial Ministries were not contacted because I was unable to offer a French translation or interpretation in New Brunswick and Quebec; a vacant Director of Welfare position in Nunavut made permission difficult, and inquiries in Ontario were passed back and forth between the Ontario Association of Children's Aid Societies and regional Children's Aid Societies.

relationship. They suggested that social work schools and faculties forward the recruiting information to students via list serves. The modified sampling strategy constituted a nonprobability purposive sampling recruitment. I purposefully selected subjects [social workers] for inclusion to ensure they had specific characteristics [access to completing assessment practices with mothers who may have premenstrual issues] relevant to my study. This strategy is used in quantitative research when selecting a predetermined number of people who are best positioned to provide the information needed (Kumar, 2008). A nonprobability approach was evident in the selection of a sample from a social work population that was most convenient. A population may be convenient but it is not necessarily easily available, as was the case in my attempts to recruit sample. Despite the expansion in scope, it took 10 months to obtain the final sample of 522 responses from social workers.

As recommended by Creswell, Plano Clark, Gutmann, and Hanson (2003), the acceptable size of the sample was double-checked using an online sample size formula calculator (Raosoft, n.d.). This suggested that based on an estimated Canadian social work population of 35,000 ⁸ with (a) a margin of error of 5%, (b) a confidence level of 95%, and (c) a response distribution of 50%, a minimum 380 participants was required. The final sample exceeded this requirement by 143 social workers, further enhancing the credibility of the research.

⁸ Canadian Institute of Health Information (n.d.) reports there were 34,868 registered social workers in Canada in 2009.

Data analysis. This study explores the relationship between the premenstrual knowledge of social workers and whether they ask about it in their assessment practices with mothers. Descriptive statistics were used to identify basic features of the data and to provide summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data (Trochim, 2006). Descriptive statistics are the most commonly used for summarizing data frequency.

The data was first cleaned, correcting any errors in coding and removing one outlier response on the knowledge score item. Frequency distributions were then constructed from the raw data set, as suggested by Weinbach and Grinnell (2007). For scoring and coding purposes, one point was assigned for an "accurate" response and a zero was assigned for a "wrong" or "don't know" response. To avoid having the "don't know" response affect the accuracy of the variable, "don't know" responses were coded as a 3 and were not calculated into the knowledge scores. Items having no response were coded as a 99 and omitted from the calculations.

Due to the nature of the majority of the variables, descriptive statistical analyses were limited to calculations of frequency distributions, and percentage frequency distributions. With respect to measures of central tendency, only the mode was calculated for the nominal data (Devries, 2007), the mode and median for the ordinal data, and the mean, median, and mode for the continuous data.

Inferential statistics are used to (a) draw conclusions about populations on the basis of data obtained from a sample, and (b) test hypotheses (Blanche, Durrheim, & Painter, 2006). Inferential statistics have value in this study in (a) determining whether

the prevalence of PMS/PMDD and the degree to which symptoms interfere with daily living is similar to the prevalence noted in the larger population; and (b) testing the relationships between variables of interest such as worker sex, PMS training, PMS incidence, and the degree of symptom interference in daily life.

Inferential statistical analysis assumes that the data is either (a) interval or ratio, (b) is based on a random sample, (c) has normality of distribution, and (d) homogeneity of variance. The condition not met by this data is the non-probability nature of the sample. Sample bias may exist in this study if social workers who found the topic of PMS/PMDD more salient in their lives responded in greater numbers than social workers who did not. This could have contributed to a non-representative sample in which social workers were more informed than one might expect in a more typical social work population.

The decision to use inferential statistics with a non-probability sample is controversial and one about which even the foremost authorities do not agree (Rubin & Babbie, 2008). Many authorities insist that inferential statistics must not be used with non-probability samples (Chen, 2001; Leon-Guerrero & Frankfort-Nachmias, 2012; Thomas, 2005) and argue that the validity of inference requires that the targeted and sampled population be the same (Koch & Gillings, 1984).

Social work researchers Rosenthal and Rosenthal (2012) advocate, however, that inferential statistics with non-random sample can be appropriate. They maintain that in the absence of random sampling, there is no *real* larger population – no real larger group of people beyond the study sample – to which the study results may be generalized using the logic of inferential statistics. They state that whether or not a real study population

exists, *the study of real people* and, therefore, conclusions about that sample do have realworld meaning. Inferential statistics will be cautiously applied to this data to compare PMS prevalence rates in the sample to those reported in the literature and to test the hypotheses noted above. However, there will be no statistical generalization beyond the sample.

To evaluate differences between the subgroups of the variables, statistical tests were conducted including Pearson's Chi Square Test for Independence, t-test for independent sample, and one-way ANOVA. Therefore, the following assumptions had to be verified, thus ensuring the integrity of the tests: (1) the data was random and unique (for purposes of this sample only); the sample size was adequate (521 respondents); (3) the data was normally distributed for the only continuous variable, the premenstrual knowledge score; and (4) there was homogeneity of the variance for ANOVA. The Fisher's Exact Test (FET) was computed for those 2 x 2 tables in which 20% of the cells had an expected frequency of less than five as recommended by Weinbach and Grinnell (2007) and MacDonald (2015). Phi values were further calculated to assess the strength of the statistically significant relationships between the variables in question using two by two tables (effect size). Baugh (2002) stated, "Effect size reporting is increasingly recognized as a necessary and responsible practice" (p. 255). It is the researcher's duty to adhere to stringent analytical and reporting methods, including the reporting of effect size, in order to ensure the proper interpretation and application of research results (Kotrlik, Williams, & Jabor, 2011).

Qualitative component.

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Methodological strategy. Qualitative research methodology should be guided by a philosophical tradition or theoretical stance (Creswell, 2003; Richards & Morse, 2013). When choosing a qualitative methodological framework it is important that researchers consider such issues as what they want to discover about the phenomenon and the kind of data collection required (Shaw, 2001).

The qualitative research seeks to answer the following questions:

- 1. What do social workers know about women's premenstrual experiences?
- 2. Do mothers describe their premenstrual symptoms to social workers?
- 3. Do social workers ask about premenstrual experiences as part of their assessments when interviewing mothers and if not, how do they account for this omission?
- 4. When they do ask questions about premenstrual experiences, what is the nature of the discussions?
- 5. Does the premenstrual knowledge of the participant influence whether and what they ask mothers in assessments?
- 6. Do social workers find it appropriate to include premenstrual inquiry in assessments with mothers?

The qualitative research will explore social workers' knowledge of the *phenomenon* of PMS/PMDD, the *meanings* they ascribe to this phenomenon, their *experiences* of PMS/PMDD, and their *understanding* of the relevance of PMS/PMDD in assessment interviews with mothers. This research goal is consistent with, as noted by Ajjawi and Higgs (2007), the philosophy, strategies, and intentions of an interpretative research paradigm.

Neither the BPS-*E* framework, nor the BPS model from which it evolved, specifies a particular research methodology but rather encourages social workers to use an approach congruent with their philosophy and the various theories from which they draw. This qualitative methodological framework was guided by aspects of interpretative phenomenological analysis (IPA) developed by Smith, Flowers, and Larkin (2009). This framework draws on fundamental principles of phenomenology, hermeneutics, and idiography (Pietkiewicz & Smith, 2014). It is not a prescriptive approach; rather, it provides a set of flexible guidelines that can be adapted by individual researchers in light of their research aims (Smith & Osborn, 2003). As such, it is especially suited to studies that aim to relate findings to bio-psycho-social theories that dominate current thinking within the healthcare professions (Smith, 1996; Smith, 2004; Willig, 2001). The congruency of IPA with the overarching BPS-*E* framework of this dissertation was critical to its selection.

IPA is (a) *phenomenological* because of the concern with individuals' perceptions and (b) *interpretative* insofar as access to the individual's perceptions depends on and is complicated by the researcher's preconceived ideas (Griffiths, 2009; Houston & Mullan-Jensen, 2012). IPA researchers attempt to stand in the shoes of their subject, and through interpretative activity make meaning comprehensible by translating it (Pietkiewicz & Smith, 2014). Pietkiewicz and Smith (2014) state,

IPA synthesizes ideas from phenomenology and hermeneutics resulting in a method that is (a) descriptive because it is concerned with how things appear and letting things speak for themselves, and (b) interpretative because it recognizes that there is no such thing as uninterpreted phenomenon (p. 363).

IPA has been a popular methodological framework in qualitative psychology (Pietkiewicz & Smith, 2014) and although new to the field of social sciences, it is relevant and well-suited in answering questions about the relationship between the personal and the social, the empirical and the experiential, and between individual and collective experiences and ontological matters (National Centre for Research Methods, 2013). IPA is gaining more traction in social work as well (Aparicio, Pecukonis, & O'Neale, 2015; Carey, 2012; Hood, 2015; Houston & Mullan-Jensen, 2012; Loo, 2012; MacDonald & McSherry, 2011; Quest, 2014). IPA affords social workers the opportunity to be aware, empathic, and self-reflective in the pursuit of improving practice (Loo, 2012).

The biological and psychological domains have both been the focus of considerable health and wellbeing research using IPA (Flowers, Smith, Sheeran, & Beail, 1997; Osborn & Smith, 1998; Smith & Osborn, 2007), often exploring individuals' psychological experiences and coping strategies to an illness, event, or crisis. IPA supports a conception of the body as subjective instead of objective, drawing on the understanding of the lived-body as set out by phenomenologists Merleau-Ponty (1962) and Van Manen (1990). Merleau-Ponty (1962) stated:

My body is not only an object among all other objects, a nexus of sensible qualities among all others, but an object which is sensitive to all the rest, which reverberates to all sounds, vibrates to all colours, and provides words with their primordial significance through the way in which it receives them (p. 236).

With respect to the social domain, IPA makes an explicit commitment to personin-environment and not just phenomenon as experienced (Finlay, 2011). Its strength can be used to examine larger macro issues such as culture, religion, migration, ethnic identification, and social roles (Pietkiewicz & Smith, 2014) and has applicability in this dissertation for the examination of gender roles and institutionalized power, societal stereotypes, and discourse as well.

The sample. Idiographic methods advocated by the IPA framework are concerned with the unique experiences of individuals. To this end, data collection usually proceeds through purposive sampling, in which similarities and differences are analyzed within a group that has been defined as similar according to important variables.

Of the 521 social workers who completed both Parts A and B of the PEKQ, 164 participants provided contact information for possible future participation in a qualitative interview. IPA researchers are dedicated to fully appreciating each participant's account. For this reason, samples in IPA studies are usually small (12-16), which allow for a detailed analysis of each interview (Pietkiewicz & Smith, 2014). While the original plan had been to conduct 12 qualitative interviews, the number was later increased to 16 interviews as per Mason's recommendations (2010). In his study of sample size and saturation of qualitative interviews in Ph.D. dissertations, Mason found that 80% of the qualitative samples of Ph.D. students adhered to Bertaux's (1981) guideline of using at least 15 participants for any qualitative study, irrespective of the methodology. I had the resources to increase the number of interviews since many took less time to complete than originally anticipated (a letter was sent to ICEHR advising them of this change) (see Appendix I).

Engaging participants proved challenging, despite the surprising large number who had volunteered to be interviewed. Many did not return emails and phone calls and in some cases the contact information was out of date. A number of individuals had moved to other positions and were no longer available.

Some of the difficulties in obtaining a qualitative sample of 16 social workers can be attributed to the almost 10-month delay between collecting 500 surveys (quantitative phase) and conducting interviews (qualitative phase). Furthermore, the interest of many participants may have waned over these months. Ultimately, the defining variable for inclusion in the qualitative interviews became availability.

The interviews. Qualitative interviews were conducted by telephone and all participants were advised that the interview was being recorded. No demographic information was collected as it was available from the quantitative phase of the research. The interview length ranged from 20 minutes (as stipulated by two interviewees who were constrained by time and pending appointments) to over an hour. Most interviews averaged 45 minutes. A semi-structured interview guide was developed to address the following three topics as summarized below (see Appendix J).

- 1. *Knowledge of PMS* such as the connotation associated with PMS, types of PMS, symptoms, and the impact of PMS/PMDD on women
- Experiences of PMS (either personal or with others) including details of symptoms, relationships with others including children, parenting with PMS, and coping strategies

3. *PMS and social work practice* including discussions of PMS in clinical and child protection settings, risk assessments, awareness and training about PMS, and practice strategies

A semi-structured interview was appropriate because while the questions were grounded in the literature in advance of interviewing, the answers could not be anticipated (Richards & Morse, 2013). Although the purpose of the semi-structured interview guide is to provide some structure to the interview, the questions were not pursued in any particular order. Semi-structured interviews are the most commonly used method of data collection by researchers using IPA (Pietkiewicz & Smith, 2014; Smith & Osborn, 2003). The popular approach adopted by the IPA researcher is to collect data from semi-structured interviews where the interviewer has developed a few main themes for discussion with the participants and some prompters (Raphique & Hunt, 2015). The strength of a general interview guide approach is the ability of the researcher to ensure the same general areas of information are collected from each interviewee (McNamara, 2009). This provided more focus than the conversational approach, but still allowed a degree of freedom and adaptability in obtaining information from the interviewee. Qualitative interviewers often deviate from the research protocols [interview guide] to go where the informant seems to want to go, or perhaps to follow what appears to be more interesting leads (Johnson, 2001). This occurred in some of the interviews.

The semi-structured interview guide was "scripted" using open-ended questions to encourage participants to expand their answers beyond "yes" or "no" responses. Although the ideal response to a question is a detailed free narrative offered by the participant without influence from the researcher, this was often not provided. Some participants had given little thought to premenstrual experiences and did not know how to approach a discussion of the topic. Some social workers had difficulty conceiving of a "context" for the questions, requiring that I describe scenarios or suggest statements for discussion spontaneously such as: "*Given that PMS is cyclical in nature, what do you think are the implications of this for child protection when working with female clients?*" "*Tell me how it might be different for a client if a worker initiated a conversation about PMS?*" "How do you think other social workers might respond to a recommendation to talk about PMS?", "What do you think is the cost [consequence] for child protection workers who may not understand women's issues with PMS or PMDD?" These more focused questions/statements resulted in richer discussions than when only general, openended questions were used.

All interviews were digitally recorded and as per the recommendations of IPA researchers Smith and Osborn (2003), all interviews were transcribed for further detailed analysis. A professional transcriber was hired to transcribe the digital recording, signing a confidentiality agreement before proceeding. She typed each interview in its entirety according to transcription standards, citing pauses, sighs, laughter, and other meaningful utterances (Kvale, 1996; Taylor & Bogdan, 1998). Transcripts were subsequently checked against the recordings for accuracy. Each interviewee was assigned a pseudonym to protect confidentiality, an alternative acknowledged by Kaiser (2009). Child protection workers were also specifically identified to differentiate their perspectives from other responding social workers.

When participant quotes are included in this dissertation, minor punctuation and grammatical changes were made only when necessary to add clarity and understanding.

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When required for context, brackets surrounded the questions or comments, i.e., [Int].

Analysis. All qualitative projects access their claims to trustworthiness from the researcher's ability to account for the outcome (Maxwell, 1992). Researchers must be clear about the process they engage in when abstracting or "thinking up" from the data (Richards & Morse, 2013). IPA consists of four stages of analysis. The first stage involved the reading and rereading of the text (Loo, 2012). IPA requires that each single transcription be completed before moving on to another (Smith & Dunworth, 2003). It is at this stage that a researcher becomes familiarized with the account. I first read the transcript in its entirety without making notes. Following this, I underlined meaningful passages of text. This process was followed until the analysis of all interviews was complete.

The second stage of IPA involves identifying and labeling themes that characterize each section of the text. Coding is a strategy that attempts to find clarity from messy, unstructured data (Richards & Morse, 2013). I engaged in topic coding by searching for predominant topics in content and context. Topic coding is an initial step toward more rigorous analysis and interpretation (Saldaña, 2013), and is frequently referred to as the "hack work" of qualitative research (Richards, 2009, p. 87). The IPA methodological analysis requires close interaction between the researcher and the text as the researcher attempts to comprehend the presented account using their own interpretative resources (Smith, 1999). Each line of text in the transcripts was reviewed using an emergent coding process and new topic codes were created as required. IPA researchers employ techniques that are flexible enough to allow unanticipated topics or themes to emerge during analysis. Qualitative inquiry demands attention to language and deep reflection on the patterns and meaning of human experience (Saldaña, 2013). "Just as a title represents or captures a book or film's primary content or essence, so does a code represent and capture a datum's primary content and essence" (Saldaña, 2013, p. 3). The topic codes were filed in "nodes", using NVivo 10 software.

Brocki and Wearden (2006) cautioned that data analysis is not merely "categorization", but rather the process of moving the researcher to analysis by developing meaningful abstractions from the data (Richards & Morse, 2013). When presenting participant responses, the data does not speak for itself but requires the reduction, reorganization, and interpretation of the research (Dey, 1993). An inductive approach (such as IPA) is consistent with a sequential exploratory model (Trahan & Stewart, 2013), as was used in this study. Most mindful qualitative research questions are "How" or "What" questions (e.g., "How did this happen?" "What is going on here?"), and are geared toward complex processes, exploration, and discovery (Newton Suter, 2012). As recommended by Smith (2008), only themes that capture something about the quality of the participant's experience of the phenomenon under investigation are to be included.

The third stage of IPA introduces structure into the analysis (Loo, 2012). Only when each interview has been examined in its entirety is there an attempt to conduct a cross-case analysis as the themes for each individual are examined for convergence and divergence (Smith, 2004). After thoroughly examining the interviews, topics with similar characteristics were placed within one category. For example, the code of "labeling in mental health" was subsumed under the code of "diagnosis of PMDD in the DSM". Other codes with similar features (such as emotional symptoms, physical symptoms, duration of symptoms) were recoded as subcategories within the larger category of PMS symptomology. These codes were then compared to the "a priori codes" embedded in the interview guide until all had been accounted for. Once this was done, the categories, rather than the data within, became the focus of attention through thematic analysis.

Thematic analysis presents a unique benefit to blended methods research. Because it can take a variety of forms, thematic analysis can be shaped to complement virtually any quantitative method and is useful in both sequential and concurrent designs (Trahan & Stewart, 2013). The criteria used to include themes in the analysis included both the prevalence of information and the desire for a wide scope of information.

The researcher thinks about ideas and meanings of the data as well as coconstructing new ones (Riviera, 2011) and the analysis itself is naturally complex (Newton Suter, 2012). Comparing concepts and their properties at a first level of abstraction, as recommended by Newton Suter (2012), permitted me to identify more abstract concepts. The analysis was conducted primarily on a semantic level, although underlying meanings were also sought. Theoretical saturation was likely not reached because data was not redundant, but this was not expected given (a) a sample of 16 social workers, and (b) a saturation of resources limited by time and data handling (Strauss & Corbin, 1998).

The fourth and last part of the analysis addresses a summary and final write-up of the themes. Smith and Osborn (in Smith, 2008) suggested that there is no actual divide between the analysis and the writing stage as the analysis will be expanded during writing. In this stage, the researcher translates the themes into a narrative account and the themes are appropriately explained. Researcher reflexivity is important in good qualitative research (Willig, 2008). IPA requires reflexivity from the researcher who is expected to explicitly present his or her own perspectives, thus illuminating the analysis (Willig, 2001). Reflexivity is the examination of how qualitative research is influenced or transformed by the researcher and inter-subjective elements (Finlay, 2002) and conversely, how simultaneously, the research experience affects the researcher (Gilgun, 2008). Reflexive researchers are, in essence, gazing in two directions at the same time. As they attend to what is taking place in the field of study, they become aware of their own projections, attachments, assumptions, agendas, and biases - like an eye that sees itself while simultaneously seeing the world (Probst, 2015). The qualitative researcher should be aware of and sensitive to the way personal history shapes a study (Creswell, 1997; Nightingale & Cromby, 1999). By acknowledging the self in social research, researchers are able to sort through biases and think about how they affect various aspects of the research (Lichtman, 2013).

With respect to my positioning as a researcher, I shift away from the tenet of phenomenology that suggests a researcher can bracket and put aside all judgments and beliefs about a subject (Van Manen, 1990). In their application of IPA, Smith et al. (2009) recommended that the researcher engage with the participant rather than with bracketing. Researchers come with their own personal baggage, their subject culture, their research preferences, and their personal goals (Newby, 2014). When considering my question, I attempted to be self aware about how (a) my history [as a mother who has had severe PMS]; (b) my biases [that PMS is an unaddressed societal issue]; and (c) beliefs [that PMS has biochemical origins] interacted with the child protection workers I was interviewing and impacted the research process at large.

I hold the premise that PMS/PMDD, although mediated by social and psychological factors, has biological/physiological origins and by embracing this tenet, I was often in conflict with a body of feminist literature favouring a social construction paradigm, despite considering myself a feminist. This inner identity crisis was reconciled to some degree by the more recent works of many feminist researchers who acknowledge the role of corporeality and the importance of valuing all women's lived experiences. I became more aware of the political and ethical processes of knowledge construction as noted by D'Cruz and Jones (2004).

One factor that might have influenced respondents was my use of self-disclosure in some of the qualitative interviews – briefly acknowledging with participants my own premenstrual struggles. There are mixed reviews about the use of self-disclosure, with some arguing there are risks to researcher interjection and self-disclosure (Miehls & Moffatt, 2000; Slattery, 2001). One such risk is that researchers may lose their focus on the personal experience of the participant by engaging their stories in the research interview (Moffatt, George, Lee, & McGrath, 2005). Self-disclosure moves the researcher more forcefully "into the room", perhaps too much so, just as self-disclosure by the therapist in psychotherapy can move the work forward or divert it (Gemignani, 2011). However, I maintain that given the stigma associated with PMS/PMDD, the decision to self-disclose increased rapport and trust and resulted in more open and honest conversation. As noted by Finlay (2002), we no longer seek to eradicate the researcher's presence –instead subjectivity in research is transformed from a problem to an opportunity.

It was also very difficult for me not to "teach" about PMS/PMDD and the

implications for practice, particularly since some participants had given very little thought to how premenstrual experiences could impact women's parenting. I had to constantly remind myself of the "research" hat I was wearing, while putting my "educator" hat on the shelf. As I progressed through the interviews, I was more successful in keeping my enthusiasm for the subject in check.

Blending the methods: Integrating the results - convergence and divergence.

As mentioned above, the quantitative and qualitative data were analyzed thoroughly and separately, teasing out the significance and meaning of the two sets of data. This process, known as parallel data analysis (Creswell & Plano Clark, 2007) involved analyzing both data sets completely before comparing or consolidating them (O'Cathain, Murphy, & Nicholl, 2008).

When both sets of data were analyzed, the two sets of results were compared and contrasted on the three questions for which the quantitative and qualitative data overlapped. These questions were: (1) What do social workers know about women's premenstrual experiences?; (2) Does the premenstrual knowledge of the participant influence whether and what they ask women in assessments?; (3) Do social workers ask about premenstrual experiences as part of their assessments when interviewing mothers? The comparison between data sets allowed for an assessment of those aspects of the data that (a) converged and supported one another, and (b) diverged and contradicted one another. In this exploratory study, the convergent findings fostered a greater confidence in the results, particularly when results were consistent with the literature, while divergent findings pointed to the need for further research.

Summary

This research methodology was designed to explore the premenstrual knowledge of social workers and how this knowledge influences whether and what they ask in their assessment practices with mothers. In this chapter, the rationale for a blended methods design was discussed, followed by the specified process undertaken for both the quantitative and qualitative methodologies. The quantitative component of the study included the development and administration of the Premenstrual Experience Knowledge Questionnaire (PEKQ) to 521 social workers while the qualitative component, guided by selected aspects of Interpretative Phenomenological Analysis (IPA), was based on sixteen interviews conducted from the larger sample. Ethical considerations relevant to the study, along with the trustworthiness of the research, were also explored. A plan for the mixing of the methodologies was outlined. The following two chapters focus on the data collected in the respective quantitative and qualitative components of the study.

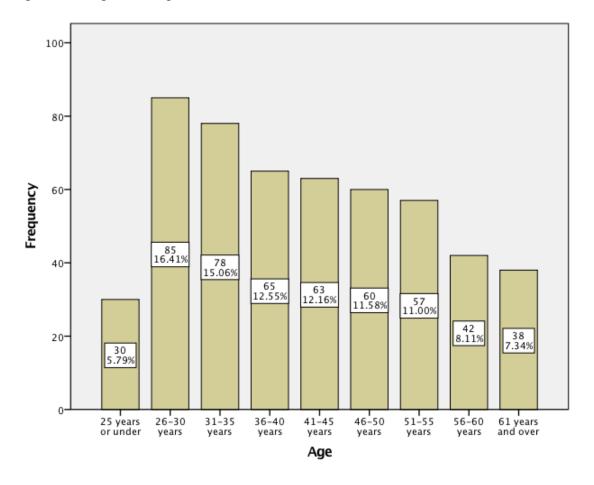
Chapter Five: Quantitative Findings

This chapter reports the research results answering the question: How does the premenstrual knowledge of social workers influence whether and what they ask in their assessments with mothers? The chapter is organized according to the phases of the study and the research sub-questions and reports the quantitative data gathered from the administration of the PEKQ questionnaire, including a statistical analysis of the findings.

Demographic Information

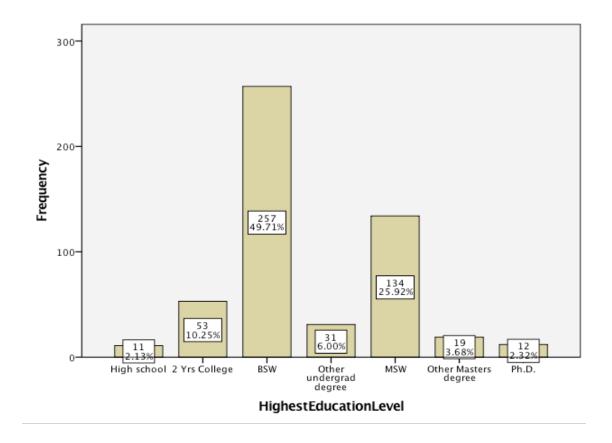
Participant information. As described in Chapter Four, the participants in this study were Canadian social workers voluntarily responding to invitations to complete the PEKQ. The final sample included 521 social workers who had completed *both* sections A and B of the questionnaire. Of participants identifying their sex (n=514), 470 (91.4%) were women and 44 (8.6%) were men. With respect to race (n=515), 452 (87.8%) participants self-identified as Caucasian, 36 (7.0%) as Indigenous (Aboriginal, Métis, or Inuit), and the remaining 27 (5.2%) were from other racial backgrounds. The ages of the participants are summarized in Figure 5.1.

