CHAPTER I
INTRODUCTION

The controversies related to equality of sexes has agitated the minds of philosophers, politicians, scholars and women activists. Evidence has been put forward by both the sides and, to a great extent it has been accepted that there hardly exists any difference between them with regard to mental abilities. Viewing the problem in correct perspective, it would impress the unbiased scholars with the fact that whatever and wherever differences exist, they may be attributed to early child rearing practices and socio-cultural conditioning. These practices have been in vogue since time immemorial with the result that the perceptions have become tinted and differences are perceived accordingly. Our point of view is amply vindicated by the 'Socialization Ideology' hypothesis propounded by Perrucci, Potter and Rhoads (1978). It has also been observed that sex-typing influences participation in family roles and joining labour force (Wrigley and Stokes, 1977).

It is also important to note that the differences between the two sexes exist in terms of employment patterns, occupations entered, financial returns and unemployment rates (Women's Bureau, 1979). Almquist (1979) has pointed out that women are not paid as much as their men counterparts. Also educated women obtained lesser returns in occupational status (Spaeth, 1977).
It is quite evident that women have to face many frustrating situations in their lives and they have to evolve adjustment mechanisms to counteract such stresses and strains of life.

But overt difference between the two sexes is a reality and the differences are mainly physiological in nature and start at the age of puberty. Menstruation is a physiological process which is related to procreation and it is probably the most significant process during the life span of a woman. It is unfortunate that a purely physiological process has been misconstrued and interpreted ambiguously. In many regions of India a menstruating woman is required to eat her meal separately. They may not be allowed to participate in religious prayers. Incidentally, such a belief is universal and it is contended that the menstruating woman is unclean, dirty and often taboos are associated with such people (Bardwick, 1971). Ignorance adds fuel to the fire and further complicates the matter. In such a case, it is desired that we explain the term scientifically. Clear understanding may be helpful to women in adjusting to their life and work.

**MENSTRUATION AS A PROCESS**

Dawn (1980) defined menstruation as "the monthly vaginal bleeding coming at an interval of about 28 days from the oestrogen-progesterone primed uterine endometrium". This process continues during the reproductive years except during pregnancy and some times during lactation. Clark (1981) reported
menstruation to be a regular process of preparation for pregnancy which is repeated every month except when a woman actually is pregnant. This physiological process starts from the beginning of sexual maturity at puberty and continues till menopause. Similar views have been expressed by Jones (1978) who contends that menstruation is the "cyclical shedding of a progestational endometrium accompanied by blood". It is important to note that every vaginal bleeding may not be considered as menstruation because the significant aspect is oestrogenated endometrium which may occur for a few years after menarche and last till the onset of menopause (Dawn, 1980).

The menstrual process is influenced by the interaction of hormonal secretions of pitutary and ovary. This leads to a series of changes in the ovaries and uterus. Regulation of normal menstrual cycle depends on striking a balance between the hormonal secretions of the two glands. The disbalance may lead to irregularity or absence of the periods or any other menstrual disorder.

The menstrual cycle starts at the onset of menstruation and ends at the recurrence of the next one.

The ovum in between this period is released on an average on the 14th day of the menstrual cycle and if the egg is not fertilised during the remaining fortnight then the endometrium (tissue lining of the womb) is ejected through the blood (Hawkins and Bourne, 1971). This completes the menstrual cycle.
MENSTRUAL CYCLE LENGTH

Researches done by gynaecologists on the menstrual cycle length show that it is usually one of 28 days. Schoeneck (1957) believes that only 10-15% women follow the 28 + 2 day cycle. Hawkins and Bourne (1971) is of the view that an exact cycle of 28 days is present only in a small proportion of healthy women. They reported that there may be departure of two or three days from the 28 day rhythm, while in others the cycle may be of 21 days.

