The effects of premenstrual syndrome on women with mental disabilities

Richard H. Doughty Jr.
Rowan College of New Jersey

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THE EFFECTS OF PREMENSTRUAL SYNDROME
ON WOMEN WITH MENTAL DISABILITIES

by

Richard H. Doughty Jr.

A Thesis
Submitted in partial fulfillment of the requirements of the Masters of Arts Degree in the Graduate Division of Rowan College (5/3/96)

Approved by: ________________________________

Date Approved: 5/7/96
Studies have shown that P.M.S. has a negative effect for women on many aspects of life. P.M.S. seems to affect social situations, family life, stress, mood, substance abuse, and crime. The purpose of this one way analysis study is to evaluate the effects of P.M.S. on women with mental disabilities with non-compliant behaviors. Fifty women, whose intelligence quotient levels range between severe and profound, who reside in an institution for individuals with mental disabilities were selected for this study. Each woman has some type of non-compliant behavior. Each female has been placed on a behavior modification program plan to reduce these behaviors. When these specified behaviors occur, the behaviors are marked on a frequency sheet in compliance with the program plan. Recording of the data in this study was
accomplished through the use of frequency sheets used with the behavior modification program plan. The results of this dependent study was tested using a t-test. The results of the statistical testing showed no significant difference between pre-menstrual and post-menstrual behavior.
Mini-ABSTRACT

Richard H. Doughty Jr.

The Effects of Premenstrual Syndrome

on Women with

Mental Disabilities

1996

Thesis Advisor: Roberta Dihoff Ph.D

School Psychology

The purpose of this dependent study was to see if the menstrual cycle, specifically, the premenstrual cycle, had an effect on the behaviors of women with mental disabilities. The findings indicate that there was no effect on behavior caused by the premenstrual cycle.
ACKNOWLEDGEMENTS

I would like to express my sincere thanks and gratitude to all those who made this effort possible. I would like to thank my wife, Donna. Without her love and support I would never have finished. I would like to thank my mom for listening to all my stupid complaints. I would like to thank my friends Sean and Jimmy for all their proof reading and putting up with my sometimes salty moods. I would like to thank my computer god, Jeff, for installing the proper fonts so I could print this project. I would like to thank my coworkers for all their help and support. I would like to thank Dr. Dihoff and Dr. Klanderman for all their encouragement, support, and dealing with my personality. Lastly, I would like to thank all the rest who supported me in this endeavor.
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CHAPTER ONE

INTRODUCTION

Individuals with mental disabilities face many limitations throughout life because of their mental and behavioral deficits. Professionals are constantly working with these individuals to find alternative means of obtaining some life survival skills through constant education. One obstacle that is always difficult to overcome is a behavioral problem, such as aggression or non-compliance.

There are many causes of behavioral problems among individuals with mental disabilities. Difficulties can arise from both physical and mental aspects. For example, problems can arise when an individual cannot communicate his or her needs or desires, such as choice of clothing. Other problems can exist from physical discomfort, such as a tooth ache or a stomach ache. The sooner a professional is able to understand the needs and/or the desires of the individuals, the easier it is to avoid a behavioral outburst.

Because behavior modification is such an inexact science, any possibility that exists that could lead to a decrease of behavioral problems in individuals with mental
disabilities needs to be researched. Only through an understanding of behavior and underlying causes of behavior can problems in individuals with mental disabilities be either prevented or worked through by both the professional and the individual.

PURPOSE

Professionals who work with women with mental disabilities may have more difficulties because of the changes that occur in the body of a woman. The menstrual cycle effects these women at least as much as the normal population, but because of the difference in mental capacity, the problems that can occur with the menstrual cycle may be expressed in a different manner, such as a behavioral outburst.

The purpose of this study is to explore the possibility that Pre-menstrual Syndrome increases non-compliant behavior in women with mental disabilities. The emphasis of this study is to attempt to determine if Pre-menstrual Syndrome causes negative behavior to increase in frequency or if it has no effect on such episodes.

HYPOTHESIS

Women with mental disabilities, classified in the severe and profound range who display non-compliant behavior, living in an institutional setting, will show an increase in behavioral episodes during the pre-menstrual cycle compared to behavioral episodes during non-cycle days.
Pre-Menstrual Syndrome (P.M.S.) is defined as a complex of physical and emotional changes which may be experienced in the several days before the onset of menstruation. Some of the physical changes associated with P.M.S. are bloating, fluid retention, breast soreness, fatigue, and headaches. Some of the emotional changes associated with P.M.S. are depression, irritability and mood swings.