Figure 5.1. Ages of Respondents, n=518



Professional information. Although the Canadian Association of Social Workers (CASW) (n.d.) states that the educational requirements for a social worker are a Bachelor or Masters Degree in Social Work, all respondents who self-identified as social workers or social work students were accepted, to increase the representation of those living in more remote communities where qualifications may be lower. The education level of respondents is noted in Figure 5.2. Almost half of the 517 social workers (257, 49.71%) who responded to this item had BSW degrees. Another 165 (31.9%) of social workers had completed graduate degrees.

Figure 5.2. Number of Respondents by Educational Level, n=517



With respect to social work position, of the 518 respondents, 194 (37.5%) social workers were working for child protection agencies, compared to 324 (62.5%) who were not, as noted in Figure 5.3.

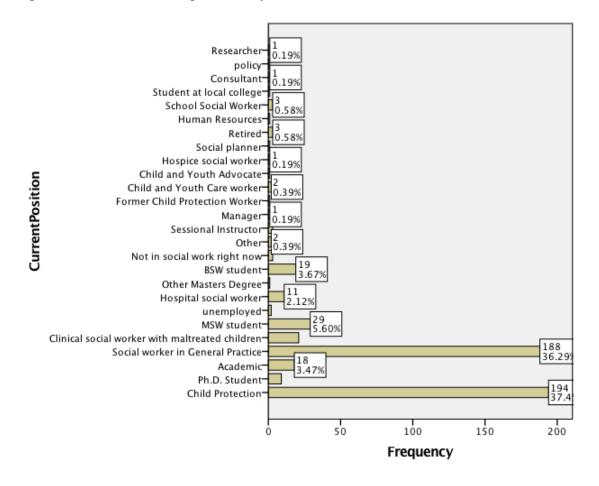


Figure 5.3. Number of Respondents by Current Position, n=518

As seen in Figure 5.4., almost half of the 514 participants (n=254, 49.4%) had worked as social workers for 10 years or less while another 140 participants (27.3%) had worked between 11 and 20 years. The remaining 120 social workers (23%) had worked for over 21 years.

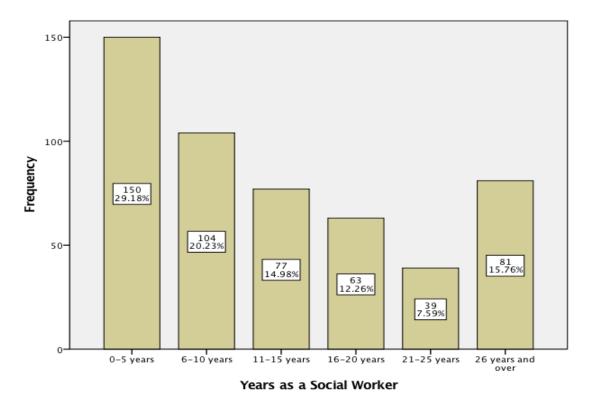


Figure 5.4. Number of Respondents by Years As a Social Worker, n=514

Out of the 512 social workers who responded to the item regarding premenstrual training, 488 (95.3%) reported having never received any training about PMS/PMDD.

Premenstrual information. Of 472 female participants who responded to whether they had personally experienced PMS/PMDD, 379 (80.3.%) indicated that they had.

With respect to rating the degree to which PMS interfered with their daily lives (Figure 5.5.), 450 social workers responded to the item (including non-PMS sufferers who rated their PMS symptoms as a 0). Using a seven-point Likert Scale, ranging from 0 (no PMS) to 6 (a lot of interference), the results are noted below in Figure 5.5. The maximum 6 rating equates to the most severe premenstrual distress (PMDD).

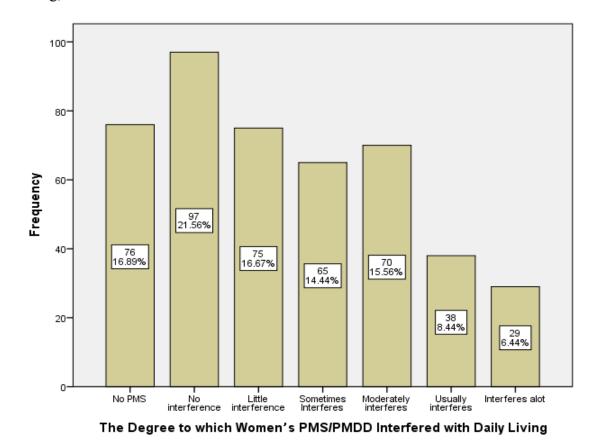


Figure 5.5. The Degree to which Female Participants' PMS/PMDD Interfered with Daily Living, n=450

Of the 186 respondents who responded to whether they had cohabited with a woman with PMS/PMDD, 134 (72%) indicated that they had. The results of participants responding to whether they had lived with a woman experiencing PMS and their ratings of the degree to which symptoms interfered with their lives were not used in the analysis as the data appeared contradictory. Frequently respondents indicated that they had never lived with anyone with PMS but then rated the symptoms anyway. Given that this information was not critical to the study, it was omitted.

This research inquired as to whether social workers asked mothers they work with about PMS/PMDD. Of 508 participants, only 26 (5.1%) asked women about their premenstrual experiences while the majority of respondents (482, 94.9%) did not.

Social workers' knowledge about women's premenstrual experiences

A key variable in this study is the knowledge (biological, psychological, and social) that social workers have about the continuum of women's premenstrual experiences as assessed by the scored results of the 20-item PEKQ completed by 521 participants.

As noted in Figure 5.6., this data set with its symmetrical and bell-shaped density approximates a normal distribution curve. Two measures of central tendency are very close with the median being 12 and the mean being only slightly higher at 12.18. The measure of skewness is -.258 (SE=.108) and the measure of kurtosis is .240 (SE=.215).

Given these measures, it can be concluded that this data set is approximately normally distributed (Manikandan, 2011). The standard deviation of 3.16 for this data is also very close to that of a normal distribution, which is typically identified as 3 (Weinbach & Grinnell, 2007). As noted in Figure 5.6., the range of the total PEKQ scores is 16, with 25% of participants scoring less than or equal to 10, 50% of participants scoring less than or equal to 12, and 75% of participants scoring less than or equal to 14.

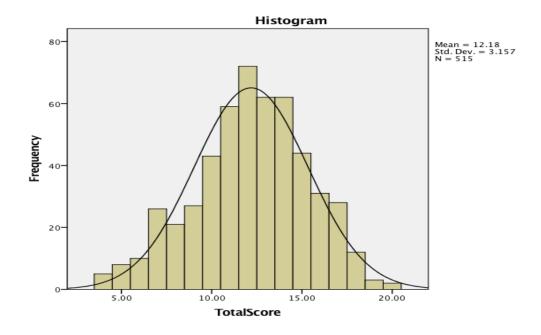


Figure 5.6. Distribution of Knowledge Scores on 20 Item PEKQ, n=515

In addition to the total knowledge scores of each participant, the research question sought to ascertain *what* social workers know, and through the lens of the BPS-*E* framework that includes specific knowledge in the biological, psychological, and social domains. The participants scored the highest in the social domain, with an average of 69.9% items correct, followed by the biological and psychological domains, both with an average of 56.9% correct scores.

As can be seen in Table 5.1., the PMS knowledge most accurately held by the respondents regardless of domain, was (a) the age of PMS onset, (b) the exacerbation of physical illnesses and headaches by PMS symptoms, (c) that women are not merely socialized to expect symptoms, and that (d) PMS symptoms can have a duration of two weeks for some women.

Table 5.1.

Biops	uency of Correct, Incon sychosocial Domain –					
n=52 Item #	I Questionnaire Item	Number of Respon- dents	Correct Responses	I Don't Know Responses	Incorrect Responses	Incorrect Responses Including "Don't Know" Responses n (%)
1 BIO	PMS generally starts when a woman is over the age of 45 years.	520	481 (92.5%)	14 (2.7%)	25 (4.8%)	39 (7.5%)
20 BIO	Physical illnesses and headaches can get work when a woman has PMS.	518	465 (89.8%)	49 (9.5%)	4 (0.8%)	53 (10.2%)
5 SOC	Women have problems with PMS only because they have been socialized to expect symptoms.	514	460 (89.5%)	32 (6.2%)	22 (4.3%)	54 (10.5%)
12 SOC	Women with severe PMS find their work and family lives most affected.	517	437 (84.5%)	61 (11.8%)	18 (3.5%)	79 (15.3%)
4 BIO	For some women, distressing PMS symptoms can last up to two weeks per month.	517	428 (82.8%)	59 (11.4%)	30 (5.8%)	89 (17.2%)
19 SOC	Some women with severe PMS have problems parenting their children.	519	401 (77.3%)	95 (18.3%)	23 (4.4%)	118 (22.7%)
9 PSY	Women tend to exaggerate how PMS affects them in a negative way.	517	392 (75.8%)	51 (9.9%)	74 (14.3%)	125 (24.2%)
18 SOC	Most women with severe PMS do not feel stigmatized because symptoms are a normal part of menstruation.	513	366 (71.3%)	89 (17.3%)	58 (11.3%)	147 (28.7%)
14 PSY	Some women feel positive before they get their period.	518	352 (68.0%)	128 (24.7%)	38 (7.3%)	166 (32.0%)
15 PSY	3 to 9% of women have such severe PMS that they are not able to	519	345 (66.5%)	164 (31.6%)	10 (1.9%)	174 (33.5%)

	cope with daily life.					
16	The physical symptoms	517	324 (62.7%)	131 (25.3%)	62 (12.0%)	193 (37.3%)
BIO	of PMS usually bother	517	524 (02.770)	131 (23.370)	02 (12.070)	195 (57.570)
BIU	women more than the					
	emotional symptoms.					
3	Usually, only women	516	292 (56.6%)	169 (32.8%)	55 (10.7%)	224 (43.4%)
SOC	in Western cultures	510	292 (30.070)	109 (32.8%)	33 (10.7%)	224 (43.470)
300						
	have severe PMS					
10	symptoms.	517	202 (54 70()	212 (41 00/)	22 (4 20()	224 (45 20/)
10 DOV	Premenstrual	517	283 (54.7%)	212 (41.0%)	22 (4.3%)	234 (45.3%)
PSY	Dysphoric Disorder					
	(PMDD) is a term for					
	women with physical					
L	symptoms only.		0.000		1.50 (0.0 50 ()	
2	When women have	519	277 (53.4%)	83 (16.0%)	159 (30.6%)	242 (46.6%)
BIO	PMS, the causes are					
	mainly related to their					
	biology.					
6	There is a psychiatric	518	245 (47.3%)	221 (42.7%)	52 (10.0%)	273 (52.7%)
PSY	category in the DSM					
	for severe PMS.					
13	Premenstrual	519	209 (40.3%)	300 (57.8%)	10 (1.9%)	310 (59.7%)
SOC	symptoms in women					
	have been described as					
	far back as 300 BC in					
	the writings of					
	Hippocrates and					
	Aristotle.					
8	Severe PMS can be	519	181 (34.9%)	291 (56.1%)	47 (9.1%)	338 (65.1%)
BIO	confirmed with a blood					
	test.					
11	There are over 150	513	154 (30.0%)	326 (63.5%)	33 (6.4%)	359 (69.9%)
BIO	different types of PMS					
	symptoms.					
7	Suicide occurs more in	519	152 (29.2%)	334 (64.4%)	33 (6.4%)	367 (70.8%)
PSY	women with severe					
	PMS in the last two					
	weeks before their					
	period than in women					
	without symptoms.					
17	The most effective	515	45 (8.7%)	313 (60.8%)	157 (30.5%)	470 (91.3%)
BIO	treatment for severe					
	PMS is SSRI anti-					
	depressants.					
	asprobballo.		1	1	1	

The three items about which social workers had the *least* knowledge (comprising both inaccurate and don't know responses) included not knowing the effectiveness of SSRI treatments, the higher risk of suicide for women with PMDD, and the extensive

number of symptoms associated with PMS/PMDD. It is relevant to consider the responses about which the respondents were least knowledgeable to ascertain whether their knowledge is actually incorrect or they simply do not have the knowledge. The most *incorrect* knowledge of participants related to the role of biology as a cause of PMS and SSRIs as a treatment for PMS/PMDD.

Identifying these items has implications for educating and training social workers about premenstrual knowledge as will be discussed further in Chapter Eight. Respondents were asked on the PEKQ about training on PMS/PMDD but a scant number of the 512 (n=24, 4.7%) had received any training.

Pearson's Chi Square Tests for Independence.

Sex of participants. The χ^2 test for Independence was used to test the null hypothesis that the effect of the sex of social workers asking about PMS/PMDD in the assessment practices of mothers was independent. The proportions can be seen in Table 5.2.

Table 5.2.

Participant Sex as Related to Social Work Inquiries about PMS/PMDD, based on valid						
number of entries=504						
Variable	Categories	Yes Inquired	No Inquiry	Total		
Sex	Male	2 (0.4%)	42 (8.8%)	44 (9.2%)		
	Female	23 (4.6%)	437 (86.7%)	460 (91.3%)		

Based on the results of the test, there is no evidence against the null hypothesis $(X^2 (1) = .018), p > 0.1)$. It can be concluded that in this sample, female social workers were no more likely to ask women about PMS/PMDD than male social workers in this sample.

Age of participants. The χ^2 test of independence was used to test the null

hypothesis that the effect of social worker age on making inquiries about PMS/PMDD was independent. The proportions are summarized in Table 5.3.

Table 5.3.

Age of Participa valid number of	ents as Related to So entries=507	ocial Work Inquirie	es about PMS/PMI	DD based on
Variable	Categories	Yes Inquired	No Inquiry	Total
Age	25 years or <	2 (0.4%)	27 (5.3%)	29 (5.7%)
	26-30 years	1 (0.2%)	82 (16.2%)	83 (16.4%)
	31-35 years	0 (0.0%)	77 (15.2%)	77 (15.2%)
	36-40 years	2 (0.4%)	63 (12.4%)	65 (12.8%)
	41-45 years	2 (0.4%)	61 (12.0%)	63 (12.4%)
	46-50 years	3 (0.6%)	53 (10.5%)	56 (11.1%)
	51-55 years	7 (1.4%)	49 (9.7%)	56 (11.1%)
	55-60 years	4 (0.8%)	37 (7.3%)	41 (8.1%)
	> 61 years	5 (1.0%)	32 (6.3%)	37 (7.3%)

Based on the results of the test, there is strong evidence against the null hypothesis (X^2 (8) = 21.44)), p < 01) suggesting in this sample that older social workers were much more likely to ask women about PMS/PMDD than younger social workers. The strength of the relationship was moderate with a phi coefficient of 0.206.

Premenstrual training of participants. The χ^2 test of independence was used to test the null hypothesis that the effect of premenstrual training on inquiries about PMS/PMDD was independent. The proportions are noted in Table 5.4.

Table 5.4.

Premenstrual Training Received related to Social Work Inquiries about PMS/PMDD				
based on valid numb	er of entries=5	502		
Variable	Categories	Yes Inquired	No Inquiries	Total
Received Training	Yes	6 (1.2%)	17 (3.4%)	23 (4.6%)
on PMS				
	No	19 (3.8%)	460 (91.6%)	479 (95.4%)

Based on the results of the test (χ^2 (1) = 22.69, p < 0.001) there is strong evidence against the null hypothesis, suggesting that social workers who had taken premenstrual training were more likely to ask women about PMS/PMDD than those not having received training. The strength of the relationship was moderate with a phi coefficient of .213.

Participants having had PMS/PMDD symptoms. The χ^2 test of independence

was used to test the null hypothesis that the effect of social workers having had PMS/PMDD on inquiries about PMS/PMDD was independent. The proportions are shown in Table 5.5.

Table 5.5.

Female Social Workers Having Had PMS/PMDD Related to Social Work Inquiries about					
PMS/PMDD base	PMS/PMDD based on valid number of entries=461				
Variable	Variable Categories Yes Inquired No Inquiries Total				
Whether SW	Yes	19 (4.1%)	352 (76.4%)	371 (80.5%)	
has had PMS					
	No	5 (1.1%)	85 (18.4%)	90 (19.5%)	

Based on the results (χ^2 (1) =.028, p > 0.1), the data appears to be consistent with the null hypothesis. Social workers having had PMS/PMDD symptoms were no more likely to ask women about PMS/PMDD than those who had never had symptoms.

The degree of premenstrual symptom interference in the daily lives of social workers. The χ^2 test of independence was used to test the null hypothesis that the effect of social workers' degree of premenstrual symptom interference on inquiries about PMS/PMDD was independent. The proportions are summarized in Table 5.6.

Table	5.	6
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Female Social Workers' Degree of PMS/PMDD Symptoms Related to Social Work								
Inquiries about PMS/PMDD based on valid number of entries = 440								
Variable	Categories	Categories Yes Inquired No Inquiries 7						
The degree of	No PMS	2 (0.5%)	72 (16.4%)	74 (16.8%)				
symptom	Symptoms don't							
interference	interfere	5 (1.1%)	89 (20.2%)	94 (21.4%)				
	Little interference	2 (0.0%)	72 (16.4%)	74 (16.8%)				
				, , ,				
	Some interference	4 (0.9%)	60 (13.6%)	64 (14.5%)				
	Moderate interference	1 (0.2%)	68 (15.5%)	69 (15.7%)				
	Usually interferes	4 (0.9%)	33 (7.5%)	37 (8.4%)				
	-							
	Significant	5 (1.1%)	23 (5.2%)	28 (6.4%)				
	interference			. ,				

Based on the results of the test, there is strong evidence against the null

hypothesis (X^2 (6) = 15.37, p < 0.01) suggesting in this sample that social workers having more interfering PMS symptoms were more likely to ask women about PMS/PMDD than those social workers with symptoms that interfered less. The strength of the relationship was weak to moderate with a phi coefficient of 0.187.

T-tests.

The influence of the participant's sex on premenstrual knowledge scores. The independent-samples t-test, homogeneity of the variances assumed (Levene's F(1, 507) =

1.138, p > 0.1), was conducted to test the null hypothesis that participant sex has no effect on the premenstrual knowledge scores of responding social workers. The descriptive parameters are summarized in Table 5.7.

Table 5.7.

Independent Sample t-test on Social Worker Sex and Premenstrual Knowledge Scores						
Variable	VariableGroup n \bar{x} SD					
Sex	Men	44	12.27	3.763		
	Women	465	12.17	3.083		

There were no significant differences in the premenstrual knowledge scores for men and women. The results (t(507) = .199, p > 0.1) suggest that the sex of the participant did not have a significant effect on premenstrual knowledge scores in this sample.

The influence of premenstrual knowledge scores on inquiries about

PMS/PMDD. As indicated in Table 5.8, an independent-samples t-test, homogeneity of the variances not assumed (Levene's F(1, 501) = 4.18, p < 0.05), was conducted to test the null hypothesis that premenstrual knowledge scores of responding social workers has no effect on premenstrual inquiries of female clients.

Table 5.8.

Independent Sample t-test on Social Workers Inquiring about PMS/PMDD and PEKQ Scores					
Variable Group n \bar{x} SD					
Ask about PMS Yes 26 14.92 2.02					
	No	477	12.02	3.15	

There was a significant difference in the premenstrual knowledge scores for social

workers who asked about PMS/PMDD and those who do not (t(32) = 6.88, p < 0.001). Since the homogeneity of variance assumption was violated, two Glass's delta (Glass et al. 1981, p.29) were calculated: Δ_1 =1.45 (based on *SD*=2.02) and Δ_2 = 0.92 (based on *SD*=3.15). Both values indicate a large effect. These results suggest that higher premenstrual knowledge scores in this sample were related to a higher probability of social workers asking clients about PMS/PMDD.

The influence of training on PMS/PMDD on premenstrual knowledge scores.

As indicated in Table 5.9, homogeneity of the variances assumed (Levene's F(1, 505) = 0.277, p > 0.1), an independent-samples t-test was conducted to test the null hypothesis that premenstrual knowledge scores of social workers are not effected by premenstrual training.

Table 5.9.

Independent Sample t-test on the Variable of Received Premenstrual Training and					
Premenstrual K	Premenstrual Knowledge Scores				
Variable	Group	п	\overline{x}	SD	
Have had	Yes	24	12.79	3.36	
PMS training					
	No	483	12.14	3.15	

There was a highly significant difference in the premenstrual knowledge scores for those who had taken premenstrual training compared to those who had not. The results (t(505)= 0.991, p > 0.1) suggest that premenstrual training did have a large effect on premenstrual knowledge scores.

The influence of social workers having PMS/PMDD on premenstrual

knowledge scores. As indicated in Table 5.10., an independent-samples t-test,

homogeneity of the variances not assumed (Levene's F(1, 465) = 6.04, p < 0.05), was

conducted to test the null hypothesis that having had PMS/PMDD has no effect on the premenstrual knowledge scores of responding social workers.

Table 5.10.

Independent Sample t-test on Social Workers' Having Had PMS/PMDD Symptoms and Premenstrual Knowledge Scores					
Variable					
Have had PMS					
	No	91	11.69	3.55	

There was no significant difference in the premenstrual knowledge scores of those women who had had PMS/PMDD and those women who had not. These results (t(121) =1.62, p >.1) show that there is no evidence against the null hypothesis in favour of the alternative that having PMS/PMDD did have a significant effect on premenstrual knowledge scores in this sample.

ANOVA.

Age and premenstrual knowledge scores. In Table 5.11., a one-way between subjects ANOVA test was conducted to test the null hypothesis of the effect that the age of social workers has on premenstrual knowledge scores. The test of homogeneity of variance was not significant (p > 0.1) and therefore met the necessary condition for ANOVA.

Table 5.11.

One Way Analy Knowledge Scor	sis of Variance be res	etween Participar	nt Age and Preme	enstrual
Variable	Group	п	\overline{x}	SD
Age of respondent	25 years or <	30	12.23	3.44
1	26-30 years	84	12.17	3.16
	31-35 years	76	11.78	2.98
	36-40 years	65	12.37	3.54
	41-45 years	62	12.73	3.01
	46-50 years	59	12.20	3.06
	51-55 years	57	12.35	2.96
	56-60 years	42	11.66	3.33
	61 years and >	38	12.17	3.16

The results (F(8, 504) =. 612, p > 0.1) suggest that age does not have a significant effect on the premenstrual knowledge scores of social workers in this sample.

Number of years worked as a social worker and premenstrual knowledge

scores. As seen in Table 5.12., a one-way between subjects ANOVA was conducted to test the null hypothesis that the number of years worked as a social worker has an effect on premenstrual knowledge scores. The test of homogeneity of variance was not significant (p > 0.1), therefore, the necessary condition for ANOVA was met.

Table 5.12.

One Way Analysis of Years Worked as a Social Worker and Premenstrual					
Knowledge Scor	res				
Variable	Group	п	\overline{x}	SD	
Years Worked	0-5 years	148	12.06	3.10	
as a Social					
Worker	6-10 years	103	12.06	3.16	
	11 15	76	12.17	3.34	
	11-15 years	76	12.17	5.54	
	16-20 years	63	12.81	3.03	
	10 20 90000	00	12101	0100	
	21-25 years	38	12.40	2.55	
	26 years and	81	11.89	3.41	
	over				

The results (F(5, 503) =.744, p > .0.1) suggest that the number of years worked by a social worker has no significant effect on their premenstrual knowledge scores in this sample.

Degree of premenstrual symptom interference in daily living and premenstrual

knowledge scores. As seen in Table 5.13., a one-way between subjects ANOVA was conducted to test the null hypothesis that the degree of social workers' premenstrual symptom interference on daily life did not affect premenstrual knowledge scores. ⁹

⁹ Since the assumption of homogeneity of variances has been violated, the Welch test (W) was used instead of the F test. The Levene statistic result was 2.411, $0.01 \le 0.05$ statistic result was 2.411, $0.01 \le 0.05$

Table 5.13.

One Way Analysis of Variance between Social Workers' Degree of Premenstrual					
Symptom Interfe	rence in Daily Li	ving and Premen	istrual Knowledg	e Scores	
Variable	Group	п	\overline{x}	SD	
Degree of	00	73	11.23	2.90	
premenstrual	(No PMS)				
symptom					
interference in	1(Symptoms	96	11.56	3.60	
daily living	don't				
	interference)				
	2 (Little	74	12.16	2.90	
	Interference)				
	3 (Sometime	65	12.52	2.62	
	Interferes)	05	12.32	2.02	
	interferes)				
	4 (Moderately	70	12.57	2.84	
	Interferes)	10	12.07	2.01	
	5 (Usually	38	13.32	2.48	
	Interferes)				
	, ,				
	6 (Significant	29	13.00	3.01	
	Interference)				

The results (W(6, 161) = 3.844, p < 0.01) suggest that the degree of social workers premenstrual symptom interference on daily life had a significant effect on their premenstrual knowledge scores in this sample. Cohen's f = 0.22 (Cohen, 1988, S. 273 ff.) indicates close to a medium effect.

Summary

This chapter began with an overview of the data analysis procedures, a description of the demographic characteristics of the 521 participating social workers, and a description of the 20-item PEKQ questionnaire. Data from the questionnaire addressed the two components of the research question including (a) the knowledge that

social workers have about women's PMS/PMDD, and (b) whether they ask mothers about premenstrual experiences in their assessments.

The results established that most social workers have limited knowledge about premenstrual experiences. The three items about which social workers had the *least* knowledge (comprising both inaccurate and don't know responses) included (1) not knowing the effectiveness of SSRI treatments, (2) the higher risk of suicide for women with PMDD, and (3) the extensive number of symptoms associated with PMS/PMDD. The two items that social workers had the most *incorrect* knowledge of were (1) the role of biology as a cause of PMS, and (2) SSRIs as a treatment for PMS/PMDD. Higher PEKQ scores were associated with greater interference of social workers' own premenstrual symptoms on their daily living, These knowledge deficits can inform the type of premenstrual knowledge needed by social workers.

The data for which statistical significance was established for this sample related to premenstrual knowledge included (a) the degree of interference of the social workers' premenstrual symptoms on daily life, and (b) premenstrual training received.

Very few social workers in this study (5.1%) addressed premenstrual symptoms with their female clients. However, a statistically significant relationship existed in this sample between asking female clients about PMS/PMDD and social workers' (a) age, (b) premenstrual knowledge score, (c) premenstrual training, and (d) the degree to which the premenstrual symptoms of female social workers interfered in their own daily living.

Chapter Six: Qualitative Findings

The qualitative component of the study contributes to a richer understanding of the knowledge social workers have about women's premenstrual experiences and their discussion of this issue, if any, with women in their assessments. The voices of the social workers provide a rationale for their current practices and their perceptions of the value of such conversations with mothers in the future.

Demographic information. Sixteen social workers were interviewed, selected from the 164 participants who volunteered on the PEKQ to participate in the interview phase of the study. Of these 16 social workers, 10 were from Alberta, two were from the Northwest Territories, two were from British Columbia, and the remaining two were from Saskatchewan and Newfoundland, respectively. Fourteen participants were women and two were men. Half of those interviewed were over the age of 40 years and the others were 40 years or less, with age categories ranging from "under 25 years" to "over 61 years".

