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LOCATION AND MENSTRUATION

by

Jennifer Lass

A thesis submitted in conformity with the requirements for the degree of Master of Arts
Graduate Department of Geography
University of Toronto

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ABSTRACT

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This study examined the impact of location on menstruation. One hundred and fifty-eight women were surveyed. 50 were interviewed and 5 participated in a focus group in order to determine whether or not attitudes and the physical experience of menstruation are affected by the area in which a woman grew up. Quantitative data were analyzed using percentages and chi squared and T tests. Qualitative data were evaluated comparatively with literature on menstruation. Findings indicated that there are few locational differences with regard to women’s attitudes and experiences of their periods. This was a result of the participants’ unique biological patterns which prevented distinct locational trends from being revealed. However, climate was found to affect volunteers’ cycles. Variation in menstrual attitude was also found in terms of age at menarche; women who were under 13 years old at menarche generally felt worse about their periods at menstrual onset.
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CHAPTER 1 - INTRODUCTION AND RESEARCH QUESTIONS

1.1 - Introduction

Although menstruation affects all individuals, either directly or indirectly, it is taboo. The nature of this taboo is complex and must be explored so that it can be understood and resolved. To date, much of the literature surrounding this subject has been written by scientists who have attempted to create static models that predict women’s menstrual experiences. However, by examining this topic from a geographical viewpoint, I show that such hypotheses are not adequate for explaining variation in menstrual attributes. By looking for locational patterns, new undertones to previously unresolved or falsely conceived ideas surrounding menstruation can be identified and reconciled. Many studies on menstruation have second guessed women’s accounts and reports and have attempted to dictate how women should deal with their cycles. Yet, by providing women with the opportunity to voice their experiences regarding menstruation, this project allows their physical and emotional reality to be revealed.

1.2 - Research Goal and Questions

The goal of this project is to challenge the traditional and rigid medical model of menstruation. It is important to understand that women’s physical experience and attitudes regarding their periods are more complex and less predictable than was previously thought. This new conceptualization permits women to be understood and aided if desired by the medical community more effectively. By using this model, the menstrual taboo may be overcome because stereotyping of beliefs and experience would be reduced. Making menstruation less invisible and forbidden will help women feel better about their periods and their bodies. It would also help men to be more supportive and understanding of their menstruating friends, sisters, mothers and spouses. For this goal to be realized, several research questions must be posited:
1. Do locational differences exist with regard to physical experience, behaviour during, education and attitude of menstruation?

2. If there are differences, why are they present?

3. Do these differences form a pattern, and why or why not?

4. Are there non-locational differences?

5. If there are non-locational differences, what are they and why do they exist?

6. What are the similarities in menstrual attitude or physical experience among women?

7. Do women's attitudes reflect long held beliefs surrounding menstruation?

In answering these questions, a new understanding of menstruation is uncovered.
CHAPTER 2 - LITERATURE REVIEW

2.1 - Introduction

Taboo is defined by Webster’s New World Dictionary as, “any conventional social restriction”; it means “to prohibit or forbid” (Guralnik, ed., 1984: 608). Yet, although menstruation is a natural phenomenon which is difficult to control or suppress, most societies expect women to hide their periods. In fact, the subject of menstruation is taboo almost everywhere. It has represented power, mystery and dysfunction in women throughout recorded history. Scholars and physicians have tried to understand menstruation for centuries while deeming women dangerous, unhealthy and imperfect in the process. Little attention was paid to women’s feelings and attitudes regarding their monthly cycle. Instead they were feared, stereotyped and controlled. Geography played an important role in shaping these early attitudes toward menstruation; the presumed purity of rural life was considered to be beneficial to women, particularly to their reproductive functions. Women were assumed not to possess the strength or intellect to live a healthy life in the stressful urban environment. But, with the rise of the women’s movements, the significance of menstruation and the role it played in society, the medical community and women’s lives were reexamined. Women’s liberation meant new freedoms and control for women concerning their bodies. But, it is possible to question whether or not this new-found freedom is a veil of false sentiment; shadows and remnants of the myths of the past, geographical and otherwise, still persist today and menstruation is still taboo.

2.2 - Taboos of the Past

It is difficult to trace how far back in history the myths surrounding menstruation originated. In fact, in prehistoric times women likely did not menstruate regularly because of frequent pregnancy, disease and low body fat levels; indeed, Golub (1992: 173) notes that women today
menstruate more than women of the past. Because of a lack of birth control women were often pregnant and, therefore, not menstruating, referred to as amenorrhea (Asso, 1983: xiii). Furthermore, authors like Dewey et al. (1997: 1403), Rogers (1997: S185), McIver et al. (1997: 1161), Sands (1966: 32), Mocsary et al. (1973: 683) and Berman et al. (1972: 524) note that lactational amenorrhea (LA) occurs after childbirth during breast feeding further delaying the recommencement of menstruation.

Disease would have also impacted prehistoric women's menstrual patterns. Because illness can cause amenorrhea (Scambler et al., 1993: 6), the multitude of pathogens which could survive in small, nomadic populations that would have been prevalent when humans evolved over two million years ago would have invariably affected the frequency of women's menstruation (Meade, 1988: 261). After the neolithic revolution in 8000 B.C. humans settled into agricultural communities encouraging the spread of new diseases, such as measles, smallpox, diphtheria, tuberculosis and whooping cough, the transmission of which relied on the close proximity of large groups (Meade, 1988: 261); again, amenorrhea persisted.

However, body fat would have most greatly influenced the degree of menstrual periodicity for women thousands of years ago. Ward et al. (1997: 71) and Otis et al. (1997: i) explain that amenorrhea can occur in women with low weights and low body fat levels. Therefore, while more traditional foraging and small-scale farming societies maintained relatively good nutritional status, periodic hunger still ensued causing heightened susceptibility to disease and reduced body fat (Howard et al., 1992: 576). Furthermore, once small-scale farming societies began to engage in larger-scale market economy activities, malnutrition became more widespread because the payment received in exchange for crops would not be enough to purchase adequate amounts of food with
sufficient calorie content (Howard et al., 1992: 577). Low body fat would have also, in part, been the result of the high degree of physical fitness attained by nomads and farmers; large amounts of exercise are positively correlated with amenorrhea (Otis et al., 1997: 1). Therefore, throughout a large part of history, women did not menstruate regularly; frequent amenorrhea was considered a part of life and likely assumed to be, to a certain extent, normal. According to Fausto-Sterling (1985: 96), Professor Frank Beach concluded that women were never meant to menstruate frequently and that any deviation from this pattern should be viewed as abnormal. This idea that menstruating women are somehow naturally abnormal led to menstruation’s scrutiny and became a significant focus for scholars and physicians. Unfortunately, by assuming that menstruation is pathological it is impossible to establish a baseline of health against which disease or menstrual dysfunction can be determined (Fausto-Sterling, 1985: 100).

The first known historic documentation of menstruation occurred in the Hebrew Bible (1300-100s B.C.) where in Leviticus the menstruating woman is considered unclean (Gruhn et al., 1989: 10). Then came the contribution of Hippocrates (460-377 B.C.) (Brush et al., 1988: 2; Ehrenreich et al., 1973: 6). Hippocratic physicians viewed women as imperfect and disordered because of phenomena like Premenstrual Syndrome (PMS) (Brush et al., 1988: 2; Scambler et al., 1993: 9, 10, 11). Gruhn et al. (1989: 10) note that Hippocrates, Aristotle (384-322 B.C.), Galen (A.D. 130-200) and Pliny (A.D. 23-79) hypothesized that menstrual bleeding was a process of cleansing and detoxification. This belief has held constant throughout history. Yet, from the time of the ancient Greeks until the late 18th century it was believed that male and female bodies were structurally similar, even equal (Scambler et al., 1993: 21). Women’s genitals were thought to be comparable to men’s, only inside the body (Scambler et al., 1993:21). Physicians saw menstruation as a natural.
normal process in need of little or no interference (Lander, 1988: 4). Nevertheless, women were considered less perfect; menstruation was still deemed a process necessary for ridding the female body of impurities and imperfections (Scambler et al., 1993: 21).

As Ehrenreich et al. (1973) and Scambler et al. (1993) explain, the 19th century brought a new and even more damaging portrayal of menstruation and of women in general by the medical community. While healing for centuries had been women’s domain, the professionalization of modern medicine in the 1800s precipitated the exclusion of women from medical practice (Scambler et al., 1993: 13). Women who were once abortionists, doctors, counsellors, pharmacists and midwives were no longer viewed as legitimate (Scambler et al., 1993: 13). Instead, Scambler et al. (1993: 16) and Ehrenreich et al. (1973: 12) describe how women were categorized as being either “sick” or “sickening”. The literature regarding this period in history clearly outlines a sharp class division in medical ideology where affluent women were portrayed as sickly or frail and working class women, especially immigrants, were viewed as healthy, yet congenitally dirty and contagious (Ehrenreich et al., 1973: 12, 13). This attitude is apparent in the writing of Mauriceau (1855: 1) whose book entitled, The Married Woman’s Private Medical Companion, explains that, “[those] of the lower rank, injured to exercise and labor, and strangers to those refinements which debilitate the system, and interrupt the functions essential to the preservation of health, are seldom observed to suffer...”. Ironically, it was the working class women who were, in actuality, chronically ill because of malnutrition, long work hours and inadequate rest; they died more often from diseases and complications of childbirth (Ehrenreich et al., 1973: 12). Yet, as Scambler et al. (1993: 18) note, it was mental work which was considered to be the primary cause for illness, not physical exertion.

The “myth of female frailty” was easily adopted by middle class women of the 19th century
who were socialized to be hypochondriacs (Scambler et al., 1993: 16). It was almost fashionable to retire to bed with headaches and bad nerves (Ehrenreich et al., 1973: 18). Mauriceau (1855: 1) declared that, "[women] in the higher ranks of life, and those of a delicate, nervous constitution, are subject to sickness, head-ache, and pains in the back and loins, during periodical evacuation". Here Mauriceau confirms Scambler et al.'s (1993: 16, 19, 27) claim that, according to 19th century physicians, the origins of female illness were rooted in the reproductive system; if women were to engage in study or expose themselves to cold and damp conditions between the ages of 15 and 25, they would develop amenorrhea, chlorosis, nervousness, loss of femininity and infertility.

According to Lander (1988: 33, 34), doctors believed that women possessed a limited supply of energy making them incapable of engaging in two activities at once. Therefore, because a woman was biologically destined to menstruate, she would not have the energy left to study; or, conversely, because a woman possessed a finite amount of energy, she had to conserve it in order to be able to menstruate (Lander, 1988: 34). Lander (1988: 34) notes that men were also encouraged to conserve their energy; yet, because the male system was not believed to be as complex as that of a female, men were absolved of bed rest and allowed to study and work. In actuality, women's illness was economically important in that it fuelled doctors' salaries and served as a financial status marker for men; the more doctors' visits a woman's husband could afford, the wealthier he was (Ehrenreich et al., 1973: 16, 24). Yet, there were other explanations that were used to keep women at bay. It was feared that a woman who developed a masculine brain through mental exertion would suffer a deterioration of her "maternal organs" and would become a "repulsive, useless hybrid" (Scambler et al., 1993: 19). It was not only expected that women would be sickly, but it was feminine to be sick (Ehrenreich et al., 1973: 22). Moreover, menstruation was viewed as pathological because of
the pain often associated with it (Scambler et al., 1993: 22). The menstrual cycle was but one of many "ailments" that plagued 19th century women of the upper echelons aiding in the perpetuation of their image as physically weak and defective.

Interestingly, Lander (1988: 22) notes a rural-urban connection to menstruation, and illness in general, in the 1800s. She highlights that although urban life was growing in importance during this time, it was perceived as evil. Cities were considered havens for excessive depravity, sexuality as well as intellectual and social stimulation, while country life represented innocence and simplicity (Lander, 1988: 22). This ideology soon became another means of controlling and categorizing women. Physicians of the time claimed that women who grew up in cities matured earlier, therefore, reaching their reproductive zenith prematurely causing them to limit their reproductive potential (Lander, 1988: 22). Hence, as Mauriceau (1855: 3.4) explained, "a difference [in age at menarche, or initial onset of menstruation] will . . . be found in the woman who may reside in cities, and in those who dwell in the country of each respective portion of the globe". The over-stimulation of the city was also blamed for female emotional disturbances causing a failure to menstruate or profuse menstruation (Lander, 1988: 24). The contradiction inherent in this belief is indicative of the grave lack of understanding regarding menstruation. Lander (1988: 41, 42) outlines a study that was conducted in the late 19th century which found that female students residing in cities experienced a high incidence of dysmenorrhea, or painful menstrual cramps, and menstrual irregularity; yet, in 1901 a control group of non-students was surveyed who experienced similar patterns of pain and cyclical variation. It seemed as if the stereotype of women as weak and vulnerable was beginning to disintegrate. According to Ehrenreich et al. (1973: 17), the myth of "female invalidism" lasted into the 1910s.
Although it might have seemed as though women were helpless and forging little resistance against oppression during these times, they were not. Ehrenreich et al. (1973: 17) explain that toward the end of the 19th century women began demanding college educations. Conversely, they used their “frailty” to their advantage; by feigning ill, women were able to avoid intercourse and, therefore, unwanted pregnancy or sex (Ehrenreich et al., 1973: 38, 39). Weakness, especially the emotionality which accompanied menstruation, was also a means of gaining control over family affairs (Ehrenreich et al., 1973: 39). Women could gain attention by using menstruation, or the fabrication of any other ailment, to manipulate family members (Ehrenreich et al., 1973: 39). Women who were portrayed as passive were in reality anything but. However, the stereotype of cities as stressors presenting mental and physical danger to women was set; from this point, most studies were conducted on urban women portraying them as overly powerful, neurotic, over-stressed hypochondriacs.

With the arrival of the 20th century, Freud provided a new perspective of urban women’s health and the menstrual taboo. Women were elevated from a state of helplessness and disadvantage to one of unfair advantage and power. Freud hypothesized that women were dangerously powerful when in “exceptional states”, such as during puberty, childbirth, sickness, death and menstruation (Lupton, 1993: 93). Menstrual blood, in particular, represented shame, difference, disease, death, filth and castration to men (Lupton, 1993: 92). Freud believed that during menstruation women possessed the ability to wither crops, turn wine sour, dull steel and drive dogs mad; all women, not just the working class, were sickening and unclean (Lupton, 1993: 93, 94). Lupton (1993: 131, 132) notes that women were still portrayed as defective, this time because they lacked a penis which relegated the role of menstrual blood to the reminiscence of castration or circumcision. However,
Asso (1983: 1) underlines the presence of Fliess' (1909) biorhythm theory which accounted for biocycles in both men and women. According to Fliess, female cells gave rise to a 28 day emotional cycle, male cells a 23 day physical cycle (Asso, 1983: 1). It was believed that women and men could exert a certain measure of control over their lives once armed with knowledge of their biorhythms (Asso, 1983: 1). Yet, the notion of this duality was lost only to resurface in the 1980s and women would remain isolated by their cyclic difference for decades to come.

As the mid 20th century approached, many of today’s most common menstrual pathologies were clinically diagnosed. In 1921 endometriosis, or the presence of functioning endometrial glands and stroma outside the uterine cavity, was diagnosed accurately (Matta et al., 1988: 251). In 1931 Horney posited a theory explaining the origins of Premenstrual Tension (PMT), now known as PMS (Goudsmit, 1988: 160). Although Horney’s arguments claiming that PMT was the manifestation of unresolved conflicts of the subconscious were poorly founded and misguided (Goudsmit, 1988: 159), she nevertheless labelled and attempted to provide an explanation for this phenomenon which had been observed since the time of Hippocrates. Prostaglandins, the group of chemicals in menstrual blood believed to be responsible for dysmenorrhea and menorrhagia, or heavy menstrual bleeding, were then discovered in 1933 (Rees, 1988: 240), although the belief that menotoxins thought to kill plants were present in menstrual fluid persisted until 1945 (Whelan, 1975: 106). Meanwhile, by 1944 Deutsch had expanded upon Horney’s PMT hypothesis emphasizing the importance of the influence of early menstrual experiences where she describes the trauma of girls at menarche viewing their own blood and fearing injury, illness and pain (Goudsmit, 1988: 160).

The 1950s witnessed a resurgence of Freudian ideology. Lander (1988: 58 - 65) provides a detailed account of, what she terms, psychologizing during this decade when the feminine mystique
as nurturer was glorified as women were lured away from the workplace after the second world war and encouraged to retreat to the suburban private realm. Lander explains that women were viewed as defective; their only chance for redemption or fulfillment was to be paired with a man. According to Lander, women were defined in relation to men; women’s lives gained meaning through supportive, passive roles such as bearing children and maintaining the homestead so that their husbands could work in the downtown core or public sphere. This logic was also prevalent in medical ideology. Freudian doctrine was easily adaptable to medicine because of its biological roots. Because Freud defined women by their anatomical shortcomings (lack of a penis) he believed that they were biologically determined to be passive receptacles. Lander notes that because women had become economically important as supporters of their husbands, menstruation could no longer be portrayed as an illness. Therefore, instead of finding the true cause of menstrual distresses, such as dysmenorrhea, the medical community of the 1950s labelled women experiencing discomfort during menstruation as neurotic, hypersensitive, vengeful and even sadistic and masochistic. Lander further describes how while menstrual pain was not considered serious, the medical community felt that it warranted professional attention because it was feared that women would grow to resent their biological function and pass a negative attitude on to their daughters. The medical establishment was clearly threatened by the potential of women shifting roles outside the private sphere.

As the 1960s began, women were reassured that they were not diseased while menstruating and continued to be encouraged to accept their femininity and societal role. Lander outlines the behaviourist approach to medicine which flourished during this time. She explains that it was thought that if mothers coddled their daughters at menarche and throughout menstruation they would view this cycle as an illness. Even Dalton questioned PMS calling it an “ambiguous phase” (Brush
et al., 1988: 3) where the suggestive powers of women influenced subsequent generations of women to fear their bodies and menstruation (Goudsmit, 1988: 160). Gruhn et al. (1989: 185) highlight the role of the Birth Control Pill (BCP) in the behaviourist approach. In the 1960s the BCP began to be used in order to prevent pregnancy, relieve menstrual cramps and regulate periods. Hence, women were liberated from menstrual interference in their lives; they no longer had to feel sick and resent their natural functions. However, this chemically-based solution for the inconveniences of menstruation is contradictory to the behaviourist edict which claims that there is no biological basis for menstrual complaints. Feminists worried that women's natural functions would begin to represent medical problems which would, in turn, prevent them from building a career outside the home (Fausto-Sterling, 1985: 95). Therefore, as the women's movement gained strength in the late 1960s, feminists rejected biological conditioning theories and instead fingered social construction as the main culprit in the shaping of women's menstrual experiences (Lander, 1988: 71).

However, following the lead of the “quick fix” BCP, the 1970s ushered in biologically based explanations for menstrual complaints (Lander, 1988: 78). According to Lander (1988: 79) these “fault-free” theories claimed that the etiology of menstrual difficulties was chemically based. Fausto-Sterling (1985: 100) explains that in this medical model the notion that hormone changes cause behavioural ones is primary and never contested. Much like the germ theory of late 19\textsuperscript{th} century, it was believed that a single cause and remedy could be found for dysmenorrhea, menorrhagia, endometriosis and PMS (Lander, 1988: 83). This disease model framework does not account for contextual factors, treating the body as if separate from the physical and social environments (Fausto-Sterling, 1985: 107). For example, prostaglandins were blamed for dysmenorrhea; it was, and still is, thought that an increased level of prostaglandins cause the uterine
muscles to become ischemic or severely cramped, creating extreme pain for some women during menstruation (Lander, 1988: 83). However, this notion is flawed. Prostaglandin inhibitors contain painkillers; therefore, it is still uncertain as to whether it is the inhibitors or the analgesic which relieves menstrual pain (Lander, 1988: 83). Moreover, studies conducted on patients who experienced myocardial infarction proved that ischemia is not always painful (Lander, 1988: 84).