The controversy surrounding P.M.S. is whether or not it exists. Some researchers claim that there is no link between the menstrual cycle and emotional stress. Female psychologists were outraged when the American Psychological Association included P.M.S. as a depressive disorder in the *Diagnostic and Statistical Manual of Mental Disorders* as pre-menstrual dysphoric disorder.

Those who disavow the existence of P.M.S. state that the mood of men, on the average, do not differ from the mood of women. These individuals argue that research consistently shows that the menstrual cycle has no effect on mental abilities, competence, or academic abilities. These individuals also believe that many women believe in P.M.S. because it allows women an excuse to have emotional outbursts at least once a month (Tavris, 1993).

Other researchers believe that many women feel bad most of the time due to societal pressures. According to these individuals, women believe that their lives are being controlled by chance, have little support from society, and have few coping skills (Gilbert, 1995).
Other medical professionals believe in P.M.S.. As stated previously, it has been classified as a depressive disorder in the D.S.M. IV. Some doctors feel that P.M.S. can trigger depression, anxiety, and violence.

A study was performed at the State University of New York at Buffalo. The researchers compared women from the United States, Italy, and Bahrain (a Middle Eastern nation). They discovered that even though the foreign women never heard of P.M.S., they described many of the same symptoms as the Americans (Wartik, 1995).

More research has produced the same results. In many experiments, it has been proven that stress is created by P.M.S., not vice-versa. Many argue that P.M.S. is not a media created phenomenon, but a true ailment.

There have been many different strategies used in an attempt to reduce P.M.S., but there is no consensus on how to treat it. Some treatments, such as hormone suppositories, have proven ineffective, while others such as the use of various vitamins have given inconsistent results. The most effective treatment seems to be aerobic exercise for forty-five minutes three to five times a week. This seems to reduce the stress of P.M.S. (Pike, 1994).

Individuals with mental disabilities in the severe and profound range should have extreme difficulty with P.M.S.. The best attempt at reducing the symptoms (exercise) is not usually a viable alternative due to both physical and mental limitations. Some of them do not understand what is happening to their bodies. Some of these individuals cannot communicate basic needs and need twenty-four hour care. Often these individuals attempt to communicate through non-compliant behaviors. In
theory, because these individuals are not able to communicate their basic needs, it should follow that if the symptoms are causing discomfort to the individual, the person may be forced to find an alternative, such as a behavioral outburst, to alert the caretaker.

DEFINITIONS

1. Pre-Menstrual Syndrome- a complexity of physical and emotional changes, such as depression, irritability, bloating, and soreness of the breasts, one or more which may be experienced in the several days before the onset of menstruation.

2. Non-Compliant Behavior- behavior that interferes with daily living, such as aggression and self-abuse.

3. Mental Disabilities- a condition of mental ability, as indicated by an intelligence score below seventy and difficulty in adapting to the demands of life, varies from mild to profound.

4. Profound Mental Retardation- mental retardation with an intelligence score below twenty.

5. Severe Mental Retardation- mental retardation with an intelligence score between twenty and thirty-four.

6. Frequency Sheet- a scoring sheet used daily for recording behavioral episodes.

7. Behavior Modification Program Plan- a type of plan which is devised to reduce the number of behavioral occurrences in an individual. Contains strategies for dealing
with behaviors and specific instructions for recording behaviors.

ASSUMPTIONS

1. All individuals are classified within the severe and profound range.
2. Pre-menstrual Syndrome does exist.
3. All individuals are involved in similar programming.
4. All individuals are in similar living conditions.
5. No medication is being administered to reduce pre-menstrual syndrome.
6. All individuals display some type of non-compliant behavior.
7. All data will be collected in the same fashion.
8. Tests of increases in behavioral episodes will have both reliability and validity at acceptable levels.