All participants were Caucasian. Although 19 survey participants of other racial origins originally expressed interest in participating in an interview, none were ultimately available. With respect to education, 13 of the 16 social workers interviewed had social work specific degrees including seven with MSWs and six with BSWs. Of the remaining three, one had a Masters degree and two had Bachelor degrees in alternate disciplines. Eight social workers were currently working in child protection services and of the two social workers with previous child protection experience, one was working in youth probation and the other was retired. Two social workers worked for government health services and four had clinical positions in a variety of settings.

With respect to the 20-item PEKQ, the total knowledge scores of these 16 interviewees ranged from a low of 9 (45%) to a high of 19 (95%). The mean knowledge score for the interviewees was 12.75 (*SD*=2.91), which is similar to the mean score of 12.18 (*SD*=3.33) for the 521 social workers completing questionnaires. Only one of the 16 social workers interviewed reported that they asked mothers about their premenstrual experiences; the rest had not.

What social workers know about women's premenstrual experiences.

Overview of themes. The key themes that emerged from the interviews related to the premenstrual knowledge of social workers are identified in Table 6.1.

Table 6.1.

An Overview of the Themes Related to What Social Workers Know About Women's		
Premenstrual Experiences		
Themes	Sub-themes	
Knowledge of the presentation of premenstrual symptoms	Symptom diversity, intensity; continuum of symptoms	
Knowledge of physical symptoms	Identification of symptoms; exacerbation of pre-existing conditions	
Knowledge of emotional symptoms	Identification of symptoms; self-blame and frustration; the most debilitating of symptoms; suicidal ideation	
Public connotations or stereotypes of PMS/PMDD	Negative stereotypes	
Impact of PMS/PMDD on relationships	Issues related to judgment; family relationships; parenting when a mother has PMS/PMDD	

The participants had varying degrees of confidence about their knowledge about premenstrual experiences with some skeptically inquiring about their results on the PEKQ, which were provided. Candice (child protection) apologized for her perceived lack of knowledge saying, "I didn't realize how little I knew about it [PMS] until I did your first survey", while Ian (child protection) was apprehensive about his score on the PEKQ stating, "There's not a lot that makes me uncomfortable. It's the knowledge piece - that's the big question."

Of the 16 interviewees, only two had indicated on the PEKQ that they had taken training on PMS/PMDD. Jennifer noted,

So it's always about reading research and attending courses and learning as much as I can, taking every opportunity to learn. Just really taking quite seriously my responsibility of knowing as much as I can so that when someone comes forward and says, "This is what I'm feeling, this is what I'm experiencing, this is what my life looks like... what are the resources I can immediately pull out and connect them with?"

Jennifer had sought out training because of her interest in the subject and not as part of her education or employment. A discussion of PMS/PMDD training did not arise in the interview with Kennedy (child protection), although it was noted on the PEKQ that she had received premenstrual training.

Knowledge of the presentation of premenstrual symptoms. The participants were asked to describe the nature of symptoms during the premenstruum. Three workers commented on the *diversity* of symptoms experienced by women. Jennifer, for example, stated, "So for me when somebody says they definitely face that [PMS], it's always about, 'So what does that mean because it can be so incredibly different?" Jennifer highlighted the diverse presentation of symptoms as one of the greatest challenges that social workers face in corroborating PMS and PMDD complaints.

Several participants considered that any discussion of the nature of symptoms must include symptom *intensity*, recognizing that depression, anxiety, and irritation range in severity. They used words such as mild, severe, low, extreme, and significant to describe how women have unique experiences of the same symptom. Chantelle's comment illustrates this.

Because - same as mental health - there's a continuum of symptoms of depression so I guess it would be the same for PMS - if you're looking at the degree of symptoms. So, certainly I can see there would possibly be more irritability, but again that can go from slight irritability to pretty severe.

Chantelle used the term "continuum" in a manner consistent with the conceptualization of symptoms proposed in Chapter One. Such a continuum acknowledges the many lived experiences of women during the premenstruum from a positive experience to severe dysfunction impacting daily life. A woman's self-report of the *degree* of premenstrual symptomology is critical in discriminating problematic symptoms from those having minimal interference.

An issue raised by Sandra (child protection) was her challenge in accurately remembering the intensity of premenstrual experience retrospectively.

The other amazing part of PMS is that as soon as it passes, there is no emotional memory or imprint. I completely forget that I spent three days in hell last week and I then report that I have minor PMS that impacts my life in little-to-no way.

When asked to describe symptoms associated with PMS, 14 of 16 participants identified *both* psychological and physical symptoms associated with premenstrual experiences. Of the two participants not discussing both, it was the physical symptoms that they did mention. Sandra (child protection) explained her understanding of PMS was characterized by physical and emotional symptoms.

Probably both physical and emotional symptoms. I feel like either you hear people say, "Oh I have really bad cramps." Or I would hear them say, "Oh I just can't really cope with something in my life right now, I'm about to get my period." So kind of that emotional turmoil or struggle a little bit.

When the respondents were asked about the nature of physical and emotional symptoms, most shared their own personal or family circumstances as a means of bringing the symptom experiences to life. This is reflected in many of the following quotes describing physical and emotional symptoms.

Knowledge of physical symptoms. Most participants were knowledgeable about the physical symptoms women find bothersome, specifically cramping, headaches, nausea, constipation, pelvic pain, and water retention. Ian (child protection) recalled the physical distress of his sisters as he was growing up.

I have vivid memories of her [older sister] lying on the couch or lying in her bed and really being incapacitated with cramps and pain. My younger sister, who is three or four years younger than I am, also has had difficulty. She's also been a child protection worker. She's also had difficult periods and experienced it. Hot water bottles were copious around my house growing up.

Kennedy (child protection) spoke of the physical symptoms that women have shared with her over the years.

Usually they talk about their pain and that their pain is so much that they can't get out of bed and they can't go to work - things like that. They also talk about headaches but mostly they talk about pain... cramps and pain and nausea, I guess. Three participants provided examples of the exacerbation of other pre-existing conditions during the premenstruum. Gus (child protection) shared, "My wife has gastrointestinal problems and prior to and during her periods those are exacerbated." Martine pointed out that mental health symptoms can also be aggravated saying, "Psychologically I think for some it can affect their mental health. So it might exacerbate some existing diagnosis or just cause mood changes." Kennedy (child protection) also expressed a concern about her own mental health disorder, "For me, that's something that I'm always worried about - having a co-morbid mental health [*diagnosis* - Am I overreacting or is it because I'm going into a [bipolar] episode?"

Knowledge of emotional symptoms. Participants were asked to describe the nature of emotional symptoms associated with PMS. The respondents were animated and detailed in their narratives and, in almost every example, the emotional symptoms were described in the context of impacting one or more relationships.

Rena (child protection) began by talking about other women with whom she is acquainted, but moved quickly to sharing her own personal experience of emotional symptoms.

It can be such hopelessness and despair or anxiety and panic attacks where they can't breathe. Women just being so petrified, 'cause there's this cloud that they know is going to hit them, like it or not. But yeah, how do I make that stop? In my own experience my fuse is much shorter at different times in my cycle or at different times in my life or in the month long period than it is at other times. I would describe them as a bit of a shorter fuse, I guess, more quick to anger, more

sort of unreasonable and more sort of when I say unreasonable things that I could typically just sort of cope with, I don't cope with as well.

Donna (formerly child protection) shared her emotional challenges, perceiving her own premenstrual behaviour as remarkably atypical of her usual self:

I get very emotional sometimes and then I'll like skip right to tears where most times I'm very level headed and will be able to talk to myself like, "Okay now's not the appropriate time to cry, you may do that later." - where just being upset right away if something doesn't go my way even if it's something really petty sometimes during, like when I am PMS'ing it'll just be like, "No you can't do that," or like "I'm mad about this and you can't change my mind.", no matter how ridiculous this whole thing may be. And going, "Oh my, this is just so not me." and yet not being able to help myself.

Women like Rena and Donna hope each month will be different, but find themselves back under the cloud, often with self-blame for their emotionality and perceived inappropriate behaviour. They highlight the effect premenstrual distress can have on such daily functions as school, social activities, or relationships, reminding us that such an impact on daily living is a necessary requirement for a PMDD diagnosis in the DSM-V.

Although not asked directly, several participants described psychological symptoms impairing their judgment and decision-making during the premenstruum. Sandra (child protection) spoke of her frustration at not being able to trust herself. "Each month my perspective is not what it normally is. It makes it hard to kind of trust my instincts 'cause in those moments what feels true doesn't feel true other days - and you'll argue it to death in the moment cause it feels so real." Women make decisions throughout their day in their roles as a parent and to be insecure about the ability to make some of those decisions effectively can be very disconcerting.

Faye described similar feelings, but in the context of her employment as a child protection worker.

She [coworker] really struggles with making tough decisions or she really second guesses herself during that week. She'll run almost everything past me or a supervisor - like if it's a bigger decision past the supervisor. We have a phrase and we know that when we say this phrase we're actually kind of judging by how we've been that day that's how appropriate our answers we'll be. We'll say something and then we'll say, "Do you think I'm on the crazy train?"

When asked to describe which of the symptoms in the premenstrual spectrum women find most challenging, the participants described the emotional symptoms as more debilitating than the physical because generally the symptoms were perceived to interfere more with women's ability to cope with daily life. Sandra (child protection) emphasized how the psychological symptoms were the worst to cope with,

I just remember one time I woke up and I felt actually aggressive. I just knew it was like hormonal. I was like it's so wild that this happens to us. Like it was definitely biological in nature. There was nothing happening in my life. I just woke up and it was like I feel like I'm this angry bear.

Two participants described having a client and family member for whom the extreme psychological distress of suicidal ideation was a reality during the premenstruum.

I had a woman that I worked with for a number of years - and she was suicidal and they couldn't figure it out. It was PMDD and it was like, "Wait a minute, how can it be that extreme?" Yet it really is. (Jennifer)

Martine experienced this at a very personal level when a close family member's death was linked to PMDD in the form of a dual-diagnosis.

I don't want to get too emotional but my relative who really struggled, she actually ended up killing herself in the spring. So who knows... But we, the women in my family, have certainly become much more aware of what's happening with each other and they all suffered greatly. Everything under the sun that you could imagine - from acts of suicidal ideation to severe immobilizing anxiety and social phobia during certain periods in their cycle. Most of it was mental - it was emotional and mental.

These quotes illustrate the potentially devastating effect on women whose experiences of premenstrual symptoms are so severe that suicide seems to be the only way to end the ongoing cycles of emotional pain and dysfunction.

The public connotations or stereotypes of PMS. Participants were asked about the "connotations" [stereotypes] typically associated with PMS/PMDD. None of the female respondents identified positive connotations of PMS. Linda (child protection) responded as follows:

I have thoughts on what it personally means but then it's kind of clouded by the negatives that seem to follow conversations around PMS. So I guess my first thought is not a positive one. Maybe that PMS is something that is only experienced by women and that it's intense mood swings, intense emotions.

Certainly, like words I've heard are – "You're crazy," "You're just PMS'ing," - things like that so it doesn't bring up a positive feeling.

A number of the social workers differentiated their own beliefs from the general connotation or negative discourse, almost as though, as professionals, they felt guilty giving a voice to the stereotype of the "the erratic, out-of-control premenstrual woman." Like Sandra, three other participants repeatedly used the word "crazy" to describe either themselves or others having PMS. For example, Rena (child protection), stated "While all this stuff is going crazy with my body, so is my brain and I don't have anybody," and Chantelle noted, "I think there's still a lot of risk around shame and perceptions of being crazy." Faye (child protection) shared how the word "crazy" became a code word among coworkers to identify times of premenstrual distress.

We'll [girlfriends) have each other's back and, like in her relationship or my relationship, we'll often say, "Hey, this is the situation, I'm just about to start my period and I think that I'm going crazy." That's the language that we use, "that crazy girl."

Several participants perceived society as having a strong connotation or stereotype of women as less competent during the premenstruum. Carly lived in a small rural town and struggled with the characteristics attributed to premenstrual women.

There was a "red neck" culture I grew up in – with women as the weaker sex and PMS as being a good example of that; that it affects all women's ability to think clearly and act rationally.

Carly also noted that, conversely, not only are women disparaged during their premenstruum but, at times, their valid thoughts and feelings during the rest of the month

are dismissed as being PMS; unfairly disqualifying women's anger, assertiveness, and humanity.

So that's where I got puzzled about the assumptions of how women think and behave and their emotions packaged up in PMS and those assumptions that every woman goes through PMS and so if you get angry at somebody or you forget where something is or you whatever - that somehow, "Oh that's a woman thing." In this way, the negative social construction of PMS and inappropriate behavior serves to wrongly reinforce the stereotype of incompetent women while denying sensitivity and support to those requiring it.

Sandra (child protection) voiced the "disconnect" that such negative perceptions have for her, particularly given her strong feminist beliefs.

As a feminist woman there is a pressure to act like you don't have PMS because that means that you are weaker than men. Like you were saying that it's not real but it is real. It is real and it is negative and it is something tough that women deal with but I think the problem is not like pretending we're not female, but how do we respond to women? I feel like it's the depression of 20 years ago in a way.

Sandra voiced a conundrum: By acknowledging the "negative" premenstrual

reality of some women, there is the fear that one also has to unfairly acknowledge an inferiority or weakness of women collectively. She opens the door for us to consider perhaps there can be a truth that allows for the support of the individual woman without diminishing the strength and competence of women as a whole. One woman cautioned against only blaming men for negativity about premenstrual experiences: "Cause I feel like not even women really know and understand PMS fully and completely." (Faye)

The impact of PMS/PMDD on relationships. Twelve interviewees shared the difficulties PMS creates in social interactions, as exemplified by Fay (child protection).

But I think when I was talking about relationships I'm more worried that I'm going to say something that I don't quite mean in the moment and it's more just like an emotional response right away.

Faye's comment was typical of many of the respondents who worry about not having the usual judgment or filter that guards against an over-reactive and potentially inappropriate communication. Rena (child protection) described that same challenge in the context of an intimate partner relationship.

I need to take a breather - even where I just go and freak out in another room. I mean it's like rage pantomime in another room, which sounds so silly but sometimes it's like the only expression of relief I can figure. Part of it is it's coming from you and that it's coming from someplace within you but you don't want to sort of throw that up all over somebody else when they aren't deserving.

Rena's sentiments are consistent with a "bad woman" discourse characterized by anger, violence, loss of control, being a bad mother, and other aspects of subjective experience.

Ian (child protection) shared difficult experiences of relating to someone with PMS in his family.

My [sister] could be quite nasty, particularly in those days leading up to her period. The first few days of her period were challenging for all of us... the snappishness, the willingness to just pick up things and throw them at me. Mostly what I recall, wow, this is interesting. You're bringing back memories here. Most of what I recall is just that face of anger. Her face really snarled up in a getaway-from-me, don't-look-at-me, don't-breathe-in-my-space kind of look. But it's hard to remember the specifics; it's just that general sense that it was a difficult time for everyone.

Two participants talked about the parenting they received from mothers who had PMS, as exemplified by Rena (child protection):

I know that my mom – there's been arguments and conversations that we've had where later she's like, "Oh I'm really sorry. It was absolutely me struggling with where I'm at in my cycle and duh, duh, duh."

Ian (child protection) described a conversation with one of his staff members; a mother who reported having a two to three days per month where her three boys and her husband just learn to walk carefully around her. Several social workers shared their own personal experiences parenting during times of PMS, including Wendy who said, "Maybe for a day or two - I always have less patience. I'd be more likely to feel annoyed over things that wouldn't typically annoy me." Candice (child protection) also finds parenting in the premenstruum challenging.

I can talk about it a little bit. I mean, certainly all those symptoms I would have to say I've experienced. You know, the typical behaviors from my kids that last a week or a few days out of one week – they seem like they're the worst kids in the world kind of thing. You can't get them to behave and whatever you were doing isn't working. So you yell a little bit more, you punish a little bit more, you're just not nice mommy for a few days. Because some of these things I can relate to and I'm not scared to say that - I mean I didn't have child welfare involved, I didn't beat my children.

Sandra (child protection) does not have children but had no difficulty speculating on how difficult parenting would be in the premenstruum.

I can only imagine how challenging that [parenting with PMS] would be because

when I have really bad PMS I just need to withdraw from the world and it's like,

"Let me be crazy for the next 24 hours." You don't have that option with kids. It

would be way tougher; I mean kids are demanding.

These interviewees suggested that it might be easier for a social worker with her

own premenstrual challenges to relate to a suffering mother.

Discussions about PMS/PMDD in assessments with mothers.

Overview of themes. The key themes that emerged from the interviews about

social workers' discussions about PMS/PMDD with mothers who are clients are

identified in Table 6.2.

Table 6.2.

An Overview of the Themes Related to Whether Social Workers Discuss Premenstrual		
Experiences in their Assessments with Mothers		
Themes	Sub-themes	
Female clients sharing their premenstrual	Incidence; understanding and rationale	
symptoms with social workers	including embarrassment, gender,	
	dominant social order, stigma, power	
	imbalances	
Whether social workers ask about women's		
premenstrual experiences in assessments		
How social workers account for not	Gender; social worker comfort/discomfort;	
discussing PMS/PMDD	social worker knowledge/lack of	
	knowledge about PMS/PMDD; cultural	
	sensitivity; power and mother/female	
	blaming	
The nature of discussions when social		
workers ask about PMS/PMDD		

Do female clients share their premenstrual symptoms with social workers?

Interviewees were asked to reflect on those occasions when women initiated discussions about premenstrual experiences in the course of an assessment. Some social workers seemed genuinely surprised as they realized they had never participated in such a conversation. This is reflected in the comments of Wendy who realized, "It's coming up on two full years that I've actually worked there I would say - you know what, I can't even think of any." Similarly, Candice (child protection) stated, "On their own? No, I don't think I can. That they just brought up on their own? No." Most of the participants had given little thought to the possibility of women disclosing their premenstrual symptoms.

Only one of the 16 participants, Ian (child protection), recalled a woman ever raising the topic of her own premenstrual experiences, saying, "Only one mom in particular had a really difficult relationship with her two daughters and would jokingly raise the issue that, 'For three days every month our home is like a war zone." This quote is significant, not only because it represents the single instance in the qualitative interviews in which a woman alluded to premenstrual challenges, but also because the social worker to whom the comment was directed was male. Even so, the communication was very indirect, appearing to spare both of them from having to use or deal with the terminology of "period" or "menstruation" or "PMS".

In the interviews, social workers were asked to speculate why clients might not initiate premenstrual discussions. Four social workers suggested embarrassment and the taboo nature of the subject as factors contributing to women's discomfort in starting discussions. It is possible that some women are sensitive to not wanting to create discomfort for the listener.

Candice (child protection) implied that the association with bodily functions was a primary source of embarrassment.

I think there's factors [contributing to a woman's reticence to bring up PMS]. First of all, there's embarrassment. I think that they don't want to bring that up. Even though it's a natural part of life, I think there's embarrassment around it.

Candices' comments illustrate the juxtaposition between what is a "natural" part of life and the associated embarrassment. As Candice implied, many women describe attitudes and practices about concealment with narratives of embarrassment for self and others, which likely occur in interactions with professionals as well.

Several social workers raised the issue of sex as a barrier to clients volunteering premenstrual information. When reflecting on a client possibly having discussions with a male social worker, Chantelle was incredulous at the thought stating, "Well, particularly if they were being interviewed by a male. I can't imagine a woman bringing that up really." Her perception is consistent with the male respondents in Guidry-Grimes study (2007) who were much more uncomfortable talking about these issues than women.

Given this thinking, it is understandable that women would be unlikely to initiate a discussion of their premenstrual experiences. However, it is again worth noting that Ian's experience (child protection) was contrary to this expressed belief.

Three of the participants self-identify as outspoken feminists, raising the issue that sexism and a male dominant order are always at play in discussions of PMS. Carly

discussed problematic reactions of men in her rural community to women's premenstrual experiences.

Everybody had their own ideas about what was right. We learned about what feminists had to say and then we'd hear what people said in church and whatever. There would be like the women's worlds and then men's world. There would be sort of the dominant voice that in my days was a sort of a dominant male voice. So the messages that I mostly incorporated were those messages [supportive from mom, sisters and family doctor] but I still had to deal with the external reactions, mostly the external reactions of men.

Not all participants were eager to blame men for premenstrual distain and disqualification. Faye (child protection) observed that, even in discussions with other women, there is a reluctance to initiate premenstrual discussions saying, "I feel like, not even women really know and understand PMS fully and completely. I feel that's a very taboo subject." Jennifer concurred stating, "So it's something that you've got to fight to learn about because it's just not spoken about or talked about or understood. It's certainly misrepresented so often through jokes and comedy and so on but certainly not understood."

Mothers may see themselves as belonging to a "discredited" group in society and in their conversational encounters with friends, family members, or social workers, fear being identified as a discredited person [crazy, PMS mother]. Donna (formerly child protection) shared how stigma can be problematic for mothers.

I can see the labeling for sure. "Stigma" is the word that I was looking for, and if you start to relate it to sharing stories if a woman is starting to talk about at this time of the month. "I feel really frustrated with my kids and I hit my kids one time when I was PMS'ing." Like a woman is not necessarily going to want to share that for so many reasons.

Sandra (child protection) concurred that the stigma surrounding PMS is a barrier to a woman initiating such discussions.

I can just imagine in child protection that women probably feel like they can't talk about it. Like why would they self-identify more weaknesses? That's how I imagine they feel about it and I think a lot of it probably has to do with that stigma. Like if a client did disclose, I really struggle. I do kind of feel like it might be held against [them] in that way. I just wish there was space for it to be like more open and build supports around it cause if we're not even talking about it then we're certainly not supporting.

The quote below also addresses the inherent power imbalance in the social worker-client relationship, particularly with mandated child protection involvement. For cons, it would be pretty difficult for some women to bring that up and to talk about it for fear of children being apprehended or fear of their partner saying, "No, you're a bad mom. You've got to get it together." and "What's wrong with you?" It could even potentially make the situation worse. You're just trying to blame it on your PMS and you're not taking responsibility for this. Or even another professional saying that it's so hard to bring up on your own - it's still really difficult to talk about (Donna, formerly child protection).

Participants seem to agree that it is unlikely that female clients will volunteer their premenstrual challenges to social workers, particularly to those more clearly in a position

of power in child protection. If social workers value premenstrual information in assessments, it appears they will have to initiate such discussions themselves. However, Faye (child protection worker), stated that if a client voluntarily disclosed her premenstrual symptoms, she likely would not recognize the relevance of the information unless what she described to me was like, 'Wow that's odd or different or something I've never heard of.' If someone was to say, 'I suffer from PMS,' I think it would go in one ear and out the other, to be very honest."

Do social workers ask about premenstrual experiences when assessing

mothers? Fifteen of 16 social workers had never initiated discussions about premenstrual experiences with mothers. Linda stated, "I have to be honest. I've actually never considered it as a standard question in my intakes with moms or my general case management and day to day work." The following examples illustrate three participant's explanations for not asking about PMS/PMDD.

It's interesting. Having worked in health care for almost 20 years now I don't think I can even think, maybe on one hand, of other social workers who even bring it up in conversation as part of the psycho-social assessment with women. Are we initiating? Oh we're not. We're absolutely not. (Martine) It's funny because when your survey came out I thought, "Gee, this is very interesting." I do parenting assessments so I ask women all about mental health, physical health. I ask about addictions, violence, and this is not something that I specifically ask nor do they ever volunteer it. I mean no one ever says, "Yeah, I really struggle with certain days of the month because of PMS." (Chantelle) Unless someone self identifies it [PMS], it doesn't really come into my mind. Again, the women [co-workers] that I've raised it with sort of raise their eyebrows. I've asked them if this is something they have spoken to a client about and it was, "No I never brought that up." Sandra (child protection)

How social workers account for not discussing PMS. In the psychiatric and other medical literature on PMS, almost no attention is devoted to social-psychological factors contributing to the existence or appearance of a premenstrual syndrome. The following two excerpts from the interviews reflect on the lack of these discussions.

I think we don't talk about it enough, surprisingly. I mean social work is a female-dominated field and yet we still don't talk about it that much. We talk about mental health but even then we don't ask about specifically PMS. We will ask the question about post-partum depression. We've come to the point where we will look at that. But we don't, I don't know why... (Candice, child protection worker)

It's so not that talked about. Like if my friend came over and was like really weepy or just not right, I don't know if I would ever even think of it. Maybe being a social worker I would kind of analyze that. It's interesting. So unless someone self identifies it [PMS], it doesn't really come into my mind (Sandra, child protection).

In general, these social workers were very open in acknowledging that they do not ask about women's PMS/PMDD, citing various reasons for this omission. Kennedy (child protection) pointed out that the demands of the child protection system make it difficult to have the time to ask saying, "In children's services we typically don't have time to do good psychosocial histories."

The two male interviewees were very clear that their sex was a huge barrier to them initiating premenstrual discussions. Ian (child protection) stated that, while he believed there was considerable value in having social workers introduce premenstrual changes in an assessment, and was open to doing so as a male, he would feel more comfortable if there was a formal policy or procedure directing his actions. He reflected on the dilemma of worker sex and the nature of such a personal discussion.

I'm not sure that they [female clients] would be open to having it [a premenstrual discussion]. I would wonder on some levels - a kind of social embarrassment about menstruation - that there are male therapists who deal quite well and males who deal quite sensitively and well with people who've been victimized. I don't know if that same kind of insight or compassion would extend to understanding and exploring menstruation. If we were to look at it from the perspective of a male protection worker doing an assessment with a vulnerable female client, or a strong female client, I could see there being barriers to getting really honest and specific responses.

Given his sex, Gus (child protection) thought that the professional costs to such a discussion outweighed any benefits. For him, being male was an insurmountable barrier to making a premenstrual inquiry.

It's such a treacherous topic. If you bring up PMS you risk either legitimately devaluing what the other person is going through because men are seen (either legitimately or because it's easier) as not understanding or respecting it. So if you

bring it up you risk being yelled at, but there's no way with any woman I would dare say, "So I think you're PMSing..." For a woman, it's definitely easier to do that. To be honest with you, in personal life and professional life for men, I think they are subconsciously trained to not consider PMS.

There seemed to be agreement from most other participants that it would be extremely difficult for a male social worker to have this conversation without being misunderstood. As stated by Sandra (child protection), "There's not a lot of options for men around that. It's hard to bring it up without it being patronizing I think."

Another child protection worker, Candice, cautioned that, regardless of the sex of the social worker, if the subject is raised, the worker must be prepared to explore it.

I think workers need to be prepared for the answers too. We started this conversation talking about - Is this an excuse for behaviour? So I think that the workers have to feel comfortable asking the questions and have to have an understanding about what PMS is, and have to believe that it exists too.