As noted by Dunham (1970: 205), there was also a tendency to depict menstruation as pathological by recruiting participants with psychopathologies or extreme menstrual disturbances. Yet, these shortcomings were ignored by a medical community determined to cure menstrual ills.

Ehrenreich et al. (1973: 75, 76) emphasize the numerous parallels that exist between medical doctrines of the 1970s and those that existed 100 years previously. They note that urban middle and upper class women of the 1970s still turned to doctors for numerous reproductive complaints and were hospitalized far more frequently than men. These scholars also explain that while in modern times pregnancy is no longer considered a disease, it is treated like a medical problem; childbirth is a surgical event. Although in the 1970s irregular menstruation was no longer viewed as catastrophic, an endless number of hormonal cures were dispensed by doctors to those who could afford them (Ehrenreich et al., 1973: 76). As well, menopause was described to medical students as “the most serious endocrinological disorder next to diabetes” (Ehrenreich et al., 1973: 76). Women, who had become essential to the labour force again, were expected to be healthy and active at all times; with a career to develop and a household to run, the women of the 1970s had no time to be ill (Ehrenreich et al., 1973: 77). Therefore, it was the doctors’ mandate to maintain a high degree of health in the female population. According to Ehrenreich et al. (1973: 76) by this time women’s dependance on physicians had actually increased since 1900; the medical community took control of each sexual
or reproductive right, such as contraception and abortion, that was liberated by the feminist movement in the 1960s and 1970s. Scholars of this time were convinced that menstruation might interfere with women's dual role as home caretaker and worker. Therefore, an increasing number of studies attempted to pinpoint whether or not a woman's functions would be impaired during her period; connections between menstruation and depressive illness (Dalton, 1970b: 603; Koeske et al., 1975) and reaction time or ability to perform at work (Loucks et al., 1967; Dalton, 1970a; Sommer, 1973; Gamberale et al., 1975) were explored. The results were inconclusive.

In the 1980s biorhythm theory reemerged and women continued to be the focus of medical preoccupation. Although this theory focused on both sexes, women's cycles were seen as a disadvantage. PMS was labelled as a hormone disorder and the Victorian idea that women's cyclicity was their destiny prevailed; the supremacy of the reproductive system was dominant in medical ideology during this time (Lander, 1988: 86). Asso (1983: 2) explains that while biocycles may on occasion be influenced by exogenous factors, like barometric pressure or electromagnetic fields of cosmic rays, they are created and primarily regulated internally. These endogenous rhythms are supposedly driven by oscillators in the hypothalamus which provide ultimate control over biological cycles, like menstruation (Asso, 1983: 3, 4). Genetics were also considered to be a key factor in the development of attributes like anxiety, depression, neuroticism and dysmenorrhea (Silberg et al., 1987: 363). In this model, social factors are not considered to be pertinent to biology; this impacted how menstruation was viewed by society and for the first time in over 100 years the importance of geographical location was diminished. Women with PMS were portrayed as victims who victimize; by this time menstruation had become so biologically determined that violence as a result of PMS could be used as a legal defense (Lander, 1988: 87, 94). Snowden et al. (1983: 1)
were one of the few groups of scholars who conducted a worldwide study regarding menstruation for the WHO and concluded that culture played a part in shaping the social significance of menstruation. These researchers examined the role that social status, rurality, urbanity and country of origin played in the expectations and experiences women possessed regarding menstruation. Their results were inconclusive as to whether socio-economic status or location was more significant in identifying differences in menstruation (1983: 137).

In a further attempt to minimize the biological focus on women's cyclicity, Lander (1988: 141) criticizes Western society for its linear conception of time which, in her view, ignores the natural biocycles inherent in all humans. In her discussion Lander (1988: 126) also struggles with the irony of menstrual glorification versus minimization; while medical science glorifies the natural determinance of menstruation, thereby confining the role of women to their biology, the logical course for resisting this stereotype or the minimization of the uniqueness and importance of menstruation in women's lives, diminishes the significance that this essential process holds. Therefore, Lander's (1988: 139) discourse of the late 1980s revolves around the dually gendered nature of cyclicity. She fights biologism with biologism by outlining the universality of cycles and the potential for controlling biological mechanisms, like hormones, through relaxation and biofeedback techniques (1988: 154). However, her arguments still follow the biologically centred logic posited by those she is hoping to discredit; Lander (1988: 177) claims that it is the women with the worst symptoms during menstruation who hold more negative attitudes toward their cycles and she denies the existence of any cultural influences in shaping these perceptions. Koeske (1983: 11, 12) also criticizes the biotheory of the 1980s because of its restrictive use of labels and overly deterministic causal models and the absence of a cross-disciplinary theoretical framework. Unlike
Lander, she makes the crucial connection between recent biomedical theory and the initial emergence of gynecology and psychiatry in the 19th century (1983: 3).

2.3 - Taboos of the Present

The late 1980s and 1990s brought new edicts which attempted to break free of the biological determinism of years past. Although the quick fixes, like BCPs, of the early 1980s were still prevalent entering into the present decade (Hauksson et al., 1989; Ekstrom et al., 1989), new, more socially sensitive perspectives of the menstrual experience were investigated. While some scholars of the late 1980s like Magos (1988: 105) believed that “normal”, “predictable” limits or boundaries could be drawn around women’s menstrual experiences, academics of the 1990s began to question the confines of normality. For example, Scambler et al. (1993: 19) note that it is often the attributes associated with men which are defined as “normal”. These authors (1993: 20) underscore the fact that in many categories of mental illness pathologies, such as excess fear, depression and anxiety, are linked to female behaviour; because it is more socially acceptable for women to express fear, sadness or stress they do so more often and, therefore, seem more pathological. Hence, instead of aiding women in altering a difficult or upsetting situation, physicians provide them with medication, ignoring the social reality (Scambler et al., 1993: 21). Scambler et al. (1993: 30) also feel that beliefs regarding menstruation tend to develop at an early age and reflect the general negative stereotypes of periods as symptom-laden and burdensome. They (1993: 58, 60) highlight that the same social influences that predispose women to PMS dictate certain emotional freedoms for men whose mood changes and violence are excused because these characteristics are thought to be part of their nature.

Other individuals, like Jamieson et al. (1996: 55), also connect social forces to menstrual experience. They claim that low income is a risk factor for dysmenorrhea and dyspareunia.
However, there still exists a strong inclination toward biologizing and medicalization in current medical doctrines. The definition and treatment of dysmenorrhea, PMS and amenorrhea are narrow and limiting in that they attempt to outline a very specific model for women's menstrual experiences. The scholars and physicians of the present have developed theories that are highly contradictory in an effort to fuse psychology with biology to explain phenomena that are still misunderstood.

For example, in an exploration of the modern treatment of dysmenorrhea, it is evident that confusion as to its etiology and treatment abounds. In the work of Dawood (1990: 170, 175) dysmenorrhea is presented as a biological event which, nevertheless, can be relieved by psychiatric aid. Dawood (1990: 172) and Ekstrom (1989: 39) also believe that ischemia is a major causal factor in menstrual pain even though according to Lander (1988: 84) this theory is seriously flawed by the fact that ischemia is not always painful. Furthermore, although Jarrett et al. (1995: 167) estimate that dysmenorrhea occurs in 30-50% of menstruating women and Sigmon et al. (1988: 483) claim that menstrual pain is the most frequent gynecological complaint, Dawood (1990: 170) insists that the uterine activity involved in menstrual cramps is "abnormal". In fact, many scholars, such as Caufriez (1991), Mishell Jr. (1993), Wilson et al. (1989: 320), Akerlund (1990), Scambler et al. (1993) and Sigmon et al. (1988) refer to dysmenorrhea as a "disorder"; Rabinerson et al. (1995: 891) and Fedele et al. (1989: 46) even term this pain a "disease". The attitude that menstrual cramps are abnormal is perhaps what still drives the medical community to promote psychiatry and psychology as central to the etiology and treatment of dysmenorrhea. It is also possible to see the continued legacy of urban stress paranoia that developed in the 19th century fueling this course of treatment; the belief that dysmenorrhea can be relieved by emotional therapy implies that stress is still thought to play a substantial part in influencing menstruation. Although the rural/urban connotation is now far less
overt, physicians nevertheless insist on stereotyping women in an effort to determine a cause for menstrual problems. Therefore, by drawing such distinct boundaries for normality a large number of women are labelled abnormal or mentally ill, thereby, overshadowing women's true experience and minimizing their physical discomfort.

Because of the presumed seriousness and abnormality of dysmenorrhea, its treatments are often taken beyond psychiatry and BCP use (Milsom et al., 1990) to great extremes. Like endometrial resection (Molnar et al., 1997), transcutaneous electrical nerve stimulation (Dawood et al., 1990: 656), laparoscopic presacral neurectomy and laparoscopic uterine nerve ablation (Chen et al., 1996). Alternative therapies, such as acupuncture, are rarely used or promoted even though they have been proven effective (Helms, 1987: 51). Moreover, dysmenorrhea is often relieved after pregnancy (Treybig, 1989: 15). Medical researchers have also become obsessed with determining which types of women are more prone to dysmenorrhea. For example, Jarrett et al. (1995) attempted to find differences between non-dysmenorrheic and dysmenorrheic women in terms of factors like smoking, exercise, psycho-social stress, likelihood of seeking medical help, health perceptions and alcohol consumption; no significant differences were apparent. Dawood (1990) and Booton et al. (1989) confirm this finding in reference to exercise. According to these authors, it is clear that stress, both physical and mental, does not significantly affect menstruation.

Yet, research of this nature, which verges on portraying menstruation as pathological as it was viewed two centuries ago, is prevalent. Amodei et al. (1989) investigated whether women who experience dysmenorrhea are more sensitive to pain; again, no differences between dysmenorrheic and non-dysmenorrheic women were discovered. In this instance, women who were dysmenorrheic were assumed to be overly sensitive or abnormal in some way. Whittle et al. (1987: 79) also depict
dysmenorrheic women as abnormal by correlating menstrual pain to an inadequate development of personal relationships. Similarly, Metheny et al. (1989: 572) claim that women who hold negative expectations regarding menstruation and the "traditional female role" are less likely to overcome dysmenorrhea. Here Metheny links menstrual pain to a rejection of femininity much like the scholars of the 1950s assuming that the more discomfort a woman experiences during her period, the less comfortable with her gender and societal role she is. However, Holmlund (1990) contradicted this finding by discovering that women with severe dysmenorrhea are actually more feminine, yet less self confident, than their non-dysmenorrheic counterparts. Nevertheless, the fact that a woman's femininity would be questioned with regard to a phenomenon that aids in defining her gender indicates that menstruation is still considered a disease; the medical community is, yet again, promoting women as sickly. Moreover, according to Yaryura-Tobias et al. (1995), sickly women are thought to have more painful menstrual experiences because they are masochistic, hypochondriac and/or neurotic: in Yaryura-Tobias et al.'s study, dysmenorrhea is linked to obsessive compulsive disorder and self-mutilation. This seems to be corroborated by the results of Fisher et al. (1989: 373) who conclude that women with more PMS symptoms are prone to severe dysmenorrhea. Women are also blamed for their menstrual ailments as is shown in the work of Durant et al. (1988) who claim that dysmenorrheic women who are more stressed respond poorly to painkillers. Again, shadows of urban over-stimulation are apparent and are presented as the etiology of menstrual discomfort. Yet, these authors fail to consider that some dysmenorrheic women might not respond well to analgesics because their pain is more severe and that their heightened anxiety may as a result of elevated levels of physical discomfort. Johnson (1988: 398) further fuels the myth that women are at fault for their own suffering by labelling those who
experience dysmenorrhea and who do not seek medical treatment as “ignorant”. Therefore, dysmenorrheic women who seek treatment are sickly; those who do not seek aid are unenlightened.

There exist many parallels between the strategies for dealing with dysmenorrhea and PMS. In an effort to understand PMS, scholars, yet again, have set boundaries that are often contradictory differentiating what is normal from what is not, using the stereotypic rural pain and stress-free existence as a baseline for expectation. Much of this research is based on an ideal, regularly occurring 28 day cycle (Fausto-Sterling, 1985: 98). For example, Wilson et al. (1989: 321) posit the biopsychosocial model as a means of dealing with PMS. This theory underscores that a woman's biological predisposition has only a limited impact upon her likelihood of developing PMS. Instead, these authors promote the idea that psychosocial factors, like stress, are equal, if not stronger, influences on a woman's premenstrual experience. As treatment, Heilbrun et al. (1988: 219) advocate that women use rationalization strategies to relieve premenstrual stress. Wilson et al. (1989: 321) recommend healthy lifestyle changes such as proper nutrition and exercise, much like the pure way of living of the country in the 1800s. However, their attempts to cure or minimize PMS contradict their basic underlying philosophy that it “should not be used as a scapegoat, and that uncomfortable and strong reactions are often normal and healthy”. If these feelings are “normal” and “healthy”, then it does not seem logical to try and rid women of them. Yet, conversely, Neinstein (1990: 1187) presents this menstrual event in the same light as did Dalton in the 1960s characterizing PMS as abnormal by defining it as a “nebulous disorder” originating from “pathophysiological mechanisms”. Similarly, Morse et al. (1988: 93, 97) press for an accurate clinical diagnosis of PMS and advise that women suffering premenstrually adopt psychological therapy, stress-reduction and skill-enhancement techniques and even medication to reduce their symptoms. Others like Sulak et
al. (1997) and Shapiro (1988) also push for chemical maintenance in controlling PMS. Therefore, it appears as if popular medical practice promotes the elimination of a phenomenon which is considered healthy.

Even more limiting treatments of PMS which claim that only the experiences of healthy women are valid are also prevalent in the literature. This ideology is evident in Cohen et al.'s (1987) study on premenstrual food cravings and MacGregor et al.'s (1990) work exploring menstrual migraines. Cohen et al. stress that their results are only applicable to “healthy women” (1987: 457), while MacGregor et al. claim that women who experience migraines at other times during their cycle are incapable of having true menstrual migraines because it is impossible to know whether or not menstruation is a real trigger for their premenstrual headaches (1990: 309). Much like the literature on dysmenorrhea, many of these studies second guess women’s menstrual experiences through psychologizing. Although Waldo et al. (1987: 35) note that the physiological mechanisms in the brain that are responsible for manic depression are separate from PMS mood fluctuations, subsequent academics have insisted on using mental illness as an excuse to discredit the reality of PMS. For example, Contreras et al. (1989), West (1989), Smith et al. (1989) and Bancroft et al. (1993) claim that women with mental illnesses or generally elevated levels of anxiety are not experiencing true PMS. These scholars believe that women who are prone to emotional lows during other parts of their monthly cycle are neurotic because they do not fit the confines of the clinical definition of PMS which insists that symptoms are only to occur immediately prior to the onset of menstruation. This rigid definition of PMS is inappropriate and reflects the values set by male physicians attempting to preserve the rural purity of the 19th century.

Anenorrhea is also treated with the same inflexibility and paranoia that was prominent in
the medical community over one century ago. For example, Mauriceau’s (1855) text explores the causes and treatments of amenorrhea. Ironically, although inactivity was dictated by physicians of the 1800s claiming that it was essential for proper menstrual function, he partially attributes amenorrhea to the sedentary lifestyle of the urban rich (1855: 9). Mauriceau (1855: 12) warns of the dangers of amenorrhea citing “fever, pulmonic diseases, spasmodic affections, hysteria, epilepsy, mania, apoplexy and green sickness” as possible consequences of such menstrual disruption. Similarly, researchers and physicians of today purport that the absence of menstrual flow, other than that caused by pregnancy, is detrimental to a woman’s health. Of particular concern is delayed menarche. Southam (1966: 781) highlights the urgency with which 15 year old girls who have not yet begun to menstruate should be examined for secondary sexual characteristics for fear that they are not developing properly. Even in 1997, McIver et al. (1161) describe amenorrhea in the absence of pregnancy or lactation as “distressing” and cite the need for women to menstruate regularly lest they develop changes in metabolism, bone density and cardiovascular health. These concerns may be well intentioned, but they fail to account for individual cyclic differences. Yet, Redmond (1989: 127) highlights the fact that a woman who menstruates 8 to 15 times per year is likely normal and that no guideline can account for every cycle. Furthermore, Thomas et al. (1990: 33) demonstrated that Nigerian university students who experienced amenorrhea during a school examination period resumed regular menstruation within two to three months suffering no adverse effects. Therefore, contrary to its portrayal in much of the literature, the absence of menstruation is not always a cause for concern. However, Thomas et al. (1990: 33) cite stress as the etiology of the students’ amenorrhea, again revealing undertones of urban stress theory. This is not to imply that stress does not play a part in amenorrhea or any other menstrual event; what is bothersome in this scenario is
the negativity with which variations in cyclicity or mood are emphasized. It is as if women are expected to attain an inhuman degree of consistency with regard to their mental and physical states.

2.4 - Myth and Medicalization

Scholars have been attempting to shatter the confines of medical ideology by exploring the extent of the medicalization of natural functions, like menstruation. The medicalization of menstruation has brought both positive and negative consequences for women. According to Scambler et al. (1993: 92) medicalization has helped in the treatment of and legitimized women’s accounts of menstrual phenomena, such as amenorrhea, dysmenorrhea and menorrhagia. However, these scholars note that it is this medicalization which has caused a decrease in empathy for women’s menstrual difficulties because there is an expectation that such problems are curable and should be solved (1993: 93, 94). Therefore, women who suffer are blamed for not accepting medical aid. This is problematic because it assumes that women want medical help and can tolerate the side effects of treatments like the BCP and powerful analgesics. Furthermore, there is usually only one type of medicine available to women; alternative healing practices are rarely accessible because of constrained finances and limited resources, especially for women in smaller communities who may not have an alternative healer near by. Hence, not surprisingly, the biomedical model of menstruation has not increased the incidence of medical intervention (Scambler et al., 1993: 93). Scambler et al. (1993: 94) note that perhaps because illness is often viewed as a source of shame and disruption, women tend not to consult a physician with regard to menstruation. Jarrett et al. (1995), Cronje et al. (1991), Johnson (1987), Snowden et al. (1983) and Green et al. (1986) also describe women’s reluctance to seek medical aid, even when faced with severe menstrual problems. Abel et al. (1998: 310, 319) note that women often rely on personal experience believing that it is more
useful than advice produced by a formalized education. However, Scully (1994: 14) observes that women seek medical aid more often than men because it is more acceptable for them to do so; yet, a large part of this aid is psychiatric and not in any response to physical ailments.

While Nichter (1998: 327) believes that the medicalization of a disorder may be self-initiated to legitimize an illness, the strict limitations that medicalization often places on bodily functions likely contributes to women's inhibitions in seeking help. For example, in reference to dysmenorrhea, Laws (1990: 169) claims that because menstrual pain is often considered a complaint of adolescence, older women do not consider their pain valid or problematic. Laws (1990: 168) also notes that women who seek medical attention are stereotyped and their experiences invalidated because of the criteria of strict biomedical models which only allow a select few to be diagnosed and treated, even if their suffering is real and immediate. Therefore, as Nichter (1998: 329) states, women with pain or irregularity are often left untreated because their symptoms do not fit a specific definition. Lander (1988: 4) explains that these women are led to believe that menstruation is only comprehensible to those with medical expertise; yet, when women ask for medical help, their experiences are undervalued by doctors. Thus, instead of relying on their own experiences and instinct, women often do nothing to help themselves and try to make sense of symptoms that are, according to the medical community, neither abnormal nor normal. This confusion is easy when there is distortion and lack of scientific knowledge regarding menstruation in the medical community (Lander, 1988: 6).