LIMITATIONS

1. This study does not take into account other variables that may increase non-compliant behavior.
2. The applicability of this study is limited to similar populations.
3. This study does not rate severity of behavior.
SUMMARY

Chapter one is an explanation of the need, purpose, and theoretical background that is the basis for the research involved in this study. Chapter two will examine significant literature to provide a background for the chosen subject. Chapter three contains the methodology and procedures implemented in gathering data. Chapter four will provide the analysis of data and will interpret and draw conclusions based on information provided by the data. Chapter five will provide a summary of this thesis and implications for further study.
CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

This chapter will review the findings of several studies of the effects of premenstrual syndrome on behavior. The initial focus will be on the general effects of premenstrual syndrome on women. This will be followed by a review of the literature pertinent to many of the specific effects of premenstrual syndrome such as stress, family life, moods, and treatments. This will be followed by a literature review of pertinent data stating that premenstrual syndrome is a fallacy.
The premenstrual syndrome disorder was first described in a scientific paper published by Dr. Robert Frank in 1931. Since the paper was published there has been much debate as to the relevance of this disorder. Many physicians refuse to accept this diagnosis and, when the symptoms of premenstrual syndrome are present, misdiagnose the malady (Delaney, Limpton, and Toth, 1976).

P.M.S. is a complex disorder apparently linked to the cyclic activity of the hypothalamic-pituitary-ovarian axis (Norris and Sullivan, 1983). It is associated with a wide range of symptoms, including but not limited to irritability, tension, headache, fatigue, breast swelling and tenderness, and weight gain (Gise, Kase, and Berkowitz, 1988).

Most researchers seem to agree on these symptoms. Researchers in India described the symptoms as mood swings, cognition difficulties, physical symptoms, such as breast swelling and headaches, and change in behavior, such as irritability (Chandra, Prabha, Chaturvedi, Santosh, and Gururaj, 1994). Further research describe symptoms involving emotions with anger, irritability, and depression (Pugliesi, 1992).

More research concludes that symptoms include negative affect dimension existing with behavioral changes, physical symptoms, agitation, and positive arousal (Rivera-Tovar, Pilkonis, and Frank, 1992). Premenstrual symptoms also include turmoil, bulging, dysmenorrhea-like symptoms, disrupted sleep and discomfort, sluggish feelings, and feeling "on top of the world" (Woods, Taylor, Mitchell, and
SOCIAL PROBLEMS

Premenstrual syndrome has brought numerous complications to the lifestyles of women. It has damaged many lives. Even though they directly affect women, the symptoms of P.M.S. also indirectly affect men and children. Over one hundred research studies have shown that the effects of P.M.S. have contributed to divorce, child abuse, alcoholism, violence, disrupted careers, and hindered personal development (Norris and Sullivan, 1983).

Research by Rittenhouse (1991) states that P.M.S. was defined in part as a social problem in the early 1980's through the interaction of medical, popular and feminist literature after the dramatic events of the Great Britain trials in which two women charged with manslaughter used P.M.S. as a defense. During P.M.S. women regularly and dramatically invert the cultural norms of acceptable feminine behavior. During the rest of the month, United States women are expected to be nice, compassionate, and generous to the point of selflessness. P.M.S. offers the opportunity for women to reverse that norm in a manner similar to "rites of reversal" that anthropologists have documented in many non-Western societies (Gottlieb, 1988).

There also seems to be sexual problems in women with P.M.S.. In a study by Dennerstein, Gotts, Brown, Morse, et al., (1994), it was found that women with P.M.S. had a lower sexual interest in the premenstrual phase than a normal population of
FAMILY LIFE

According to research, women with P.M.S. have difficulties with family life. Ekholm and Backstrom (1994) and Ryser and Feinauer (1992) agree that the marital relationship of P.M.S. couples is similar to non-P.M.S. in the follicular cycle phase, but deteriorates in the luteal cycle phase. Other research has agreed with this finding.

In one study, a P.M.S. group scored significantly higher on the amount of conflict in their families and on emphasis on ethical and religious values when compared to the control group. The P.M.S. group scored lower on direct emotional expressiveness within the family, intellectual-cultural orientation, and active-recreational orientation when compared to the controls (Kuczynierszyk, Labrum, and Johnson, 1992). Another study concluded that P.M.S. symptoms effect self-perceived conflict or changes in relationships (Woods, Taylor, Mitchell, and Lentz, 1992).

STRESS

Stress is a major symptom of P.M.S. Research performed by Palmer, Lambert and Richards (1991) studied fluctuations between "best" and "worst" times during the menstrual cycle. For this study, "best" and "worst" times were defined as any physical or mental symptom that they had experienced on their P.M.S. calendars. These
symptoms were rated on a scale of 1 (mild) to 7 (severe) which allowed the "best" and "worst" judgement. These individuals used the Minnesota Multiphasic Personality Inventory as a tool to identify these fluctuations. The results of this study suggest dramatic differences between cyclic and non-cyclic periods. The results suggested serious psychological impairment to a profile suggestive of normal functioning.