Candice's quote raises two issues: a) the comfort a worker has in discussing a personal topic such as premenstrual experiences, and b) the beliefs of social workers about the impact of premenstrual changes on functioning and relationships. Two participants voiced that some social workers express concern about providing mothers with an "excuse" for inappropriate or abusive parenting. Ian (child protection) stated,

Almost every protection worker I spoke with in the past week and a half, that's one thing they all say. There was almost a tacit acknowledgement that, yeah that can be really horrible for some people, but if we go down that road it's going to become, "Sure I slapped my son but I was PMS'ing." Well, I see some validity in it but I was sort of a little taken aback by how consistent that response was almost across the board. I'm not sure what it means. I'm not sure what it means.

Rena (child protection) and Jennifer advised caution about making women more vulnerable, given the power differential between a child protection worker and a mother.

So it just gets shut down simply because people don't understand it. Also, as human beings, we like the power. We like to be able to take something and turn it or twist or fix it or make it something we want and this is something I don't know anything about so I'm just going to pretend it's not there. (Jennifer) When I did that I was really reluctant in the child protection realm cause it wasn't something that I looked at that arena of work as inherently oppressive, right? You're going in with all your power and you could potentially disrupt the family unit based on your own assessment. That's huge. I don't think that we should be coming in there guns blazing and throwing up our power over all of these people who are already feeling no power because, inevitably, these kids are coming back to this family system likely in some way, shape or form. Who are we to come in and disrupt that? (Rena, child protection)

Two social workers, both working in northern rural areas, identified cultural sensitivity as a consideration in raising a discussion about PMS, particularly with Aboriginal mothers. Sandra (child protection) expressed her concern as follows:

I think some people might be embarrassed especially here in the north. I'm not First Nations or Inuit but I can imagine there would be some cultural rules around talking about that. At the same time, I think some people would be really open about it just like anything else, like sexual abuse. Some people aren't ready to go there and other people are glad to talk about it. So I definitely think it would make a difference.

Linda (child protection) was also sensitive to cultural differences.

They're Aboriginal, Métis, and First Nations but up here, because there's different groups, the overarching terminology is used. It would be interesting to see if there is anyone who might just have a little deeper experience than I would, 'cause I am relatively new. But I do feel like it would be a little different in a conversation with someone that identified as being Aboriginal.

Although the research validates the existence of PMS and PMDD in most cultures, there is little research related to cultural sensitivity in having menstrually-related discussions.

When social workers do ask about premenstrual experiences, what is the nature

of the discussions? Only one of the 16 social workers has actually initiated discussions about premenstrual experiences with mothers and thus her experiences are drawn on heavily to answer this question. Jennifer said the following about the stigma associated with premenstrual experiences and the need to address it anyway:

This [PMS] has become such a big horrible stigmatized thing cause we didn't talk about it soon enough and now we're trying to backtrack. We need to do that really forcefully and start opening up the conversations sooner rather than later. So that we actually can have people understand this is what they're going into every month. Their family understands so that they can have a plan. This is what we're up against and we're going to get through this together. Jennifer indicated she always asks about a woman's premenstrual experiences in an open-ended manner, never making any assumptions given the diversity of women's realities. At times she uses personal disclosure and humour to raise the topic, for example saying "Before my period I eat everything in the house including the sofa - and that there are probably thousands of other sofas missing in city houses as well!" Although they have not yet done so, several other social workers suggested how they might raise the issue, including talking about mindfulness and body awareness. Jennifer shared the importance of the social worker being comfortable inquiring about PMS in an assessment, saying, "I think that the big thing is, in an assessment, if you're uncomfortable with something, people pick up on that and they go, "Oh this is something I should be ashamed of or scared of because she is." She spoke to the importance of being thorough yet sensitive, adding,

The first thing is to talk about it – absolutely. If there's a cycle to when the mom is abusive or neglectful or whatever that should raise flags for some people. It's about asking. It's the same as when we do our domestic abuse assessments on people for legality. There are the right questions to ask that will let you know this is a potential so I think it's almost the same thing. We could, as part of an assessment with any family, with any mom and the partners if there's a partner there as well. "Are there cycles? Are there times? Is there anything you've noticed?" - so that we actually have an opportunity to assess and say, 'cause most women will go, "No I don't suffer from PMS."

Jennifer was the only participant affording us a glimpse into the professional practice of addressing premenstrual experiences with women, suggesting that much

further research needs to be conducted in the area.

The perceived appropriateness of premenstrual inquiry in social work

assessments with mothers. The social workers were asked whether they believe there is a place for premenstrual inquiry in the assessments of mothers. Most of the interviewees believe that premenstrual discussions could be valuable, as noted by Megan who said, "I told my team that this is what I am doing and they were all nodding. Yes, of course - this is part of child welfare and this fits in." Shelley also believes that such a question is appropriate for medical social workers.

If we are talking with women about what it's like to be who they are and to live in their bodies, we need to understand, we need to ask questions about that. I mean, in the health world, quite often, "Do you experience any difficulty with your menses?" is kind of a standard assessment question.

Chantelle concurred, believing a premenstrual question can be easily inserted into standard assessment questions.

I think that the questions need to be asked. Certainly, I will start to incorporate that into my own practice because we ask about everything else. We ask about mental health. What are your sleeping patterns, eating patterns? We don't ask a lot of questions around sex although if there are concerns around that, I will. If we're prepared to ask about all these other risks then why not ask about that [PMS] as well? I think it's a quick question. It doesn't need to be delved into sort of intensely in any way.

Linda (child protection) questioned the timing of the inquiry, suggesting this should also be a consideration in the assessment.

I don't think that there would be a risk [to asking about PMS/PMDD]. I generally have a good rapport with my clients. I don't know if I would ask them in an initial intake. But certainly when a level of rapport was established, I would feel comfortable going that way. The only risk would perhaps be the client being like, "Whoa I'm not really interested in discussing that aspect of my life with you!"

Linda also reiterated her previous thoughts about cultural sensitivity.

The only risk I could see in doing so in the work I do, is just in the cultural norms. That's something that I just don't know how that question would be accepted by the mom I was talking to.

Faye (child protection) recognized the potential in having discussions about premenstrual experiences with women, but felt uncertain and inadequate about her own response.

I don't feel I'm qualified enough to have a logical response, whereas if someone said, "I'm going to commit suicide.", I know how to support you. Whereas I feel like saying these are the symptoms I go through, I don't feel I'm educated enough to know exactly what I could do to help my clients.

Carly shared the need for workers to have adequate premenstrual knowledge, but also appeared to have reservations about adopting it as a standard question in assessments.

People need to have an understanding of basic biology in order to understand human beings as creatures and then the complexity of that. So one of the problems in bringing it into curriculum and assessment tools, is that it has to be done carefully because there are so many assumptions about it. I think it can become bigger and something that it really doesn't need to be.

At the same time, she alluded to the assumptions that can be made [likely around motherblaming], and her fears that the issue could take on a life of its own.

Several social workers had suggestions about how to raise the topic of premenstrual experiences with mothers. Chantelle believed it would be important to explain to the client why you are asking the question stating,

They are much more apt to understand the questioning when you phrase it in a different way, "I'm not asking you these questions to get some dirt on you for court" as opposed to, "We want to make sure that your child gets the help he or she needs". So I can see the same with PMS being sensitive to what the answer might be and explain why I'm asking. I always give people the option. I always say, "If I'm asking something that you don't understand or you want to know why I need to know, please tell me so that we can have an open conversation about it." Jennifer stressed social workers must practice talking about premenstrual

experiences so there is no indication of discomfort by the interviewer:

To me, it's practicing it with people. So focus groups, practice groups, students with students. Practice it over and over and over again. It's memorizing a speech but it's not just memorizing a speech, it's understanding it so that when they have that conversation that first time with an uneducated population they already have the words down.

Impact of the qualitative interviews on participants. Although social workers were not asked how completing the PEKQ and participating in the qualitative interviews

impacted them, several volunteered that their thoughts about premenstrual inquiry in assessment practices had changed.

I'm really looking forward to seeing what comes out of it. This talk with you, it'll probably change my practice a little bit now. I mean you can't teach an old dog new tricks, - but maybe you can. I think I will be asking more questions. It's one of those things that come up every once in a while and you think about it. Different files will kind of jump up and you think, we're still not doing anything about this. So I'm glad it's your area. I'm glad you're doing it. Candice (child protection)

Oh wow. I literally have goose bumps, Lynn. I came of age as a social worker with children and families during the disclosures of sexual abuse. When it was almost like, overnight, the bubble of our awareness popped about sexual abuse. My realization was, "Oh my, I've been surrounded by this [sexual abuse, PMS/PMDD] my whole life but never recognized it". Coming out of that kind of experience with not only the permission but the requirement to explore these difficult topics. I'm having that, not quite at the same level, but *that* kind of moment. (Ian, child protection)

I truly believe that your research can be a part of a collective shift where we learn to see and recognize this element of the female experience in a new way. If we do get to a point in the future where we can recognize these experiences in a "better" or more helpful light I really think that the conversations you're having will be instrumental. (Sandra, child protection)

Summary

The interviews discussed above offer insightful data on the knowledge that social workers have about PMS/PMDD and their experiences, not only in assessment practices with client mothers, but with their own premenstrual symptoms and the personal relationships they have with other friends and colleagues. Within these narratives commonality and variation in experience can be observed.

The qualitative discussions validated that some social workers were more knowledgeable about premenstrual symptomology, premenstrual stereotypes, and the challenges posed by PMS/PMDD in interpersonal relationships than others who were interviewed. It appears in this sample that discussions about PMS/PMDD with clients rarely occur because (a) clients do not volunteer information, and (b) social workers do not ask. Social workers seemed open to the possibility of asking about PMS/PMDD in assessment practices provided that the social worker is knowledgeable about premenstrual issues and that the motivation for asking is to be helpful rather than punitive. Some social workers were uncertain about the appropriateness of male social workers asking women about PMS/PMDD.

The following data analysis discussion chapter observes patterns in the data and further interprets the findings.

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Chapter Seven: Data Analysis and Discussion

This chapter elaborates upon the research findings in the context of an enhanced biopsychosocial (BPS-*E*) framework. The research question guiding this study is: "How does the premenstrual knowledge of social workers influence whether and what they ask in their assessment practices with mothers?" The data in the quantitative and qualitative components of this study was gathered sequentially, anticipating that the quantitative results from the PEKQ survey would provide foundational information to be further elaborated upon by participants in the qualitative interviews. This chapter reflects the first "point of interface" (Morse & Niehaus, 2009, p. 55) where similarities, differences, and contradictions in the two data sets are analyzed. This chapter addresses the following six sub-questions identified in Chapter One:

- 1. What do social workers know about women's premenstrual experiences?
- 2. Do mothers initiate discussions about their premenstrual symptoms with social workers?
- 3. Do social workers ask about premenstrual experiences as part of their assessments when interviewing mothers and if not, how do they account for this omission?
- 4. Does the premenstrual knowledge social workers' influence whether and what they ask mothers in assessments?
- 5. When social workers do ask questions about premenstrual experiences, what is the nature of the discussions?
- 6. Do social workers find it appropriate to include premenstrual inquiry in assessments with mothers?

What do social workers know about women's premenstrual experiences?

Overall premenstrual knowledge. In general, the mean score of 12.18 (60.9%) on the PEKQ indicates a deficit in the premenstrual knowledge of respondents, but how *much* of a knowledge deficit is more difficult to specify. In some cases, a 60% grade is considered a minimally acceptable score, with many universities considering it a passing grade. A standard pass score answers the question "How much knowledge is enough?" (Livingston & Zieky, 1982). Standard setting is a complex process used to define an acceptable level of performance and a pass score (Medical Council of Canada, n.d). The most widely used and researched reference method of standard setting is the Angoff method (Boursicot & Roberts, 2006; George, Haque, & Oyebode, 2006). A "formally" established minimally adequate knowledge score for the PEKQ would have required a thorough standard setting exercise that was not feasible for the purposes of this dissertation.

With respect to participant sex, the mean premenstrual knowledge score was almost identical for men and women such that sex was not associated with social workers' premenstrual knowledge scores. This is noteworthy since one might expect women to be more knowledgeable about PMS/PMDD than men. The men in this study likely do not represent the larger male population, having possibly chosen to participate in this type of research because of their particular premenstrual knowledge and experience with women having PMS/PMDD. A completely random sample of social workers would more accurately address the variable of participant sex.

It is evident from the PEKQ scores that social workers, and therefore their clients, can benefit from increased premenstrual knowledge. The qualitative findings supported the need for greater premenstrual knowledge as expressed by social workers who were (a) concerned about not being knowledgeable enough to help clients, (b) feeling apologetic and uncomfortable due to a perceived lack of knowledge, and (c) desiring a greater understanding of basic biology as it relates to PMS/PMDD.

This calls into question how effective social workers can be working with mothers who have PMS/PMDD when they do not have adequate premenstrual knowledge. Some might argue, as Hislop (1985) did, that "We must be critical of the level of knowledge we [social workers] attempt to take on board and keep in perspective what we 'need to know' versus what is 'nice, marginal, or irrelevant' to know" (p. 25). However, our knowledge needs in social work are no longer general, but also specific (Magill, 2006). The idea of practice being guided by relevant knowledge on an identified condition is not only a potential time-and-cost-saving effort, but also an ethical standard underemphasized by many practitioners (Gambrill, 2006).

Like Rosen (1994), I concur that the practice behaviours of social workers should not be random or arbitrary but guided by considerations of knowledge offered in support of practice decisions. This sentiment was also echoed by some of the respondents in their interviews. A female health condition such as PMS/PMDD, that incapacitates the monthly wellbeing of 3-9% of women and impacts a further 20-40%, must be considered "need-to-know" knowledge. As I explored the relevance of premenstrual knowledge with interviewees, there was a general consensus that social workers need to be more informed.

Female social workers whose premenstrual symptoms most interfered in their daily lives scored higher on the PEKQ. In this study, 6.28% of women rated their PMS as a 6 (highest score) on the Likert scale, falling within the estimated 3-9% of women

reporting the more serious PMDD in the general population. A further 56% of the women who reported symptoms that ranged from "occasional" interference to "significant" interference fell within the published PMS incidence range of 30-80% (Singh, Berman, Simpson, & Annechild, 1998). Epidemiological surveys have estimated that as many as 75% of reproductive age women experience *some* symptoms attributed to the premenstrual phase of the menstrual cycle (Zaka & Mahmood, 2012). When including those women who reported premenstrual symptoms with "little" interference in daily functioning, the total number of women reporting any premenstrual symptoms rose to 76.5%. In essence, the symptom distribution in this study was comparable to that reported in the literature for the general population.

The more distressing premenstrual experiences of social workers are associated with higher premenstrual knowledge scores, suggesting either that (a) women's own experiences with PMS/PMDD were their primary source of knowledge, or (b) women had sought out additional premenstrual information because of their PMS/PMDD. This raises the issue of the validity of "alternate" sources of knowledge. The use of knowledge in practice has been recognized as a very complex phenomenon, influenced by a variety of factors (Rosen, 1983). Personal knowledge is a legitimate source informing and enriching performance as social workers (Forte, 2014). In a study of social work students' use of knowledge in direct practice, Blom, Nygren, Nyman, and Scheid (2014) found that students' "similar experiences" were stated as the source of knowledge in 25% of the cases.

The development of individuals' knowledge and ways of construing what they experience throughout their personal histories is referred to as ontogenesis (Scribner,

1985). Ontogenetic development in individuals manifests in unique dispositions of ways of knowing and knowledge (Billett, 1996). Learning occurs at the intersection between the trajectories of the evolving social practice of particular workplaces and an individual's socially influenced personal history or ontogenesis (Billett, 2000).

Consistent with the BPS-*E* framework, knowledge in this study was specifically considered in the context of biological, psychological, or social domains. PEKQ scores indicated that participants had an average of 10% more premenstrual knowledge in the social domain (70%) than they did in either of the biological or psychological domains (both having a 60% mean). This is not particularly surprising given that the social domain has been front and centre in social work education and practice.

An approach focusing on only one of these "decontextualized" core domains would be incomplete (Gatchel, Peng, Peters, Fuchs, & Turk, 2007). As stated in Chapter Three, the BPS-*E* framework assumes premenstrual experiences are best understood when biological, psychological, and social domains are explored in an integrated manner. Past debates about the suitability of one over another should be disqualified in favour of domains that can be mutually informing (Cameron & McDermott, 2007). Social workers conducting assessments with mothers should have adequate premenstrual knowledge in all three domains to make that exploration valuable, productive, and beneficial to the client.

Biological domain knowledge. Participants collectively had little correct information about three biological items on the PEKQ including that (1) PMS cannot be confirmed with a blood test (34.9%), (2) there are over 150 different symptoms of PMS (30%), and (3) the most effective treatment for severe PMS is SSRI anti-depressants

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(8.7%). The lack of knowledge about these biologically related items was also reflected in most of the interviews. Some respondents downplayed the "bio" in assessment. Kennedy (child protection) noted, "The more I think about it, the more important it is that we do a better social history or social/psych history - whatever, that includes". Kennedy omitted a reference to biology in her quote, even though her own personal premenstrual experiences were primarily physical and she had rated the interference of premenstrual symptoms in her daily life as the highest score of six.

Only a third of respondents who answered the PEKQ appeared to know that PMS/PMDD presents with over 150 symptoms, although the social workers who were interviewed did have an appreciation of the wide range and diverse nature of the symptoms. It is possible that such a high numerical estimate of the item, which the research now establishes even higher at over 200 symptoms, distracted from their real understanding that PMS and PMDD present in very different ways among women.

It is concerning that most social workers were unaware that anti-depressants are currently the best treatment options for women, as evidenced in the low PEKQ scores and in the conversations with social workers. It is incumbent on social workers to be knowledgeable about treatment alternatives, including medication and lifestyle changes. While several treatment modalities are beneficial in treating PMDD and severe PMS, selective serotonin reuptake inhibitors (SSRIs) have emerged as a first-line therapy (Brown et al., 2009; Rapkin, 2005; Shah, 2008; Steiner et al., 2006). SSRIs have become the treatment of choice for PMDD and severe PMS (Grady-Weliky, 2003; Landen et al., 2001; Pearlstein, 2002, 2003; Wyatt et al., 2002) because of their efficacy and tolerability. The efficacy of SSRIs has been demonstrated in improving irritability, depressed mood, and dysphoria, as well as in improving the physical symptoms of PMDD (e.g., bloating, breast tenderness, appetite changes). Importantly, such SSRIs as citalopram, fluoxetine, paroxetine, and sertraline (Shah, 2008) have been shown to improve psychosocial function (Pearlstein & Steiner, 2008; Wyatt et al., 2002).

Social workers pondering referrals for medication consultations for clients they work with need to be conscious of how their beliefs and theoretical frameworks impact why, when, and how this decision is made (Bentley, 2014). A rigid adherence to any biological, psychological, or social model of practice may obscure the ability to practice competently and compassionately. Social workers must critically assess the benefits deriving from various viewpoints and integrate these with the client's beliefs about health and illness into a truly integrated and biopsychosocial [enhanced] perspective (Bentley, 2014). Clinical relationships become more complicated when medications are initiated because a triangular treatment relationship develops – client, social worker, and prescriber. Beliefs about medications and illness may impact the thoughts and feelings about a specific medication, the dosage, side effects, and the therapeutic response. The risk is that without awareness of these issues, splits and alliances can develop that impede successful integration of all biopsychosocial aspects of the client's experience and negatively impact outcomes (Bentley, 2014).

The basics of human biology must be integrated in social work professionals' knowledge (Ginsberg, Nackerud, & Larrison, 2004). The essential role of physiological processes (and, in particular, brain function) in all mental life has become more and more evident. We now know human biology and human experience interact continually in shaping mental life (CASW, n.d.). Social work professionals, and human service

professionals in general, could benefit from training to enhance their biological lens in clinical assessment and intervention planning (Sampson, 2010).

Psychological domain knowledge. Respondents also had knowledge deficits in the psychological domain. Less than half of the 521 PEKQ respondents and only a few of the interviewees were aware that PMDD was listed as a diagnosis in the DSM (psychological domain), a considerable oversight given its inclusion as PMDD for over 11 years (since 1994) and as LLPDD since 1987. This is inconsistent with the knowledge/educational requirements of social workers noted by the Canadian Association of Social Workers (CASW) (n.d.) that states social workers must have specialized knowledge of mental disorders and their impact on individual, family, and community.¹⁰

Undoubtedly, assessments associated with the acts of "classifying" problems [diagnosis] and "taking action" on them [intervention] constitute key judgements in social work practice (Wallander, 2011, p. 368). The lack of knowledge about the PMDD classification in the DSM could indicate not just a lack of familiarity with this particular disorder, but with the entire DSM as a whole. The use of the DSM (APA, 1987, 1994, 2000, 2013) in social work roles has been a source of contention and disagreement by

¹⁰ This includes the psychiatric classification system; major syndromes, theories and knowledge of aetiology; and current concepts of intervention, treatment, risk assessment and rehabilitation; organizational aspects of mental health services; community structure, social and political processes; development and resources; and knowledge and understanding of the paradigms for practice of the other mental health disciplines (CASW, n.d.).

scholars, writers, and practitioners (Frazer, Westhuis, Daley, & Phillips, 2009), and its treatment in social work curricula may be uneven.

I argue that a decision to avoid the use of the DSM in practice due to concerns of labelling, for example, may be a professional choice but a lack of knowledge about the *contents* of the DSM is unacceptable. Although there is ongoing professional conflict regarding the role of the DSM in social work practice, the profession has an ethical obligation to train workers to competently deliver clinical services (McLendon, 2014). McLendon found that many social workers do not receive DSM training in their academic courses, particularly in undergraduate programs.

Another important item in the psychological domain (the increased vulnerability of premenstrual women to suicide in the two weeks before their period) was answered correctly by only 29.2% of respondents. PMDD and moderate PMS symptoms can be a biological risk factor for suicide. Pilver et al. (2013) found that women with moderate/severe PMS were significantly more likely to report suicidal ideation than women with no premenstrual symptoms. Similar results were found with first-time suicide attempters, who had a significantly higher frequency of PMDD than those in the control group (54% vs 6%; Fisher's exact test, $p \le 0.001$) (Baca-García et al., 2004). The most prevalent symptoms of suicidal women with PMS were mood symptoms (irritability (95%), anxiety (89%), affective lability (85%), and depressed mood (84%)).

Respondents talked more about suicidal risk to mothers suffering from PMDD in the qualitative interviews than was evident in the PEKQ results. Some shared the personal heartache of having had friends or relatives with PMS/PMDD attempt or commit suicide, while others discussed working with clients who were suicidal in the premenstruum. As social service providers, social workers are likely to encounter suicidal individuals across all fields of practice (Feldman & Freedenthal, 2006). More than 90% of social workers have worked with at least one client at risk for suicide (Feldman & Freedenthal, 2006) and 33% of mental health social workers have lost a client to suicide completion (Jacobson, Ting, Sanders, & Harrington, 2004). With such extensive involvement with suicidal adults, many of whom are mothers, we cannot justify being unaware of the increased risk that PMDD creates for both non-fatal and successful attempters. Although suicide is actively discussed in the PMDD literature, PMS/PMDD do not appear in suicidal *assessment* literature (Cardarelli et al., 2015; Rogers & Alexander, 1994). For example, the British Columbia Ministry of Health (2007) addressed the importance of awareness of specific risk populations, but failed to identify PMDD as a risk variable for women. Research supports the need for such information and clearly such critical omissions demand a call for change.

Improving our understanding of the hormone(s) contributing to suicidal behaviour in the menstrual cycle may generate significant inroads in the prevention, assessment, and treatment of suicidal behaviour (Smith et al., 2015). Social workers should be asking suicidal women about the phase of their menstrual cycle in order to assess and intervene competently and effectively. Suicide risk is not static and may increase significantly during the luteal phase. This unique risk factor [PMDD], once identified, is *predictable*, and allows for support, safety planning, and the implementation of effective treatment and resources.

Social domain knowledge. It is not surprising that social workers scored highest in the "social" realm, given the strong history of the profession and identification with a

person-in-environment framework. Since the profession's inception, social work has focused on the social contributions to emotional wellbeing and mental health (CASW, n.d.). Interviewees validated the importance of these macro issues (despite not being asked directly), suggesting a degree of convergence. On the PEKQ, 437 (85%) of respondents were aware that severe PMS impacts the work and family lives of some women and 401 (77.3%) respondents also recognized that some of these women have problems parenting their children. The lowest scoring item in the social domain pertained to the incidence of PMS in 300 BC, and is not relevant to contemporary practice issues with mothers.

Respondents in the interviews, who either had had their own PMS symptoms or lived with others who had experienced PMS/PMDD, were often quite emotional when they talked about the impact of symptoms on relationships. It was clear that severe premenstrual symptoms seriously impacted not only the women suffering, but also those struggling to deal with the unpredictable behaviour of a friend, loved one, or colleague.

The dynamic, interactive nature of the bio-psych-social domains. In seeking to understand PMS/PMDD, it does not suffice to assess biological, psychological, and social domains independently. Instead, it is critical that the complexities of premenstrual experiences be assessed in the context of reciprocal *interactions* among the three domains. Such "inter" and "intra" variations of symptom manifestations among women are attributable to the changes in many aspects of homeostatic functionality during the menstrual cycle (Campagne & Campagne, 2007). Premenstrual symptoms can certainly impact a woman's psychological and social wellbeing (Lustyk & Gerrish, 2010) and

conversely psychosocial and environmental factors often modify symptom expression (Matsumoto et al., 2013).

The dynamic interrelationship of these domains is demonstrated diagrammatically (see Figure 6.1.) using the interview conversation with Sandra, a social worker in child protection, who described her general premenstrual experiences over the past year. Sandra reported being blindsided each month by the seeming "sudden onset" of premenstrual symptoms, that she described as "very real and negative and something tough that women deal with". She says, "I just knew it was like hormonal. I was like - it's so wild that this happens to us. Like it was definitely biological in nature".

Sandra became frustrated that her partner recognizes the monthly behavioural changes before she does. She tunes into her symptoms upon waking - feeling like a "wild animal" with "heightened emotional perceptivity and sensitivity". Her coping skills are compromised and she finds herself angry. "I'd be ready to argue. I'd be ready to fight". She described feeling like Lorena Bobbitt ¹¹ - having "emotional [psychological] needs - and there are *a lot* [stated emphatically] of needs in those moments and fixating on the inadequacies socially of her partner relationship, feeling that he is not "doing enough to see me or meet my needs". She noted, "It [PMS] has impacted my life and my relationships so much." Although Sandra is not a parent, she did not hesitate to volunteer how difficult she could imagine parenting to be during the premenstruum.

¹¹ Lorena Bobbitt was an American woman who, in anger, cut off her husband's penis in 1993 (Moyer, 2015).