Yet, this treatment of menstruation does not impact solely on the individual. Another facet of medicalization is its role in the shaping and reflecting of societal norms and stereotypes. Lander (1988: 4) believes that medicine is a social institution which follows and reinforces other such
institutions. She states that “medical doctrine reflects ideology as much as biology” (1988: 5). Martin (1987: 45, 46) outlines some of this industrial, urban ideology in her discussion of menstrual imagery. She highlights that menstruation is viewed as failed production in the context of the metaphor of the body as a factory. Therefore, according to her, menstrual blood is considered a useless waste or by-product by those in the medical community; yet, conversely, the mass production and waste of sperm is extolled as an incredible accomplishment (1987: 48). Even the renewal of the stomach lining is presented in a more positive light than female reproductive system (Martin, 1987: 50). Moreover, Martin (1987: 49) notes that much of menstrual imagery reflects the desired passivity and weakness of women by society in the public, or working and production realm. According to Martin, the discussion of ovulation in medical texts emphasizes the degeneration of female eggs over time in contrast to the prolific production of sperm. Instead, Martin posits a new theory which highlights the prolific nature of the female system noting the multitude of female eggs that are produced at birth even though few will actually be used. This negative menstrual imagery contributes to the portrayal of menstruation as taboo.

Invariably, the taboos proliferated by medicalization infiltrate the politics of work and the media. Lander (1988: 186) explains that while medical difficulties associated with men, such as prostate cancer, are not used against them in the socio-political arena, women with PMS are judged and in the past have been thought not fit to work. Delaney et al. (1988: 62) note that women were also discouraged from playing sports during menstruation. The media is also influenced by the medicalization of menstruation. Delaney et al. (1988) outline how closely advertisers’ strategies for promoting menstrual products, like pads and tampons, complement the biomedical model. The main objective of advertising is to encourage women to be active during the time of menstruation; similar
to the wishes of the medical community, the ads suggest that a woman will feel no change during her period so that she can “carry on needed chores” (Delaney et al., 1988: 129.131). Ironically, this view conflicts with the idea that women are unfit for work. Delaney et al. (1988: 129.130) highlight the media’s focus on the importance of wiping any trace of menstruation from a woman’s life through cleanliness, hence the term “sanitary napkins” or “feminine hygiene products” and the discretion of bulk-free pads. These authors also explain that the media naturalizes this state of invisible menstruation by relating menstrual products to a stereotypic female image promoting pads and tampons as having “soft, natural [shapes]” allowing women to be “confident and free” from the burdens of menstruation (1988: 133). Similar themes are apparent in the education of young girls approaching menarche. Whisnant et al. (1975: 815) and Cumming et al. (1991: 472) note that girls are taught hygienic management of menstruation rather than how to accept their sexuality as healthy or how to satisfy their emotional needs. Here, the notion that menstruation is an illness that should be cured or hidden is reinforced.

There has been a considerable resistance to the biomedicalization of the body which can be applied to menstruation. For example, Dorn et al. (1994: 107) draws attention to the social construction of the body, particularly of the political construction of the unhealthy body where deviant bodies are segregated so as not to challenge social norms. Dorn and his colleagues describe the conundrum of the body as a site of struggle, being subjectively lived, yet objectively represented. Therefore, Dorn et al. (1994: 107, 109) explore the notion of body-as-site-of-resistance and the importance of place in shaping that battle. Bell et al. (1996: 143) outline the tension inherent in the body where stereotypic performatively constructed naturalized conceptions of identity are simultaneously played out and resisted. For example, a homosexual man with AIDS is
unintentionally and automatically representative of a naturalized stereotype (most individuals with AIDS are homosexual) which he may try to resist but plays out simply by existing. Expanding on this, Brown (1995a: 159) notes that the spread of AIDS is socially influenced. He feels that current research does not account for the impact of mitigating actions of various communities which alter the distribution of the disease. Brown believes that it is important to look beyond the idea that the body is merely a vector for illness and include the influence of the confines of social stigma and resistance to that stereotype in the definition of a disease and its spatial manifestation (1995a: 161).

He explains that it is not only place which affects the spread of AIDS, but how a place is used (1995a: 162). Brown (1995b: 251, 252) outlines the use and overlap of public and private space as being key to the development of AIDS awareness campaigns; AIDS education volunteers for the gay community target specific areas for health promotion, such as bath houses and bars. Hence, following this logic in relation to menstruation, a woman would not be reduced to an uncontrollable biologically determined entity. Instead, she can be viewed as a social being who is influenced and who can influence place and political attribution. In this model, women can resist and alter pressures to conform to specific medically defined limitations of menstruation by controlling their own menstrual experiences, like whether or not they choose to accept medical intervention. Thus, acknowledging the social construction of menstruation allows it to be modified according to the parameters of those that it affects. Socially motivated individual, as well as group, actions are accounted for and validated; the locus of power is shifted from the medical community to those whose experience defines the intricacies of menstruation.

2.5 - Methodological Issues

The methodology for studying women’s experience of menstruation has contributed to its
current taboo status and its knowledge base being grounded in the medical community. Studies have largely concentrated on categorizing and modelling menstrual events using scientific tools like psychological questionnaires and symptoms diaries. For example, the Premenstrual Assessment Form (PAF) developed in 1982 by Halbreich et al. consists of a 95 item survey detailing the emotional and physical symptoms involved in menstruation (Fisher et al., 1989: 369). However, this questionnaire is not designed to measure the positive effects of menstruation or how women feel about their experience. Other surveys, like the Menstrual Symptom Calendar (Lever et al., 1981: 81; Smith et al., 1989: 528), the Moos’ Menstrual Distress Questionnaire (MDQ) and the Personality Inventory are designed to trace mood shifts throughout a woman’s cycle (Smith et al., 1989: 529). Furthermore, in Mitchell et al.’s (1992) chronicling of the varying severity of cyclic moods, they attempt to further refine all previously mentioned techniques to be even more precise and scientifically accurate. However, according to Laws (1990: 168) and Brown Parlee (1974: 229), such precision can lead to stereotyping the sufferer. Moreover, these often outdated and negatively toned instruments are largely used to discredit menstrual difficulties by demonstrating through scientific objectification that because women experience pain and mood fluctuations at times other than around their periods, PMS is a myth. Koeske (1983: 5, 8, 10) notes that this bias is a result of a positivistic emphasis on facts and description and post-hoc, unreliable interpretations as to the cause of covariations. These studies also rarely investigate issues of heredity in menstruation (Laws, 1990: 166). However, some like Goudsmit (1988: 168) and Asso (1983: 154) argue that such menstrual questionnaires are highly accurate.

While it is important to achieve a certain degree of accuracy and objectivity in any study, it is nearly impossible to objectify a phenomenon which is subjective or quantify an experience that
is qualitative. Therefore, the methodological design of this project follows more closely the ethnographic/retrospective research strategy. In this method, women are asked to recall their menstrual experiences without having to fit narrow guidelines and definitions. There are many advantages to using this less confining technique. Bancroft et al. (1993:143) and Parry et al. (1985:89) explain that retrospective reports account for inter-cycle variability, or individually differing experiences, in women. Similarly, in a study exploring dysmenorrhea, Holmlund (1990: 185) highlights that it is important to base the concept of dysmenorrhea on a woman's intuition because her experience of this pain and the degree of her distress is subjective. Holmlund (1990: 186) goes on to state that women are capable of distinguishing dysmenorrhea from PMS, even when symptoms overlap. Even in the 1970s some scholars, like Chamberlain (1972: 467), noted the importance of retrospective observation claiming with regard to menorrhagia that women who notice their periods getting heavier are usually correct. Interestingly, Lock et al. (1998: 1) state that self reflection is essential to understanding the structure of common sense. Furthermore, in a more geographical context, Brown (1995a: 162) underscores that while socio-spatial distance can compromise achieving geographic knowledge, ethnography can overcome that distance. For example, in his discussion of the use of a Vancouver AIDS help phone line geographical scale, class, age, race and sexuality are transcended as HIV sufferers from every type of location and walk of life reach out for anonymous guidance (1995b: 260). Brown (1995b: 246) also notes that the intricacies of local-global scale relations are not captured by objective, purely quantitative analysis.

Yet, while this methodology is beneficial in many ways, it is not fault-free. Asso (1983: 152) claims that similar to psychological testing, much of the research which employs retrospective reporting is largely concerned with the negative changes involved in menstruation. Therefore, the
method of this project explores both negative and positive aspects of menstruation. This duality is important as revealed by Stubbs et al. (1988: 4) who note that young girls express both positive and negative feelings regarding menstruation. Asso also questions the accuracy of ethnographic methodology (1983: 154). One strategy used by Thomas et al. (1990: 31) in an attempt to overcome the potential inaccuracy of memory recall with regard to menstrual events was to interview university students. Thus, this study is designed to attract a large number of participants who are university students. However, Goudsmit (168: 1988) claims that using volunteers as participants creates bias. Yet, it is important to acknowledge that no methodology is perfect; any research strategy can only meet the basic goals of a project. Therefore, this project’s method aims to give women power with regard to their own bodies and experiences.

2.6 - Possible Outcomes

During the practical application of this study’s methodology, it is also important to try to anticipate and assess possible reasons for any observed geographical differences in menstrual experience. One area of considerable interest in the literature is that of the effects of climate on the human body. The impact of various climates on human health has been noted since the 19th century (Hingston et al., 1884; Mauriceau, 1855). Since that time, climate has been observed to affect arthritis (Hameed et al., 1997; Crane et al., 1997), incidence of suicide (Salib et al., 1997; Ho et al., 1997; Kubacki et al., 1986; Preti, 1997), respiratory health (Braun-Fahrlander et al., 1997; Epton et al., 1997), circulatory ailments, like Raynaud’s phenomenon (Maricq et al., 1997; Valter et al., 1997), psoriasis (Porter, 1997), sleep (Nilssen et al., 1997), likelihood of seeking medical aid (Cyr, 1985; Rose et al., 1995), epilepsy (Ruhentroth-Bauer et al., 1984), general sensitivity to pain (Shutty et al., 1992), myocardial infarction and stroke (Thompson et al., 1996; Auliciems et al., 1997;
Ohlson et al., 1991; Glass et al., 1979; Enquaselassie et al., 1993; Vuori, 1987; Biller et al., 1988). Depression, schizophrenia and seasonal affective disorder (Albert et al., 1991; Barnston, 1988; Berk et al., 1996; Garvey et al., 1988; Morissey et al., 1996) and human conception, birth and sudden infant death syndrome (Sherrets, 1979; Driscoll et al., 1984; Bider et al., 1991; Noller et al., 1996; Beal et al., 1991). It is clear that climate can have a considerable impact on human physiology.

Weather and climate have also been minimally connected to menstruation. According to Mauriceau (1855: 1-5, 7, 12) temperature influences the incidence and severity of dysmenorrhea, age of menarche and amenorrhea. He states that, “[in] the more northern regions, as in Lapland, . . . this evacuation is generally delayed until the female has attained her eighteenth or nineteenth year: in the temperate latitudes the average period will be found from the fourteenth to the sixteenth year” (3). Furthermore, he argues that, “[it] may also be observed, that in cold countries, women continue to menstruate for a longer period than in warm . . .” (4). Mauriceau also believes that women in equatorial and more northern regions do not menstruate as heavily as do women from more temperate climates and that cold can trigger amenorrhea. However, it is difficult to know whether these theories are the result of actual research or merely an extension of 19th century cold/damp phobia as outlined by Lander (1988: 27, 28). She explains that this fear was rooted in Hippocratic medical theory which believed the body was comprised of four humors (blood, phlegm, black bile, yellow bile). Each humor was assigned various degrees of heat, cold, wetness and dryness; therefore, because blood was regarded as hot and dry, its flow was thought to be stopped by exposure to cold and wet conditions. Hence, the validity of Mauriceau’s arguments is questionable.

However, there are a small number of modern reports connecting menstrual variances to climate. According to Sulman (1984: 87), women are more sensitive to weather changes because
their adrenal gland produces less resistance-stress hormones than men; therefore, it is conceivable that women's menstrual experiences could be affected by climactic variations. Graham et al. (1985: 254) discovered that in an Eskimo village at the Arctic Circle menstruation would cease for many women during the winter months. Yet, it is unclear as to whether this amenorrhea was prevalent because of the colder temperatures or because of a decreased number of daylight hours. Similarly, Messing et al. (1993: 498) and Mergler et al. (1985) found a high incidence of dysmenorrhea in women in cold weather; furthermore, the pain was unaltered by the use of BCPs. These authors blamed this phenomenon on vasoconstriction triggered by low temperatures. But, the women in Messing et al.'s study were cannerie and slaughterhouse labourers who experienced heavy physical work loads; thus, it is, once again, difficult to determine whether it was work load or actually climate which affected these women's dysmenorrhea the most. Conversely, Hildebrandt (1962: 761) describes an overheating effect whereby women's dysmenorrhea is aggravated by a warm climate. Although the data are unclear and contradictory, geographically varied climate is an important factor to consider when analyzing the data for this project.

Another crucial geographical influence to be explored is pollution. Pollution is more common in large urban areas; therefore, this increased amount of effluents could cause human health to vary locationally. For example, pollutants like DDT, PCBs, dioxins (National Strategy, 1996: 917; Raloff, 1996: 356) and polycarbonate plastics (Raloff, 1997a: 255) have become known for their effect on the endocrine system by mimicking estrogen. These pollutants, like sewer effluents (Cooper et al., 1997: 159), pesticides, industrial chemicals and natural products (Lucier, 1997: 34), often bioaccumulate and target the central nervous system (Cooper et al., 1997: 159, 160). Estrogen mimics, or endocrine disruptors, first gained widespread attention in 1993 (Raloff, 1997b: 254)
because of their suspected influence on fertility, cancer and reproductive functions (National Strategy, 1996: 917). In fact, in 1996 legislation was passed requiring the Environmental Protection Agency (EPA) to define a testing scheme for estrogenicity in pollutants (Tong et al., 1997: 1122). According to Rhomberg (1997: 74) and Lucier (1997: 34) very little is known regarding the magnitude of human exposure to environmental hormones and how much these chemicals contribute to human dysfunction. However, there is enough evidence mounted to conclude that there is a probable connection between illness and endocrine disruptors.

Of particular interest is the effect of estrogen mimics on human reproduction. Exposure to these pollutants can cause decreased male fertility (Cooper et al., 1997: 159; Safe et al., 1997: 52), and premature puberty (Cooper et al., 1997: 159). Unfortunately, very little research has been conducted concerning the effects of endocrine disruptors on women; most studies focus on declining sperm counts in all types of animals, including humans. Only Lucier (1997: 35) hypothesized that these chemicals could be increasing the incidence of endometriosis. Yet, even without rigorous testing, it is possible to believe that hormone altering effluents could affect menstruation. The question is how it will be affected. Each woman’s body is so unique that it is easy to surmise that any given hormonal combination could affect every woman differently; women in larger urban areas could all be affected dissimilarly from an over-exposure to the same group of chemicals. Effluent exposure can even vary within a city, depending on proximity to industrial sites, major roadways and watersheds. Therefore, it is important not to discount the possible complex influence of estrogen mimics on women, and particularly urban women, in discussing this study’s results.

2.7 - Conclusion

This historical outline demonstrates how little has changed for women over the centuries, the
most common theme being that women are denied ownership and control of their own bodies. From the time of Hippocrates through to the 20th century, physicians have dictated the significance, treatments and definitions for all aspects of the menstrual cycle. Interestingly, geography has played a substantial role in shaping women’s menstrual expectations. With the extensive urban migration of the 1800s came the belief that the over-stimulation of the cities posed a threat to women’s reproductive functions; this belief provided the foundation for how women are treated by the medical community. While it is noteworthy to acknowledge that some progress has been made in the comprehension of the basic physiological processes involved in menstruation, the expectations regarding how a woman should experience her monthly cycle are similar to those of previous years; the fact that there are such specific expectations about how women should cope with and experience their periods is a major flaw in past and present medical ideologies.

Furthermore, these beliefs have fluctuated according to a woman’s economic role in society. When women were not welcome in the public sphere or urban life, they were deemed too frail to work. Yet, when women were important for the labour force, they were portrayed as healthy: the status of menstruation has fluctuated from being one of elevated importance to one of disregard depending on which is economically more convenient for society and the medical community. There has also consistently existed a desire to cure menstrual difficulties, such as dysmenorrhea or amenorrhea, as if they were illnesses. This is not to imply that women who suffer from menstrual problems like severe dysmenorrhea should not be aided. It is simply important to note that like a disease, menstruation has been defined in narrow terms; the wide variation in individual bodily rhythms has not been accounted for in centuries worth of interpretations of the menstrual cycle. With the rare exception of the Trobrianders of British New Guinea who possess unusually free
attitudes toward sex and sexuality. Menstruation still continues to be taboo in most societies.

Therefore, much of the research conducted by physicians and scientists has ignored the reality of women's experience. Even more recent attempts at understanding phenomena, such as dysmenorrhea, amenorrhea and menorrhagia, have minimized women's difficulties. Instead, this project will attempt to explore menstruation in new ways and consider alternate explanations for the etiology of menstrual events; positive aspects of menstruation will also be discussed. While primarily the extent of locational influences will be assessed, non-geographical differences will also be considered. Furthermore, attention will be paid to the dilemmas involved in medicalization, whose detriments often seem to outweigh its benefits to women. By bringing a further understanding to menstruation, it is hoped that some of the myths surrounding this cycle will be exposed and dispelled.
CHAPTER 3 - METHODOLOGY

3.1 - Introduction

The primary goal of this study is to collect data in a manner which would enable women to speak freely regarding their feelings and experiences concerning menstruation. The method is also designed with the assumption that women are knowledgeable and accurate observers of their bodies and menstrual cycles. Each part of the methodology operates under the premise that menstrual phenomena such as PMS and dysmenorrhea are a reality and not manifestations of mental illness or insecurity. Women of all ages, cultures, races, sexualities and social statuses were accepted as volunteers for this project. Because no other geographic studies regarding menstruation have been conducted, it is impossible to know which variables to control for because no precedent has been set. Also, because the sample size is small, it is difficult to control for these attributes. Women who were not born in North America were also encouraged to be part of this study because data generated by individuals from different continents might have revealed clear climatic or cultural differences. Furthermore, women from areas varying in population size were requested as volunteers in an attempt to pinpoint a potential correlation between community size and menstrual attitude and experience. Finally, women were not rejected as participants if they had too few or too many menstrual problems or general health difficulties. However, the population of this study is anthropologically homogeneous in that all participants had spent a considerable amount of time in North America even if this was not their birth place. Openness to any menstrual experience is a key strategy in this methodology.

1 Women of any age were accepted for this study as long as they had been menstruating for a minimum of four years. If any volunteers had been under the age of 16, parental consent would have been obtained; however, this situation did not occur at any time during this project.
3.2 - Primary Data Collection

It was hoped that many of the negative attitudes surrounding menstruation would be supported or dispelled using a mostly qualitative method that would allow women to clearly voice their experiences and opinions. To achieve this, the primary data collection process involved three parts, each expanding on the other. The first part of the data collection was a menstruation questionnaire (Appendix A, Figure 1). In order to encourage participation, anonymity was assured and the questionnaire was only one page long. The main purpose of this survey was to assess degree of discomfort during menstruation and whether or not this could be related to location. The questionnaire also asked women about any treatments they might have undergone to aid in the relief of menstrual discomfort and whether or not they used the birth control pill (BCP). It was important to screen for BCP use because oral contraceptives (OCs) often alter the duration of menstrual flow, heaviness of flow and degree of menstrual cramping (Akerlund, 1990: 563; Mishell, 1993: 1021). Near the end of the survey, participants were requested to leave their telephone number if they were interested in being involved in an in-depth interview or focus group discussion. Finally, the participants were offered a chance to freely expand on their survey response by adding comments on the back of the questionnaire. This opportunity was primarily in place so that individuals who did not wish to be interviewed, but who wanted to convey information beyond the scope of the survey would be able to do so.

The survey did not screen for race, ethnicity or social class. The primary reason for this was that the questionnaire would have exceeded one page thereby discouraging participation if all social variables had been accounted for. Age was determined to be the most pertinent social factor for the purposes of this study because it would help determine in what decade each woman would have
reached menarche and for how long they had been menstruating. It is, therefore, the only such variable collected on the survey. Other variables would be discussed casually during interviews, thus, the decision was made to discount these factors during the initial data collection process. I created all survey questions.