Israel (1976) studied the menstrual cycle of obstetrics and gynaecologic patients and found it ranging between 26 to 34 days with an average of 28.6 in 80% of the sample. Jones (1978) is of the view that menstruation normally occurs at the interval of 24 to 34 days (mean = 28). Scommega and Dmowski (1977) believe that the length of menstrual cycle varies among women and does not remain constant throughout the reproductive years in the same individual.

The cycle of 21 days may be considered normal unless accompanied by some pathological symptoms. Thus it can be inferred that, by and large, menstrual cycle conforms to 28 days, but the variation may not be completely ruled out.

MENSTRUAL DURATION

Another important aspect of menstruation is the duration of the periods. Dawn (1980) reported that the duration of menstrual
bleeding extends from the first to fourth or fifth day of the cycle. The duration of the period, according to Jones (1978) ranges between 1 to 8 days with a mean of five days. The general consensus is that the duration of menstrual bleeding lasting between 2-7 days is considered to be normal.

Like the menstrual cycle length, the duration of menstrual bleeding is not constant in the same individual. It also varies from individual to individual and even in the same individual from time to time. The fluctuations may be attributed to a host of factors such as age, health, nutrition, climatic changes, emotional experiences, psychological stress, etc. The duration of menstrual bleeding has been reported to vary considerably with the individual, but remain in the same person from month to month (Hawkins and Bourne, 1971). It has been reported that young women suffering from iron deficiency may have excessive bleeding with long duration (Dawn, 1980; Hawkins and Bourne, 1971).

MENSTRUAL DISCOMFORT

Human beings are self-adjusting organisms. Man is required to adjust to both the internal as well as the external environments. During hunger the contraction and expansion of the stomach muscles give rise to the feeling of pain. During cold weather, shivering may be controlled by bringing together all the parts of the body. It could be logically proved that the
organism has to evolve techniques to adjust to the internal and external environment. It is also observed that physiological changes taking place inside the human organism result in a sort of warning to the individual. Stretching the same logic to the physiological process of menstruation, it is observed that the change is accompanied by feeling of discomfort. Prior to and during the periods, the feeling of discomfort could also be explained in terms of hormonal interaction that takes place between the ovary and pituitary on the fourteenth day before the onset of the next menstrual period. These physiological changes take place inside the human organism and it is felt by the individual as uneasiness, minor headache or backache, laziness, etc., prior to the onset of menstruation. These symptoms during the periods are termed as dysmenorrhea by gynaecologists. This gynaecological term is referred to as feeling of discomfort by psychologist and the same term is used by psychiatrists as distress. Gynaecologists classify dysmenorrhea as primary and secondary. This classification is based on the severity of the symptoms. The psychologists classify the feeling of discomfort in terms of its intensity. Sherif (1976) is of the view that relationship between menstrual and premenstrual distress and attitudes regarding menstruation, masculinility-femininity and other similar variables is quite complex, and may be mediated by many factors including religious orientation, self esteem, social competence, traditional vs. modern attitudes etc.
Attempts have also been made to study the degree to which the environmental factors relate to menstrual cycle symptoms. Moos (1977) reported that same type of symptoms are more physiologically based (e.g., pain, water retention, autonomic reaction), whereas others are more environmentally based (e.g., change in concentration and general behaviour). The former leads to physiological and the later to psychological changes. It is more likely that physiological and environmental factors usually interact or combine to result in high or low levels of reported complaints.

PREVALENCE OF MENSTRUAL DISCOMFORT

Researchers differ in their views regarding the prevalence of menstrual discomfort. Kessel and Coppen (1963) reported that only 12% suffer from severe form of dysmenorrhoea. While Andersch and Milson (1982) found that 72% Swedish women of 19 years age group suffer from dysmenorrhea. Sehgal, Marwah and Tiwari (1972) studied the prevalence of the discomfort among Indian women of the same age group, and observed that the prevalence of discomfort was 44.8%. Vohra and Sen (1985) reported an investigation, conducted on healthy women, that 84% among them suffer from pain and other troubles during menstruation. The differences among the percentage of prevalence of menstrual discomfort may be attributed to the differences in age, health, marital status and socio-economic status of the sample studied.
MENSTRUAL PATTERN

The three aspects of menstrual mechanism namely duration of menstrual bleeding, cycle length and feeling of menstrual discomfort can be termed as menstrual pattern. The menstrual pattern has been defined as "cyclic pattern of a women's menstrual duration, cycle length and prevalence of menstrual discomfort" (Khatoon, 1986).