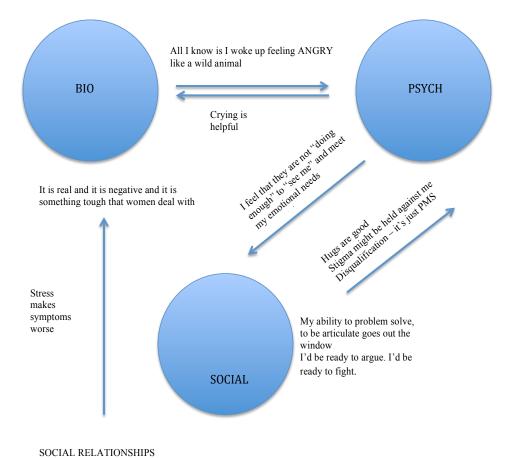


Figure 6.1. The Interrelationship of Bio, Psych, and Social Domains in the example of Respondent Sandra

I seem to fixate on my partner/close relationships My partner and I have joked about me being in a "Lorena Bobbitt" state of mind in these times. Parenting would be challenging -

when I have really bad PMS it's

like I just need to withdraw from

the world and it's like let me be

crazy for the next 24 hours and

you don't have that option with

kids.

COLLECTIVE SOCIAL Yeah. I feel like a feminist woman there is a pressure

to act like you don't have PMS because then that means that you are weaker than men. but I think the problem is not like pretending we're not female but like how do we respond to women. I can't believe how much this is not addressed in society. And when I talk to other women about it, it's

so common. How do we bring this discussion out of the darkness?

There needs to be a collective shift where we learn to see and recognize this element of the female experience [PMS] in a new way 1

Such stress in social relationships can reciprocally heighten Sandra's symptomology (biological and psychological) while conversely a welcome hug (social) from her partner decreases stress and associated symptoms. She laughingly now sees more value in being sequestered "away to a hut" for those several days, while at the same time recognizing the patriarchal overtones of isolating women (social).

As a self-identified feminist, with a strong sense of social justice and collective womanhood, Sandra was dismayed that no one is talking about PMS stating,

I feel like there's almost more understanding for so many other disorders before PMS. It's not appreciated that it has a bearing. It's just kind of made fun of -"Right. Oh PMS." I feel like as a feminist woman there is a pressure to act like you don't have PMS because then that means that you are weaker than men."

She added, "I can't believe how much this is not addressed in society. And when I talk to other women about it, it's so common. How do we bring this discussion out of the darkness?" (social). Sandra also pointed out that for some women discussions are not supported in their cultures (social). Sandra's narrative illustrates the reciprocal dynamics of the biological, psychological, and social domains of PMS/PMDD, and the utility and applicability of the BPS-*E* framework to describe it.

Do mothers initiate discussions about premenstrual symptoms with social workers?

There was very strong agreement that generally, mothers do not initiate discussions about premenstrual experiences with their social workers. Participants identified barriers to mother-initiated conversations including (a) the male sex of a social worker, (b) embarrassment, (c) stigma, (d) unequal power relationships between worker and client [mother], and (e) culture. The interview participants contended that societal reactions to PMS deter women from engaging in premenstrual discussions for fear of disqualification or ridicule.

Worker Sex. There was a general consensus by qualitative respondents that the sex of the social worker plays a role in a woman's decision to discuss premenstrual challenges. Interviewees seemed almost incredulous at the prospect of a mother disclosing her most personal premenstrual experiences to a male social worker.

Participants cited the attitudes of men toward PMS/PMDD as deterrents to mothers disclosing. In the menstrual cycle research literature, men generally have negative constructions of the menstrual cycle (King, 2013) and PMS, specifically the "bitchy woman" and the "premenstrual woman who uses PMS to get out of things they don't want to do" (Thornton, 2013). Men have also been reported to question the existence of PMS, as well as the credibility of women claiming to have PMS (Koch, 2006). Dismissive practices have been linked to women's self-silencing and selfpathologization (Perz & Ussher, 2006; Ussher, 2003a, 2003b, 2003c; Ussher & Perz, 2010).

Despite the overall sentiment by interviewees that women would not initiate a discussion of premenstrual experiences with men, it is noteworthy that the only instance of any premenstrual conversation in this research between a social worker and client was by a mother to a male social worker, who referred to the "monthly wars" in her home. I suggest that while worker sex may be a barrier, other aspects of the social worker-client relationship such as empathy, kindness, and active listening may be more significant in decisions to disclose. Like many other situations where there are dissimilarities between client and worker, the relationship can usually transcend the differences (Zastrow, 2010).

Embarrassment. Qualitative respondents anticipated that female clients would be unlikely to initiate discussions about their premenstrual experiences due to embarrassment, given that conversations related to "bodily fluids" tend to be taboo and avoided. Additionally, references to women's reproductive functions are further associated with sexuality and add an additional element of discomfort.

Stigma. The PEKQ item acknowledging the stigma associated with PMS/PMDD was accurately answered by almost three quarters of the respondents and further validated by interview respondents who identified it as a barrier to self-disclosure. An awareness of the social stigma associated with a contested illness such as PMS/PMDD contributes to women's reluctance to disclose. Goffman's central thesis (1963), partially replicated by Rusch, Todd, Bodenhausen, Olschewski, and Corrigan (2010), is that the ability of social groups to stigmatize individuals largely depends on the extent to which the group is able to socialize individuals to respond to the group with feelings of shame and avoidant behaviours.

Encounters between stigmatized individuals and normal individuals make for "anxious unanchored interaction" (Goffman, 1963, p. 29). The result is interactionuneasiness for both parties. As noted above, men are more likely to contribute to stigmas about PMS/PMDD, but this does not mean that women are not without judgment, particularly when they do not share a similar experience. We must be careful not to become the same "moral guardians" by harshly judging the experiences of other women. By silencing the "Other" experiences that are different from the "female norm", we are guilty of universalizing women as men have done before them. The disqualification and negation of both individual and collective PMS experiences is, in itself, a form of oppression.

Women may respond to a perceived threat of rejection by suppressing their beliefs and opinions to meet the perceived requirements of the source of approval (London, Downey, Romero-Canyas, Rattan, & Tyson, 2012) and "silencing the self" (Jack & Dill, 1992, p. 98). Jack and Dill suggested that the process of self-silencing involves judging oneself by the presumed standards of those in power [good mother], taking responsibility for fitting in [parenting within societal norms], hiding aspects of one's real self that conflict with what is valued by powerful others [premenstrual-related behaviour], and behaving in self-censoring/silencing ways intended to prevent rejection [judgments about being a bad parent].

Relationship concerns in women have been linked with caretaking as a social expectation for females, the nature of womanhood, and the female social identity (Gilligan, 1982). For some women, being diagnosed and treated for depression or developing depression-related impairments of their psychosocial functioning is personally and socially unacceptable and a threat to social identity (Oakley, Kantor, Taylor, & Duguid, 2011). It is likely this would be similar for women with PMS/PMDD.

Power and societal narratives. It is interesting to note that despite participants being quite adamant that mothers would not share their personal experiences with social workers, most participants were very open in sharing their own premenstrual stories. How is it they felt comfortable having such discussions but expected that their clients would not? It may be that one of three primary factors influenced the participants' decisions to share premenstrual information in a research environment.

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The first variable is my own personal self-disclosure as a researcher. At the beginning of each interview my introduction included the rationale for the study as partially stemming from my own past premenstrual struggles. It is possible that such personal sharing of information contributed to participants feeling comfortable in reciprocating. Individuals tend to disclose most about themselves to people who have disclosed most to them (Jourard, 1971). Thus, it could be expected that subjects in an interview would disclose more to an interviewer who has served as a model of self-disclosure than would subjects who were exposed to an interviewer choosing to remain relatively unknown. Therapist self-disclosure in response to similar client self-disclosure also seems to be particularly effective in eliciting client disclosure (Hill & Knox, 2002). Reciprocity in relationships is one of the central notions of an interactional perspective with the movements of the worker influencing the responses of the client and the client responses influencing the worker (Shulman, 1991).

Another contributing variable was that I had previously met some of the participants, which may have made them more comfortable sharing about themselves. As well, the lack of a significant power difference between researcher and respondents may have been a factor. When there is a level playing field with guaranteed confidentiality, there can be a greater exchange of confidences without fear of repercussion or being "outed" in any way. Conversely a power difference, particularly in child protection, can be a significant barrier for clients when it does exist.

Concerns about stigma, judgment, and evaluation become magnified in a professional relationship when social workers have more power than the women they are working with. Given that the "telling" of details in any person's life involves an assessment of the trustworthiness of the listener, some definitions of disclosure specifically include reporting abuse to persons of authority (Alaggia, 2004) such as child protection. The authority that is delegated to a child protection worker further impedes the likelihood of establishing trust. Some women may be reluctant to disclose PMS to those who they feel make use the information against them and it is not a big leap to understand some women's reluctance to share information with a social worker who has even more power to do the same (Mooney-Somers et al., 2008).

Mothers with extreme premenstrual distress can experience a "double whammy" of judgment and distain leading to self silencing – not only about the validity of premenstrual experience but with respect to mothering narratives that might be perceived as unacceptable and selfish relative to, as noted by Miller (2005), the moral minefield in which motherhood is lived out. When a woman perceives herself as not having achieved the standard of what it means to be a "good mother", regardless of how the role is defined, the result is feelings of guilt, blame, shame, and marginalization (Allan, 2004). Societal expectations of women related to their reproductive selves [premenstrual experiences] and to standards of mothering [the bad mother] exert double pressure for women to self-silence about premenstrual parenting experiences. Social workers' assumptions about mothers mirror these larger cultural expectations of motherhood (Davies et al., 2003). Therefore, there was a general sense that typically, mothers are reluctant to enter the minefield of discussion involving both sensitive issues premenstrual experiences and "good enough" parenting. Tension arises primarily from the need to manage information about any failing that might be discrediting about themselves and their parenting (Waterhouse & McGhee, 2009). When people [mothers]

believe others have the power to help or hinder them in achieving important life goals [as in the case of child protection], it is natural for them to be concerned with how they are perceived (London et al., 2012).

Due to the stigma of mental illness, the juxtaposition for mothers with serious mental illness relates to the reality that requests for help heighten the risk of child removal (Montgomery, Mossey, Bailey, & Forchuk, 2011). It is, therefore, understandable that the lack of services or the feared implications of exposure by illness may contribute to mothers parenting without professional intervention.

Women deserve a strengths-based, non-judgmental orientation to their premenstrual distress that is not inherent in the positivist, biomedical tradition. Certainly critics of child protection maintain that the system itself is based on a medical model conducive to mother-blaming. Social workers would benefit from taking a BPS-*E* approach in their practice, with appreciation that the child protection discourse inherent in the larger system is slow to change.

Do social workers ask about premenstrual experiences as part of their assessments when interviewing mothers and if not, how do they account for this omission?

Both the quantitative and qualitative components of this study suggested that it is not general practice for social workers to initiate an inquiry about mothers' premenstrual experiences, as only 5% had ever done so. For this minority of social workers who do ask about PMS/PMDD, statistically significant relationships were established with (a) the age of social worker, (b) past premenstrual training, (c) greater premenstrual knowledge scores, and (d) the degree of social worker premenstrual symptom interference on daily life. During the qualitative interviews, the social work participants offered a number of explanations for having never asked about premenstrual experiences including having never considered such an inquiry, and concerns about sex differences between the worker and client.

Never considered a premenstrual inquiry. By far the most common reason for not asking about premenstrual experiences was that participants had never really given it any thought until participating in this research. In essence, it was not on the social workers' "radar" for assessment inquiry.

Those social workers in this sample who had given it more thought (specifically those with premenstrual symptoms interfering in their own daily lives), are more likely to inquire about PMS/PMDD with female clients, as supported by findings in Chapter Five that suggest a significant relationship. Notably, their acute awareness of PMS/PMDD likely increases the possibility they would ask other women about premenstrual challenges. Boulton (2000) insightfully notes that if one is an "insider" [with shared premenstrual difficulties] then "those ordinary, routine, everyday things which are essential to an understanding of the world being observed would remain unnoticed" by the very nature of knowing as an insider (pp. 90-91).

Child protection workers were no more likely to ask about PMS/PMDD than the other social workers in the sample. Many of the interviews were challenging because it was clear that respondents had given PMS/PMDD little thought, particularly in a professional context.

Worker Sex. Worker sex was again raised as a barrier to social workers initiating

discussions of premenstrual experiences with mothers. There was consensus that a male asking about women's premenstrual experiences is dangerous territory. All participants, men and women, could anticipate that women would likely feel offended and would attribute the inquiry to patriarchal, blaming, and ill-conceived motives. However, it should be noted that the quantitative findings indicated that participant sex was *not* associated with premenstrual inquiry as female social workers were no more likely to ask women about PMS/PMDD than male social workers.

Does the premenstrual knowledge of the social worker influence whether and what they ask mothers in assessments?

There was a significant difference in the premenstrual knowledge scores of social workers who asked about PMS/PMDD and those who did not. These results suggest that higher premenstrual knowledge scores in this sample were related to a higher probability of social workers asking clients about PMS/PMDD. This indicates that efforts to increase social workers' premenstrual knowledge are likely to have a positive impact on premenstrual inquiry in practice. It is not possible in this study to determine whether premenstrual knowledge influenced *what* they asked, as only one participant engaged in premenstrual discussions.

How did study participants learn what they know? Although only a small number of participants in this sample had taken training on PMS/PMDD, the findings suggested a significant association between training and premenstrual knowledge. The formal academic education of participants was generally high with almost half the social workers (49.7%) having BSW degrees and (31.9%) of social workers having graduate degrees. However, there was no association between formal education and premenstrual knowledge scores or between previous premenstrual training and premenstrual knowledge scores. Clearly, this speaks to the need for premenstrual training of social workers.

When social workers do ask questions about premenstrual experiences, what is the nature of the discussions?

Only one social worker in the qualitative interviews actually asks women about premenstrual experiences in her practice. She described using humor and self-disclosure to "break the ice" and engage the client. She suggested an open approach that does not make any assumptions about the woman's own experiences, recognizing the diversity of women's realities. Clearly, there is limited information about the nature of premenstrual discussions given the rare times social workers inquire, but should social work practice change to include more conversations, further research would be valuable.

Do social workers find it appropriate to include premenstrual inquiry in assessments with mothers?

Most qualitative interviewees acknowledged the potential value of asking women about PMS/PMDD, stating "Yes, this is a part of child welfare and this fits in"; "I will probably change my practice a little bit now...I think I will be asking more questions"; and "I literally have goose bumps Lynn...[like sexual abuse] I have been surrounded by this and never recognized it. Coming out of that kind of experience with not only the permission but the requirement to explore these difficult topics".

Despite the "conceptual" support for inclusion of premenstrual inquiry in assessments with mothers, social workers expressed concern that things could "go badly" for a mother in the hands of social workers who are (a) misinformed by erroneous dominant discourses about PMS/PMDD; (b) lacking in premenstrual awareness and knowledge (biological, psychological, and social); (c) not culturally sensitive to the impact of this inquiry, particularly for Aboriginal, Métis and Inuit women; (d) convinced that PMS/PMDD is offered by mothers only as an excuse for inappropriate or abusive parenting; (e) not operating from a strengths-based perspective; and (f) prone to abuse their power (in such roles as child protection) by using disclosures of PMS/PMDD punitively to "mother-blame" without extending support, resources, or treatment. Such judgments are more reflective of a medical model characterized by victim blaming. Critical feedback can communicate a more pernicious message - that of rejection - to individuals with reason to doubt their acceptance and value (London et al., 2012), contributing further to the self-silencing of women.

Summary

The overarching research question for this study asks "How does the premenstrual knowledge of social workers affect whether and what they ask in their assessment practices with mothers?" This chapter has suggested that social workers are not well-informed about the premenstrual experiences of women and that in their assessment practices, most do not ask mothers about PMS/PMDD. Notably, there was a statistical association between the premenstrual knowledge scores of respondents in this sample and whether they ask about PMS in their parenting assessments of mothers.

It would appear that social workers in this study, and I daresay social work as a profession, have given very little thought to the impact that severe premenstrual experiences may have on some women's parenting and the role that helping professionals might have in supporting them and their children during some predictably difficult times. Although many social workers shared stories of friends and colleagues who struggled with PMS/PMDD in their daily lives, most had not considered asking about it in their professional roles.

Some social workers enthusiastically embraced the value that such a premenstrual inquiry might have for women who have self-silenced for so long, while others expressed concern that information about PMS/PMDD may be used to further stigmatize, punish, and blame mothers who are perceived to fall short of "good enough" parenting.

The next chapter addresses the limitations of this study and further elaborates on the implications of this research for social work practice, education, and training. Key recommendations are identified.

Chapter Eight: Limitations, Implications for Practice, Considerations for Research, and Recommendations

The intent of this research was to explore how the premenstrual knowledge of social workers influences whether and what they ask about PMS/PMDD in their assessments of mothers. Findings suggest that social workers who have received premenstrual training and those who have a greater degree of interference of premenstrual symptoms in their daily living in this sample are more knowledgeable about PMS/PMDD than those with no training or less severe symptomology. Generally, social workers in this sample do not ask women about their premenstrual experiences, but they may be more inclined to do so when they are older, have a higher degree of premenstrual symptom interference in their daily lives, are knowledgeable about PMS/PMDD, or have received previous premenstrual training. Through the exploration of social workers' biological-psychological-social premenstrual knowledge [what social workers know] and why they do or do not initiate discussions about premenstrual experiences with female clients, participants provided personal and professional insights into the frequency and relevance of such practice in social work assessments. In this chapter, study limitations will be discussed first as they inform implications for social work practice and recommendations.

Study Limitations

The limitations of a study are those characteristics of a design or methodology impacting or influencing the interpretation of the findings from the research (University of Southern California, n.d.). After considerable reflection, I have identified four key limitations related to my research design and implementation. They are (1) constraints related to the sample selections, (2) PMS/PMDD diagnosis validation, (3) the PEKQ questionnaire, and 4) the triangulation convergence design.

Sample selections. One of the limitations of the quantitative component of my research was using a non-probability sampling strategy rather than randomly selecting participants. I recognize that the participants responding to the invitation to participate (in both the quantitative and qualitative components of the study) were likely more interested in the subject of premenstrual experiences, thus increasing the possibility of sample bias and reducing generalizability to the larger population of social workers.

A larger sample size, with greater representation from men as well as those from diverse racial/ethnic backgrounds, would have allowed for more extensive analysis and further investigation related to the exploratory aims. Although the variables of race/ethnicity were not used to include or exclude participants in the sample selection, the disproportionate number of Caucasian participants was a limitation of the study. In the qualitative component, there was no diverse representation in terms of participant race. One possible explanation for the lack of Aboriginal social worker involvement could have been the severe flooding that impacted many Alberta reserves at the time of the interviews. Although some Aboriginal social workers had expressed a desire to participate in the qualitative phase, at the time of contact they were actively involved with the tragedies in their home communities. I would suggest future studies have greater sample diversity.

Validation of PMS/PMDD diagnosis. One research limitation is that I accepted retrospective self-reports and Likert scale ratings from women stating they have PMS/PMDD, without corroborating their self-diagnosis by asking for two months of

charting, or validation of PMDD criteria as stated in the DSM. Some researchers argue retrospective reporting is prone to error and when people believe there is an expected connection (in this case between premenstrual symptoms and personal challenges), some suggest their memories are more likely to support such a connection.

For the purposes of this dissertation, the primary focus was on the knowledge participants had about PMS and the impact on practice. Whether the premenstrual experiences of the female social workers were clinically validated was not critical to the outcome of this study.

The reliability and validity of the PEKQ. The PEKQ questionnaire that was developed was not a standardized instrument and may not have had the reliability and validity associated with a more proven measure. There could have been greater distinction between knowledge and beliefs. As well, some uncontrolled variables may have affected the results of this study. The PEKQ did not differentiate between knowledge and attitudes, treating them as one construct.

Triangulation convergent design. The triangulated convergence design used in this dissertation is designed to generate complementary data from both quantitative and qualitative methodology. In this model, both types of data are collected and analyzed separately on the same phenomenon and then the different results are converged (by comparing and contrasting the different results) during the interpretation (Creswell et al., 2003).

A key criticism of blended methods is that researchers are often not clear on how the findings from qualitative and quantitative data should be integrated or linked to provide a fuller understanding of the phenomenon (Creswell & Tashakkori, 2007; Yin, 2006). Those most strongly advocating triangulation fail to indicate how this prescribed triangulation is actually performed and accomplished (Jick, 1979). For example, it can be challenging having different samples and different sample sizes when converging the two data sets (Creswell & Plano-Clark, 2007), particularly considering the triangulation premises of focus, weight, timing, and implementation (Flick, 2007; Greene, 2007). Replicating blended methods research, including idiosyncratic techniques, can be a nearly impossible task (Jick, 1979).

A significant limitation in all triangulation designs is the premise that weaknesses in each single method will be compensated by the counter-balancing strengths of another (Jick, 1979). That is, it is assumed that multiple and independent measures do not share the same weaknesses or potential for bias (Rohner, 1977). Critics of blended methodologies clarify that triangulation gives no truth guarantees to research. It combines, but does not eradicate, problems with each method of data collection (Fielding & Fielding, 1986).

Despite these limitations, this exploratory study with quantitative and qualitative phases and a triangulated convergence design, was best suited to address my research question. Triangulation is often used in researching less explored or unexplored research problems (Yeasmin & Rahman, 2012). The design allowed for the breadth of understanding in the quantitative phase of the study, providing statistical corroboration of the "lay of the land". The qualitative phase permitted an in-depth exploration of premenstrual experiences and social work practice. The convergence of data allowed for more confident interpretations, while the divergent results encouraged the generation of more thoughtful explanations (Plano-Clark & Creswell, 2008). I maintain that this

triangulated convergent design afforded, as touted by Jick (1979), a more complete and contextual portrayal of premenstrual knowledge in social work practice.

As noted by Bazeley (2010),

Integration can be said to occur to the extent that different data elements and various strategies for analysis of those elements are combined throughout a study in such a way as to become interdependent in reaching a common theoretical or research goal, thereby producing findings that are greater than the sum of the parts. (p. 432)

Implications of this Research for Parenting Assessment Practices and Social Work Education

One significant activity of daily living for many women is parenting and a significant activity for many social workers is assessing parenting – in such contexts as child protection, adoption/foster home studies, clinical private practice, and mediation. Social workers are frequently involved in assessing parenting capacity and in child protection specifically, mothers are overrepresented on caseloads. There is consensus in the research that approximately 3-9% of women have severe premenstrual symptoms to the degree that symptoms seriously interfere with their ability to function in daily life.

Women's parenting often come to the attention of social workers at times of crisis. A crisis, as defined by Parad and Parad (1990), is an upset in a steady state; a critical turning point leading to better or worse; a disruption or breakdown in a person's or family's normal or usual pattern of functioning. The upset, or disequilibrium, is usually acute in the sense that it is of recent origin. When an individual experiences an emotionally hazardous situation and is unable to effectively utilize previously learned coping behaviour, then an emotional crisis may ensue (Burgess & Baldwin, 1981).

An accurate assessment is the most critical aspect of a crisis response because it guides the intervention (Dass-Brailsford, 2007). Although situations may appear to be similar, each woman is unique; therefore care must be exercised to conduct a thorough and enhanced biopsychosocial assessment. Premenstrual symptoms often contribute to an "interpersonal crisis", characterized by Zola (1973) as the perceived interference with social or personal relations and sanctioning by others to seek help.

In the case of a mother experiencing extreme distress managing her child, an inappropriate assessment of "inadequate parenting skills" and a subsequent referral to parenting groups to increase her capacity would have limited effectiveness if she parents well in the follicular phase of her cycle. However, if a mother identifies premenstrual challenges during an assessment, interventions would focus instead on how to increase and mobilize coping skills (e.g., family support, medication, respite, meditation, vitamins) during intense premenstrual distress in order to reduce the impact of disruptive monthly crises. The parenting assessment of a mother failing to inquire about premenstrual challenges is incomplete and suggested interventions may miss the mark.

In the context of child protection services, there is the possibility, as noted in Chapter One, that inaccurate assessments can have serious consequences if a child is removed from a mother at a time when premenstrual symptoms precipitate parenting crises, particularly when parenting is non-problematic the rest of the month. When "cyclical" parenting challenges are not identified, it may be incorrectly assumed that parenting observations made during the premenstruum are typical of parenting capacity,

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resulting in inappropriate decisions about risk to a child in remaining with a mother. Conversely, if child protection services receives a complaint about risk to a child but is unable to assess the circumstances until the mother is in the follicular phase of her menstrual cycle, serious issues of risk that led to the initial referral may be missed.

I maintain it all begins with the "ask" – a simple *invitation* to a mother to share any concerns she may have about her premenstrual experiences to provide valuable information related to any parenting challenges. This study has confirmed that social workers generally do not ask women about their premenstrual experiences during parenting, often because they have not thought of it, are embarrassed, or fail to see the relevance. The invitation however, should only be extended by a social worker appreciating the interrelationship of biological, psychological, and social domains – made for the purposes of supporting women to parent during times when they feel their abilities are compromised. The caveat to "asking" is that social workers must be knowledgeable about PMS/PMDD in the context of cultural sensitivity and with an awareness of how larger macro factors such as gender, power, cultural, and economic circumstances of women interplay with premenstrual challenges and emotional distress.

It is critical to restate that in no way am I implying that all women with PMS/PMDD have problems parenting their children, nor that the challenges of a subgroup of women should define the collective experience of all women. I am stating that for those women who either self-identify parenting difficulties, or are brought to the attention of the authorities and therapists, premenstrual challenges may be a relevant variable.

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For women not having PMS/PMDD, an inquiry about the premenstruum should be a non-issue. It will likely be responded to with a denial or perhaps a quizzical "No, why are you asking?" - perhaps generating a further social response such as, "For some women I work with PMS is a significant issue, but I am glad it isn't for you!" There are vocal naysayers who are reluctant to ask the question lest it provide women with an "excuse" for neglectful or abusive parenting. PMS/PMDD is not something women fight to "have". The credibly of a woman's experience will be assessed as all other narratives are evaluated in an assessment, with the validation of details, sensory description, and congruency between verbal and non-verbal language. By not asking about premenstrual experiences, our "blindness" to the issue is comparable to years of social workers not asking about sexual abuse or suicide. By asking about PMS/PMDD, we are validating and recognizing premenstrual challenges and bringing the associated "stigma" out of the closet.

The decision about whether to disclose premenstrual experiences remains in the control of a mother and she should not be pushed to share more information than she is comfortable with. The disclosure process is an intricate pattern of decision making, influenced by implicit philosophical ideas regarding the value of being fully known; wanting to avert emotional pain; by the desire to unburden oneself of secrets; by beliefs about the negative clinical consequences of secret-keeping; by individual tolerance for shame; by the mediating effects of a strong alliance and the anticipation of approval; and by expectations of emotional, cognitive, and interpersonal benefits of disclosure (Farber, 2004). Tension can arise primarily from the need to manage information about any failing that might be discrediting about themselves [premenstrually] and their parenting

(Waterhouse & McGhee, 2009). All assessment is reciprocal. As a joint activity by both the social worker and the client, assessment requires mutual understanding and agreement (Bisman, 1999). While we are assessing mothers, mothers are assessing us for our trustworthiness and sense of relationship. Women perceiving social workers as punitive will likely keep their vulnerabilities hidden, out of fear they may be used against them.