Participants were initially solicited from university residences because of the variety of locations represented by the women living there; many of these women originate from smaller communities, while some grew up in a larger urban setting. A questionnaire distribution and collection system was arranged between the Dean of Student Affairs, the Dons of each residence and me. Once surveys were retrieved, they were numbered because name provision by participants was optional. Numbering kept the surveys ordered ensuring that none would be lost. A total of 118 surveys were produced from this initial distribution. Then, volunteers who wished to be interviewed were contacted. Interviews were arranged at a time and location convenient to the students, usually at their dormitory rooms. Eighteen interviews were completed from the pool of students in residence. However, because the interview sample size goal was at least 40, networking with female friends was the next means by which participants for this study were found. These friends and friends of friends filled out a questionnaire before the interview, just like the students in residence. They were interviewed at their workplace during lunch, at their home or in my office at school.

The interviews were tape recorded and designed to last no more than 30 minutes, again to encourage participation during April, a busy time of year for students and for women in many other occupations. However, some of the interviews lasted beyond 30 minutes, especially for older participants who had more experiences and opinions to convey. In the end, the range of interview lengths was 15 to 60 minutes. This duration varied greatly because this second part to the primary
data collection process consisted of open ended, non-directive, neutrally phrased questions exploring each participant’s feelings about menstruation and her physical menstrual experiences (Appendix A, Figure 2). Many of the interview questions were borrowed from Martin’s (1987) cultural analysis of reproduction; some questions were my creation. Moreover, the interviewee was allowed to digress into material not specifically requested during the interview, like their cultural background, class/lifestyle or sexuality, therefore, adding time to the question and answer process. A great deal of improvisation on my part was also common. For example, question 16 (what are some positive things about menstruation?) would be altered to match each participant; if the interviewee spoke very positively about menstruation, she would instead be asked to list some negative aspects of menstruation. All participants signed a consent form (Appendix A, Figure 3) before beginning the interview, except for one woman who gave tape recorded oral consent. The total number of interviews was 50 and the total number of surveys was 158, including those completed by focus group participants (see below). The age range of volunteers was 18 to 83\(^2\). However, 88% of the participants were under thirty years of age; one woman did not include her age.

The third and final part to the primary data collection process was the video taped focus group discussion. The purpose of this group discussion was to observe how women from different kinds of communities interact with one another. The focus group questions (Appendix A, Figure 4) were designed to initiate discussion and highlight potentially conflicting opinions among group members, particularly in attitude toward menstruation, based on location; all questions were originally created. This part of the data collection process was meant to encourage freer interaction

\(^2\) For background information regarding participants specifically quoted or discussed in this project, refer to Appendix B, Table 1.
than the interviews which were more controlled. Five participants arrived for the discussion, although the originally planned number was six; this number was chosen because it would facilitate continuous conversation while not preventing any individual from expressing her opinion due to competition for participation time. The participants from this group were recruited from summer classes at the University of Toronto. An announcement was made in these classes requesting volunteers for the video taped focus group. Once a list was compiled, a date was set and we met in a graduate lounge at the university for one and a half hours. Each participant filled out a consent form (Appendix A, Figure 5) and because two volunteers had not been interviewed, they were asked to complete a questionnaire (Appendix A, Figure 1). All group participants received ten dollars for their time and were asked to sign a receipt form (Appendix A, Figure 6).

Using three types of data collection (surveys, interviews and a focus group) was an important strategy in this research effort. It allowed for a combination of qualitative and quantitative data to be collected. The qualitative information was used to expand upon trends found in the quantitative data allowing for a more complete conception of a new menstrual model to be formed. Each stage of data collection held a distinct, yet complimentary role in uncovering women’s menstrual reality. The surveys primarily assessed negative physical experience, the interviews examined attitudes and both positive and negative physical experience, and the focus group mostly expanded on women’s feelings about menstruation and how they feel menstruating women are viewed by society. Each data collection method elaborated on and added to the other. By using several strategies, the collection process also took more time allowing new and unexpected avenues to be discovered, like climate, and incorporated into the data gathering strategy.

The populations of all cities, towns and villages identified as primary locations for dwelling
by the volunteers were obtained from 1986 census data, except for those who did not originate from Canada. The women who were not originally Canadian grew up in large cities; therefore, there was no question as to the size of location in which they were raised and they were placed in the ‘larger community’ category. In determining the location category for Canadian born participants, census data from over ten years ago was employed because the mid 1980s would have coincided with the time that they were growing up and experiencing menstruation. Women were considered to be from a larger community if their home town or city had a metropolitan population of at least 150,000; smaller community participants were those whose primary place of origin had a metropolitan population of less than 150,000. This division was fairly arbitrary. In making this choice, consideration was given to lifestyle and the types of amenities and services that define a location. Cities and towns with more services and higher ordered goods, like Hamilton, were categorized as ‘larger’ rather than smaller and generally had populations of 150,000 or more; nineteen participants were from smaller communities and 31 grew up in larger communities.

3.3 - Secondary Data Collection

The collection of secondary sources occurred throughout the school year. This information stemmed from books and scholarly journals which spanned several academic fields. The most prominent area from which information was collected was the medical disciplines, such as physiology, psychiatry/psychology and biometeorology. Studying these fields provided an understanding of modern treatments, diagnoses and beliefs surrounding all aspects of menstruation. This literature highlighted the experiential context in which most girls are raised and gave insight into how women are viewed by the medical community. It also served as a basic tool for comprehending the biology of menstruation. Historical and theoretical feminist data were then
collected to underscore the path that the medical community has taken to reach its present philosophies. While the historical accounts provided a context for the development of medicine in the late 20th century, feminist theory contributed an alternative perspective to mainstream ideas throughout history. This information was also important for tracing both the changes and consistencies of women’s menstrual experiences over time.

3.4 - Data Collection Limitations

As with any methodology, this data collection process was not without flaws. One of its major weaknesses is the fact that all of the data are derived from participant recollection. While there are many benefits to asking subjects to discuss general observations, the women in this sample may not have remembered their experiences correctly. They may have also remembered a worst case scenario because such experiences are more memorable. Many of the older interviewees had only vague memories of their early sexual education and menarche experience. Moreover, some women who were interviewed admitted to forgetting to list information like PMS symptoms on their survey. This likely occurred because the questionnaire is short and women may have been rushed in answering it, taking less time to think carefully about their responses. Another problem that arose was probably due to this rushed responding was ignoring survey instructions. This was apparent specifically with regards to questions 10 and 11. In question 10 participants were asked to rank their menstrual symptoms from not severe to severe on a scale of one to 10; a small number of women misunderstood the ranking system or did not rank their symptoms at all, simply indicating the presence of a symptom by marking it with an ‘X’ or a checkmark. Similarly, when in question 11 women were asked to add symptoms that were not listed in question 10, many women did not rank their newly revealed symptoms. However, this was not a frequent occurrence and it was often
possible to determine the severity of symptoms based on comments noted in question 12 or on the back of the questionnaire.

A further weakness of the data collection was its treatment of BCP use. The questionnaire asked the participant whether or not using BCPs changed her periods, but did not require an explanation of how her periods were altered. Interview results revealed that for some BCP use was a positive experience, while for others it was not. Therefore, the menstrual symptoms listed in questions 10 and 11 could have been aggravated or ameliorated by BCPs. Furthermore, during the interviews specification of BCP type was not mandatory; some BCPs contain varying weekly doses of hormone that are designed to mimic more closely the natural hormone fluctuations inherent in a woman's monthly cycle, while others consist of the same hormone levels for all three weeks of pill consumption. This distinction is important because using the multiphasic pills would have made the women who suffered from PMS while still on a hormone pill more susceptible to their PMS symptoms earlier in their cycle. If women who were not on multiphasic pills experienced PMS while still on their BCP, this would have revealed a new finding. Unfortunately, by the time this mistake was realized many students were unreachable because the attempted follow up occurred near the end of exam time. Yet, a select few of those who were interviewed and who were using BCPs did specify a BCP brand which allowed for limited extrapolation and production of a result.

The survey also asked participants to rate menstrual symptoms which caused them discomfort; however, one symptom that was listed (increased energy) is not one which many associate with feeling ill. Nevertheless, the primary goal of the questionnaire was to assess levels of discomfort to attempt to identify locational variations in the occurrence of menstrual problems; any other information that was gathered from the questionnaires was considered a bonus because this
material would be revealed during the interviews and focus group. Therefore, it was not crucial for *increased energy* to be rated, or even acknowledged, by participants. Furthermore, very few participants chose this symptom and those who did rated it very low. Thus, this weakness is minor and had little impact on the scoring process.

The sampling method was also biased in several ways. Because a great deal of recruiting occurred at a university, the sample consisted of young (under 30 years of age), well educated, middle class individuals, most of whom are white and from Ontario. This group is clearly not representative of the majority of women in North America nor on many other continents. This bias might have affected the results in that women of varying cultural backgrounds may have learned about menstruation in a unique way that may influence their feelings about their periods. Therefore, the relatively culturally homogeneous population of this study may possess a dominating view about menstruation which is not representative of many women; women of some cultures might have grown up with more or less tabooed models of menstruation than others. The education level of women in this sample may also have created bias because the menstrual education experience might vary according to degree of education or class background. For example, a woman whose family is financially secure or had a long history of university education is more likely to attend a post secondary institution and be exposed to more enlightened views of menstruation through talking with friends in residence or enrolling in a women's studies class. Thus, some of the participants in this project who had well thought out philosophies about menstruation may possess ideas that are more developed than the average woman. Also, Ontario’s subsidization of its health care and education systems for both rural and urban areas may account for the lack of rural/urban differences in experience with the medical community and medication use that is evident in the results.
However, because of time and cost constraints a proportional sample of women stratified by race and class was not possible for this project. Furthermore, achieving such a balance would be complicated by the fact that participation in this study was voluntary; therefore, it is possible that women from particular cultures and/or who grew up over certain periods in time possess a heightened sense of taboo regarding menstruation and, as a consequence, resisted participation in this endeavor; this sample was not random. Those who volunteered to participate in this study may have been attracted to the project for specific reasons, like a strong feminist belief system or serious menstrual problems. Also, several of the volunteers were personal friends and colleagues who requested to be a part of the study; these individuals may possess similar philosophies to my own making this group of participants fairly homogenous. However, during the interview process it was evident that each woman’s experiences and thoughts were distinct and unique. Finally, the sample size is also cause for concern. While the sample size was fairly large, it was hardly representative of all women who menstruate. Again, because of cost and time constraints it was not practical to recruit a larger group of subjects.

3.5 - Analysis

Because most of the data was qualitative, so was much of the analysis. The results were analyzed mainly through comparisons with the literature, although in an attempt at being holistic data was analyzed both qualitatively and quantitatively. Both similarities and differences between the participants’ responses and the literature were noted as well as any new information that arose from the surveys, interviews or focus group. General locational and non-locational patterns of menstrual experiences and attitudes among subjects were discussed. Specific case studies were also highlighted. Interview and focus group participants were assigned pseudonyms to ensure anonymity.
The quantitative analysis of the data included descriptive and inferential statistics. Percentages, chi squared tests and T tests were applied to determine statistical significance of the data. All inferential tests were two-tailed and were considered significant if their level was .10 or less.

3.6 - Limitations in Analysis

As with any analysis this examination of the data is biased to some extent by my own preconceived notions surrounding menstruation. My culture and opinions have been shaped by my context within Canadian society, thereby, influencing what is analyzed and how the data are interpreted. Moreover, my personal experience with menstruation has also influenced the analysis of the data. I had a great deal of difficulty with my periods and, as a result, entered into this undertaking assuming that most women have similar problems, both in degree of severity and nature of difficulty. However, as the analysis of the interviews progressed it became clear that this was not true; therefore, I altered my frame of thought accordingly. It also became evident that my ideas were biased by mainstream North American medical philosophies. For example, menstruation is frequently discussed as if it were a disease; PMS and dysmenorrhea are termed “illnesses” with “symptoms” which require “treatment”. This is problematic because menstruation is a natural, cyclical process that is a healthy part of any woman’s life, not an anomalous illness that must be overcome and forgotten. Unfortunately, this disease analogy is how menstruation is described in the literature leaving limited opportunity for the development of new terms. Also, by ignoring the reality of the disease model its merits, such as improved treatment for dysmenorrhea, would be lost. The disease model may, in fact, be adequate for explaining some women’s menstrual experiences; it is simply important to acknowledge that an alternative model must be presented so that women may choose which paradigm is best for them. Furthermore, developing an entirely original vocabulary
for a new conception of menstruation is a more appropriate subject for a linguistics thesis. Nevertheless, there is an attempt to compensate for or deal with this disease imagery in the discussion section of this paper.

Although the quantitative analysis in this project is appropriate when considering the qualitative, nominal and ordinal nature of the data. Yet, this type of data only allowed for less powerful statistical tests to be performed. More powerful statistical tests, like regression, might have provided a higher degree of inference enabling a more definitive conclusion or direct causality to be drawn. However, the nature of this conundrum is complex and qualitative and any data on menstruation would likely be hindered by forced mass quantification; this view is supported by authors such as Laws (1990), Brown Parlee (1974), Koeske (1983), Bancroft et al. (1993), Parry et al. (1985), Holmlund (1990) and Brown (1995a). Direct variable connections are particularly problematic in this study because of its focus on the human body. The body is complex and each woman’s hormone combination is completely different in the way which it reacts with her environment, both physical and social. The multifaceted nature of the body is not accounted or compensated for in the methodology through techniques like controls, although it is doubtful that total control would be possible under any circumstance. This analysis is designed primarily to aid in the identification of general patterns of menstrual experience and attitude, locational or otherwise, and posit directions for future research.
CHAPTER 4 - ANALYSIS AND RESULTS

4.1 - Introduction

In reviewing the results of the analysis it became evident that there are locational differences in the menstrual experiences of the women in this study. However, those variations are few and far between and are not accompanied by locational differences in attitude. Instead, age at menarche was determined to be most important in predicting attitudinal discrepancies. Yet, although some general patterns are discernible, it is important to note that each volunteer's experience and feelings were unique; no two menstrual accounts were similar. Furthermore, as I noticed and some participants emphasized, a woman’s periods may also vary from cycle to cycle making it difficult to pinpoint definitive paradigms in relation to menstruation. Therefore, all results discussed in this section are to be understood as a guideline for future research and not to be used to categorize or stereotype women of various locations, cultures and ages.

4.2 - Use of Medication

There were no differences in how those from smaller communities and those from larger urban areas used medication to aid in the regulation of their periods. While at a .06 level of significance a chi squared test showed that more of those from smaller areas are on BCPs, the majority of those using the BCP in this instance were not doing so to regulate menstruation. The primary reason for using the BCP was for birth control purposes. Of those in smaller communities, 44% were using BCPs; of those who were from larger communities, 29% were on BCPs. All together, 35% of the participants were using BCPs. No significant differences were found between women from either type of location (bigger or smaller) regarding their use of prescription medication, like BCPs and analgesics, to ameliorate any discomfort during menstruation. Even though 66% of participants claimed to experience moderate to severe problems, like irregular
periods, dysmenorrhea, headaches and nausea when menstruating, 82% of all participants resisted using prescription medicines to alleviate their discomfort. Furthermore, only 32% of women experiencing cycle irregularity were on medication to regulate their periods; there were no significant differences in medication use between those who menstruated regularly\(^3\) and irregularly (Figures 1a and 1b). This resistance to the use of medication is concurrent with findings of Scambler et al. (1993) who outline women’s hesitation to approach the medical community for support.

During the focus group discussion the role that the medical community should play in menstruation was expanded upon. While no locational differences were apparent, the women in this group provided some insight into how they feel about external influences on their menstrual experiences. Meg, one participant from a large city, noted that the medical community should attempt to make products like tampons and painkillers as safe and effective as possible. The others in the group agreed with Meg. Meanwhile, Doreen and Tess, two smaller community volunteers, noted that many of the mainstream products available to women seem to profit large businesses, a fact which bothered the group members because they felt that the primary concern of this outreach is not to benefit women, but to make money. Therefore, this hierarchy could place women at risk because their well-being is not a priority. Doreen suggested an integrative approach to menstrual research where women would guide researchers’ ideas and participate actively in determining what is important for menstruating women. She also explained that she disliked the distinction made between alternative and traditional medicine. As an example, Doreen explained that breathing deeply helps her feel better while menstruating and challenged me to categorize this “treatment” as

\(^3\) Regular menstruation is defined by the medical community as occurring approximately once a month. Even a woman who menstruates every five weeks is considered regular. When the space between periods exceeds six weeks a woman’s cycle may be considered irregular.
Figure 1 - Prescription Medication Use Tied to Regularity

Figure 1a

Figure 1b
either traditional or alternative. Other group members soon acknowledged that many of their menstrual coping strategies, such as exercising, lying down, crying and sexual intercourse, do not fit any known category of medicine. Coping strategies listed by those who were interviewed were similar to those mentioned by focus group members. However, very few of those who filled out the survey or participated in an interview or the focus group tried classically categorized alternative remedies like evening primrose oil, herbal teas and massage. Therefore, it appears as though women in this study are searching for a wider variety of coping options when dealing with menstruation and may be finally beginning to trust their own instincts rather than strategies developed by others in achieving this goal.

This dissatisfaction with coping options and availability was manifested by participants in their stoicism. When asked why they were not taking medication for symptoms like dysmenorrhea, women claimed that suffering during menstruation was normal and they did not enjoy taking pills or ingesting chemicals unless it was absolutely necessary. Rose, a participant who grew up in a smaller location and who suffered from severe nausea and vomiting during menstruation, said that she resented having to medicate herself for an event which is supposed to be natural and not a disease:

I feel very strongly about this. Like, I won’t take Midol and I probably should. On a rare occasion I’ll take, like, a Tylenol or an Aspirin or something . . . I resent the fact that I have to, like, this is a natural thing. It’s something that my body goes through all the time and I guess I’m kind of hoping that [my] biological perseverance will carry me through and in the end I’ll just get better at dealing with it . . . I just feel like I should be able to overcome this on my own, like, because it seems like a betrayal philosophically that I have to take pills to

The notational conventions for the quotations include: [ ] - meaning that the word in these brackets has been altered to allow for a smoother reading of the dialogue, (xxx) - meaning that this part of the speech was inaudible and . . . - meaning that part of the dialogue has been purposely omitted.
kind of save me from myself... I just feel like I’m not sick... I guess I just view it as part of my body’s regular function and I don’t have a disease. It’s just what I do and I’m not going to take medication to help me do what I do better.

Doreen, who suffered from problems with depression, felt “flattened out” on BCPs; she believed that she lost part of herself after going on the BCP in that her emotions and menstrual cycle were tamed and overly controlled. Such feelings were revealed to an extreme during my interview with Tina, a participant from a larger city whose menstrual discomfort was minimal. She believes that the way a woman chooses to deal with menstruation exposes how she feels about herself. Tina feels that if a woman uses medication she is out of touch with her body and has been assimilated by dominant societal ideologies:

It’s almost like menstruation is a feminist act because the way you deal with it says a lot about your attitude towards... how you feel as a woman and how you feel women should be treated... The women who, who do their best to medicate themselves out of their misery and try to go on as if nothing is wrong have been assimilated (xxx). Where as I don’t know, I think the healthiest reaction’s I guess a balance between realizing its significance... culturally and I guess biologically because... it’s just, it puts you so much more in touch with your body than (xxx) and uh recognizes its impossible to treat your body as if it was a machine because your body is not at your mercy. You’re at your body’s mercy. So then, I then. I think that ultimately it’s, I hesitate to say more natural because I don’t really believe in women as more natural beings, but... it’s harder to kind of get away from a conception of yourself in the whole workings of nature when you’re reminded of your own biological force every month.