Researches in India on menstrual pattern are few and far between. The term menstrual pattern has not been used by researchers, though isolated studies have been conducted by gynaecologists on individual aspect of menstrual patterns. Also no national level averages have been reported for menstrual cycle length, menstrual duration, and of feeling of discomfort. Khatoon (1986) determined the averages for the above mentioned aspects and they are reported below. But these averages were based on a small sample of women students of Aligarh Muslim University, Aligarh.

<table>
<thead>
<tr>
<th>Pattern Aspect</th>
<th>Range</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menstrual Cycle</td>
<td>21-33</td>
<td>28.70</td>
</tr>
<tr>
<td>Menstrual Duration</td>
<td>2-09</td>
<td>4.62</td>
</tr>
<tr>
<td>Menstrual Discomfort</td>
<td>0-03</td>
<td>1.76</td>
</tr>
</tbody>
</table>

These averages cannot be said to represent the national averages but at least broad inferences could be drawn. Thus there is a need for concerted effort to determine the national averages.
MENSTRUATION : SOCIO-PSYCHOLOGICAL ASPECTS

Menstruation as a physiological process has been discussed but the concomitant behavioural aspects have also to be highlighted. We remain, by and large, unaware of the physiological process and only respond to behavioural aspects.

It has been pointed out that external factors as well as personality factors influence almost all the aspects of menstruation -- menstrual cycle -- duration and feeling of discomfort (McClintock, 1971; Shanan, Brzezinski, Sulman and Sharon, 1965). Many external factors some times termed as environmental or situational factors, influence human behaviour in general and menstruation in particular. The response to menstruation is culturally conditioned. Scommega and Dmowski (1971) have dealt in detail with this aspect. They have shown that throughout the history bleeding was associated with violence, sickness and death. The concept of periodic loss of blood without visible harm to a woman was difficult to accept. Thus menstrual blood loss was viewed as an evil event and menstruation was considered as a morbid condition. They further comment that in most cultures during menstruation a woman was believed to be impure, unclean and various social restrictions were imposed upon her during this period to limit her contact with other member of society. Even today, menstruation is shrouded with misconceptions, doubts and taboos. In most Indian communities a menstruating woman is asked to sit apart and eat her meal separately. They may not be allowed to perform puja.
The feeling that the menstruating woman is dirty and unclean is widespread in Indian society. Bardwick (1971) contends that menstruating woman is considered as dirty and unclean. It may give rise to negative feelings and "the menstruating woman is likely to internalize it and also to resent it."

It is easy to infer that socio-cultural as well as environmental factors influence the menstrual patterns. Keeping this in mind we selected depression and anxiety and noise as the independent variables that may affect the menstrual pattern.

**NOISE**

Noise, temperature, illumination, etc., are the various exteroceptive stimuli that influence human behaviour but noise has been recognised as the most significant determinant of behaviour of the modern technological era. There are toxic pollutants that are producing ecological imbalances but the noise pollution in cosmopolitan cities is a real threat to the quality of life. It has been found to be the worst form of environmental pollution. It is the principal killer, though its killing is slow and insidious (Latif, 1976).

Noise has been defined as the unwanted sound. Those sounds to which no definite pitch can be assigned are designated as noise. Its main characteristic is the great irregularity in vibration (Ahmad, 1977). It is usually unwanted, unpleasant irregular and intense. Blaring of loudspeakers, sound produced by trains, trucks, busses and automobiles may be cited as
examples. Added to these is the noise produced by supersonic jets which makes the city life unbearable to common people.