Perhaps the most striking aspect of the data on PMS/PMDD disclosures/consultations in the medical community is the relatively few number of women consulting doctors. A study by Weiss and Knappen (2009) examining the medical consultations in five countries (USA, Canada, UK, France, and Germany), found there were less than 0.1% of consultations annually by women. Their data makes it clear that PMS/PMDD does not bring large numbers of women into the medical system to consult with doctors. Relatively few doctors in any country diagnose women as suffering from PMS/PMDD. Laws (1983) stated, "Many women suffer significant premenstrual disruption and discomfort, without believing that ''we can safely hand [this problem] over to doctors to deal with'' (p 30). This makes the role of social workers even more central to premenstrual discussion, particularly if women do not believe medical professionals are suitably addressing PMS/PMDD.

There exists a certain shred of doubt for many people when they discuss someone with a contested illness, especially one where psychosomatic symptoms may be confounding factors for patients trying to communicate their experience. So long as an illness remains "medically invisible," it can be dismissed as psychosomatic and, therefore, less real than physical diseases (Walker, 2012). In reality, this becomes one of the most important characteristics of contested illnesses, affecting access to diagnoses

and health care, the response of others to one's problem, and the very identity of the sufferer (Conrad & Barker, 2010).

Surprisingly, most social workers in the interviews in this dissertation did not fully appreciate the implications of the predictability of menstrual symptoms. Premenstrual predictability, and thus the predictability of problematic symptoms and behaviours, can be forecast - a distinct feature uncharacteristic of most mental and physical illnesses. It is also noteworthy that participants did not identify the dangers of inaccurately identifying risk with respect to "false positive" or "false negative" assessment outcomes.

The above notions of risk have been considered in the context of possible harm to others, but the issue of harm to self [mother] should pose another concern for social workers. Research indicates that people in stressful life situations have a higher incidence of suicide, often due to an overwhelming sense of hopelessness (Ron, 2002). PMS/PMDD can create the stressful life situation that catapults a woman into the depths of despair. As noted in Chapter Three, in contrast to women without PMS/PMDD, women with severe premenstrual symptoms were more than 2.8 times as likely to have suicidal ideation, 4.2 times more likely to have suicidal plans, and 3.3 times more likely to have attempted suicide. Social workers have a significant role to play in preventing suicide and intervention strategies need to address what role interpersonal difficulties [created or exacerbated by PMS/PMDD] may play in suicide-related behaviours. (Joe, 2009).

Social workers can assist in the diagnosis of PMDD by suggesting mothers chart their symptoms prospectively for two months, as required by the DSM-V criteria (APA,

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2013; Pearlstein, 2010). Not only does this help with diagnosis, it affords the woman insight as she tracks her symptoms and behaviours. At times, there can be an "ah ha!" moment on the charting journey. Knowledge of a woman's premenstrual struggles can help a social worker contextualize and understand previously inexplicable disruptions in treatment progress, recognizing the role that PMS/PMDD can have in precipitating crises that impact daily living. The charting can serve as a basis of collaborative discussion for the social worker and mother, creating opportunities to plan for support, respite, self-care, and enhanced parenting/relationship strategies. Social workers may also choose to focus their work with other family members who are impacted by a woman's PMS, and in turn, whose behaviours and responses reciprocally influence the woman and her symptoms. A treatment approach involving the partner may be more appropriate in some cases than interventions focusing primary on the PMS sufferer (Frank, 1995; Jones et al., 2000). Informed social workers should make medical referrals as appropriate and therapeutic referrals when there are indicators that parenting capacity is compromised in the premenstruum.

There are implications of this research for social work education and training to ensure social workers are more informed about the relevance of PMS/PMDD knowledge in assessing the parenting of mothers. Awareness of premenstrual experience as a biopsychosocial process should be increased among professionals who work with women complaining of premenstrual distress and the BPS-*E* framework provides an appropriate structure through which to do this. Minimally social workers must be taught that (a) PMDD exists as a category in the DSM; (b) women with PMS/PMDD are overrepresented in the literature on attempted and completed suicides during the premenstruum; (c) that some women's personal relationships are seriously impacted by PMS/PMDD, including the mother-child dyad; and (d) that SSRIs have been found to be an effective treatment for some women.

The provision of "descriptive" information about PMS and PMDD, particularly related to the key areas of the PEKQ and by social workers identifying items critical to practice, is essential. Many disciplines use "training" as the strategy for knowledge translation (Larrivee, Hamelin-Brabant, & Lessard, 2012). However, training alone is insufficient (Schrader & Lawless, 2004). Research has shown knowledge instruction alone is a poor agent for influencing changes in behaviour (Bruvold, 1990; Morrison, Baker, & Gillmore, 1994; Valente, Paredes, & Poppe, 1998).

Training can be enhanced when learning is reciprocal and occurs at the intersection between the trajectories of the evolving social practice of particular workplaces and individuals' socially influenced personal histories or ontogenies (Billett, 2000). Instructor presentations are inadequate unless they assist participants in analyzing societal perceptions related to women's PMS/PMDD and engage participants in examining their own values and biases. Lombardozzi (n.d.) poses the question: What if the real problem with applying knowledge is how to apply knowledge garnered in one context to another [such as applying premenstrual knowledge from personal experience to the professional environment]? This question appears most relevant given that while some social workers had some knowledge of PMS as evidenced in their PEKQ scores, they really had not considered applying it in the context of their social work practice.

Recommendations for Social Work Practice

This research has contributed to an increased understanding of social workers' knowledge about PMS/PMDD and their assessment practices and is instructive to those professionals engaged in assessing the parenting of mothers. It adds to the very limited contribution by social workers to the subject of women's premenstrual experiences. The following recommendations flow from the research results and analysis.

- Social workers must gain increased awareness and knowledge of the predictable premenstrual phase as a biopsychosocial process [enhanced to address macro societal issues] to be thorough and effective in conducting both parenting and suicidal risk assessments of mothers.
- 2. Social workers should advocate for less stigmatizing views of PMS/PMDD, similar to current advocacy efforts to reduce the stigma of mental illness.
- 3. Suicide literature (including medical information for the public) must be expanded to include the risk that PMS/PMDD can pose for some women.
- Social workers must become familiar with the DSM-V category of PMDD and the associated diagnostic mental health criteria, a professional responsibility identified in the Canadian Code of Ethics.
- There must be increased dissemination of evidence-based premenstrual research and practice considerations to social workers in academic and on-the-job training environments.
- 6. Effective training on PMS/PMDD must go beyond mere instruction to reflect on personal and institutional bias, dominant societal discourse, and the role of social workers in supporting and intervening with mothers who are reluctant to engage with medical practitioners.

- Social workers, in the context of cultural sensitivity, should inquire about premenstrual experiences, while respecting the amount of detail a woman may choose or not choose to share.
- 8. Social workers can assist women in prospectively charting premenstrual symptoms and in processing and making meaning of the experiences.
- Social workers should advise women of evidence-based treatment alternatives, particularly that SSRI anti-depressants have been proven to be effective for some women.
- 10. Social workers must individually engage in a reflective process about how values, or biases about premenstrual experiences perpetuate or resist stereotypes about the collective incompetencies of women and/or deny the lived experiences of others. Social workers must appreciate the relationship between attitudes, knowledge, positions of power, and practice as it relates to discussions of both the premenstruum and mothering.
- 11. Social workers can advocate for meaningful services and supports for women suffering from PMS/PMDD including medical services, trained medical staff, and respite for women during these difficult times.

Considerations for Future Research

Given the exploratory nature of this study on premenstrual knowledge as it relates to social workers' inquiries about premenstrual experiences, there are many opportunities for further research. There would be value in conducting the PEKQ survey and qualitative interviews with a more diversified sample of participants, primarily with respect to race and ethnicity. This would allow for a more enriched understanding of social work knowledge and practice.

This study focused on what social workers *know* about premenstrual experiences but did not examine attitudes and beliefs. The relationship of attitudes to knowledge and practice would be very informative. A growing number of researchers from different areas have adopted a multi-construct approach to assessment evaluating not only knowledge, but attitude and behavioural change as well (Schrader & Lawless, 2004). Further research could tease out the role of premenstrual attitudes and beliefs in relation to knowledge and practice.

A controlled pilot study evaluating the practice of a cohort of social workers incorporating a premenstrual inquiry and the subsequent responses of mothers in both clinical and child protection settings would also be beneficial in further guiding research and social work practice. There might also be value in conducting future research in crisis nurseries to determine whether there is any connection with the timing of mothers' cycles and the use of emergency care for children.

Conclusion

The 3-9% of women who struggle monthly with severe premenstrual symptoms and are incapacitated in their daily lives is remarkable. The concomitant derision and stigma make it difficult for those women who yearn for support, understanding, and treatment to come forward. Many mothers are not prepared to risk the shame, embarrassment, and at times unwanted intervention that might result from admitting challenges in parenting during the premenstruum. These results can direct social work education and practice. Social workers must be trained, more informed, and more *sensitized* about PMS/PMDD and the mental health implications of a DSM diagnosis, that at its most severe, can result in suicide, social isolation, and at times, harm to children. Not asking about PMS/PMDD symptoms can have potentially negative outcomes, particularly in child protection, where the safety needs of children could remain unaddressed. Conversely, women who tell uninformed or disapproving social workers about their premenstrual symptoms might be further subjected to mother-blame, stigmatization, or punitive interventions.

Social work needs to lead by example in engaging its professionals in more open discussions on the bio-psycho-social health of women; challenging the destructive discourse and narratives related to women's PMS while recognizing the unique suffering of the individual, and making this invisible syndrome "visible" to those helping systems who seem to have forgotten many of the women they serve.

Actions are beneficial for women who fear they're on their own when it comes to premenstrual problems. It is hoped that women's organizations, the medical field [and I add the field of social work] will join in contributing to dialogue that alleviates the misinformation and stigma associated with PMDD (Society for Women's Health Research, 1999, paragraph 10).

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Appendix A

Premenstrual Experience Knowledge Questionnaire

Copy of Premenstrual Experience Knowledge Questionnaire (PEKQ)

PREMENSTRUAL EXPERIENCES KNOWLEDGE SURVEY

Thank you for your time in completing this questionnaire and contributing to the research on the knowledge about premenstrual experiences held by child protection workers. It should take approximately 10 minutes to complete.

SECTION 1 - Premenstrual Experiences Knowledge Questionnaire (PEKQ)

Please mark the answer (True, False or Don't Know) that best describes your response to each statement.

1. PMS generally starts when a woman is over the age of 45 years.

- C True
- C False
- C Don't Know

2. When women have PMS, the causes are mainly related to their biology.

- C True
- C False
- C Don't Know

3. Usually, only women living in Western cultures have severe PMS symptoms.

- C True
- C False
- C Don't Know

4. For some women, distressing PMS symptoms can last up to two weeks per month.

- C True
- C False
- C Don't Know

5. Women have problems with PMS only because they have been socialized to expect symptoms.

- C True
- C False
- C Don't Know

6. There is a psychiatric category in the DSM for severe PMS.

- C True
- C False
- C Don't Know

7. Suicide occurs more in women with severe PMS in the two weeks before their period than in women without symptoms.

- C True
- C False
- C Don't Know

8. Severe PMS can be confirmed with a blood test.

- C True
- C False
- C Don't Know

9. Women tend to exaggerate how PMS affects them in a negative way.

- C True
- C False
- C Don't Know

10. Premenstrual Dysphoric Disorder (PMDD) is a term for women with physical symptoms only.

- C True
- C False
- C Don't Know
- 11. There are over 150 different types of PMS symptoms.
- C True
- C False
- C Don't Know

12. Women with severe PMS find their work and family lives most affected.

- C True
- C False
- C Don't Know

13. Premenstrual symptoms in women have been described as far back as 300 BC in the writings of Hippocrates and Aristotle.

- True
- False
- Don't Know

14. Some women feel positive before they get their period.

- C True
- C False
- C Don't Know

15. 3 to 9% of women have such severe PMS that they are not able to cope with daily life.

- C True
- C False
- C Don't Know
- 16. The physical symptoms of PMS usually bother women more than the emotional symptoms.
- C True
- C False
- C Don't Know

17. The most effective treatment for severe PMS is SSRI anti-depressants.

- C True
- C False
- C Don't Know

18. Most women with severe PMS do not feel stigmatized because symptoms are a normal part of menstruation.

- C True
- C False
- C Don't Know

19. Some women with severe PMS have problems parenting their children.

- C True
- C False
- C Don't Know

20. Physical illnesses and headaches can get worse when a woman has PMS.

- C True
- C False
- C Don't Know

SECTION 2 - Demographic Information

21.	Sex

- Male
- Female

C Other/Transgendered

22. Current Age

0	25 or younger	0	46-50
0	26-30	0	51-55
0	31-35	0	56-60
0	36-40	0	61 or older
0	41-45		

23. Race

Caucasian	Asian
Native Aboriginal	East Indian
Metis	Black
Inuit	
Other (please specify)	

24. How many years have you been a social worker?

0-5	16-20
□ ₆₋₁₀	21-25
□ 11-15	26 years or more

25. How many years have you worked in child protection?

0-5	16-20
□ 6-10	21-25
□ 11-15	26 years or more

26. What is the highest level of education you c	ompleted? (Choose only one).	
High school	Masters degree in Social Work	
2 years College	Other Masters degree	
Undergraduate degree in Social Work (BSW)	Ph.D.	
Other undergraduate degree		
27. Current child protection position		
C Screener	Supervisor	
Investigator (assessor)	Manager	
Family support worker/caseworker		
Other (please specify)		
28. I usually ask about PMS in my risk assessm	ent practices with mothers.	
□ Yes		
□ No		
29. I have taken training about women's experie	ances with PMS	
 Yes 		
(If yes, please specify)		
30. I have lived in the same household as a wo	man who had PMS.	
Don't Know		
T Yes		
□ _{No}		
31. Rate the degree to which you believe PMS	interfered with her life activities.	
No		Significant interference

	interference						interference
Rating	0	0	O	0	O	0	0

32. (For females only) I have experienced PMS.

□ _{No}

C Yes

33. (For females only) Rate the degree to which PMS symptoms interfered with your life activities.

	No interference						Significant interference
(Rating	0	0	0	0	0	0	0

SECTION 3 - Future participation

34. I am interested in identifying a specific charity to be entered into a draw for a \$250 donation. The draw will be made on March 15, 2013 and you may contact Lynn at pmsresearcher@gmail.com to find out the winner.

Charity Name	
Address	
City	
Province	
Phone number	

35. I am interested in being contacted for Phase 2 of the study to participate in a confidential interview on women's PMS and child protection. For more information please see the Research Information Cover Sheet. Please note that you will only be contacted if you have been selected for an interview.

Yes
 No

- No

36. If yes, please provide the following information:

Name	
Email	
Phone number	
Fax	
City	
Province/Territory	

Thank you for taking time out of your busy schedule to complete this survey.

Appendix B

Research Information Cover Sheet

TITLE: Premenstrual Experiences as a Consideration in Risk Assessments of Mothers Conducted by Child Protection Workers

Researcher: Lynn Barry, Ph.D. student School of Social Work Memorial University of Newfoundland Email: csica@telus.net

Supervisor: Ross Klein, Ph.D. School of Social Work Memorial University of Newfoundland Email: rklein@mun.ca

INTRODUCTION

Hello! My name is Lynn Barry and I am a Ph.D. student at Memorial University of Newfoundland. I worked in child welfare with Alberta Children's Services for over 23 years. As a partial requirement for my Ph.D. in Social Work, I am conducting independent research. I am interested in understanding what child protection workers know about the continuum of women's premenstrual experiences and how this knowledge influences whether and what they ask in their risk assessment practices with mothers.

This research study will protect all information provided and will not use names or identifying information of subjects in the reporting of the research. The information that you provide will be anonymous in the final report and no one will be named or identified in any way. Individual competence is not the focus of the study, but rather an assessment of the knowledge of Canadian child protection workers as a collective. It will be impossible to identify individual workers or groups of workers or their employers. This non-identifying survey and interview information will be used in a dissertation, and possibly journal articles, conference presentations, or agency reports. It may be used by social work trainers or educators. It is also possible that child welfare agencies will use the collective information to make changes to risk assessment policies and procedures.

I am excited to invite you to participate! So that you are most informed, please take the time to read the following information carefully.

ABOUT THE RESEARCH

This research study has three stages as follows:

In the first stage, child protection workers fill in a survey, taking about 10 minutes. One section includes true and false statements about women's premenstrual experiences. A second section asks about your social work practice. A final section asks about future participation. Please complete the attached survey and return it anonymously through the Survey Monkey link. Your answers are secure, confidential and private. The results will be analyzed using statistics. This phase of the research will occur between May 2012 and August 2012.

The second stage involves selecting 12 child protection workers from the sample of participants across Canada who completed and returned the questionnaire. These 12 workers will be selected based on their knowledge of premenstrual experiences. These workers will be asked to participate in a taped telephone or Skype interview lasting between 1 to 2 hours. These interviews will be analyzed for different themes. Again, this data will be analyzed and compiled and the information will not be identifying. This phase of the research will take place between July 2012 and December 2012. All related tape recordings and transcriptions will be kept securely in locked cabinets and will be kept for a minimum of five years, as per the policies of Memorial University of Newfoundland.

The final phase involves sending a draft copy of the research chapter for feedback to all 12 interview-participants. Your input is important to me to see if my analysis has accurately portrayed and interpreted your thoughts. This feedback will allow me to make any necessary changes with respect to meaning or accuracy before completing my final dissertation.

HOW YOU CAN PARTICIPATE

Your Ministry has approved child protection workers in your province/territory to participate in this study. Please complete the attached survey and return it anonymously through the Survey Monkey link. Your answers will be helpful in understanding how premenstrual knowledge affects child protection practice.

VOLUNTARY PARTICIPATION

Your participation in this study is completely voluntary and it is entirely up to you whether you want to be involved! A decision not to participate will not compromise your employment in any way. When you send in the completed survey, your consent will be assumed. If you are later contacted to participate in an interview, you will need to complete a consent form.

CONFIDENTIAL, ANONYMOUS, PRIVATE

All survey and interview information will be locked in a file cabinet and will be kept for a minimum of five years, as per the policies of Memorial University of Newfoundland. Computer files will be protected by a password. Your employer will not have access to your information. Survey Monkey is an American company and as such is subject to that country's Homeland Security and Patriot's Act. Although it is unlikely, Survey Monkey is subject to important conditions regarding privacy and confidentiality.

The information that you provide in the survey will be anonymous in the final report and no one will be named or identified in any way. This non-identifying survey information will be used in a dissertation, and possibly journal articles, conference presentations or agency reports. It may also be used for training and educational purposes.

DISADVANTAGES, RISKS AND BENEFITS OF TAKING PART

Should you decide to withdraw from the survey, your survey data cannot be removed as it was provided anonymously and cannot be separated out from all the other anonymous responses. The charity you have identified will remain in the draw for a \$250 donation, because it cannot be identified when you withdraw.

It is not expected that there will be any risk or harm to any participant in this study. If discussing premenstrual experiences causes you stress, you will be provided with a list of counselors who can help you. You may benefit from the opportunity to share your professional thoughts and ideas.

If any information is disclosed indicating that a child is at risk of child abuse, I am required to report it to authorities if a report has not yet been made.

THE STUDY APPROVAL

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and was found to meet their ethical standards. If you have concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at (709) 864-2861.

CONTACT INFORMATION

If you have any questions or concerns about the research (or you would like to request an electronic copy of the final dissertation), please feel free to contact me at either my email address of pmsresearcher@gmail.com by phone at (250) 447-7675 or by cell at (403)

875-6606. My research supervisor Ross Klein, (Ph/D. Studies Committee at Memorial University of Newfoundland) can also be reached at rklein@mun.ca or by phone at (709) 864-8147.

Thank you so very much for taking the time to be informed about this study.

Lynn Barry, Ph.D. candidate

Appendix C

Interview Research Participation Consent Form

Research: "What knowledge do child protection workers have about the continuum of women's premenstrual experiences and how does this knowledge influence whether and what they ask in their risk assessment practices with mothers?" Investigator: Lynn Barry (Ph.D. student, School of Social Work, Memorial University of

Newfoundland and Labrador

This consent form, a copy of which has been given to you, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more details about something mentioned here, or information not included, please ask or consult the Research Information Sheet. Please take the time to read this form carefully and to understand any accompanying information.

The purpose of this research is to determine the knowledge and attitudes that child protection workers have about premenstrual syndrome (PMS) and explore the relationship of this knowledge and attitudes to the invitation and receipt of PMS disclosures in child welfare practice. This information is important in considering whether or not workers view PMS as relevant in child abuse cases. This study will compile the knowledge and attitudes of participating child welfare workers about PMS and the discussions that they have or do not have with mothers they are involved with.

We are asking you to discuss your experiences in interviews that will likely last between 1.5 and 2.5 hours. The interview will be digitally recorded and no identifying information will be included on the recording. If you like, you may look at the typed transcripts and change any aspect that does not reflect your opinions or experiences.

Your participation is completely voluntary and confidential and will in no way impact your employment as a child welfare worker. The only exception is the requirement to report any child abuse that has not been previously reported to authorities. Further, if you are involved in legal proceedings, this file may be subpoenaed.

You are free to refuse to answer any question and you have the right to withdraw your participation at any time. Signed consent forms, digital audiotapes and transcribed interviews will be kept in a locked file cabinet in the care of the investigator. This information will be destroyed after five years as per the policies of Memorial University of Newfoundland and Labrador. The information that you provide will remain

anonymous for the final report and no individual will be named or described with identifying information.

Your signature on this consent form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights, nor release the investigators, sponsors or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time. Your continued participation should be as informed throughout your participation. If you have further questions concerning matters related to this research please contact:

Lynn Barry, Ph.D. student: Phone: (403) 875-6606 or (250) 447-7675 Email: csica@telus.net

If you have any questions concerning your participation in this research project, you may also contact Ross Klein, Ph.D./Chair Ph/D. Studies Committee at Memorial University of Newfoundland and Labrador: Phone: 709-737-8147 Email: rklein@mun.ca

I agree to participate in the questionnaire as outlined above and have it used in research reports and publications.

Signature: _____

Date:

Witness (optional)

Appendix D

Summarized Research Proposal

Hello! My name is Lynn Barry and I am a Ph.D. student at Memorial University of Newfoundland and Labrador. I worked in child welfare with Alberta Children's Services for over 25 years. As a partial requirement for my degree, I am interested in understanding what knowledge child protection workers have about the continuum of premenstrual syndrome and how this knowledge influences whether and what they ask in their risk assessment practices with mothers.

I am excited to invite you to participate! So that you are most informed, please take the time to read the following information carefully.

About the research

This research study has three stages as follows:

- The first stage is a quantitative study in which participating child protection workers will be invited to complete a questionnaire that should take no more than 10 minutes. There is one section of the questionnaire that consists of statements related to knowledge about the continuum of premenstrual experiences and another section seeking demographic and professional practice information. Please complete the attached questionnaire and return it electronically through the SurveyGold link. Your answers will be secure, confidential and private. The questionnaire results will be statistically analyzed. This phase of the research will occur between February 2012 and May 2012.
- 2. The second stage is a qualitative study of 12 child welfare workers purposively drawn from the sample of participants who completed and returned the questionnaire. The 12 workers will be selected based on the amount of knowledge they have about premenstrual experiences: including four who have none or little knowledge; four or who a moderate amount of knowledge and four who are very informed. These workers will be asked to participate in a face-to-face taped interview between 1.5- 2.5 hours. These interviews will be analyzed for different themes of interest. Again, this data will be analyzed and compiled together and at no time will the information be identifying. This phase of the research will occur between June 2012 and December 2012. All related tape recordings and transcriptions will securely stored before being erased and destroyed within 5 years as per Memorial University policy.
- 3. The final phase involves sending a draft copy of the research report for feedback to all 12 interview-participants and an additional 20 randomly selected survey participants. Your input is important to me to see if my analysis has accurately portrayed and interpreted your thoughts. This feedback will allow me to make any necessary changes with respect to meaning or accuracy before completing my final dissertation.

How you can participate

Your Ministry has already approved child welfare workers in your province to participate in this study. Please begin by completing the attached questionnaire and returning it at your earliest convenience via electronic link to SurveyGold. Your thoughtful answers will be most helpful in generating new thoughts and ideas about premenstrual syndrome in the context of child welfare practice.

Voluntary participation

Your participation in this study is completely voluntary and it is entirely up to you whether you wish to be involved! Should you begin the study and decide later to withdraw (no reason required), you may do so at any time before my thesis is submitted for examination by contacting me via telephone or email. If you indicate that you would also like to withdraw the information that you have shared in the study up to that point, that request will be honored and your data not utilized.

No consent forms will be required with the questionnaire as your submission of the questionnaire itself will be taken as an indication of consent. If you are one of the 12 child welfare workers contacted to participate in an interview, your completion of a consent form will be required. Your participation in the questionnaire does NOT oblige you to participate in a subsequent interview nor to provide feedback to the distributed draft report.

Confidential, anonymity and privacy

All related questionnaire and interview information will be securely stored in a locked file cabinet to which only I have access, before being destroyed within 5 years as per Memorial University policy.

Possible disadvantages, risks and benefits of taking part

It is not anticipated that there will be any risk or harm to the well-being of any participant in this study. Should any undue stress be caused by the discussion of this subject, a participant will be provided with a list of counselors in this area to assist him/her further. Participants may benefit from the opportunity to share professional thoughts and ideas. At the completion of the interview, participants will receive an information package on PMS that contains relevant and current literature that may further their understanding on the topic.

The study approval

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and was found to be in compliance with Memorial

University's ethics policy. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at <u>icehr@mun.ca</u> or by telephone at (709) 737-2861.

Contact information

If you have any questions or concerns about the research, please feel free to contact me at either my email address of <u>csica@telus.net</u>, by phone at (250) 447-7675 or by cell at (403) 875-6606. My research supervisor Ross Klein, Ph/D. Studies Committee at Memorial University of Newfoundland and Labrador) can also be reached at <u>rklein@mun.ca</u> or by phone at (709) 737-8147. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at <u>icehr@mun.ca</u> or by telephone at (709) 737-2861.

Thank you so very much for taking the time to be informed about this study.