Tina defines power for women as giving in to the demands of their bodies. She presents the ‘sickly’ woman as the liberated woman. Yet, ironically she is at the same time afraid of being labelled ‘sickly’ as seen in her fear of accepting medication and admitting any need for help from doctors. When asked what she would recommend to someone who suffers from severe dysmenorrhea Tina suggested tea, a hot water bottle, emotional support and a head massage. Therefore, in strong opposition to medicalization and the female frailty myth, interviewees from both locations are
resisting the temptation to acknowledge their discomfort during menstruation. These examples illustrate the strong conflicts that women feel surrounding current medical treatment options.

However, in an interesting and unexpected finding that contradicts the literature, 67% or two thirds of volunteers on BCPs were found to develop PMS up to one week before bleeding. In other words, before these women ceased taking their BCPs to induce a period, they experienced PMS. According to current medical doctrine, this is nearly impossible because of the constant chemical influence of the BCP; PMS symptoms should not manifest until a woman has stopped administering the BCP in order to menstruate. Yet, interviewees reported the onset of symptoms such as bloating, crying, food cravings, anxiety and depression while still on their BCP. While it may be possible that this PMS is psychologically induced in anticipation of menstruation, it is highly unlikely. Participants reported not only mood changes, but also physical changes that are not psychologically influenced like bloating and breast tenderness before stopping the use of their BCPs. Moreover, in describing the onset of this PMS, interviewees consistently highlighted the fact that they tend to notice their symptoms before realizing that a period is about to occur. This phenomenon is plausible because women on BCPs often do not track when their periods come each month; the severity of menstrual problems and fear of pregnancy is frequently drastically lessened with the use of BCPs making menstruation worry free and its timing easy to forget. Also, a locational difference was present in the experience of this phenomenon in that at a significance level of .002 a chi squared test revealed that more small community members noted this early onset of PMS. This is likely because of the significantly higher percentage of small community participants that are taking BCPs. Thus, this result provides evidence that the interaction between the BCP and the human body is not fully understood.
4.3 - Education and Communication

In terms of learning about menstruation, there were some limited locational differences. More smaller community participants (53%) were found at a significance level of .10 as the result of a chi squared test to have first learned about menstruation from their parents as opposed to at school or from friends and siblings or not at all (Figures 2a and 2b). Conversely, a chi squared test revealed that at a significance level of .16 more large community participants learned about menstruation from their peers or siblings (Figures 2a and 2b). Although this difference is not significant, it does show a potentially noteworthy difference because while only 5% of small community individuals learned about menstruation from friends and siblings, 19% of larger city volunteers learned about menstruation in this manner. Also, a larger sample size may reveal a more significant finding.

No differences, however, were found between locations in terms of learning about periods from school before commencing menstruation; there were also no significant differences found between the 12% of participants who did not learn about menstruation at all. No significant locational differences were evident regarding who and how often participants chose to confide in about their menstrual experiences. Both groups seemed to communicate equally with friends (84%) and family (62%) about menstruating. The kind of information exchanged in such communications regarding periods that was consistently identified by volunteers dealt with coping strategies and commiseration.

During the focus group discussion, participants (all five members were under 30 years of age) expressed their views regarding teaching children about menstruation. No differences of opinion were apparent; all group members agreed that the role of the school system in educating both
Figure 2 - Pre-Menarchial Learning Patterns

Figure 2a

Source of Menstrual Education Before Menarche

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<thead>
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<th>Big Community</th>
<th>Small Community</th>
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<tbody>
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<td>School</td>
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<td>Parent(s)</td>
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<td>Friends/Siblings</td>
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<td>Not at All</td>
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Figure 2b

% Participants

<table>
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<tr>
<th>Source of Menstrual Education</th>
<th>Big Community</th>
<th>Small Community</th>
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boys and girls about periods is key for passing on accurate information, especially the biological aspects of this cycle. Discussion volunteers highlighted the fact that many families are uncomfortable with discussing menstruation and that by teaching the basics at school, parents would be spared embarrassment. However, all participants also noted that parents should still be instrumental in teaching their children about menstruation to some degree, even if biological information is excluded from such talks. Meg suggested that the media become involved by posting information posters around the subway system and ads in magazines. Yet, participants acknowledged that individuals of various cultures may wish to handle this information in unique and more private ways making mass menstrual and general sexual education difficult.

Showing no locational difference, the focus group volunteers identified appropriate ages for learning about menstruation as being between nine and 12 years old. Group members stressed the importance of not attempting to teach children too young, even if, like Meg, their experience was one of being educated about periods at a very young age of three or four. Doreen illustrated one concern involved in teaching a young child taboo information. She feared that if a child knew about menstruation he or she would try to talk about it with peers who might tease her or him for discussing something so private. Interestingly, the importance of learning about menstruation at a young age is exemplified by one interviewee who began to menstruate when she was eight years old and had no knowledge regarding menstruation prior to menarche. Furthermore, when asked what they wished had been different in their preparation for menarche, focus group members identified having at least some knowledge about menstruation or more direct education as opposed to learning indirectly by observing older sisters deal with menstruation as being the most helpful improvements.
Interestingly, and in another non-locationally varying result, most interviewees (82%) would choose to pass on only positive information regarding menstruation to younger girls. Although focus group discussion members and many interview volunteers felt that an educator's (mostly mother's) attitude does not influence how a girl will feel about menstruating, they placed great emphasis on teaching about periods in a positive manner, underplaying any drawbacks like PMS or dysmenorrhea. Yet, the desire to pass on a positive attitude sometimes stemmed from an initially bad menarche experience that was often the result of a lack of communication with an educator, like a parent or friend. During interviews, concepts that were stressed as being important for passing on to a young girl learning about menstruation for the first time included the idea that menstruation is “natural”, happens to all women and should not be feared or cause for embarrassment. Some participants added that it is important that a young girl be aware that each woman’s menstrual experience is different. For example, Natalie, who grew up in a large city said:

I guess the main, because I remember being so scared, is not, like it’s natural. It’s gonna happen . . . It’s a part of a cycle . . . it happens to all women. It’s a bit different in all women . . .

Also, Camille, who is 53 years of age with one daughter and another participant from large urban area explained:

Well, I don’t think that I would do it much differently than I did before is that I did want to make it seem like it was sort of the way my. I thought my attitude and the attitude my mother had that it was a natural process and that it was just part of growing up when, and so I would approach it in . . . It’s something great to look forward to and your body changes . . . and it’s just a natural change in your body.

Therefore, while many women possessed negative feelings about menstruating they chose not to relay these sentiments to younger girls.

There were also no locational differences among focus group participants in reference to their
attitudes about why women might suffer discomfort during menstruation. When questioned about myths like whether a woman’s weight, feelings about her femininity, psychological health, acquired negative attitude about menstruation from a role model or psychological health played a part in causing her PMS or dysmenorrhea all group members claimed never to have previously heard these theories. Doreen and Meg believed that diet may serve to create or solve menstrual problems. Interestingly, all participants believed that women from large urban areas might experience exaggerated menstrual difficulties because of the added stress of the city; here urban stress paranoia which was posited over one hundred years ago is reincarnated. However, other old myths, such as wet and cold phobias, were not apparent among group members; none of the participants believed that swimming, bathing, washing one’s hair or sexual intercourse should be halted during menstruation.

Culture, although not specifically tracked throughout this study, appeared to play a minimal role in the shaping of the participants’ menstrual educational experiences. However, several interviewees noted that their cultural background may have influenced how, when and whether or not they learned about menstruating. For example, Shelly who grew up in a variety of large cities and who is Chinese was never told about menstruation. When I asked whether she felt that this lack of communication could be the result of her culture, she replied that it was possible because her parents had an extreme sense of modesty. However, Louanne who also hailed from a large urban area and is Chinese learned about menstruation from her mother explaining that hers is a scientifically oriented family who views menstruation as yet another scientific fact to be understood, acknowledged and accepted. Martha, an interviewee who is from a smaller community and, again, Chinese learned about menstruation primarily from friends but claimed that her mother was open
and willing to discuss the subject once approached. Yet, Lisla, a volunteer from and smaller urban area and who is Portugese described European communication as not being open; her mother only provided limited information regarding menstruation after Lisla received sex education at school. Finally, Roxanne from a large city explained that her Catholic family was also very secretive about bodily functions like sex or menstruation. Although Roxanne’s mother educated her about menstruating, the information was, again, limited. Nevertheless, not all women who were inadequately educated about menstruation grew up in a religious or ethnic household. Therefore, it appears that culture can influence what and how a girl will learn about menstruation, but it does not always.

4.4 - Age

Age played a far more significant role than location in determining attitudinal patterns regarding menarche. A chi squared test demonstrated that at a .08 level of significance more women who began to menstruate when they were 13 years of age or older (45%) had more positive menarche experiences than those whose menstrual onset occurred when they were less than 13 years old (20%) (Figures 3a and 3b). Furthermore, at a .06 level of significance a chi squared test showed that more women whose initial menstrual experience occurred when they were 13 years or older and was negative now feel better about menstruating (69%); conversely, only 33% of women who originally felt bad about their periods in the younger menarche age category now possess more positive attitudes regarding menstruating (Figures 3c and 3d). Also, more women who belong to the younger menarche age category who felt good about the onset of their periods now feel worse about menstruation (75%). While this result of a chi squared test was not significant at only a .16 level, it is still important to note because only 33% of women from the older menarche age group who felt
Figure 3 - Feelings Related to Menarche

Figure 3a

Figure 3b
Figure 3c

Felt Negative at Menarche But Now Feel Better About Menstruating

Age at Menarche

- <13
- >12

Figure 3d

Felt Negative at Menarche But Feel Better Now About Menstruating

Age at Menarche

- <13
- >12
positively about the onset of their periods now feel worse about menstruating. However, interestingly at a .14 significance level more women who had neutral feelings about menstruation from the older age category (75%) now hold worse sentiments regarding their periods as opposed to only 40% of women from the younger menarche group. Again, this result is not significant but is worth acknowledging. Finally, there was no significant menarche age difference when comparing both age groups in terms of neutral feelings at menstrual onset.

During the course of the interviews and the focus group it became clear that many women who experienced menarche at a younger age tended to be more shocked about their early experiences with menstruation because of a lack of knowledge regarding what was happening to them or because they did not feel ready or old enough for this stage in their maturation. Many interviewees were informed that menstruation was synonymous with womanhood which is a label that most participants who experienced menarche at younger ages identified as being problematic for them at the time of menstrual onset. For example, Natalie's mother taught her about menstruation when she was eight or nine years old. Yet, this information did not make menarche less frightening for her when she got her period at age 11:

**Jenny:** And what was it like the first time you menstruated?

**Natalie:** ... Scary as can be. But ... it was ok ... I was actually, I can remember being anxious in that I was the first and I didn't have any other friends. It's like, then I can remember as I got older, y'know, and [my] other friends came along, you, y'know, [I] got used to it ... I remember it wasn't something at that age that was talked about at all.

Sophia is, however, one exception to this scenario. She was so young (eight years old) that she did not know to be scared or worried:

I didn't know what happened. I thought, like, I'd cut myself ... I didn't think much of it. It was bleeding for two days so I just thought I'd cut myself badly. I didn't know what I was supposed to do ... I just put toilet paper in my pants.
Yet, feelings at menarche were frequently most heavily influenced by the incidence of menstruation of peers, as is evident by Natalie's account; if very few of their friends were menstruating, women from the younger group explained that they would try to hide their periods for fear of teasing by boys and general embarrassment. Mira, a large community volunteer who got her period at age 11, also felt ashamed and embarrassed at menarche; but, once she learned that her friends were also menstruating she began to feel good about her periods:

From the beginning through high school it was very much mediated by my peers. No one else had it so I was embarrassed. I mean, I'm embarrassed to say I was such a little cog in a machine but I was and when my friends started getting it I started to feel okay about it.

Here, Mira eludes to the strong social forces influencing her feelings. Conversely, participants from the older menarche age category expressed feelings of relief with regard to the onset of their periods. Gina, a small community participant who got her period at the end of grade nine related that she hid the fact that she was not menstruating from her friends throughout her grade nine year fearing that she would not fit in unless she were menstruating.

Another aspect of age influence to be explored involves that of the older women (>34 years old) in the two samples. There were no significant differences between the feelings or average age at menarche between the younger and older women of the two samples. However, there exists some variation with regard to menstrual education before menarche and average number of symptoms during menstruation. Only one out of ten older participants who were interviewed (four others completed surveys only) learned about menstruation from school as opposed to from friends or parents because the sexual education program in schools was not developed until much later on. Also, the average number of symptoms experienced by these women during menstruation was not significantly different from those of other participants but was, nevertheless, slightly greater.
Moreover, many of their symptom scores (43%) were among the highest of all the participants (73, 56, 56, 103, 77.5, 69). This could be due to the fact that treatments for menstrual problems, like the birth control pill, were not as well developed. Further evidence of this includes two women in this older group who received hysterectomies in order to relieve severe dysmenorrhea. While this drastic treatment still remains an option for women with extreme menstrual difficulties, it is rarely necessary because of new technological advancements in BCPs, pain killers and laparoscopic surgery. These older women also reported less communication with friends and family regarding menstruation, limiting their acquisition of varied and effective coping strategies that could alleviate discomfort. Hence, age is a strong influence in shaping experiences and attitudes regarding menstruation.

4.5 - Feelings, Attitudes and Behaviour

There were no significant locational differences between participants’ feelings and habits surrounding menstruation. Interviewees’ sentiments regarding menstruating at menarche were largely negative with 58% of these volunteers expressing predominantly negative views about their menstrual onset; no significant differences were apparent between the number of negative attitudes at menarche between women from smaller areas (60%) and those from larger locations (77%). Similarly, there were no significant differences between women from each type of location with regard to feelings of neutrality at menarche. In total, 24% of participants held positive views and 18% expressed neutral opinions about their periods at menstrual onset. Furthermore, these volunteers’ current feelings about menstruation do not vary significantly locationally, the majority of which are negative (48%) as opposed to 41% positive and 10% neutral (Figures 4a and 4b). Yet, more women currently feel positive about menstruation than they did at menarche. The most prominent explanation provided for this phenomenon during interviews was that menstruating had
Figure 4 - Current Feelings About Menstruation

Figure 4a

Figure 4b
become part of participants’ lives; they claimed to have learned to manage their periods more effectively and also felt more comfortable with their own bodies over the years.

Interviewees also demonstrated highly conflicting views regarding their feelings about menstruation, again showing no locational variations. When answering questions pertaining to how they felt about their menarche experience they would often provide multi-faceted contradictory responses. Many women claimed that beginning to menstruate was “no big deal”, but would then proceed to describe their periods as being “scary” or “exciting”. For example, April, a volunteer from a smaller town, described her menarche experience with conflicting tones:

It was really mild, like it wasn’t, wasn’t heavy. More embarrassing than anything because my mom called my grandmother right away. It was New Years Eve so it was grade seven so I would have been about 12 ... I didn’t see it as that much of a big deal ... it was a little exciting I guess because, like, I knew that, like, I was. I didn’t know, sort of like a bit of an initiation kind of thing because all your friends would talk about it, like if they did and when they did. But it wasn’t a huge deal for me, like emotionally or anything.

Note that amidst April’s contradictory sentiments she refers to the peer pressure involved in menarche. Similarly, Josephine who grew up in a larger urban area, explained that at menarche she felt scared but did not panic claiming that it was merely a minor inconvenience on her birthday. She then added that it was “no big deal”. Finally, when Hillary, another participant from a large city, was asked what menarche was like for her, her reply was:

... Well shocking ‘cause hey there’s this blood coming out of me whoa! And ... yeah, it was very, yeah it was just, I remember it being extremely bizzare. Like, just sort of it just sort of seeming like this really, really strange, strange thing that was happening to me ... I guess maybe I felt, well I don’t, I don’t really remember feeling that, I mean ... I guess a little of it y’know mommies like a big deal that their babies are women so I probably felt y’know proud, y’know in that respect ...

Again, Hillary’s reaction shows how conflicting feelings can arise at menarche.

Interestingly, many of the women who expressed these kinds of feelings about menarche had
more focused and definitive views about their current menstrual experiences. For example, Hillary’s current feelings about menstruation are quite consistently more positive:

It’s, it’s much more. sort of, connected . . . Now, y’know, I’m closer to the point in my life where I may have children than I am to the point where I won’t. And, y’know, especially with, like, going on the pill . . . I’m sort of taking control of it now because y’know for a lot of my life, y’know, in times when I’ve been so . . . unwell with my period that I’ve had to lie down. Now I’m just like, y’know what? I’m gonna deal with this because that’s crap.

Casey, a volunteer from a large city, also expressed conflicting feelings about menarche, but now has more focused ideas about her feelings. Casey initially claimed that she was “looking forward” to menstruation because she got her period when she was 15 years old. She explained that she was “excited”, yet “scared” because she felt like she was losing control over her body. However, her sentiments are now less contradictory:

I’m not excited anymore . . . I think I have figured out, I mean, in trying to figure out what works and what doesn’t work for me. I know Asprin doesn’t work for me. I know certain things don’t work for me . . . walking does seem to help me or at least it has in the past . . . I’m more cautious in terms of my schedule . . . So, I’ve kind of tried to make it more a part of my life rather than something intrusive.

Like Hillary, who is using the BCP to help her periods, and Casey who now knows what strategies work best for her, many women have figured out how better to deal with menstruation. Therefore, they expressed less ambivalent views surrounding menstruating. In fact, very few interviewees could not think of positive attributes associated with menstruation. The most frequently occurring response with regard to positive characteristics of menstruating was strongly connected to childbearing. Most volunteers stated that the abilities to conceive and give birth were important positive results of menstruating. Conversely, the occurrence of menstruation as being an indicator of not being pregnant was also listed as positive. Many women listed other benefits, like feeling connected and in touch with their bodies and feelings, enjoying the passage of their cycles, allowing
themselves permission to relax and be pampered, knowing that their bodies are working properly or appreciating the ability to monitor their health, using the emotions present during menstruation as an outlet for stress, bonding with other women and feeling purified. Although many of these women possessed generally negative attitudes about their periods, some found their cycles comforting. The negative aspects of menstruation put forth by these women included the mess, inconvenience and pain associated with this phenomenon. For example, women noted that menstruation interferes with sports, sex and work. Therefore, in agreement with the literature and regardless of location, women have both positive and negative feelings about menstruating.

However, the confusing feelings about menarche could stem from the taboos surrounding such bodily functions. In the focus group, participants described that societal imagery of menstruation, often in films or televisions shows, usually focuses on PMS portraying women with such symptoms as dangerous or turning their experience into a joke. They astutely noted that actual menstrual bleeding or dysmenorrhea is never mentioned; only emotional symptoms are dealt with in popular culture. Although, group members underscored the fact that tampon and pad commercials indirectly refer to blood implying that during menstruation women must not leak and should keep “fresh”, “free” and “feminine” by using appropriate sanitary products. Women in the group discussion agreed that the media portrays menstruation as a disease that needs to be cured; by using scientific terms, ads promote absolute truths dictating what women need and how they should manage their periods. Although focus group members claim that those who are close to them are supportive during menstruation, much of the societal shame associated with menstrual blood is manifested in their accounts of embarrassment in staining their sheets at night. Sue, explained that a stain is permanent and difficult to hide. When asked what kinds of strategies they would rather see
used by the media in portraying menstruation, group members said that more realistic imagery would be more appropriate. For example, Sue wished to see women in pain and not smiling. Tess remarked that alternative products like the keeper\(^5\) should be advertised in mainstream media, while Doreen relayed that scientific and medical terms and ideologies in ads should be replaced by women speaking frankly about their own experiences.