**Effect of Noise: Mental and Physical**

Shirreffs (1974) reported that modern civilisation imposes tremendous noise burdens on human hearing mechanism accelerating normal hearing loss. Pollock and Barltell (1932) pointed out that the effect of noise depends on the kind of noise and the kind of work. Mental work is effected more than manual work by noise. The effect of noise is greater when it is irregular and also when it is uninteresting. Laird and Coye (1929) reported that the noise that have a higher pitch are more annoying than those of lower pitch. The sound of either very high or very low tone qualities are more irritating than those of middle zone. Much earlier Morgan (1916) conducted a study in which he found that noise also causes muscle tension. Latif (1976) reported that people in noisy cities become victim of cardiovascular, respiratory and neurological diseases. Noise produces temporary constriction of the smaller arteries speeding up pulse and respiratory rates, while continuous exposure to loud noise results in dizziness, headache, fatigue, rise in blood pressure, and abnormal heart rhythm. Broadbent (1957) observed that the sudden and unexpected noise produced marked changes in the body, such as increased blood pressure, increased heart rate, and muscular contraction. The flow of saliva and gastric juices may be restricted. These changes wear off as a
person becomes accustomed to the noise. He further pointed out that even if a person is accustomed to an environment where the noise level is high, physiological changes occur. Smith and Laird (1930) studied the effect of noise on stomach contraction. They observed that marked gastric changes occur on exposure to sudden and unexpected noise even when the exposure time was as short as 10 minutes. Shatalov (1962) found the differences in cardiovascular functions of textile workers exposed to 25-95 DB and those exposed to 114-120 DBs. The most significant difference found was a decrease in blood pressure and low heart rates during work. Ray, Brady and Emurian (1984) studied cardiovascular effects of noise during complex task performance. They draw a conclusion that the task performance was affected with significant increase in mean blood pressure, heart rate and respiration rate they also found the significant decrease in pulse rate. The noise exposure was found effecting further decrease in pulse rate and further increase in the average blood pressure.

The investigation on both animals and human subjects have revealed that noise can effect the hormonal level in the blood stream. Bugliarellow, Alexander, Barnes and Wakstein (1976) found that exposure to low frequency sound of 150 Hz, released oxytocin, the hormones that stimulate uterus during labour; noise-induced changes in oxytocine level may adversely affect
the foetus and birth process. The ill effects are reflected in the behaviour of the baby. They cry and are prone to gastrointestinal disorders.

Takahashi, Isao and Kyoshoki (1968) have reported a survey on influence of jet noise on the physiological growth of infants and school children living around air-fields. Results show a higher premature birth data, and slow growth rate of children. Cameron, Robertson and Zaks (1972) explored the urban parameters of noise and sound pollution. The result represented a possible association between sound exposure and increased prevalence of both acute and chronic illness.

In recent years experts in the field of psychology and gynaecology have forcefully advocated that noise may effect menstruation. The effect of auditory stimulation upon the reproductive organs and functions have also been studied by Zondek and Tamari (1976). They reported that the intense sound of 100 DB from an alarm bell does not affect the general behaviour of female rats and rabbits. Philipp Barne and Neuton (1970) suggested that the noise may effect the menstruation, fertility and pregnancy condition of the women working in noisy environment. Mehta, Mazumdar, Pathak and Skandhan (1977) made an attempt to study auditory reaction time (RT) during different phases of menstrual cycle. The result indicated that the RT was found on the peak on 15, 16, 17 and 18 day of the cycle. The increased hormonal level may be responsible for affecting the threshold of sensitivity.
ANXIETY AND DEPRESSION