Lynn Barry, Ph.D. candidate

Appendix E

Research Ethics Application



Form 1B: Post-doctoral Fellow and Student Research

(It is the responsibility of researchers to read the ICEHR "Information for Researchers" found on our website: http://www.mun.ca/research/researchers/ethics.php)

Access to Information and Protection of Privacy

The information on this form is collected under the authority of the Memorial University Act (RSNL 1990 Chapter M-7) and is needed for and will be used by the Interdisciplinary Committee on Éthics in Human Research (ICEHR) to assess your application for ethics review and by the ICEHR Coordinator and the Secretary to administer ethics clearance. If you have any questions about the collection and use of this information contact the ICEHR Coordinator, Office of Research, at 709-864-2861.

SECTION A – GENERAL INFORMATION

General instructions: This application form has been revised to facilitate the application and review process. It is designed to be completed electronically. Use the space inside the expandable textbox to provide the information requested. Please do not skip items. Answer "n/a" if it does not apply to your proposed research. Click or double- click on the "yes/no" box to select.

TITLE OF PROPOSED RESEARCH PROJECT 1.

Premenstrual Experiences as a Consideration in Risk Assessments of Mothers Conducted by Child Protection Workers

PREVIOUS OR OTHER RESEARCH ETHICS BOARD APPROVAL(S) 2.

- Has this project received ICEHR recommendation for the "Release of Research Fund"? Yes, ICEHR application RF #: Click here to enter text.
- No No
- Has this research project been reviewed by another institution's ethics board?
- Yes [Attach a copy of the application you submitted and the approval letter.]

No

3. POST DOCTORAL FELLOW OR STUDENT PRINCIPAL INVESTIGATOR INFORMATION

Title	Last Name:	First Name:	Middle Initial:
Ms.	Barry	Lynn	Е.
Department/Faculty/School (or	Institution if not MUN):		
School of Social Work	, Memorial University o	of Newfoundland	
Mailing address for corres	pondence, if different from	MUN email address:	
department/faculty/school:		lb5231@mun.ca	
PO Box 606		Email address (other): [will copy to this address, if provided] csica@telus.net	
Christina Lake, BC V0H 1E0		Telephone: (250) 447-7675	
		MUN Student No. 200883023	

Form 1B: Post-Doctoral Fellow and Student Research - Section A

Positions:	
MUN Undergraduate Student	MUN Master's Student MUN PhD Student
MUN Post-Doctoral Fellow	Other (specify): Click here to enter text.

4.	PROJECT PROGRAM		
	Undergraduate Honours Thesis	Master's Thesis	Doctoral Dissertation
	Other: Click here to enter text		

5. **CO-INVESTIGATOR(S):** [Do not include supervisor's information here – see item 6]

Not applicable

Name			Position			Faculty/Department			Email						
Click	here	to	enter	Click	here	to	enter	Click	here	to	enter	Click	here	to	enter
text.				text.				text.				text.			

6. SUPERVISOR(S)

Name	Department/Faculty/School (or Institution if not MUN)	Email
Principal Supervisor:	School of Social Work	rklein@mun.ca
Ross Klein		Ŭ
Co-supervisor:	School of Social Work	lbella@tcc.on.ca
Leslie Bella		<u> </u>

7. DATA COLLECTION START AND END DATES

Beginning of formal recruitment or informed consent process normally constitutes the start date of data collection.

Estimated project start date: July 2012

Estimated start date of data collection involving human participants: July 2012

End date of involvement of human participants is when all data has been collected from participants, no further contact with them will be made, and all data are recorded and stored in accordance with the provisions of the approved application.

Estimated end date of involvement of human participants for this project: February 2013

Estimated project end date: May 2013

8. USE OF SECONDARY DATA

Does your project involve secondary use of data collected for other purposes? If it involves the use of secondary data that is not in the public domain, provide letter of approval from the data holder.

Not applicable.

Only secondary data
 Both human participants and secondary data
 Only human participants

9. FUNDING OF PROJECT

Form 1B: Post-Doctoral Fellow and Student Research - Section A

Is this project funded? 🔀 No
Yes, funding agent/sponsor: Click here to enter text.
If no, is funding being sought? 🔀 No
Yes, funding agent/sponsor: Click here to enter text.
Will funds be administered through MUN? Yes No X/A
Funded research title if different from this application: N/A
Principal Investigator of above funded research: N/A
10. CONTRACTS
Is there a MUN funding or non-funded contract/agreement associated with the research? 🗌 Yes 🛛 🗙 No
If Yes, please include one (1) copy of the contract/agreement with this application
Is there any aspect of the contract/agreement that could put any member of the research team in a potential conflict of interest? Yes No

11. SCHOLARLY REVIEW

Yes If Yes, please elaborate under Section C, item #5.

The ICEHR will assume that research proposals prepared for presentation to the three national granting councils (CIHR, NSERC and SSHRC), as well as other funding agencies, will be subjected to scholarly review before funding is granted. The ethics review process for research that is beyond minimal risk will incorporate a determination of the project's scholarly merit and may request the researcher to provide full documentation of such scholarly review.

Please check one:

\square	The research project has undergone scholarly review prior to this application for ethics review by (specify review committee – e.g. departmental research committee, peer-review committee, etc):					
	Dissertation Supervisory Committee consisting of: Ross Klein (MUN), Leslie Bella (MUN), Leslie Tutty (U of C)					
	The research project will undergo scholarly review prior to funding by (specify review committee – e.g. departmental research committee, peer-review committee, etc):					
	Click here to enter text.					
	The research project will not undergo scholarly review.					
	The research project has been reviewed the supervisor(s).					

Form 1B: Post-Doctoral Fellow and Student Research – Section A

Page 3

SECTION B – SUMMARY OF PROPOSED RESEARCH

1. RATIONALE AND HYPOTHESIS/RESEARCH QUESTION

Explain in non-technical, plain and clear language the purpose and objectives for the proposed project. Include hypothesis or research question if applicable. The rationale for doing the study must be clear.

A critical advance in women's mental health has been the identification of mood disturbances during specific phases of women's reproductive life (Joffe & Greenfield, 2009). The effects of the menstrual cycle on the emotional state and cognitive function of some women have long been recognized (Farage, Osborn, & MacLean, 2008). Two types of premenstrual experiences, Premenstrual Syndrome (PMS) and the more severe Premenstrual Dysphoric Disorder (PMDD) have been reported by some women to interfere with their daily functioning to such a degree that their ability to lead normal lives is seriously compromised. Pearlstein and Steiner (2008) estimate in each menstrual cycle, one in four women have emotional, behavioural and physical premenstrual symptoms leading to disruption in interpersonal relationships and role functioning.

One of the primary roles for women in their reproductive years is parenting. Robinson and Swindle (2000) reported that in their sample of women who identified premenstrual syndrome as problematic in their lives, 77.6% indicated the domain of relationships with children as an area where symptoms frequently or always interfered. For some women, premenstrual experiences negatively impact the quality of their parenting in the luteal phase of the menstrual cycle. In some cases, premenstrual syndrome may be an unrecognized risk factor for child abuse/neglect. Women, who have suffered from premenstrual syndrome and have had past involvement with child protection workers, have identified interventions ranging from intrusive and coercive apprehensions to a complete lack of discussion about premenstrual symptoms.

Child safety remains the mission and defining principle of the child welfare profession. Evidence-based practice is used in child protection in risk assessment (Wells & Daniels, 2007). The classic theory of risk assessment always analyzes two factors when attempting to determine potential risk: 1) the likelihood that a harmful event will occur and 2) if it occurs, the potential severity of that harm (Rycus & Hughes, 2003). Barry and Tutty (2011) found that of 44 women who self-identified as having PMS, 12 (27.3%) acknowledged having had current or past child protection involvement. A major finding of this unpublished quantitative study was the support for a link between the severity of both women's total premenstrual symptoms, psychological symptoms, and the difficulties in parenting a young child.

The challenge for child protection workers is that the quality of their assessment is dependent on an understanding of these possible dynamics. To this should be added the *timing* of the problems as there are few other chronic disorders that repeatedly alternate between health and wellness in the short span of approximately 30 days. Many women with severe PMS are unhappy with the way they handle their interpersonal relationships prior to their menstrual period and overcompensate for their behaviour in the symptom-free weeks of their cycle. A mother may present one way during the follicular phase of her cycle and present very differently two weeks later. Premenstrual experiences should be discussed when assessing safety and risk to any children living in the home. None of the child protection literature reviewed for this thesis addresses premenstrual experiences as a point of discussion in assessment.

The literature review, in conjunction with my personal interest, resulted in the generation of the following research question: What do child protection workers know about the continuum of women's premenstrual experiences and how does this knowledge influence whether and what they ask in their risk assessment practices with mothers?

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2. PROPOSED STUDY DESIGN/METHOD

Describe in some detail all procedures and methods to be used. Explain what the participants will be doing in the study, types of information to be gathered from participants, where and how they will be obtained and analyzed. If research includes intentions to publish, please indicate publication venues.

Attach a copy of all materials (survey questionnaires, interview questions, or other non-standard test instruments) to be used in the study.

This cross-sectional exploratory study uses a triangulated mixed methods design consisting of both quantitative and qualitative methodology to collect complementary data. The quantitative component will collect foundational data to be used as a springboard for the qualitative stage of the research. A survey consisting of three sections has been developed. It will be used to determine how the independent variable (what child protection workers know about the continuum of premenstrual experiences) is related to the dependent variable (if and what they ask about premenstrual experiences during their risk assessments with mothers). After the collection of this data, qualitative interviews will be conducted with a smaller sample to explore this issue in greater depth. The reason for collecting both quantitative and qualitative data is to bring together the strengths of both forms of research to compare results and to integrate them into a final analysis and discussion of the implications for practice (Cresswell & Plano Clark, 2007).

Quantitative Research Procedures

Survey administration

The survey was initially piloted with two child protection workers (who will not be participating in the actual research study due to a possible conflict of interest) and five former child protection workers who have either retired or who are now working in other positions. Based on the feedback from these seven participants, no changes to the survey were required.

Child protection workers will be invited to complete the electronic survey that should take approximately 10 minutes. A Research Information Cover Sheet accompanies the survey. Each paragraph and/or statement in the Research Information Sheet (Appendix A), the Premenstrual Experiences Knowledge Survey (Appendix B), and the Research Consent Form (Appendix D) were analyzed using the Flesch-Kincaid reading grade level and reading ease application. The reading grade level does not exceed grade 12 on any of these documents and the most difficult reading ease score is 26. As a frame of reference, legal documents average a score of difficulty score of 10 while comic books average an easier reading score of 90. These scores reflect an appropriate grade level and reading ease for the documentation in this study, given that the minimum hiring pre-requisite for child protection workers is high school completion.

The first section of the survey consists of statements about the continuum of premenstrual experiences and response options of yes, no or don't know. Please find the actual survey in Appendix B and an additional survey (with the correct responses) in Appendix C. The second section asks for demographic and professional practice information. The third section invites respondents to volunteer to be interviewed for the second stage of the study, and asks those willing to do so to provide contact information. If they are interested completing the survey,

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they are invited to enter their name in a draw to have \$250 donated to a charity of their choice, which they are asked to identify. Implied consent will be assumed when participants choose to submit their surveys over the Internet using Survey Monkey (n.d.). It is anticipated the data for this phase of the research will be collected April through July 2012.

Data analysis and dissemination.

The purpose of analysis will be to a) summarize the characteristics of a specific research sample or population (child protection workers conducting risk assessments), b) to estimate the degree to which the characteristics of the sample (child protection workers conducting risk assessments (in participating provinces) reflect the population (child protection workers conducting risk assessments in Canada), and c) to determine if any patterns of relationships found within a research sample (such as the knowledge about the continuum of premenstrual experiences in relation to what is asked in risk assessments with mothers) can be generalized back to the population (Canadian child protection workers conducting risk assessments) from which the sample was drawn. The data will be analyzed using SPSS Statistics 18 software to conduct primarily descriptive statistics - with the exception of three demographic items (age, years as a social worker, and years in child protection) that will be analyzed using inferential statistics. The reliability of the PEKQ and the psychometric properties of the 20 sub-scales will be assessed using Cronbach's Alpha.

Qualitative Research Procedures

Data Collection

The 12 selected participants will be asked to sign the emailed/ faxed Research Consent Form (Appendix D) and to return it signed via scanned/email or fax or self-addressed envelope. The consent form will contain the researcher's contact information should the participant have questions. Upon receiving the consent form, a digitally recorded telephone or Skype interview will be scheduled to collect data about how the knowledge that child protection workers have about premenstrual experiences influences whether and what they ask in their risk assessment practices with mothers. The use of telephone or Skype affords the most flexibility, given the geographic diversity of participants. Interviews are with professional social workers comfortable with the use of telephone and discussions are generally within the scope of their professional practice. Therefore, any losses from lack of face-to-face interaction are outweighed by the convenience of using technologies to interview a widely dispersed sample.

An interview guide (Appendix E) will be used by the interviewer, listing in outline form the topics and issues that will be covered in the interview, yet still allowing for the adapting of the sequencing and wording of questions to each particular interview. The guiding questions of the semi-structured interview are open-ended and allow for an answer to the question as the informant wishes to provide it.

Data analysis.

The interviews will be transcribed and entered into a qualitative computer research software program such as NVivo. The transcripts will be analyzed working inductively from the particular to more general perspectives, and identifying major themes and subthemes. The interviews will be coded, line-by-line thematically and the themes will be grouped together and checked for emerging patterns, variability, consistency and uniqueness (Trinder, 1996).

Integrated Analysis and Documentation

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With the two phases of data collection completed, the analysis will involve comparing and contrasting the results and integrating them using a convergence model such as the one suggested by Cresswell and Plano Clark (2007). I will report the data results in two phases, followed by the integration of information in the discussion or conclusion. I anticipate, based on the information received about the knowledge child protection workers have and how it influences whether or what they ask in child protection risk assessments, making recommendations related to child protection practices and the training of child protection workers.

Please see Appendix A for Research Information Cover Sheet, Appendix B for Premenstrual Experiences Knowledge Survey, Appendix C for Premenstrual Experiences Knowledge Survey (with correct responses), Appendix D for Research Consent Form and Appendix E for Interview Guideline.

3. PARTICIPANTS INVOLVED IN THE STUDY

a. Indicate who will be recruited as potential participants in this study

Undergraduate students	Graduate students	Faculty or staff
General population	Children	Adolescents
Senior citizens	Aboriginal people	Other (specify):Child protection workers employed by provincial/territorial Ministries.

 Specify the expected number of participants and exclusion criteria. Provide justification if participation is dependent on attributes such as culture, language, religion, race, mental or physical disability, sexual orientation, ethnicity, gender or age.

Because the research question aims to determine what child protection workers know about premenstrual experiences, the unit of analysis for the study will be individual *delegated* child protection workers and supervisors who are responsible for conducting risk assessments in the provinces/territory of British Columbia, Alberta, Manitoba, Newfoundland, and the Northwest Territories (once consent is received).

For the quantitative component, a universal sampling strategy will be used in which all delegated child protection workers in each approved province/territory will have an equal opportunity to participate. The study is seeking 500 participants but given that high caseloads and workload demands will influence the available time workers have to participate, 2000 eligible workers are being sought in anticipation of a response rate as low as 25%. Should this sample size not be attained in the specified provinces and territory above, additional provincial/territorial Ministries will be approached to participate. These numbers will also be double-checked with sample size formulas as recommended by Creswell and Plano Clark (2007).

For the qualitative component, 12 workers will be selected for interviews a) volunteers responding to section three of the questionnaire described above, b) selection of 12 of those

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volunteers according to the amount of knowledge they have about premenstrual experiences: including four who have none or little knowledge; four or who have a moderate amount of knowledge and four who are very informed. The exact boundaries of these three categories will be determined after a frequency distribution has been created from the participants' scores.

c. Is there any pre-existing relationship between you (or any member of your research team) and the researched (e.g. instructor-student; manager-employee).

🖂 Yes	🗌 No	N/A	
If yes, please explain:			

While I have previously been employed as child welfare worker in the Province of Alberta, I am no longer a salaried employee. I do provide occasional training to workers on a contract basis approximately 3 days per year in both Alberta and the Northwest Territories, but this role is not one of influence and has no aspects of evaluation or reporting. In my role as Director of the Canadian Society for the Investigation of Child Abuse (CSICA), approximately 25 Calgary child welfare workers have volunteered over the past 20 years for the Calgary Child Witness Court Preparation Program and received honorariums. There are currently only two active child welfare workers volunteering for the program. They participated in the piloting of the survey, so that any possible conflict of interest is avoided in the actual research. Their responses will not be included in the research data.

d. Are you or any member of your research team in a direct position of power in relation to the participants outside the scope of the research study?

Yes	🔀 No	N/A
If yes, please explain:		
Click here to enter te	xt.	

e. Will you or any member of your research team be collecting research data from your/their own students?

Yes	🔀 No
If yes, please explain:	
Click here to enter tex	xt.

f. Will the targeted research population consist of any vulnerable group that will have difficulty understanding or will not be able to give free and informed consent e.g. the mentally disabled, minors (under 19), or any institutionalized individuals such as prisoners, etc?

Yes 🛛 No

If yes, please explain:

Click here to enter text.

4. RECRUITMENT PROCESS AND STUDY LOCATION

a. Describe how, by whom, and from where the potential participants will be recruited. Where participant observation is to be used, please explain the form of your (or members of your team) insertion into the research setting (e.g. living in a community, visiting, attending organized functions). Please make it explicit where it is reasonable to anticipate that all or some of the participants who will be recruited will not speak English or will speak English as a second language. Describe any translation of recruitment materials, how this will occur and whether or not those people responsible

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for recruitment will speak the language of the participants. Attach a copy of any materials to be used for recruitment [e.g., emails, posters, advertisements, letters, and telephone scripts].

Maximum 2 pages

Because the question aims to determine what child protection workers know about premenstrual experiences, the unit of analysis for the study will be individual *delegated* child protection workers and supervisors who are responsible for conducting risk assessments in the provinces/territory of British Columbia, Alberta, Saskatchewan, Manitoba, Newfoundland, and the Northwest Territories (providing that consent from specified Canadian provincial and territorial Ministries is received). Each Ministry will be requested to electronically distribute the Research Information Cover Sheet (Appendix A) and the survey (Appendix B) using an internal List-Serve. This process ensures no confidential staff information is shared with the researcher without the participant's consent.

b. Identify where the study will take place.

On campus (e.g. university classroom, university lab, etc.) Please specify below.

Off campus (e.g. aboriginal community, schools, etc.) Please specify below.

Click here to enter text.

Note: Research to be performed outside the jurisdiction or country of the institution that employs the researcher will undergo prospective ethics review both (a) by the REB within the researcher's institution; and (a) by the REB, where such exists, with the legal responsibility and equivalent ethical and procedural safeguards in the country or jurisdiction where the research is to be done (TCPS Art. 1.14)

5. EXPERIENCE

For projects that involve collection of sensitive data, methods that pose greater than minimal risk to participants, or involve a vulnerable population, please provide a brief description of your (or your research team) experience with this type of research (including people who will have contact with the participants).

N/A. Unduly sensitive data is not being collected.

6. COMPENSATION

If compensation is offered, it should not provide undue influence on a participant's decision to participate in the research. Justification for the amount of compensation to be offered should be provided.

a. Will participants receive compensation for participating in the research?

Yes No

If yes, please provide details and justification for the amount or value of the compensation offered.

Participants will be invited to identify a charity of their choice to be entered into a draw for a \$250 donation. The \$250 donation will be personally contributed by this researcher. The draw will be made on August 31, 2012 and participants interested in knowing the successful charity will be invited to email the researcher.

b. If participants choose to withdraw, how will you deal with the compensation offered?

If participants choose to withdraw from the research, their names will still remain in the draw

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for a charity of their choice to receive \$250. Since survey submissions are made anonymously, their identified charity could not be removed from the draw.

7. SHARING OF RESEARCH RESULTS WITH PARTICIPANTS

Explain what and how information/feedback will be provided to participants and/or communities after their participation in the project is complete. (e.g., report, poster presentation, pamphlet, etc.)

The responses of child protection workers participating in the qualitative study will be sought to validate a draft chapter that will be distributed to them via email. They will be asked whether the chapter includes a fair reflection of their own comments in the interview and whether they feel the presentation of the information protects their own identity and that of any clients they have discussed in the interview. This member-checking strategy will allow me to determine whether my interpretations appear accurate and meaningful to them (Cresswell, 2008), and to make adjustments if needed. It will also allow participants the opportunity to help ensure that data has been thoroughly de-identified so cases are not recognizable. This process will provide participant validation of the findings. These 12 child protection workers will also be asked whether their participation in this research project affected their practice and if so, how. Any participant interested in reading the final dissertation can request to view an electronic copy by contacting the researcher directly.

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SECTION C – STATEMENT OF ETHICAL ISSUES

1. BENEFITS

a. Identify and describe any known or anticipated *direct benefits* to the participants (or to the community) from their involvement in the project.

Benefits to the interview participants, such as the opportunity to reflect on an aspect of their practice in a safe environment and to share professional thoughts and ideas, are likely to exceed any minimal risks incurred. An additional benefit is that all survey respondents have the opportunity to identify a charity of their choice to be entered into a draw for a \$250 donation.

b. Identify and describe any known or anticipated *benefits to the scientific/scholarly community or society* that would justify involvement of participants in the research.

Given that negative premenstrual experiences can be a factor influencing some women's parenting, the topic has applicability for child protection workers interviewing mothers whose children have *already* been identified to be at risk by referral sources. It is not the intent to imply that all mothers with severe premenstrual symptoms will have problems parenting their children nor that they will abuse or neglect their children.

What does it mean for the practice of child protection workers who have discussions about premenstrual experiences with female adult clients? A worker assessing a mother's parenting capacity during her time of premenstrual distress may have a distorted and inaccurate perception of her situation and over-estimate the risk to her children for the remaining weeks of the month. Children could be apprehended in an intrusive manner in response to the symptoms of a treatable condition that is not present all the time, with tragic consequences for all. Conversely, if a safety or risk assessment occurs during the follicular phase of the menstrual cycle when premenstrual symptoms are not present, a mother could be wrongly assessed as presenting no risk to her children, with equally tragic results.

Child protection workers could have more active roles with mothers by determining the degree, if any, to which PMS is an exacerbating risk factor. This could ultimately lead to a reduction of risks for children, and the long-term emotional and financial benefits for families remaining together and functioning more effectively. Knowledge of a woman's premenstrual struggles could help a worker understand confusing and previously inexplicable disruptions in treatment progress – understanding the situation as a "hiccup" in the therapeutic journey rather than an irreversible "backslide". If it is determined in this study that child welfare workers do not consistently ask women about their premenstrual experiences, then this research could provide important direction to child protection practice.

Biological factors are well-related to the etiology of PMDD (Adewuya, Loto, & Adewumi 2008; Farage et al., 2008). The literature suggests that selective serotonin-reuptake inhibitors (SSRIs) have been shown to improve both emotional and physical symptoms of PMDD as well as to enhance psychosocial functioning and overall quality of life (Jarvis et al., 2008). The dosing of SSRIs can be effective when provided continuously, intermittently, semi-intermittently or at the time of symptom-onset (Jarvis et al., 2008). Child protection workers sensitive to the challenges of premenstrual experiences can make appropriate medical referrals, possibly ameliorating the risk of child abuse with medical treatment.

Child protection workers alert to early identification of negative premenstrual experiences

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could result in women predicting times when their coping skills and parenting abilities may be challenged, providing early intervention opportunities for women to ask for what they need and to develop support, assistance, self-care and parenting strategies. Because premenstrual syndrome lends a *predictable* risk for the children of women involved with child protection, interventions such as respite care and /or in-home support could be more accurately informed.

2. HARMS

What is important in explaining the risks involved in participating in a project is to provide potential participants with a clear understanding of the potential for harm. Research risks are those that reflect the likelihood and magnitude of harms that participants may experience as a direct result of taking part in this research (e.g., stress or anxiety during data collection, stigma, loss of job, injury, etc.).

Please indicate if the participants as individuals or as part of an identifiable group or community might experience any of the following risks by being part of this research project. In particular, consider any factors that pose potential harm to at-risk groups.

a.	Physical risks (including any bodily contact, administration of any substance, or in dangerous location such as politically unstable countries)?	Yes	🔀 No
b.	Psychological/emotional risks (feeling uncomfortable, embarrassed, anxious or upset)?	Yes	No No
c.	Social risks (including possible loss of status, privacy or reputation)?	Yes	🔀 No
d.	Is there any deception involved?	Yes	🔀 No
e.	Will your methods induce participants to act against their wishes?	Yes	No No
f.	Will participants be asked to disclose information of an intimate nature or otherwise sensitive nature?	Yes	🔀 No
g.	Financial risks to participants (e.g. loss of job, promotion opportunities, etc.)?	Yes	🔀 No
h.	Financial risks to organization/company (decrease in demand for goods/services, loss of funding opportunities, etc.)?	Yes	🔀 No

If **yes** to any of the above, please explain the risks and describe how they will be managed or minimized. In the case of an adverse event (if any), provide information on how you plan to manage the risks inherent in your research and provide information or resources to participants who might experience adverse effects stemming from participation in your research.

It is not anticipated that either the quantitative or qualitative components of this research will expose the participant to any risks beyond those typically experienced in his/her everyday professional and personal life. The nature of the topic is not unduly sensitive or emotionally disturbing and is unlikely to provoke distress in participants. However, in the unlikely case that a participant does become distressed, he/she will be provided with a list of counselors who are skilled in providing assistance.

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3. FREE AND INFORMED CONSENT

You are encouraged to examine our informed consent form template for information on the required <u>minimum</u> elements that should be included in the information letter and consent form, and follow a similar format: <u>http://www.mun.ca/research/researchers/Consent_Form_Template.pdf</u>.

a. What process will you use to inform the potential participants about the study's details and to obtain the participants' consent for participation? If the research involves extraction or collection of personally identifiable information from a participant, please describe how consent from the individuals or authorization from the data custodian will be obtained.

Participants are provided research study details of the quantitative research in the Research Information Cover Sheet and details of the qualitative research in the Research Consent Form. Participants are also invited to ask questions about the research at any time.

For the qualitative research component, the 12 child protection workers selected to participate in the interview, will be emailed or faxed the Research Consent Form. They are advised in the form to return it by email or fax.

b. If you will not be obtaining written consent, please provide the rationale for oral or implied consent (e.g. discipline, cultural appropriateness, etc.) and explain how consent will be recorded. Also, explain how you are going to ensure participants understand that their participation is voluntary.

When participants send in the completed survey, their consent will be assumed, given they are under no obligation to submit it unless they are in agreement. Participants are also advised that if they submit the survey, they are not obligated to participate in a later interview. If they are later contacted as one of the 12 individuals to participate in an interview, they will need to complete the Research Consent Form and return it via email or fax. A copy of the signed consent form will be kept by the researcher.

c. If the target population is not competent by reason of age or mental ability to provide free and informed consent, (*The age of legal consent in this province is 19 years of age*) describe and justify the process you will use to obtain the permission of the parental and third-party consent. [*Note: If the participants are capable of understanding the objectives and consequences of the research, his or her assent should be obtained in addition to the consent of the parent or guardian.*]

The target population is a professional one and individuals are able to participate with informed consent.