Focus group members were also asked why they feel that menstruation is taboo. They all primarily attributed the heightened sense of taboo surrounding menstruation to men's discomfort with this cycle. One participant who completed a survey claimed that “boys get really uncomfortable in co-ed bathrooms when girls carry tampons . . .”. Gina, an old interviewee, described how in an effort to make her boyfriend feel more comfortable about her periods she laced their bed with tampons. Male domination and the historical aspect involved in shaping women's purpose as childbearers were also cited as possible reasons by focus group members for the forced invisibility of periods. Doreen hypothesized that menstruation was historically viewed as failed pregnancy and, therefore, acquired a negative connotation. However, all group members except for Doreen explained that the men they encountered were curious and supportive with regard to menstruation.

Another reason that was offered for the menstrual taboo involved the categorization of this process as being one of a multitude of bodily functions, like urination, that are considered private and hidden. A small number of women challenged the notions of menstruation as negative or a disease claiming that these connotations are partly responsible for its taboo status. For example, Sheila, an interviewee from a rural area describes her periods as “energizing” and views menstruation as part

\(^5\) The keeper is a non-disposable version of the tampon. It is a small rubber cup that is placed under the cervix in order to catch menstrual blood.
of the world’s natural cycle as opposed to an inconvenience or illness. Rose believed that treating menstruation like a disease was wrong explaining that, to her, taking drugs to control her periods would be like “taking medication to pee”. Focus group members also noted that euphemisms like “the curse” might contribute to the negativity surrounding menstruation. Overall, there appeared to be no locational differences with regards to these beliefs about menstrual taboo.

4.5.1 - Menstruation as Interference

During the interviews participants were asked whether or not they would choose never to menstruate again if given this option. Again, no significant locational differences were found in the responses to this question. In fact, many interviewees placed conditions on accepting such an offer, such as retaining the ability to bear children or halting menstruation only if other women were given the same opportunity; no significant locational differences were apparent in terms of conditional acceptance of this offer. Also, some women who decided to keep their periods wished to do so only if their symptoms could be reduced in severity or eliminated. Reactions to this question were often met with hesitation, suspicion, disbelief or contempt, as is exemplified by Gina’s initial reaction of “bite me”. But after some contemplation, the vast majority of interviewees chose to stop menstruating as long as they could conceive. During the focus group discussion, many of the same concerns were raised. In this group, only Sue, a participant from a large city, opted not to menstruate at all, even if given the choice of not being burdened with symptoms. Alice, from a small town. Doreen and Meg all wished to keep their periods as long as their symptoms were eradicated. Tess, who represented a small minority of interview and focus group participants, chose to continue menstruating unconditionally.

One locational result which was more significant than the rest in reference to attitudes
regarding menstruation was the degree to which women felt that their periods interfered with their lives. A chi squared test showed that at a .17 level of significance more (52%) of the larger city volunteers as opposed to 32% of participants from smaller communities felt that menstruation interfered with their lives and/or others' lives around them (Figures 5a and 5b). Although this result is not significant, it could point to potential differences in lifestyle or experience based on location. However, women who claimed that their periods interfered with their lives to a moderate or large extent all gave similar reasons for their sentiments. Many cited the physical and emotional symptoms associated with menstruating as being the prime influence on their feelings. Women also tended to place any blame for such interference on themselves explaining that they were not as aggressive in treating their symptoms as they could be. Some even felt that if they missed school or work as a result of their periods it was because they took the easy way out by not pushing themselves to continue on a regimented schedule. For example, Denise felt that:

It doesn't really interfere with my life I don't think. It doesn't really stop me from doing anything unless... the pain is really bad. But that, that's sort of my own fault for not catch, like if I, if I sense that the pain's now I have to take the pills but I still go to class and stuff.

Participants would describe “giving in” to food cravings and the pain as if they were weak for not being able to resist their own bodies. This finding is an extension of the stoicism surrounding medication resistance. Some participants who felt that menstruation did not interfere or only minimally interfered with their lives were on BCPs and fingered BCPs as aiding in making menstruation more tolerable.

Among the focus group members there were no locational differences with regard to this issue. Sue felt that menstruating interferes with her work as a waitress and often regrets what she says to others during PMS. Alice and Tess agreed that during PMS it is important to be careful when
Figure 5 - Feelings Regarding Life Interference

Figure 5a

Figure 5b
making decisions. However, Tess, Doreen and Meg emphasized that PMS does not always create negative interference. They believed that PMS allows them to view situations more clearly and be more direct and effective in confrontations or conflicts with others. For example, Meg relayed that once when she was experiencing PMS she severed ties with a boyfriend she no longer loved. Tess claims to be more direct and frank in conversations during PMS which makes her feel “great”; as she remarked, “a shorter temper gets things done”. But, all group members felt that the positive aspects of PMS are more often overshadowed by the negative. When asked whether or not symptoms like PMS and dysmenorrhea would be problematic for women in certain occupations, Sue, Alice and Tess claimed that due to the portrayal of menstruating women in the media as being very active they never think of women with periods as dysfunctional. Ironically, Sue did feel that menstruation interferes with her job and Alice often wishes that she could call in sick to work during her periods. The focus group members seemed torn between their experience of menstruation and what society feels their experience of menstruation should be like.

Yet, the social influence of place on attitude was evident in a few instances providing some basis for locational difference. Some study participants described how place positively affected their perceptions of menstruation. Loretta, an interviewee who grew up in a small town, traveled to Sudbury as a young adult where the large Native population’s spirituality surrounding menstruation allowed her to celebrate and welcome her period rather than dread its onset. Although Loretta’s experience at menarche was “terrifying” and embarrassing, the influence of Native beliefs in a new location altered her feelings about menstruation. Also, Tess and Doreen explained that when they spend time in forests they feel more at ease with menstruation. They claim to be more in touch with themselves and with the changes that occur in their bodies during menstruation. Doreen observed
that in the city all bodily functions are controlled; but, she felt that in the wilderness she had the freedom to bleed and be "unclean" without discomfort. Therefore, the fewer restrictions that are placed on these women in the rural or forested areas where they grew up influenced how they view menstruation, particularly when actually in a non-urban area.

4.52 - Behaviour During Menstruation

In relation to behaviour during menstruation, there were no locational differences. Even though a chi squared test showed that there exists a significant locational difference at a .07 level between small and large community participants with regard to degree of physical fitness, the number and severity of menstrual problems experienced by women in each location did not vary (Figures 6a and 6b). This result is in stark contrast to the work of Wilson et al. (1989) who state that women who are more physically fit have less menstrual discomfort. Interestingly, all focus group participants except Tess were familiar with this information and believed that too little exercise would cause worse periods. Many of these women claimed that exercising during menstruation helped alleviate their discomfort; but, several interviewees did not find this strategy to be effective explaining that they felt too ill or were in too much pain to exercise. Moreover, the relief felt by focus group participants was a result of temporary physical activity, not the regular exercise habits promoted by the literature as being beneficial.

However, the fact that more of the smaller community participants were physically active is concurrent with findings from Lass (1997); Lass discovered that due to the lack of variety in available activities in smaller towns, teens and children usually engage in team sports run by their schools, thereby, forming fitness habits early in life. Conversely in larger cities, the multitude of possibilities for entertainment, like movies, live theatre, art galleries, museums and restaurants often
Figure 6 - Menstrual Difficulties Related to Fitness

Figure 6a

Figure 6b

6 Whether a woman has more or less problems was determined based on the extent of her medication use and number and severity of symptoms.
provides a substantial distraction from regular physical exercise. Furthermore, many of the small
town participants in this current study who recently moved to Toronto to attend university reduced
their physical exercise regimens upon arrival in this large city. Yet, there remains no locational
variation in symptom occurrence despite this difference in behaviour. There is also no significant
locational difference in terms of these women altering their behaviour during menstruation.
Regardless of location, the vast majority of women changed their behaviour during and immediately
prior to menstruation by altering eating, exercising, socializing and/or resting patterns. While some
women chose to eat, exercise, socialize and/or rest more around the time of menstruation, some did
the opposite. This result reflects the very unpredictable, different and individual kinds of choices
made by women from a variety of locations in dealing with their periods.

4.6 - Symptomology and Physical Experience

In examining the differences in the incidence of menstrual symptoms, some locational
variation was apparent. Women who changed residences, specifically those moving from smaller
communities to larger ones, noticed changes in their periods; at a significance level of .002, a chi
squared test showed that more small town and rural participants experienced menstrual changes
when they moved to large cities as opposed to large community volunteers who moved to smaller
locations (Figures 7a and 7b). Surprisingly, at a significance level of .01 a chi squared test
demonstrated that more of those from smaller locations who experienced menstrual changes after
moving underwent a more positive transformation. In other words, these women’s symptoms were
lessened and their menstrual experience improved after moving to larger cities. This has striking
implications in that according to urban stress theory of the 1800s any move, especially one that is
to a larger, more fast-paced urban environment would imply increased stress and worse symptoms.
Figure 7 - Locationally Based Menstrual Change

Figure 7a

Menstrual Change When Move
No Menstrual Change When Move

Big Community
Small Community

Figure 7b

Menstrual Change When Move
No Menstrual Change When Move

Big Community
Small Community
However, most women who reported feeling stressed also claimed to miss periods and experience lighter, easier periods. Yet, 28% of smaller community women and 18% of larger community women experienced worse symptoms upon changing locations. For example, Roberta, from a rural area noticed that since her arrival in Toronto she has begun to experience PMS. Therefore, it is likely that stress may play a part in altering a woman’s period, but it is impossible to predict exactly how it will change.

Also, other factors, like pollution could be affecting these women’s periods instead of or in conjunction with stress. Interestingly, again, a possible increase in pollution by moving to a larger city would imply an increase in symptom severity. But, this is not so; the majority of women who moved from smaller to larger locations experienced an improvement in their periods. Hence, it is important for further research to be conducted regarding the influence of estrogen mimics on the body because these chemicals may be producing negative and positive changes in the human hormonal system. Another facet to this conundrum was discussed in the focus group. As was previously mentioned, Doreen and Tess were more comfortable with menstruating in the wilderness. They also reported less severe symptoms while in the forest. These two women did not have a definitive explanation of why this occurred, but they surmised that because they were more in touch with their bodies, felt less encumbered and were more physically active their periods became easier. It is unclear whether the increase in physical exercise or the peace and calm of the forest was the main contributor to their symptom relief; it is quite likely that both aspects were responsible for their experience. It is also essential to account for general genetic and biological propensity for menstrual patterns and symptomology; everyone’s body is so different that any physical change may simply be the result of their own internal rhythms. In total, 23% of women who changed residences
experienced worse periods, 9% had more positive changes and 3% became irregular.

In an unexpected finding possessing locational implications, climate also seemed to influence participants’ periods. Although there were no significant differences with regard to reaction to climate change between small and large community members, 60% of all those who experienced climate changes noticed marked alterations in their periods. Messing et al. (1993) and Mergler et al. (1985) claim that menstruation becomes worse in colder weather; yet, Hildebrandt (1962) found that menstruation can become worse in a warm climate. These results were confirmed in this study where 15% of those who changed climates got worse periods in hotter weather. 25% had better periods in hotter weather and 15% missed their periods or became irregular regardless of the type of temperature change. Again, it is difficult to measure the degree to which other factors like stress, diet, pollution or number of daylight hours may influence these women’s experiences.

For example, Roxanne, a participant from a large city who experienced severe dysmenorrhea, moved to the Arctic Circle for two years and began suffering worse cramping, migraines and heavier bleeding during menstruation. Yet, when she relocated back to Southern Ontario her symptoms were lessened returning to the way they had been before her trip up north. When asked whether stress could have affected her periods at this time in her life, she explained that she was happy and relaxed during her years up north:

**Jenny:** Did you find that you were particularly stressed during that time?

**Roxanne:** No. Not at all. No, actually. I had the time of my life.

However, it is possible that Roxanne’s pain was caused by a change in diet or hours of sunlight. Conversely, Fanny who grew up in a small community with a harsher, colder climate claimed to
experience almost total relief from her menstrual symptoms upon moving to Toronto. Prior to her move to Toronto, her menstrual survey symptom score was 52; now it is five. She also specifically mentioned the warmer weather as being key to making her feel better during menstruation:

Since I’m here I’ve never had any problems. Nothing. I think it’s the weather. I don’t know but I feel so good here. I’m not sure but I think the weather helped.

Interestingly, Fanny’s living accommodations in Toronto are on a main street with high levels of pollution. She feels that the pollution is affecting her because she has developed skin problems; yet, even with this harmful chemical influence her periods are easier to handle. Furthermore, Fanny’s move to Toronto occurred under great duress because upon arrival her original plans fell through resulting in a stressful search for a new job. Therefore, Fanny’s scenario provides more evidence that stress and pollution appear not to necessarily create worse menstrual experiences and that temperature or climate may be of stronger influence. There were nine other women whose periods changed according to climate.

Another surprising finding which contradicts authors like Contreras et al. (1989), West (1989), Smith et al. (1989) and Bancroft et al. (1989) includes the participants’ experience of PMS. Although there were no significant locational differences with regard to this result, 62% of all volunteers reported feeling PMS throughout their periods. Natalie, a large community participant who becomes irritable and emotional when she begins to bleed, even renamed this phenomenon “DMS” or “During Menstrual Syndrome”. Several women were noticing symptoms like lethargy, bloating, acne, increased energy, depression and/or anxiety before, during and, in one instance, after bleeding. Therefore, while some women conformed to the traditional pattern of PMS relief after

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7 Toronto’s climate is generally warmer than Fanny’s hometown, but the year that she arrived was particularly warm because of El Nino.
beginning to bleed, many did not.

There were also no significant locational differences regarding menstrual questionnaire symptom scores and number of symptoms. Although all together those from larger communities reported more symptoms than those from smaller locations, standardizing these values by dividing number of symptoms by number of participants from each location revealed that there were no differences in number of symptoms reported. Furthermore, in examining the average frequency of the occurrence of these menstrual symptoms using a T test, no significant locational differences were evident. However, the average number of symptoms experienced by women from specifically rural locations (4.3) was almost significantly less than that associated with urban women (6.1). A T test revealed this potential difference at a .17 significance level. The number of purely rural participants was low (ten); therefore, a larger rural sample might have demonstrated a significant variation with regard to this variable. Yet, there were no significant differences in terms of rural versus urban symptom scores or rural versus urban age at menarche.

Interestingly, there was another difference which was almost significant surrounding age at menarche, but only when larger compared to smaller, not simply rural, communities were analyzed. A T test showed that at a .13 level, the average age at menarche for larger community participants (11.75) was almost significantly less than the average for smaller community volunteers (12.76). While this result is currently not significant, it may be exhibiting a trend predicted by endocrine disruptor researchers like Cooper et al. (1997) who believe that estrogen mimicking pollutants can induce early, or "premature", puberty. Therefore, women who were raised in larger cities with higher levels of pollution might be demonstrating signs of this effect by experiencing menarche at an earlier age than their small community counterparts. It is important, though, to consider that
residents of large cities are not the only ones to be affected by effluents. Individuals living in rural areas could be exposed to farming chemicals which could also influence menstruation. Thus, the evidence for endocrine disruptor interference in this instance is inconclusive.

No significant differences were found between smaller and larger community members’ degree of menstrual regularity. Of all participants, 14% menstruated irregularly (13% of smaller community members and 15% of larger city dwellers). However, the notion of what is irregular or abnormal should be challenged. Many women who were “irregular” regularly menstruated every two to three months. Although this frequency does not conform to the commonly held medical belief that women should menstruate approximately once a month, it is possible that having a period once every two or three months is just as regular. If the health of these “irregular” women is not suffering and not menstruating each month is not what their bodies want to do, then there is no reason to label them different or abnormal. One extreme example of naturally occurring and innocuous irregularity is Crissy’s situation. Crissy, a volunteer from a large city, is 36 years old and has only menstruated a few times in her life. Like many women, her first period occurred when she was 12 and only lasted for one day. However, since that time she has been menstruating regularly - every few years. In fact, the last time she menstruated was so long ago that she could not recall when this period had occurred. She has been on every kind of medication to induce menstruation; but nothing has worked. It appears that Crissy’s body does not want to menstruate every month, or even every year. Crissy is in the best of health and while her body’s menstrual pattern may not be usual it may, in fact, be normal and safe for her. It is possible that Crissy’s partial amenorrhea could cause problems for her as she ages, like osteoporosis or uterine cancer; but, it is not a guarantee and it is questionable whether a woman who menstruates every two to three months will suffer extreme consequences.
4.7 - Conclusion

It is now possible to provide answers for many of the research questions posited in the introduction to this study. Indeed, there are some locational differences with regard to physical experience and attitudes of menstruation. However, none of these variations present any discernable patterns, the reason for which is discussed in chapter five of this report. While there are locational patterns in relation to educational differences, one major pattern of variation, age, was not locationally based. There also exist similarities among all participants concerning their current attitudes toward menstruation. Many women's attitudes seem to coincide with the long standing stereotypes surrounding menstruation; yet, some women are beginning to challenge these paradigms. Therefore, while there are limited locational differences with regard to menstrual experience, these differences are only starting points in trying to understand the dynamics of women's practice and perception of menstruation and how their bodies interact with their environment. The results of this analysis demonstrate the complexity that is revealed and extreme variation that occurs when attempting to account for the human experience. It is this variability which must be remembered when identifying behavioural and experiential patterns.
CHAPTER 5 - DISCUSSION AND CONCLUSION

5.1 - The Physical Reality

The patterns that are revealed by the analysis indicate that the human body is more complex than the medical community often wishes to acknowledge. There were so few locational and other differences among participants because the physical experience of menstruation is largely determined by biology. Each woman's body is so different that general locational patterns are nearly impossible to detect. This does not mean that women's menstrual patterns are solely dictated by their biology. Instead, this study revealed that a woman's biology provides a foundation for how her body will react to external influences; therefore, because all women are distinct, their bodies will react differently to a given set of circumstances making how any group of women menstruate, whether they be clustered locationally or otherwise, relatively unpredictable.

However, this is not meant to imply that women are helpless puppets being manipulated by their biology. The days of fault free menstruation which literally led to women with extreme PMS getting away with murder are over. While biological determinism denotes a certain inability to control, overcome or manipulate biology, many participants took control of their menstrual cycle if they were dissatisfied with their periods. By using painkillers, BCPs, rest, exercise and other treatments most of the women in this study were able to ameliorate their menstrual experience. Therefore, my theory is centred around the idea that biology is a much stronger factor in predicting menstrual experience than any environmental influence and plays a much larger part in shaping women's periods than has previously been acknowledged. Women's bodies have a propensity for behaving in a certain way which can be modified, but not completely changed. The most important difference between this hypothesis and previous bio-centric philosophies is that I am emphasizing the vast individual discrepancies that exist among women with regard to their menstrual cycles. I
also believe that women can moderate their biology, if they so wish, and do not have to be trapped by debilitating menstrual symptoms. Furthermore, in this model women have the freedom to not adjust their menstrual patterns if they deem letting their cycles take a natural course important.

The unpredictability which led to this conclusion became apparent in the results in terms of participants' physical changes when faced with a new set of life circumstances. For example, the alterations in volunteers' periods when they changed climate was inconsistent. Some women experienced amenorrhea in a different climate, some had worse symptoms and some noticed an improvement in their periods; many experienced no menstrual changes at all. Furthermore, the type of climate change (hot or cold) seemed to have little bearing on occurrence of amenorrhea or whether symptoms became worse or better. This sort of unsystematic pattern is also evident in participants' physical reactions to a shift in community size. More women from smaller communities underwent an improvement in menstrual symptoms upon moving to larger urban areas. Yet, many of these smaller community women had a worsening of symptoms and many large community volunteers had similar experiences with regard to physical change in moving to smaller areas. This might be a reaction to variations in pollution or stress levels; however, there exists no consistent pattern when trying to predict physical experience as the result of a locational shift.