Anxiety as an emotional response plays a major role in almost all the gynaecological problems, manifested both behaviourally and physiologically. Anxiety is experienced as a "foreboding dread or generalized anticipated fear or feeling of threat in apprehension" (Sharma, 1986). It is also defined in terms of perceived signal of danger which mobilizes the human organism's resources to counter the threat (Basowitz, Persky, Korchin and Grinker, 1955). It leads to disorganization and is observed as disturbances of human functioning. It is true that anxiety has many facets and may be expressed as feeling of vague, uneasiness, fear, anger, restlessness, irritability, etc. (Jersild, 1978). Anxiety may vary in degree and intensity ranging from mere nervousness to neurotic behaviour but its consequence may lead towards either neurosis or integrated healthy behaviour (Coleman, 1981; Basowitz and others, 1955). Freud (1936) while differentiating objectives and neurotic anxiety contends that the latter may have chronic manifestations due to repeated exposure to stressful situations. Anxiety in contemporary literature is classified in terms of "state anxiety" and "trait anxiety" (Cattel and Scheier, 1961). State anxiety is also called free-floating anxiety and is marked by changes in intensity and fluctuation. Trait anxiety is relatively stable and becomes an integral part of one's personality. It has been observed that those who have anxiety
as personality trait react in situations that contain some degree of stress. They perceive a wide range of objectively nondangerous circumstances as threatening, and respond to these situations with a state anxiety (Spielberger, 1966). Kaplan and Sadock (1981) categorize anxiety into four major types depending on the nature of feared consequences. These are super ego anxiety, castration anxiety, separation anxiety and impulse anxiety. They are of the opinion that "these varieties of anxiety are viewed as having their source and taking their colour from various points along continuum of early growth and development". Shastri (1986) is of the view that the source of anxiety producing situations are increasing because of the demands of changing society marked by excessive competition, unemployment, adjustment problems in society as well as in the home.

DEPRESSION

Depression is used in many ways to describe a mood, a symptom, a syndrome as well as specific group of illness (Mendels, 1970). Arieti (1968) states that "depression" commonly refers to an aftermath of some negative emotional feelings. Some times it is viewed as symptoms and at other times it is considered as clinical entity. But since long it is contended that the essence is the persistent negative feeling which leads to "abnormal lack of feeling of pleasantness when compared with normal average" (Brown and Minninger, 1940). The feeling of
unpleasantness may often be accompanied by such somatic conditions as numbness, paraesthesia of skin, alternation of muscle tone and decrease in despiration. There is also retardation of movement, rigidity in thinking and general feeling of weakness. Most of us particularly experience such feeling but this emotional state is most difficult to describe and to analyse. It is quite evident that depression seems to be reaction to psychological processes that have occurred at cognitive level.

The depressive mood when extending over a considerable period of time interferes with the daily activities of the individual. Lack of motivation to face the situation may lead to abnormal depression (Landis and Bolles, 1957). Depression is defined as "emotional state characterised by extreme dejection, gloomy rumination, feeling of worthlessness, loss of hope and often apprehension" (Coleman, 1981). Bakal (1979) reported that clinical depression is simply more intensive form of normal condition of feeling unhappy or down, and has also been reported to differ qualitatively from normal depression. It is interesting that in majority of the cases initially the symptoms are mild and disappear within a short time while in others, the symptoms are more persistent for which medical assistance is needed. Depressed people are classified on the basis of symptoms which includes sadness, pessimism and self dislike. It is also marked by lack of motivation and difficulty in concentration. Innumerable symptoms have been reported ranging from variation in mood to anxiety and a comprehensive list has been
Psychologists classified depression into different categories, depending upon the intensity, duration, nature and origin of the symptoms. Brown and Menninger (1940) classified depression as mild depression, deep depression and suicidal depression. Coleman (1981) and other psychologists classify it as depressive neurosis and depressive psychosis. People suffering from depressive neurosis react to some distressing situation with more than the usual amount of sadness. The reaction may last for weeks or even months. And it is more frequent in women than men.