4. ANONYMITY OF PARTICIPANTS AND CONFIDENTIALITY OF DATA

a. Describe the procedures you will use to protect anonymity of participants or informants, where applicable, and the confidentiality of data during the conduct of the research and in the release of the findings.

Survey respondents submit their surveys anonymously in the quantitative component and only

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identify themselves if they are interested and willing to participate in an interview in the qualitative component. Participants are advised in the Research Information Cover Sheet that Survey Monkey is an American company and as such is subject to that country's Homeland Security and Patriots' Act. Although it is unlikely, Survey Monkey is subject to important conditions regarding privacy and confidentiality.

Although I hope to transcribe all the interviews myself, should it be necessary at any point to hire an assistant to transcribe the interviews, the assistant will be required to complete an oath of confidentiality.

This research study will protect all information provided and will not use names or identifying information of subjects in the reporting of the research. The information provided will be anonymous in the final report and no one will be named or identified in any way. Individual competence is not the focus of the study, but rather an assessment of the knowledge of Canadian child protection workers as a collective. It will be impossible to identify individual workers, groups of workers or their employers.

This non-identifying survey and interview information will be used in a dissertation, and possibly journal articles, conference presentations or agency reports. It may also be used by social work trainers and educators. It is also possible that child welfare agencies will use the collective information to make changes to risk assessment policies and procedures.

c. Explain how written records, video/audio recordings, photographs, artifacts and questionnaires will be securely stored, how long they will be retained, who will have access, and provide details of their storage location and final disposal. Provide a justification if you intend to store your data for an indefinite length of time. If the data may have archival value, discuss this and whether participants will be informed of this possibility during the consent process. Data security measures should be consistent with Memorial University's *Policy on Integrity on Scholarly Research* (http://www.mun.ca/policy/site/policy.php?id=130).

The surveys, digital tape recordings and transcribed interview data will be kept securely in locked cabinets and will be kept for a minimum of five years, as per the policies of Memorial University of Newfoundland and Labrador. For those who use the online survey, all information will also be removed from the host website (Survey Monkey, n.d.).

d. Describe any limitations to protecting the confidentiality of participants' data (eg. access to or disclosure of information during or at the end of the study) whether due to the law, the methods used or other reasons (e.g. duty to report).

Although it is unlikely that child protection workers would have reason to disclose that an uninvestigated child was at risk of abuse, participants are advised that if any information is disclosed indicating that a child is at risk of child abuse, I am required to report it to authorities if a report has not yet been made.

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e. If participants' anonymity is difficult or impossible to achieve (e.g. in focus groups), please explain the barriers to anonymity.

There are no barriers to anonymity anticipated.

5. CONFLICT OF INTEREST If any member of the ICEHR is ineligible to review your application because of a conflict of interest, please notify the ICEHR administrative staff.

If the proposed research involves real or apparent conflict of interest (e.g., yours or your team's judgement may be influenced or appear to be influenced by private or personal interests such as remuneration, intellectual property rights, rights of employment, consultancies, board membership, stock options, etc.), please identify and explain how you will inform research participants of these conflicts.

As mentioned previously, while I have been employed as child welfare worker in the Province of Alberta, I am no longer a salaried employee. I do provide occasional training to workers on a contract basis approximately 3 days per year in both Alberta and the Northwest Territories, but this role is not one of influence and has no aspects of evaluation or reporting. In my role as Director of the Canadian Society for the Investigation of Child Abuse (CSICA), approximately 25 Calgary child welfare workers have volunteered over the past 20 years for the Calgary Child Witness Court Preparation Program and received honorariums. There are currently only two active child welfare workers volunteering for the program they participated in the pilot of the survey, so that any possibly conflict of interest is avoided in the actual research. Their responses will not be included in the research data.

6. ABORIGINAL PEOPLES

If your research involves Aboriginal peoples, please describe in detail the ethical issues relevant to project proposed and how you plan to comply with the TCPS guidelines Section 6.

Child protection workers in Canada reflect a variety of diverse cultural and ethnic backgrounds including Aboriginal workers among the many others. As a researcher I will be culturally sensitive to all workers and the communities they represent. Aboriginal social workers will be participating in this research in their role as child protection workers, but not specifically because they are Aboriginal or because they are spokespersons for the larger Aboriginal community.

Aboriginal people and those of other cultures may have distinctive perspectives about premenstrual syndrome and menstruation embodies in their cultures and histories that require sensitivity in any questioning (personal vs private life). I will be respectful of the diversity of beliefs and responses.

The responses of Aboriginal child protection workers will not be categorized or analyzed as a sub-group but rather they will be included in the larger collective group of child protection workers.

However, Aboriginal people and those of other cultures may have distinct perspectives about premenstrual syndrome and menstruation embodied in their cultures and histories that require sensitivity in any questioning (personal vs private life). I will be respectful of the diversity of

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beliefs and responses. However, in the qualitative component of the research, should a participant self-identify as Aboriginal during the collection of primary data, I will inquire whether culturally appropriate assistance is desired to interpret, or support compliance, with the research project. I have added this inquiry to the Interview Guide (Appendix E).

7. ORGANIZATIONAL OR COMMUNITY CONSENT

If the research is taking place within a recognized organization or community (e.g. School Boards, Band Councils, etc.) which requires that formal consent be sought prior to the involvement of individual participants, explain whether consent from that organization/community will be sought. Describe this consent process and attach a copy of the approval document. If consent will not be sought, please provide a justification and describe any alternative forms of consultation that may take place.

Requests for permission to survey child protection workers in identified provincial/territorial Ministries will be submitted using internal request forms specific to each Ministry. Ministry staff will notify applicants/researchers once submissions have been reviewed and a decision made about approval. Please note that provincial/territorial agency and/or Ministerial correspondence is not available at this time because documented ICEHR approval is necessary *before* any application to the agency or Ministry can be submitted. However, I will ensure, after receiving ICEHR approval to proceed, that the committee is immediately forwarded the approval documentation from each participating provincial/territorial Ministry.

8. PARTICIPANT WITHDRAWAL

Please describe how participants will be informed of their right to withdraw from the project. Outline
the procedures which will be followed to allow them to exercise this right.

In the quantitative component of the research, survey data cannot be withdrawn as it is provided anonymously and therefore cannot be disaggregated.

Participants are advised of their right to withdraw from the qualitative component of the research project in the Research Consent Form (Appendix D). Participants can withdraw at any time, without any reason, and their information will be removed from the study, providing notification is received prior to the submission of the dissertation.

c. Indicate what will be done with the participant's data and any consequences that withdrawal may have on the participant.

Participant's qualitative interview data will be immediate deleted from the results and not included in subsequent reports. There will be no consequences whatsoever for the withdrawing participant and this is stated in the Research Consent Form.

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d. If participants will not have the right to withdraw from the project at all, or beyond a certain point, please explain.

Once the dissertation is ready for submission, individual data cannot be removed from the dataset. Participants are advised of this in the Research Consent Form.

9. **DECEPTION**

a. Describe and justify the use of deception or intentional non-disclosure in this study.

This research is not deceptive in nature and there has been full disclosure about the study in the Research Information Cover Sheet and Research Consent Form.

c. Explain and justify if information will be withheld from participants that might reasonably lead them to decline to participate in the study.

Not applicable.

d. Explain and justify if participants will be photographed or video- or audio-taped without their knowledge or consent.

Not applicable.

d. <u>Debriefing</u> (*Attach a copy of written debriefing sheet or script*) Outline the process to be used to debrief participants. Explain and justify whether participants will be given the option of withdrawing their data following the debriefing.

Not applicable.

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SECTION D - SIGNATURE

PRINCIPAL INVESTIGATOR:

As the **Principal Investigator** on this project, my signature confirms that I have read *Memorial* University's Policy on Ethics of Research Involving Human Participants and the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS). I will ensure that all procedures performed under the project will be conducted in accordance with the TCPS and all relevant university, provincial, national and international policies and regulations that govern the collection and use of personally identifiable information in research involving human participants. I agree to conduct the research subject to Section 3 (Guiding Ethical Principles) and accept the responsibilities as outlined in Section 18 (Responsibilities of Researchers) of Memorial University's Policy on Ethics of Research Involving Human Participants.

Any deviation from the project as originally approved will be submitted to ICEHR for approval prior to its implementation. I understand that deviations from the project that alter the risks to participants and that are implemented without ethics approval constitute a violation of the TCPS and Memorial University's policy.

If there is any occurrence of an adverse event(s), I will complete and submit Form 5 – Adverse Event(s) Report to the Chair of ICEHR immediately.

My signature confirms that my project has been reviewed and approved by my supervisor(s) and advisory committee (where applicable). If my status as a post-doctoral fellow/student changes, I will inform the ICEHR.

Lynn Barry

April 10, 2012

Name and Signature of Principal Investigator

Date

PRINCIPAL SUPERVISOR:

As the **Principal Supervisor** of this project, my signature confirms that I have reviewed and approved the scientific merit of the research project and this ethics protocol submission.

I understand that as the Principal Supervisor, I have ultimate responsibility for the conduct of the study, the ethical performance of the project and the protection of the rights and welfare of human participants. I will provide the necessary training and supervision of the researcher throughout the project to ensure that all procedures performed under the research project will be conducted in accordance with the TCPS and all relevant University, provincial, national or international policies and regulations that govern research involving human participants.

I will ensure that any deviation from the project as originally approved will be submitted to the ICEHR for approval prior to its implementation, and any occurrence of adverse event(s) will be reported to the ICEHR immediately.

Click here to enter text.

Name and Signature of Principal Supervisor

Click here to enter a date. Date

Form 1B: Post-Doctoral Fellow and Student - Section D

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Appendix F

ICEHR Ethics Approval



Interdisciplinary Committee on Ethics in Human Research (ICEHR)

Office of Research - IIC2010C St. John's, NL Canada A1C 5S7 Tel: 709 864-2561 Fax: 709 864-4612 www.mun.ca/research

ICEHR Number:	20130078-SW
Approval Period:	June 15, 2012 - June 30, 2013
Funding Agency:	
Responsible Faculty:	Dr. Ross Klein School of Social Work
Title of Project:	Premenstrual experiences as a consideration in risk assessments of mothers conducted by child protection workers
Amendment #:	01

January 21, 2013

Ms. Lynn Barry School of Social Work Memorial University of Newfoundland

Dear Ms. Barry:

The Interdisciplinary Committee on Ethics in Human Research (ICEHR) has reviewed the proposed addendum for the above referenced project, as outlined in your email correspondence dated January 16, 2013, and is pleased to give approval to broaden the recruitment from individual, delegated child protection workers to social workers across Canada, including fourth year BSW students, MSW students or Ph.D. students; and from "risk" assessment with mothers to assessments with mothers, as requested, provided all previously approved protocols are followed. However, with respect to students, surveys cannot be administered in-person by instructors, as this involves a power relationship. Instead, you may ask social work schools/faculties to forward your recruitment information via their list serves. Once obtained, please provide to the ICEHR copies of university permissions to recruit their students.

If you should make any other changes either in the planning or during the conduct of the research that may affect ethical relations with human participants, please forward a description of these changes to Theresa Heath at <u>icehr@mun.ca</u> for further review by the Committee.

Your ethics clearance for this project expires June 30, 2013, before which time you must submit an annual status report to ICEHR. Also, to comply with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, please notify us when research on this project concludes.

The Committee would like to thank you for the update on your proposal and we wish you well with your research.

Yours sincerely,

Gail Wideman, Ph.D.

Vice-Chair, Interdisciplinary Committee on Ethics in Human Research

GW/th

copy: Supervisor - Dr. Ross Klein, School of Social Work

Office of Research Services, Bruneau Centre for Research & Innovation

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Appendix G

Request to modify ICEHR Ethics Application

ICEHR SUPPLEMENT FOR PROPOSAL CHANGES

Date: December 31, 2012

Rationale for proposed changes to doctoral student research quantitative sampling The quantitative component of the original proposal involved seeking permission from provincial and territorial child protection Ministries to invite child protection workers to complete a 10-minute electronic survey about their knowledge of women's premenstrual experiences. Of 11 provinces and territories contacted, only Saskatchewan and Newfoundland Ministries provided their approval to date. Rejections were received from British Columbia, Alberta, Manitoba, Ontario and the Northwest Territories and no response was received from New Brunswick, Yukon, Nova Scotia, or PEI. Quebec was not contacted because of anticipated language issues and Nunavut required an application to the Aurora Research Institute with an accompanying fee of \$125.

A factor that may have influenced Ministry administrators in their decision to approve the research request is the media publicity given to recent University of Toronto research conducted by Romans, Clarkson, Einstein, Petrovic and Stewart (2012) that questions the existence of PMS. The first paragraph in an article published October 18, 2012 in the Globe and Mail entitled "Is PMS a myth? One study says yes", states "A woman's best three-letter excuse for monthly bouts of irritability is being dismissed by a group of Canadian researchers". The article can be found at http://www.theglobeandmail.com/life/health-and-fitness/health/is-pms-a-myth-one-study-says-yes/article4621996/. This research was also cited and discussed in other Canadian media outlets such as the Huffington Post (Canada)(October 18, 2012), the Toronto Star (October 17, 2012), The Atlantic (October 16, 2012), Prevention Magazine (October 2012), CBC News (October 18, 2012) and Global TV (October 18, 2012). It was during this time frame that my research requests were on the desks of decision-makers.

In late November 2012, Newfoundland's Department of Child, Youth and Family Services sent out an email to all child protection staff inviting them to complete the survey and submit it via electronic link. Saskatchewan's Department of Social Services modified the survey distribution survey procedure somewhat by having the dissertation information provided to their staff by child protection team supervisors. However, despite the potential for participation from at least 800 workers in both provinces, only four responses have been received to date. This outcome would appear to suggest there is a lack of priority for a survey on women's premenstrual experiences - both for child protection organizations and child protection workers invited to participate. Another unexpected possibility could be that my sample will consist primarily of women who submitted the survey because of their own personal experiences with PMS. This could result in a sample that potentially does not represent the premenstrual knowledge of a cross-section of child protection workers. Proposed changes to

a) Nature of sample

I am seeking to broaden the sample recruited for the quantitative component of my research from 1) individual, delegated child protection workers to social workers across Canada and 2) in a broader context from "risk" assessment with mothers to assessments with mothers.

I am proposing the following change in my research question in order to reflect this change.

"What do social workers (changed from child protection workers) know about women's premenstrual experiences and how does this knowledge influence whether and what they ask in their assessments (changed from risk assessments) with mothers?

Recruitment Process and Study Location

Because my question has been expanded to determine what social workers know about premenstrual experiences, the unit of analysis for the study will be individual social workers in various settings across Canada including 1) students at universities, specifically fourth year BSW students, MSW students or Ph.D. students; 2) child protection workers; and 3) other social workers who may assess mothers in their practice.

The research involves a stratified sampling method through which the following subpopulations of social workers can be identified about the knowledge they have about women's premenstrual experiences and how that knowledge influences whether and what they ask in their assessments with mothers:

These social work populations may be recruited in any of the following ways:

General recruiting for all social workers

Provincial/territorial social work associations and the Canadian Association of Social Workers have regular publications and newsletters in which recipients can be invited to participate.

A copy of this CASW or ACSW notification will be emailed to the researcher's professional network.

Each of these associations (ie: CASW, ACSW etc) also has social media sites including Facebook and Linked In, where notices about the research can be posted.

Permission will be sought from Executive Directors of approximately five family service agencies in at least four provinces/territories seeking permission to invite their social workers to participate in the research. These organizations will be requested to electronically distribute the Research Information Cover Sheet (Appendix A) and the

survey (Appendix B) using an internal List-Serve. This process ensures no confidential staff information is shared with the researcher without the participant's consent. It may be that some agencies prefer the researcher or delegate to attend at a staff meeting(s) and administer the survey if the agency is located in the provinces of British Columbia or Alberta.

Recruiting for child protection workers

The Child Welfare League of Canada (CWLC) publishes an e-Newsletter every 3-4 weeks that goes to approximately 2300 recipients. These include individual employees from their 150 member organizations, as well as academics from universities, people within other associations, employees of provincial/territorial social services departments, and many other organizations that work in the areas of child welfare, youth justice and child/youth mental health. The e-Newsletter would explain the research and invite recipients to participate if they are interested.

A copy of this CWLC notification/newsletter will be emailed to the researcher's professional network.

CWLC has both Facebook and Linked In social media sites where notices about the research can be posted.

The Canadian Society for the Investigation of Child Abuse (CSICA) of which this researcher is Executive Director, will include a notice about the research in the Winter 2013 newsletter and the Taking Action Against Child Abuse Facebook site.

Recruiting for university social work students

Permission to access fourth year and graduate university students will be first received from the social work faculty/school Dean(s)/Director(s) and subsequently from the instructors of individual face-to-face or online courses. In these courses, a hardcopy survey might be administered face-to-face and immediately collected by the researcher, the instructor, or her delegate. In the case of online courses, students will be encouraged to complete the survey using the electronic link. Initially contact will be made at four universities including the University of Victoria, the University of Calgary, the University of Manitoba and Memorial University of Newfoundland and Labrador. Should approval not be received, other Canadian universities with social work faculties/schools will be approached.

The study is still seeking targeting 2000 eligible social workers in anticipation that a response rate of 25% would result in a final sample size of 500. These numbers will also be double-checked with sample size formulas as recommended by Creswell and Plano Clark (2007).

Data collection start and end dates

Beginning of formal recruitment or informed consent process normally constitutes the start date of data collection.

Estimated project start date: July 2012

Estimated start date of data collection involving human participants: November 2012

End date of involvement of human participants is when all data has been collected from participants, no further contact with them will be made, and all data are recorded and stored in accordance with the provisions of the approved application.

Estimated end date of involvement of human participants for this project: March 2013

Estimated project end date: December 2013

Data analysis and dissemination.

Quantitative

The purpose of analysis will be to a) summarize the characteristics of the collective sample and the three identified research sub-samples b) to estimate the degree to which the characteristics of the collective sample and identified sub-samples conducting assessments of mothers in Canada, and c) to determine if any patterns of relationships found within the research sample and sub-samples (such as the knowledge about the continuum of premenstrual experiences in relation to what is asked in assessments with mothers can be generalized back to the populations from which the sample was drawn). The data will be analyzed using SPSS Statistics 18 software to conduct primarily descriptive statistics - with the exception of three demographic items (age, years as a social worker, and child protection (if applicable) that will be analyzed using inferential statistics. The reliability of the PEKQ and the psychometric properties of the 20 sub-scales will be assessed using Cronbach's Alpha.

Qualitative

As per the original proposal, the qualitative component will involve 12 social workers being selected for interview. A decision about the selection of these 12 social workers will be made after an examination of the frequency distribution of the participant score data. The exact boundaries of these three categories will be determined after a frequency distribution has been created from the participants' scores.

Statement of Ethical Issues

Benefits

For those universities granting permission for the PEKQ survey to be administered during face-to-face or online classes, an offer will be made by this researcher to debrief the

answers with the class once the surveys have been handed in and/or to teach the rest of the class on the issues of mothers, child protection, PMS and risk assessments should the instructor be interested.

Conflict of Interest

As the Executive Director of the Canadian Society for the Investigation of Child Abuse (CSICA), I plan to place a notice about the research and a link to the electronic survey in the Winter 2013 newsletter. However, because participation is voluntary, and I am not in a position of power or control over any of the participants, I do not believe a conflict of interest exists. With respect to the prospective recruitment of university students, I am not teaching any courses and have no influence over their participation.

The above categories are ones needing to be readdressed as a result of expanding the nature of the sample for this dissertation research. The rest of the ICEHR remains the same, although the term "social worker" will now replace child protection worker and "assessment" will replace risk assessment.

PRINCIPAL INVESTIGATOR:

As the Principal Investigator on this project, my signature confirms that I have read Memorial University's Policy on Ethics of Research Involving Human Participants and the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS). I will ensure that all procedures performed under the project will be conducted in accordance with the TCPS and all relevant university, provincial, national and international policies and regulations that govern the collection and use of personally identifiable information in research involving human participants. I agree to conduct the research subject to Section 3 (Guiding Ethical Principles) and accept the responsibilities as outlined in Section 18 (Responsibilities of Researchers) of Memorial University's Policy on Ethics of Research Involving Human Participants.

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If there is any occurrence of an adverse event(s), I will complete and submit Form 5 – Adverse Event(s) Report to the Chair of ICEHR immediately.

My signature confirms that my project has been reviewed and approved by my supervisor(s) and advisory committee (where applicable). If my status as a post-doctoral fellow/student changes, I will inform the ICEHR.

Lynn Barry

December 31, 2012

Name and Signature of Principal Investigator

Date

PRINCIPAL SUPERVISOR:

As the Principal Supervisor of this project, my signature confirms that I have reviewed and approved the scientific merit of the research project and this ethics protocol submission.

I understand that as the Principal Supervisor, I have ultimate responsibility for the conduct of the study, the ethical performance of the project and the protection of the rights and welfare of human participants. I will provide the necessary training and supervision of the researcher throughout the project to ensure that all procedures performed under the research project will be conducted in accordance with the TCPS and all relevant University, provincial, national or international policies and regulations that govern research involving human participants.

I will ensure that any deviation from the project as originally approved will be submitted to the ICEHR for approval prior to its implementation, and any occurrence of adverse event(s) will be reported to the ICEHR immediately.

Click here to enter text. Name and Signature of Principal Supervisor Click here to enter a date. Date

Appendix H

ICEHR Response to Amendment Request



Interdisciplinary Committee on Ethics in Human Research (ICEHR)

Office of Research - IIC2010C St. John's, NL Canada A1C 5S7 Tel: 709 864-2561 Fax: 709 864-4612 www.mun.ca/research

ICEHR Number:	20130078-SW
Approval Period:	June 15, 2012 - June 30, 2013
Funding Agency:	
Responsible Faculty:	Dr. Ross Klein School of Social Work
Title of Project:	Premenstrual experiences as a consideration in risk assessments of mothers conducted by child protection workers
Amendment #:	01

January 21, 2013

Ms. Lynn Barry School of Social Work Memorial University of Newfoundland

Dear Ms. Barry:

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If you should make any other changes either in the planning or during the conduct of the research that may affect ethical relations with human participants, please forward a description of these changes to Theresa Heath at <u>icehr@mun.ca</u> for further review by the Committee.

Your ethics clearance for this project expires June 30, 2013, before which time you must submit an annual status report to ICEHR. Also, to comply with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, please notify us when research on this project concludes.

The Committee would like to thank you for the update on your proposal and we wish you well with your research.

Yours sincerely,

eman Gail Wideman, Ph.D.

Vice-Chair, Interdisciplinary Committee on Ethics in Human Research

GW/th

copy: Supervisor - Dr. Ross Klein, School of Social Work

Office of Research Services, Bruneau Centre for Research & Innovation

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Appendix I

Notification to ICEHR of Qualitative Sample Modification

July 7, 2013

Coordinator Interdisciplinary Committee on Ethics in Human Research (ICEHR) Office of Research Bruneau Centre for Research and Innovation, Room 2010C Memorial University of Newfoundland St. John's, NL A1C 5S7

Re: Research project file number - 20130078-SW Research project title: Premenstrual Experiences as a Consideration in Assessments of Mothers Conducted by Social Workers

As a follow-up to the Annual Progress Report submitted for June 30, 2013, I would like to request approval for an amendment to my research proposal.

In the Qualitative Component of my methodology, I originally planned to conduct interviews with 12 social workers. However, I would now like to increase the number to sixteen social workers. As noted by Becker, 2011, http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf), one cannot know at any point in one's research what evidence will be needed, certainly not at the beginning. The number of interviews one needs will change from day to day as one learns and revises ideas.

Given the very exploratory nature of this study, some of the participants in the interviews have not been well informed about the topic and thus the interviews have been shorter than anticipated. It is my belief that my research will benefit by increasing the total number of qualitative interviews to sixteen. All else remains the same. I have the support of both supervisors, Ross Klein and Leslie Bella in making this amendment.

I look forward to hearing back from you.

Lynn Barry Ph.D. student, School of Social W

Appendix J

Qualitative Interview Guide

Aboriginal child protection workers	• As an Aboriginal child protection worker, do you feel that culturally appropriate assistance would be helpful in interpreting and supporting this research project?
PMS Knowledge	 When someone says they have premenstrual syndrome, tell me what you know about it? What is it? Are you aware of any types of premenstrual syndrome? If so, please describe. When does it occur? What are the symptoms? Which ones do you think women find most bothersome? What is the impact of premenstrual syndrome on women? What is the cause of premenstrual syndrome?
Personal Experiences with PMS	 Have you had any personal experiences with women who have had premenstrual syndrome? Tell me about those experiences. How were the women impacted? Self and identity Relationships with others Relationships with children How did these women cope? Parenting? Tell me about the most significant PMS episode(s) that you remember these women having. Tell me about any parenting episode they had while having premenstrual syndrome. Has PMS been something that you have ever experienced? (To female participant) Tell me about those experiences.
	Tell me about the most significant PMS episode that you remember having. Tell me about any parenting episode they had

	while having premenstrual syndrome.
	How has PMS impacted Self and identity Relationships with others Relationships with children How have you coped?
Professional Discussions with PMS mothers (clients)	How relevant do you think premenstrual syndrome is to women's parenting in child protection?Have you had any cases in your role as a child protection worker where PMS was discussed?
	 IF YES: Tell me about that case (s) What was the nature of risk – abuse, neglect, child/parent conflict, etc?
	 How was premenstrual syndrome relevant? Did she have a partner? How was it affecting the client, child(ren), family? Did she ever worry about hurting her children (or actually hurt them) during premenstrual times?
	 How did the topic of PMS arise? Invitation to disclose What questions did you ask? Unsolicited client disclosure
	Tell me about the nature (process) of the disclosure What was your personal response to her premenstrual syndrome?
	 Cognitive level Emotional level Behavioural
	How do you feel that your knowledge of premenstrual syndrome affected your discussion of premenstrual symptoms with her?
	What was your assessment of premenstrual syndrome in relation to her parenting capacity?

	• Does she parent differently during PMS times?
	What did your client need during her premenstrual times in order to parent effectively?
	What other risk factors existed for this mother in relation to the protection of her children?
	If NO:
	Tell me why you think there have been no discussions of premenstrual syndrome with your clients.
	How do you feel your level of knowledge about premenstrual syndrome affects the lack of discussion of premenstrual syndrome with your clients?
PMS and practice consideration	Tell me about the relevance of premenstrual syndrome in the risk assessment practices of child welfare.
	Tell me about your thoughts about the role of child protection workers in discussing PMS.
	Do you know of any child protection workers who regularly talk about PMS with their female clients?
	Do you have any more thoughts about PMS, parenting and child welfare that we have not discussed?