Moreover, both smaller and larger communities are host to various stresses and, often, air and water effluents; thus, it would be problematic to generally declare one type of location more stressful or polluted than another, with the possible exception of wilderness areas like forests which are often less stress producing and polluted than high population density locations. So, any locational menstrual differences could merely be internally and hormonally induced occurring without external stresses. Even a potentially significant locational difference, such as age at
menarche due to varying pollution levels. is questionable because while it is possible that all smaller areas may have less pollution, it is not probable, especially if that location is near farmland laced with pesticides. Also, the high number of external elements, such as pollution, stress, diet, altitude, heat, daylight hours and humidity, that are influencing an individual's physical menstrual experience at any given time further complicates the accuracy of attempted locationally-based predictions. Therefore, it is difficult not only to identify patterns in physical experience, but also to foretell which external variables an individual is being exposed to and which of those she is being most affected by based on her community size.

This unpredictability is also evident when considering non-locational influences, like stressful life events that are not the result of locational change; again, there are no predictable standards for women's physical menstrual reactions. For example, Rose admitted that this past year has been stressful for her because several close friends relied on her support as they underwent serious life crises. She blamed a worsening of her menstrual symptoms, such as nausea and vomiting, on this increase in stress. Conversely, after Trish's father passed away she lost her period for several months. And, Loretta blamed her lighter periods over the past year on stress. Here, three very different reactions to emotional upset are revealed. Each woman's body is compensating for internal chemical changes in dissimilar ways. Also, although some participants' levels of physical fitness varied, their degrees of suffering during menstruation did not follow a consistent pattern; while an increase in exercise eased some women's menstrual problems, many volunteers were not aided by attaining a higher level of physical fitness. This randomness signals that while biology can be influenced by externalities, its rhythm is strong and can not be entirely overpowered.

Even more direct external variables are not able to overshadow the biological forces at work
inside a woman's body. For instance, each participant reacted differently to medications, such as painkillers and BCPs. While some women found Annaprox and Ponstan, two powerful prescription analgesics, to be effective in relieving their dysmenorrhea, others claimed that these painkillers were ineffective. This variability was also apparent with BCP use; different BCPs were effective for different women in ameliorating problems like PMS, amenorrhea, menorrhagia and dysmenorrhea. Furthermore, the fortitude of these women's biologies was most evident in their premature onset of PMS while on BCPs; although the chemical influence of their BCPs should have created consistent mood and body conditions until they discontinued their BCP to get a period, many volunteers reported experiencing PMS up to one week before the onset of bleeding. As was mentioned in the analysis of this report, not only psychological, but physical symptoms, like bloating and acne, were common during this premenstrual week providing evidence that this PMS was not psychologically anticipated or fabricated. It is as if these women's bodies are pre-programmed to undergo a certain pattern of symptoms at specific times throughout their cycle regardless of direct external chemical influences. Doreen noted during the focus group that although every period is different, even without external influences, each woman maintains a basic set of symptoms specific to her that vary in intensity and frequency:

I think every period is different, but with general things, like you never bleed at night (to Meg).

Here Doreen is referring to the fact that while Meg claimed that her period length varies on BCPs, she never bleeds at night. Similarly, all interview participants were able to identify a standard group of symptoms that occurred during each period, regardless of how these symptoms were altered by stress, physical fitness level, pollution or climate; some women simply did not experience some
symptoms, clearly demonstrating basic differences in biology.

Understanding the individuality and complexity of women’s physical experience of menstruation is crucial because their feelings about their periods are often shaped by their symptoms. The participants who claimed that menstruation interfered greatly with their lives tended to have worse symptoms than those who believed that menstruation interfered less or not at all with their lives. Some women with worse symptoms explained that their negative attitudes regarding menstruation were a direct result of their physical experience. Perhaps more larger city women felt that menstruation interfered with their lives because of the faster and more unforgiving pace often associated with the urban lifestyle would prevent them from properly treating their symptoms and resting. Conversely, some women with menstrual difficulties expressed positive sentiments regarding their cycle claiming that they viewed learning to deal with their periods as a challenge. Participants’ sentiments about their physical menstrual experience also changed over time and in different circumstances. Therefore, there should also exist no expectations for how women should feel about their physical experience.

In order to allow for this freer bio-model it is essential to reexamine what constitutes a “normal” or “natural” menstrual cycle. In light of this study’s results it would be difficult to pinpoint such a denotation. For example, it was previously thought that women only experienced PMS prior to the onset of bleeding. Yet, as previously noted in the analysis section of this report, over half of the interviewees noticed PMS symptoms, such as bloating, acne, depression, anxiety and lethargy well into the time that they were bleeding. Conversely, just under half of these women were relieved of such symptoms when they began to bleed. Therefore, it is impossible to declare one group more “normal” than the other. Also, the women who were menstruating every two to three months, or
even every few years, are termed abnormal by the medical community. However, the fact that their cycles could be doing what is best for these women’s bodies is not considered. Instead, it is possible that all women have different biorhythms producing different intervals between periods - intervals that are not necessarily abnormal or dangerous.

Moreover, some women who menstruated every five weeks or in intervals varying from 28 to 40 days and were not considered irregular by the medical community, categorized themselves as irregular. Therefore, although these regularly menstruating women felt that their periods were somehow problematic (mostly due to unpredictability), their instincts and physical reality are denied because of an arbitrary categorization process created by physicians with authoritative power. This deferral to authority caused by the professionalization of medicine could be one explanation as to why women are so hesitant to use medication. Several women reported avoiding medicine because according to medical theory a certain amount of discomfort is to be expected during menstruation. Rather than asking themselves whether their discomfort was at a tolerable level for them, based on popular medical doctrine they categorized themselves as normal and did not pursue treatment. Interestingly, the literature considers dysmenorrhea, or extreme cramping, and irregularity abnormal or dysfunctional even though they are quite common. Following this belief system, participants tended to seek medical help only when they were experiencing extreme pain or “irregularity”. Women are discouraged from deciding what is acceptable or normal for them because of society’s propensity to believe those with authoritative knowledge over those with experiential knowledge. Because they are taught to doubt their instincts, women rely on outside sources which provide seemingly clear cut answers dictating how they should deal with their menstrual patterns. Unfortunately, it is these generalized models guiding those with medical knowledge which have
prevented doctors from truly understanding menstruation and, for example, how medications like the BCP affect different women. When dealing with the complexities of the human body, less rigidity is necessary for adequately treating and educating about physical phenomena like menstruation; because each woman’s body is distinct, the definition of “normal” will vary on an individual basis. Women must be taught to trust themselves and their bodies.

This logic applies to issues surrounding location. Just as it is problematic to generalize what is natural or normal for all women, it is equally as difficult to assign fixed expectations for women from particular types of locations with regard to physical menstrual experience. No one place is identical to another; therefore, no location or those who live in any given place can be issued benchmark status and designated as typical or standard. There is a much finer and ephemeral gradation shaping and defining physical experience and locational attributes. It is impossible to order women or their place of origin linearly and predict who and what is “normal” and how far others deviate from this mid range (Figure 8).

<table>
<thead>
<tr>
<th>Severe Symptoms</th>
<th>Many Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe Symptoms</td>
<td>No Symptoms</td>
</tr>
</tbody>
</table>

| No Symptoms | Abnormal | Normal | Abnormal |

In other words, if two women are from two different types of location but have similar physical experiences, which experience would be classified as normal for which location? What if two women have different sets of menstrual symptoms but originate from the same hometown? Which
of these women represents the standard? More specifically, in considering the experiences of women from my samples, two noticed that they dream more vividly during menstruation and one reported that she became feverish during the first day of bleeding: are these women normal? Are their experiences normal for women coming from large urban areas? It becomes clear that this system of categorization and standardization quickly breaks down. It simply is not feasible to classify these women based on their physical experience or their location. Instead, a multi-dimensional representation of women’s experience which allows for variability in location, medication use and symptomology should be considered (Figure 9). In such a conception, physical experience is influenced by external factors. This experience can then change or remain constant depending on each woman’s biological propensity. Note that in this scenario, if there is a physical change, it is not categorized as worse or better. Each woman’s change is merely different from what it was before and from any other woman’s experience.

5.2 - Resisting Taboo and the Societal Double Bind

The taboo surrounding menstruation is the root of much of its misunderstanding. This taboo has influenced how women are viewed and treated by society and has created a great deal of confusion surrounding the status and rights of menstruating women from all types of locations. Moreover, it has discouraged women from dealing with their physical experience in the way that
would be most satisfactory for them. The evolution of the menstrual taboo is layered and multi-
faceted and has led to a great deal of confusion surrounding menstruation. For example, the
portrayal of women’s menstrual experiences in the media does not reflect reality for many women.
Advertisers, in particular, ignore women’s physical menstrual reality by only showing women who
are pleased by their periods and who feel in control of their cycles. These fabricated women are
hyper-feminine": thin, clad in dresses or form fitting clothes, playful, upbeat and energetic;
ironically, in an advertisement for a product used mostly by grown women, the actors usually
resemble little girls. Menstruation does not prevent them from upholding their female duty of
staying “fresh”, clean and happy. They do not allow themselves to be shackled by their biology; they
are “free”.

Yet, as many participants revealed, menstruation is often inconvenient no matter how many
precautions are taken to make a period easier. Nevertheless, advertisements for pads and tampons
are designed to eclipse the true issue - menstruation - by making it invisible and controlled: odorless,
hassle-free and totally absorbed. And, if any reference is made to a negative aspect of menstruation
in television shows or movies it is done so jokingly or insultingly focusing only on issues
surrounding mood; because women are thought to be less emotionally stable than men, the negative
psychological aspects of menstruation are highlighted. However, women are simultaneously faulted
for this perceived hyper-emotionality and assumed to be defective or less feminine by not fulfilling
their archetypal female role of emotional support, care-giver and sexual icon. This media imagery
reflects ideas found in the literature which imply that women with menstrual problems are rejecting
their femininity. Fortunately, the results of this study provide evidence to disprove this long held
belief. Participants who overtly challenged traditional female stereotypes and roles, like Doreen,
Tess. Sheila, Gina. Rose and Tina, felt extremely proud of, comfortable with and connected to their monthly cycles. Thus, these popular images which are clearly not reflective of reality, influence and perpetuate the menstrual taboo and reinforce female stereotype.

The taboo is further fuelled by North American society’s attitudes toward illness. Although menstruation is not an illness, many women feel sick during their periods. Unfortunately, the seven day work week and fear of appearing lackadaisical often prevent women from resting and adequately caring for themselves during menstruation. Therefore, many women grow to resent menstruating as they would an illness because they are not afforded the privilege of responding to their bodies’ needs. Furthermore, although resting when ill is discouraged in our society, it is nevertheless acceptable if the ailment is legitimate and physical, like the flu or broken bones, and not psychological in nature. However, menstruation is not sanctioned as a valid excuse for taking time off; hence, unlike in response to regular physical illness, women are less likely to receive sympathy during menstruation. Instead, menstruation is treated with the same degree of complacency as would an equally tabooed mental illness where women are required to, as Terri from a large urban area claimed, “get over it”. Some participants like Terri and Alice expressed frustration with this double bind; these women believed that while it is important not to let menstruation interfere with their lives, they wished that they could take time to rest during their periods. Alice, in particular, expressed the desire to call in sick to work when menstruating. Shawn, from a large city, also lamented that her school instructors were not understanding or accommodating when her severe dysmenorrhea prevented her from writing exams and completing assignments. Because menstruation is not an illness per se, women are hesitant to push for rest during their periods; however, when they do, their motives are questioned and they are labelled as lazy. Hence, more
negative and tabooed feelings about menstruating develop and are perpetuated by its awkward status as pseudo-illness.

This illness dilemma which contributes to menstrual taboo is complicated by its treatment by the medical community. Although, as highlighted by several participants, menstruation is an indication of health, it is discussed as if it were an illness. Even though menstruating women are not treated as if they were ill by a society which does not allow them time to rest, researchers and the medical community talk about menstruation as if it were a disease; underlying the media's naturalized images of women who are impervious to the effects of their periods is medical ideology which has led to the medicalization of menstruation. By using disease related terminology, such as “symptom” and “syndrome” (as in Premenstrual Syndrome), menstruation becomes removed from the domain of the general female population and power is placed with those who know how to deal with illness: doctors. While at least the medical community acknowledges that menstruation can be problematic for some women, it goes further implying that a woman's body is dysfunctional during menstruation and that women are incapable of caring for their cycles themselves. Yet, ironically, when many women approach their physicians for help, they are not aided satisfactorily. Moreover, if a woman develops a problem with her period, she is frequently blamed for not taking care of herself. Therefore, women are trapped in a double bind attempting to overcome their problems so that they can function appropriately in an unsympathetic society by turning to their doctors for help who claim that they are ill but who can do very little to solve their menstrual difficulties. The conflicts inherent in this scenario are truly dizzying.

However, doctors and the media are not the enemy. The problem stems from the highly ingrained and systematically taboo treatment of menstruation which has developed historically.
More than simply being considered personal and private, menstruation has evolved a status unto itself. As was reviewed in the literature, menstruation is expected to be kept secret, yet suddenly becomes a societal concern when issues like reproduction or economics are at stake. Menstruating was historically also considered unclean and the cause of many illnesses in women. Conversely, if this seemingly problematic affliction disappears, its absence becomes equally as unforgivable. Women from large cities with dysmenorrhea were thought to suffer due to over stimulation; ironically, women with menstrual problems were told to engage in vigorous exercise and immerse themselves in the busy life of the country to relieve any discomfort. These conflicting ideas have survived to the present, except now women from all types of locations are instructed to both exercise more and relieve stress by resting in order to menstruate more efficiently. It has been a no-win situation from the start.

This societal discord, regardless of location, then creates confusion and conflict for women regarding their feelings about menstruation, particularly at menarche. This was apparent in the contradictions expressed by women when describing their feelings at menstrual onset. Menstruation is initially often understood by young girls to be taboo; this negativity is then compounded by a fear of being different from their peers by menstruating before any of their friends and seeming different. Therefore, while it was largely women's symptoms which guided their sentiments as they became older, the menstrual status of their peers appeared to be the largest influence on how they reacted to menstruating at menarche. Yet, this explanation is not complete. If menstruation were not taboo in North America and so many other societies it would be a positive and coveted experience to reach menarche first; in this instance being different would mean being special, not an outcast. There would be menstrual celebrations like there are for other rights of passage, like circumcisions.
confirmations, weddings and Bar and Bat Mitzvahs. Instead, the positivity surrounding menstruation for young girls is often received in the form of a message contradictory to that put forth by society; their mothers or school educators explain that menstruation is a milestone in their lives and is important for shaping their identity as women. So, when girls begin to menstruate, they are somewhat content because it signals that they are functioning normally, and simultaneously ashamed because of menstruation’s heightened taboo status. Many girls are taught that menstruation is special, yet forbidden.

Fortunately, there exists evidence which shows that such taboos can be contested. Although most forms of resistance were non-locational, there were locationally linked results pointing to the importance of the social influence of place in defying the menstrual taboo. For example, Loretta’s view of the taboo was altered when she moved to a community with a large Native Canadian population. Embracing the Native treatment of menstruation helped her feel more positive about her periods. Also, Tess and Doreen explained that the forest allowed them to feel more at ease with their bodies. Tess noted that she was able to enjoy and accept her periods in a wilderness setting:

Well, I think going out into the forest, like, if [I] go camping for a few weeks and I’m out there and feeling really earthy and not showering and just loving it and . . . my attitudes about my body change and that’s one of the things, like I might really enjoy it a lot more if I’m out there . . . paying more attention to my body, enjoying just the processes and not trying to sterilize myself and sanitize myself.

Therefore, gaining both physical and social distance from the menstrual taboo can, either temporarily or permanently, alter a woman’s views regarding menstruation.

But, participants in all types of locational settings are resisting and challenging the taboos they faced as young girls. The stoicism practiced by some participants when experiencing menstrual discomfort is one indication of resistance. While resisting medication use by many volunteers can
be partially attributed to a certain expectation of suffering during menstruation, it is also due in part to a growing dissatisfaction with the treatment choices presented to them by the medical community. For example, many women in this study claimed not to take medication like painkillers and BCPs because they did not want to be inundated with chemicals. There are women who want to learn to deal with and appreciate their cycles as they occur naturally and make time to adequately care for themselves. Casey is one interviewee who is part of a growing trend of women insisting on making time to sleep more and eat well during menstruation. These women are attempting to make menstruation part of their lives, not an inconvenience or intrusion.

Some women are also rejecting the notion that menstruation is an illness. These participants achieved this partially by accepting and incorporating menstruation into their lives and also by altering the way they think about menstruating. Loretta chooses to feel empowered by her cycles; she feels that her periods bring her closer to nature than a man and believes that her body is tied to other cycles, like that of the moon. Similarly, during the only conflict in the focus group, Tess and Doreen argued about alternate ways of viewing menstruation. Doreen saw menstruation as a shedding away of life and part of the body’s natural continual process of decomposition. She explained that humans are out of touch with death in general, especially when surrounded by the urban landscape. Doreen described the forest as simultaneous and continual life and death and saw the decay and renewal of the human body as a parallel to those natural forces. Tess, on the other hand, objected to this imagery and proposed that menstruation is instead a part of an ongoing process that is not terminal and is not equivalent to death. Doreen then challenged the notion of death as terminal. The links that these women draw between natural processes, like life, death and lunar cycles, are indicative of their desire to feel as connected to their bodies as they do to nature. The
medicalization of menstruation has in many ways detached women from their cycle and their bodies and has denaturalized and complicated their biology; therefore, several of the participants are trying to recapture, or perhaps discover for the first time, how their natural internal rhythms fit into the larger biorhythms of the planet.

Ironically, these women express a desire to simplify menstruation by relating it to one of the most complex systems in the known universe. Also, although illness is a part of nature, it is often treated as though it is an intrusion on the natural workings of living beings. Hence, in an effort to naturalize menstruation which is often treated or thought of as though it were an illness, it is automatically removed from the status of “disease”. In fact, many participants made a point of differentiating menstruation from sickness even though they admitted to feeling ill during their periods. This coping mechanism is important for these women in that it enables them to define menstruation as something positive and unique, something they can learn to appreciate. While enjoying being ill would be viewed as delinquent, feeling good about menstruation as a naturalized physical process can be considered healthy. However, this attitude and resisting medication use were often mutually exclusive; women who suffered from severe dysmenorrhea tended not to naturalize and embrace menstruation and were searching for ways to minimize its effects. It is, nevertheless, important to note that several women on BCPs were able to view menstruation positively because of these drugs. Not surprisingly, the less ill their periods made them, the more able these women were to resist disease ideology and appreciate their cycles. Thus, for a large number of volunteers, rejecting menstruation as a sickness was key in allowing them the ability to feel good about their periods. This strategy accounts for the greater number of women who felt more positive about menstruating later in life when compared to their feelings at menarche.
Participants also demonstrated a desire to feel better about menstruating and to resist emphasizing its taboo when explaining menstruation to a young girl. The majority of women in this study would choose to pass on positive information regarding menstruation to young girls. In particular, volunteers whose own menarche experience was unpleasant stressed that menstruating should not be feared. More specifically, they would present this phenomenon as an important and natural stage in a female's development. Again, the theme of naturalization recurs. With these statements it is possible to surmise that they wished that menstruation had been taught to them in this manner and by breaking the cycle of misunderstanding and fear they would be helping to reduce the effects of the taboo. Thus, this openness would enable both future generations and women of the present to appreciate and embrace menstruation as a part of their lives. These women understand that if menstruation is taught secretively or not taught at all, its taboo will persist. The role of parents in the sexual education of children was another issue that was addressed. While many interviewees and focus group members believed that the school system should teach the biology of periods, they stressed that it was still important for each child's family to play an integral part in the education process. Even though there was more family communication regarding menstruation in smaller communities, volunteers from both small and large locations equally highlighted the importance of family involvement. It is difficult to guess why smaller community participants received more family attention with regard to this subject; it may be coincidental or it may be a result of the more close knit nature of a smaller town or village. Nonetheless, some women from various cultures who were not taught about menstruation by their parents also believed that family should play a key role in menstrual education. Hence, the drive to minimize the effects of the taboo through adequate education did not vary locationally or culturally.
Interestingly, none of those who were interviewed volunteered ideas regarding the education of young boys concerning menstruation. Although they were not specifically asked about this, passing on information to both boys and girls, not just girls, would dismantle the taboo even further by shifting menstruation from the isolation of the female sphere of knowledge. Menstruation also affects men in that they can impregnate a girl when she begins to have periods. If they are not told this, then the onus falls solely on young women to be responsible about protecting themselves against unwanted pregnancy. However, during the focus group, Meg emphasized the importance of educating young boys about menstruation. Therefore, demystifying menstruation for both young boys and girls is one means by which the persistence of the menstrual taboo can be reduced.