There is extensive evidence to indicate that many normal women suffering from depression display sharply decreased appetite, low self esteem and feeling of inferiority. Like minor emotional maladjustment, they represent ways of dealing with frustration and conflicts. The prevalence of clinical depression is at least twice as high in women than men (Paykal, 1976). Coleman (1981) has also reported that neurotic and psychotic depression was found to be more frequent among women. Psychologists (Stranger, 1976; Mendels, 1970) talk about the reactive depression. It is a reaction and not an illness, a response to condition of loss and disappointment. The response is highly subjective. The condition that may depress one individual may not effect the other. Some times the depression is internalized and manifested through the physical symptoms.
The problem is more frequent with menopausal women who complain of physical symptoms. Mendels is also of the view that "depressed women frequently report changes in their menstrual cycle. The most frequent problem is a lengthening of the usual cycle, with much lighter flow. Menstruation may stop completely for several months at a time". Extensive as well as intensive research work has been done to investigate the genesis, symptoms and ramification of anxiety and depression.

The two terms, anxiety and depression, often evoke a semblance of similarity because the symptoms of the two overlap (Clum, 1984). Generalized anxiety disorders are often accompanied by mild depression. They also occur without marked depressive symptoms. But experts (Derogatis, Kalarman and Lipman, 1970) have evolved strategies to differentiate between the two terms because they are definitely not synonymous. Differences could be found out with regard to the pattern, the level and the quality of symptoms. More precisely Derogatis, Lipman Cov and Rickels (1972) state that with regard to the level of symptoms, individuals with anxiety states typically score higher than individuals with depression on both the severity of fears and the number of phobic objects. They further point out that anxiety neurotics differ in their pattern of symptoms from depressive neurotics. The depressive neurotic does not have any interest in his environment and he may also have suicidal ideation. These two symptoms are not necessarily manifested by
anxiety neurotics. Clum (1984) suggested that "as similarities exist between anxiety and depression on the molar level, significant differences between them exist on a molecular level. The similarity of some features of anxiety reaction and depression does not mean that the two syndrome are in the same category". The overlapping as well as distinguishing features should be well understood, while examining the effect of these two personality variables.

ANXIETY AND DEPRESSION IN RELATION TO MENSTRUATION

Psychologists to the best of our knowledge have not tried to study the relationship between depression and anxiety and menstrual patterns. Naturally the cumulative effect of these two personality variables on menstrual patterns has also not been ascertained. Gynecologists and psychologists have visualised some relationship between anxiety, depression and other psychological variables and menstrual cycle phases and menstrual disorders. Parlee (1973) has reported an increase in tension, anxiety, depression, irritability, commission of violence, crime, suicide and accidents in the late or early menstrual days. He further says that negative behavioural aspects such as fatigue, lethargy, feeling of insecurity and heightened tension are commonly observed during premenstrual phase. May, Amherst and Amherst (1976) studied depressive mood shift and menstrual cycle among 30 healthy young women. The findings reveal that 50 % of
this group had their most depressive mood at premenstrual phase, while 40% felt worst at menstrual phase and 10% had low at mid cycle. Long back, Chadwick (1932) described the premenstrual phase as the "recurrent neuroses of women" and related anxiety and irritability to fear of bleeding which was symbolic of castration fear of early childhood.

Gottschalk, Kaplan, Gleser and Winget (1962) studied anxiety level of 5 women during their one-three menstrual cycle. The result suggested that 80% of the subjects showed significantly rhythmic changes in the magnitude of anxiety, outward hostility, and/or inward hostility during the cycle. There was a tendency for the level of anxiety to decrease transiently around the time of ovulation followed by an increase of inward hostility during the cycle. There was a tendency for the level of anxiety to decrease transiently around the time of ovulation followed by an increase of inward hostility during the premenstrual phase. Dalton (1964) reported that there is gradual increase in the symptoms of depression, lethargy and irritability during pre-menstrual week but there is an abrupt cessation of symptoms at the onset of menstruation. She further reported that the environmental stresses such as death of the loved one, changing of job, ensuing marriage or divorce were found to have significant effect upon exacerbation of symptoms.