By learning to feel better about menstruating by fighting the menstrual taboo, these participants were also able to resist female stereotypes. In declaring menstruation natural and empowering as opposed to a debilitating illness, volunteers were refuting the myth that women are sickly. Rejecting medication may be another method of demonstrating that women are neither sickly nor sickening. By refusing to be medicated, women have the opportunity to prove that they are able to be strong and healthy without the help of drugs. Ironically, accepting medication could also signify this same act of defiance by minimizing symptoms allowing women with more severe menstrual problems to function. Furthermore, participants who accepted medical intervention are simultaneously helping to discredit both the hyper-naturalization of women and their denial of any natural roots or ties by embracing the medicalization of menstruation; in other words, they are admitting that the natural state of a woman is not always convenient or safe for her and that at the same time it is not entirely unnatural or wrong to accept medicine. One illustrative parallel to this argument would be natural childbirth. Before the medicalization of childbirth, many women used
to die in labour. Now it is rare for a woman not to survive the birthing process. Therefore, by accepting medical aid in this circumstance, women are not denying any connection they might have to nature; instead they are protecting themselves and ensuring that this nexus continues. There is simply nothing unnatural about living responsibly, safely and happily. Basically, women are not more or less natural beings than men and should not be expected to refuse necessary medical treatment to preserve some mystical, pure state. Interestingly, women with more severe symptoms who do not wish to use medication are also invalidating stereotypes by exercising their free will and power over their own bodies. Essentially, by responding to their own needs which, in turn, enables them to feel better about menstruating, most of the women in this study are negating long promoted platitudes regarding women’s physicality.

Therefore, medicalization should not be viewed entirely as antagonistic. The research and improvements in knowledge regarding women’s health over the past few decades has been responsible for improving the female living standard. In considering menstruation, the advancements in pain relief have been beneficial for countless numbers of women. me included. Without the I would have very little quality of life with dysmenorrhea so intense and debilitating that every known painkiller lost efficacy. However, the dilemma that women face is one of a lack of choices. For those who experience side effects from BCPs and analgesics there exist few other avenues to explore. It seems as though traditional North American medicine is the only option presented to women who wish to treat their menstrual difficulties. It is not only problematic to find other remedies, but once they are discovered they are frequently too expensive for many women to consider because they are not covered under any health plan. Hence, without adequate treatment, the stereotype of women as “sickly” persists. This conundrum is perhaps one explanation as to why
some women are reluctant to rebel overtly against the menstrual taboo and risk seeming weak. Instead, they resort to finding what feels right for themselves more quietly and subtly.

5.3 - Future Research

These findings are not conclusive and only present one part of a very complex puzzle. There exist many opportunities for future research endeavours which would broaden the knowledge base concerning menstruation. Although many non-locationally based results were found in this study, it is still possible that geographical variation exists. I primarily defined location in terms of population size. However, it can also be categorized by culture, pollution level, climate, proximity to certain natural and/or human-made landscape features or linguistic boundaries. Location can also be examined on a micro scale, for example, in terms of household or neighbourhood. Although it is doubtful, by looking at menstruation at these differing scales a more consistent pattern of menstrual variation may become apparent. The only real possibility for uncovering rural/urban differences would be to compare these two types of location in the United States where access education to health care is not universal.

Research regarding the effects of pollution on menstruation is one area that also requires further attention. The knowledge that the scientific community has acquired with regard to endocrine disruptors and their effect on humans and other living beings is recent and currently being developed. As this research progresses it will no doubt provide valuable insight into the changes induced by estrogen mimics. Moreover, more studies that examine the effects of these chemicals specifically on women must be conducted because much of the work in this area concentrates on men and issues of concern to them, like sperm counts. Scientists need to explore the possibility that hormone mimics can create side effects that are both positive and negative for menstruation. The
long term effects of these chemicals must also be studied. Once this analysis is completed, more distinct geographical or locational patterns in menstrual experience may be revealed.

Another area which requires further study is that concerning the effects of climate on menstruation. It is logical that extreme changes in climate and temperature would affect menstruation because they alter the workings of the body in general. However, factors aside from temperature, such as altitude and humidity, should also be considered when exploring this topic. A larger sample size and more focused project may show more distinct patterns with regard to how various women's cycles change when influenced by climate. This has implications for women who travel; it is important that they understand that a shift in their normal menstrual rhythm is not necessarily cause for concern. Understanding this phenomenon could help women plan and adjust for such changes, as well.

Examining potential differences in class and culture with regard to physical experience and attitude surrounding menstruation could also reveal new information. The women in this study were fairly uniform with regard to their social class background; most were middle class. However, women from lower classes might have different experiences concerning their interaction with the medical community and treatment. These women may not have the funds to access either traditional or alternative medical aids if they are dysmenorrheic, amenorrheic or menorrhagic. There could also exist differences in lower class educational practices and attitudes surrounding menstruation. Similarly, upper class women may possess distinct menstrual experiences. Or, conversely, such research could demonstrate that no class patterns exist which would be an equally important finding. Although defining class would be problematic, this avenue is nevertheless worth exploring. Also, looking at how women from different cultures deal with the physical experience and education of
menstruation would be useful. Some work has already been completed regarding this issue; yet, further research measuring the differences in experience between women who grew up with immigrant parents and women who were raised by parents who were born and raised in North America from various cultures could prove to be valuable. It would also be prudent to conduct cross-cultural studies. There is tremendous potential for work to be done in the areas of class and culture and their impact on menstrual experience and attitude.

More research in this area also needs to be done with regard to non-able-bodied women. Differently-abled women may possess dissimilar views concerning menstruation because of differences in how they feel about their bodies and differences in how they manage their periods. For example, the way that this monthly change interferes with their lives could be unlike the way that able-bodied women are affected by menstruation. Differently-abled women could feel as though menstruation is more of an imposition than able-bodied women because of the physical care and maintenance required during this time of month. Conversely, non-able-bodied women might possess more positive feelings regarding menstruation because their periods may be important in defining their identity as women when other societally defined, stereotypically feminine attributes are lacking. Furthermore, it would be useful to examine how women with differing mental abilities, like those with mental retardation, feel about menstruation.

Another menstrual issue that needs to be explored is the importance of education. This study's results indicate that women wished that they had been better educated about menstruation prior to menarche. Therefore, parents should be encouraged and helped by pediatricians and schools to teach their daughters and sons about menstruation at a young age. Because girls can menstruate as early as six or seven years old, it is essential to educate them as soon as they are able to
comprehend this kind of information. Schools should also play a central role in teaching about menstruation. However, this may be problematic because of varying cultural beliefs. Perhaps developing an optional after school sexual education program might allow girls and boys to learn details that their parents might be too shy to discuss. Bringing about this level of awareness could aid in making menstruation easier for younger girls under the age of 13. For example, a few participants who began menstruating in elementary school complained of not having access to pad dispensers in the school washroom. Similarly, they resented being forced to wear tampons at such an early age when taking swimming lessons or competing in swim meets. If adults were more sensitive to needs of a younger menstruating girl, the early years of menstruation need not be so traumatic.

The results of this study also indicate that research regarding the effects of medication on women should be pursued. Because so many participants did not respond well, or responded differently, to BCPs and analgesics, it is important for the scientific and medical communities to rethink the kinds of menstrual treatment options that are made available to women. New research efforts should be aimed at reevaluating and understanding the plethora of physical reactions that various women can have to medication. Furthermore, studies exploring the merits of alternative methods like acupuncture, massage and meditation, should be initiated. It would be valuable to measure in more detail how women feel about medication and treatment for their periods; they need to have more input into how menstruation is dealt with by the medical community.

Menstruation might also be better understood if research were conducted on the entire menstrual process. This project, like most studies, has concentrated on the bleeding phase of the menstrual cycle. Therefore, much information is missed when emphasis is placed solely on the pre-
menstrual and menstrual stages. The knowledge base concerning women's feelings and experiences remains incomplete when post bleeding experiences are ignored. The various parts of the menstrual cycle seem disconnected when only one phase is exhaustively explored. What happens to a woman in between periods may reveal clues as to why and how her menstrual patterns vary and what she can do to help herself. For example, if a woman is experiencing severe dysmenorrhea, there may be very little she can do to relieve these symptoms; but, by tracing her behaviour all month she may discover that during months that she eats more foods that she is allergic to her dysmenorrhea is worse. Doreen noticed this kind of pattern in her own cycle; she finds that her physical experience is less tolerable when she consumes foods containing substances that she is allergic to, like caffeine. Each woman must be encouraged to become familiar with her own complete cycle and identify her own individual patterns. It would be difficult for a woman to accurately trace her body's rhythms by only focusing on one or two phases of her menstrual cycle. Therefore, researching all parts of this cycle could help women understand their bodies better and reveal how and why individuals' experiences vary from month to month. Furthermore, it seems as though only the parts of the menstrual cycle that are emphasized are those that are considered most problematic. By focusing more on the inter-menstrual positive weeks where few if any problems exist, menstruation may seem less taboo or at least may not seem so negative to so many women.

It would also be useful to compare this data with data from a State from the U.S.A. More rural/urban differences might become evident in such an undertaking because of the discrepancies in subsidization with regard to health care and education between rural and urban locations in the U.S. The States results may, indeed reveal that the education and health care experience in rural U.S. areas is substandard. As a consequence of these differences, American rural women may possess
different attitudes of menstruation when compared to their urban counterparts. The urban American women might, then, be found to have similar feelings and experiences to the women from Ontario in this project. Such a result would be valuable in that it could demonstrate the importance and power of universal health care and subsidized education.

Finally, only studying women's views and experiences of menstruation would not provide a complete depiction of the social taboo surrounding this phenomenon. It is essential to conduct research on men's views of menstruating. By comprehending how men feel about menstruation and when and how they are taught about it, it would be possible to understand their perspective of the taboo. Using this information as an educational tool could contribute to dispelling menstrual myths and fears. Helping to make men more comfortable with this subject would be a major step in enabling women to feel more at ease with their cycle because focus group members identified male discomfort with menstruation as being one of the main contributions to their own desire to hide their periods. Also, by explaining how important menstruation is to the girls and women around them, men might then see the relevance of menstruation to their lives. Moreover, men could be taught to be more in touch with their bodies and monthly rhythms so that they could gain a deeper understanding of women's experience and provide stronger support for menstruating.

5.4 - Conclusion

This project has shown that menstruation is a complex phenomenon which is influenced minimally by location. This is largely because menstrual physical experience is largely determined by each woman's individual biology regardless of the strong social and physical pressures surrounding and shaping it. In the broader context of medical geography, this research has provided evidence that ethnographic methodology is an important and useful way of determining and
understanding physical experience. More importantly, this project questions the degree to which psychological factors can influence physical events. Thus, unlike previous scholars I dispute the idea that the physical symptomology involved in menstruation is psychologically perpetuated; instead, the social influences which are responsible for forming women’s attitudes do very little to alter their physical experience. Hence, women’s feelings about menstruation are linked to its social taboo status. This status forces women to be secretive about menstruation which, in turn, often makes menstruating inconvenient and embarrassing. More research is needed to fully understand all of the forces, including locational ones, that help create the menstrual taboo and better and earlier sexual education is required to minimize the forbidden nature of this natural process; as Koeske explains, it is essential to integrate the whole person for successful health research (Fausto-Sterling, 1985: 108). But, in order for the taboo to be terminated the desire for its end must first exist. The women in this study seemed to want to break free from the confines of menstruation’s current status; therefore, there is hope that within the next few decades menstruation might become less taboo.
GLOSSARY

Amenorrhea: A medical term meaning to not menstruate or to miss one or more periods.

Dysmenorrhea: A medical term meaning severe menstrual or uterine muscle cramps.

Endometriosis: A medical term referring to excessive growth of the endometrium, or lining of the uterus, outside of the uterus.

Menorrhagia: A medical term referring to excessive blood flow during menstruation.

PMS: An acronym for Premenstrual Syndrome which refers to a change in mood and/or physical state occurring around the time that a woman menstruates, usually one week before the onset of bleeding.
REFERENCES


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Appendix A

Figure 1 - Menstruation Questionnaire

Hello, my name is Jenny Lass and this questionnaire is part of my Masters thesis in Geography at the University of Toronto. I am studying the menstrual experiences and attitudes of women who have grown up in various kinds of urban and rural settings. Your identity will be kept confidential in every copy of my final report and I would like to thank you for your time in helping me by filling out this short survey.

Name (OPTIONAL, or only use your first name if you wish) __________________________

Date __________________________

1. In what year were you born? __________

2. What is your occupation? __________________________

3. What is your level of education? __________________________

4. In what city/town/village (please circle one) did you primarily grow up? __________________________

5. At what age did you get your first period? __________________________

6. Do you menstruate regularly (ie. at least once a month)? __________________________

7. If you do not get your period regularly, how often do you menstruate? __________________________

8. Have you ever experienced discomfort (emotional or physical) that you associate with your period? __________

9. If you answered “no” to question 8, please skip to question 13. If you answered “yes” to question 8, how long after the onset of your first period did you begin to feel this discomfort? __________________________

10. Please choose which symptoms below you usually experience and indicate their severity by rating your symptoms from 1, being not severe, to 10, being very severe. Several different symptoms may share the same rating.

   ___ menstrual cramps ___ anxiety/stress
   ___ back pain ___ insomnia (sleeplessness)
   ___ bloating/weight gain ___ nausea
   ___ headaches ___ tiredness
   ___ increased energy ___ vomiting
   ___ breast tenderness ___ depression/sadness

11. Please add any other symptoms you have experienced that are not listed above and indicate how severe they are using the same rating system as explained above. __________________________

12. If you are on any medications or are you undergoing any treatments to help relieve these symptoms, please describe them, how long you have been using them and how well they are working for you. If you are not, please skip to question 13. __________________________

13. Are you on the birth control pill? ______ If you are not, please skip to question 15.

14. Has being on the birth control pill changed your periods? ______

15. Whether or not you have menstrual difficulties, I may wish to speak with you. Would you be interested in being contacted for a more in-depth interview or to participate in a focus group discussion? ______ If so, please write your telephone number(s) and area code(s) in the space provided so that I can get in touch with you sometime before April 1998. __________________________

16. If you wish to add any information regarding your menstrual experiences or attitudes, please feel free to do so in the space on the reverse side of this survey. Thank you again for your participation and interest!
Figure 2 - Interview Questions

1) Tell me about yourself. What are your hobbies? Do you play any sports? Do you have a job?

2) Where do you live? How long have you lived there? What have been your living patterns throughout your life? Have you ever noticed a difference in your periods throughout your life?

3) When did you first learn about menstruation? Who told you about menstruating? What were you told?

4) What was it like the first time you menstruated?

5) How did you and do you now feel about menstruating?

6) Why do you think you feel this way about menstruation?

7) What sort of treatments have you tried to help your menstrual difficulties/why or why not? Have they been effective? Did you consult a physician/why or why not? What was his/her reaction?

8) What are your coping strategies?

9) Do you ever change your behaviour around the time of your period? Why?

10) How much does it interfere with your life or others’ lives?

11) Do you ever talk with friends or family about your experiences with menstruation?

12) Describe your experience with menstruation (including a typical period) and any other experiences you might have heard about.

13) What significance does menstruation have for you?

14) How would you describe menstruating to a young girl of about 8 or 9 who knew nothing about it?

15) How would you react if someone magically offered you the chance never to menstruate again?

16) What are some positive things about menstruating?

17) Do you have any (other) health problems?

18) Would you be interested in participating in a focus group? Until when will you be in town?
Figure 3 - Interview Consent Form

I ____________________________ agree to participate in one interview with Jenny Lass at a time and location that are convenient to me. I understand that she will ask me questions about my menstrual experiences and that the interview will be tape recorded. I also understand that I can ask for the tape recorder to be turned off at any time, for any portion of my tape recorded interview to be erased and can refuse to answer any questions that I am asked to respond to. I understand that my identity will be kept confidential in every copy of the final report of this project and that my participation in this interview will not benefit me in any way. I understand that the information that I volunteer will be used to bring more understanding to menstruation in North America.

________________________________________  ____________________________
Signature                                      Date
Figure 4 - Focus Group Questions

SECTION 1 - MYTH AND SOCIETY

1. What do you think society’s perception is of women who have PMS and other menstrual problems? Why?
2. What are some of the reasons that women have menstrual difficulties? (PMS, food cravings, mood swings, bloating, irregularity, cramps)
   - received negative attitude from mother
   - are neurotic/have psychological problems
   - are rejecting their femininity
   - are not well exercised
   - are from big cities as opposed to rural areas
   - need to lose/gain weight
Do you believe these reasons?
2a. Do you feel that there are things that women shouldn’t do during their periods?
   - swim (or do you think that bleeding stops in water)
   - wash hair/bathe
   - have sex (or do you think women can’t conceive when menstruating)
3. Do you think that menstruation would be problematic for women in some occupations? Do you think that women should not participate in some occupations because of menstruation?
4. What role do you feel the medical community plays in menstruation?
5. What could be done to change attitudes about menstruation (ie. prevent it from being so taboo)?
6. Why do you think it is so taboo?
7. When should women start learning about menstruation? Who should tell them?
8. Is a woman who is not fertile/does not menstruate less of a woman?
9. What euphemisms can you think of that refer to menstruation? What are their connotations?

SECTION 2 - MEDIA AND PRODUCTS

1. How do you feel about how the media treats menstruation (commercials, TV shows, movies, magazines - SHOW EX.)
2. How would you like to see menstruation portrayed in the media?
3. How do you feel about the products that are available (tampons vs. pads)?

SECTION 3 - PERSONAL EXPERIENCE

1. Would anything make menstruating easier for you? What?
2. What kind of reactions have you had to your menstrual problems? What reaction would you like?
3. What advice would you give to someone who is having severe problems?
4. What are some positive and negative aspects of menstruating?
5. Have you ever spoken to a man about menstruating? What was his reaction?
6. Have you ever spoken to a woman your grandmother’s age about menstruating? What was that like?
7. How do you deal with the emotions you feel around the time of your period? Do you ignore them? Do you try to rationalize them? Do you enjoy them?
8. Is there anything you wish that had been different in your preparation for menstruation?
9. Have you ever tried alternative treatments for your period (ie. teas, massage)?
10. What influences your period (stress, diet, exercise)?
11. Does menstruating affect your thinking?
Figure 4 - Continued

12. If you didn’t have to menstruate, would you choose to?

SECTION 4 - LOCATION

1. Have you noticed seasonal/climate change differences in your experience of menstruation? What about dietary differences?
2. Have you noticed a difference in your periods or attitude regarding menstruation when moving around to new locations?
3. Why do you think that there might be a locational difference in symptoms?
Figure 5 - Focus Group Consent Form

I __________________________ agree to participate in one group discussion led by Jenny Lass. I understand that I will be interacting with several other women during the focus group and that we will be talking about menstruation. I also understand that the group discussion will be video recorded and that I can choose to stop participating in the focus group at any time, ask for any portion of the video tape on which I am expressing my views to be erased and can refuse to answer any questions that I am asked to respond to. I also understand that participating in this group will not benefit me in any way and that the information I provide will be used to bring more of an awareness of menstruation in North America. I understand that my identity will be kept confidential in every copy of the final report of this project.

____________________________  ______________________
Signature                                      Date
Figure 6 - Focus Group Receipt Form

I ______________________________ acknowledge that I received $10 cash from Jenny Lass.

__________________________       ________________________
Signature                      Date
## APPENDIX B

Table 1 - Participant Information

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