Deutsch (1944) observed that there are individual variations
in occurrence of depression. She opined that some women suffer premenstruality while others during menstrual period. In describing premenstrual depression she stated that women who suffer from this condition have prepubertical expectations that something terrible is about to happen. Anxiety and depression were observed to be related to menstrual disorders. Much earlier O'Neill (1954) reported some cases of psychogenic bleeding, associated in seven cases with severe anxiety, in four cases with sexual conflict, in two cases with guilt and in the last case any emotional upset would cause bleeding. Friederich (1976) suggested that "stress also effects the production of neurotransmitters. Many kind of stress affect the reproductive physiology". Hill (1956) believes that fear and depression classically produce amenorrhea.

It is also important to note that if depression is profound enough a woman may not menstruate at all (Schildkraut, 1965). Sharman (1965) studied a group of 65 girls of the age group of 17-22 years, having signs of transient amenorrhea during their stay in the boarding school in Israel. The result indicated that 22% of the sample was suffering from transient amenorrhea. The result also indicated that their TAT stories were significantly associated with positive ending and showed other indications of more latent anxiety than did the girls who did not suffer from transient amenorrhea.

It could be easily inferred from the review of the research investigations that psychological factors do effect the
duration of menstrual bleeding and menstrual cycle length. Menstrual duration has been studied by Peskin (1968) in relation to tension and personality. Long duration was found to be related to personality integration. Laster and Orloff (1970) reported that the adolescent girls with shorter duration were more self-confident and dominant than girls with longer menstrual duration.

Gynaecologists (Schagl, Marwah and Tiwari (1972) forcefully advocate that psychological factors play a dominant role in dysmenorrhoea (pain during menses). Others (Israel, 1963; Fluhman, 1957) argues that psychological factors not only play causative role in dysmenorrhoea, rather they may be the end result as well. O'Neill (1954) endorses such a view and describes menstrual pain as a severe form of "masculine protest" found in women who may be inclined to reject the feminine role. Similarly Frienderich(1976) views pain during menstrual phase as a psychic experience based on conscious or unconscious memories of guilt or it may be accentuated by a recent guilt provoking situation. In this regard it could be a psychosomatic symptom akin to conversion reaction symbolizing forbidden psychological wishes or fantasies. We get ample support from Paulson's (1966) findings that the factors contributing to dysmenorrhoea may be traced to life experiences and negative attitudes towards feminity.
AIMS OF THE STUDY

When we venture to critically evaluate the literature discussed earlier a few facts clearly emerge. Gynecologists while explaining certain unexplained phenomena attribute the suffering to psychological factors. Their meaning and concept of psychological factors remain ill-defined. It is also customary on their part to club together a host of factors. The terms anxiety and depression are usually differentiated simply on the basis of symptoms. Though extensive overlaps have been reported, these symptoms are not ascertained with the help of truly valid and reliable psychological tools.

Psychologists have not addressed themselves to study the menstrual patterns. They uncritically accept the findings of gynecologists who have mainly investigated the people suffering from menstrual disorders. In brief, studies on normal and healthy women have not been conducted.

It is desirable that each aspect of menstrual pattern -- cycle, duration and feeling of discomfort -- should be thoroughly investigated. Then the influence of anxiety and depression on these aspects have to be ascertained. Noise pollution is threatening the quality of human life. Research reports reveal that it has contributed to maladjustments and abnormality in big cosmopolitan cities. It is logical that the influence of exteroceptive stimulus (noise) on menstrual patterns should be probed into so as to facilitate the adjustment of working women
in particular and the women folk in general.

Menarche, the first menstrual bleeding has been reported to be significant event throughout the reproductive years of women. This aspect has so far eluded the attention of psychologists. Its relation to anxiety, depression and noise must be determined.

Innovative methodological approach had to be developed for the measurement of each aspect of menstrual pattern. This has led to the development of a standardized tool (Menstrual Pattern Schedule). This tool may prove helpful to psychologists who intend to further extend such a study or who desire to measure the menstrual pattern in future.

The study is expected to throw light on many other aspects of menstruation which have not been properly understood.