A study dealing with the effects of P.M.S. discovered that a woman with P.M.S. experiences a high rate of ongoing psychological distress (Ryser and Feinauer, 1992). In a survey of 658 women who reported symptoms of P.M.S., over 60% reported psychological distress. Mitchell, Woods, and Lentz (1994) agree with this research. They discovered that women with P.M.S. had more psychological stress than the control group.

Menstruation is not simply a physiological process but is linked with psychological, social and cultural variables (Snowden and Christian, 1983). Women with P.M.S. feel they have very little control over their lives. These women may be afraid they may hurt their children or spouses.

In a study based on work and family environments of women who experience P.M.S., women were found to be in heightened distress during the P.M.S. period. The P.M.S. group, when compared to non-P.M.S. women, had a higher amount of conflict in their families, were lower on direct emotional expressiveness within the family, had more perceived work pressure, less autonomy on the job, and less variety on the job (Kuczmierczyk, Andrzej, Labrum, and Johnson, 1992).

Women with P.M.S. also tend to have difficulties with coping skills. When
women with the symptoms of P.M.S. are faced with stressful situations, they seem to use avoidance coping behaviors. Because of the practice of avoidance, they become easily depressed (Kuczmiuczyk, Andrzej, Johnson, and Labrum, 1994). Burrage and Schomer (1993) seemed to draw the same conclusions. Coping strategies were found to be weaker when the symptoms of P.M.S. were stronger.

DEPRESSION AND MOOD

Neurosis seems to be prevalent among women with P.M.S.. Often, women with severe P.M.S. believe that they are going insane. Women report accounts of "another me" performing acts that normally do not fit into their normal personality, such as berating their spouse or screaming at their children for no apparent reason (Parker, 1960).

Research describes mood swings more in depth. Cumming C.E., Urion, Cumming D.C., and Fox (1994) describe how a woman with P.M.S. becomes more agitated during the experiences of the menstrual cycle. Women with P.M.S. described becoming cranky and depressed.

According to Keenan, Lindamer, and Jong (1992), depressed mood is a common feature of P.M.S.. Using the Beck Depressive Inventory, P.M.S. women during the late luteal phase were pessimistic, had a sense of failure, were dissatisfied, felt guilty, and were indecisive. Asso and Magos (1993) agreed with this research. They discovered that P.M.S. women were higher on several negative moods and lower
on cortical arousal.

Bancroft, Rennie, and Warner (1994) concluded that a history of past depression was associated with a tendency for premenstrual depression to be prolonged with more severe depressive symptoms during premenstrual and menstrual phases of the cycle. High depressive P.M.S. women tend to use more avoidant coping skills in dealing with stressors independent of the premenstrual cycle (Kuczynierczyk, Andrzej, Johnson, and Labrum, 1994).

SUBSTANCE ABUSE

Research in Maryland found that 21 women with confirmed P.M.S., reported greater alcohol use than the control group of 16 non P.M.S. women. The difference in reported alcohol use was not limited to the late luteal phase or cravings for food premenstrually (Tobin, Schmidt, and Rubinow, 1994).

CRIME

P.M.S. has been used as a reason for some criminal activity. In 1981, a woman from England murdered her lover. Although P.M.S. was not used as an excuse for committing the crime, it seemed to have played a role in sentencing. The woman pleaded guilty to manslaughter citing P.M.S. as a mitigating circumstance and was sentenced to a 12 month conditional discharge (Lewis, 1990).
TREATMENTS

Various treatments have been utilized in the treatment of P.M.S. Different levels of success have been obtained in managing P.M.S. using nutritional supplements such as vitamins, hormones, ovarian steroid via oral contraceptive, and gonadotropin-releasing hormone, diuretics to control salt and water balance, exercise and sleep cycle manipulation (Rausch and Parry, 1993).

Pariser (1993) suggest premenstrual depression is strongly linked to traditional psychiatric mood syndromes and may benefit from appropriate antidepressant therapy. Burrage and Schomer (1993) suggest that alternative treatment options besides pharmacological intervention should be made available to P.M.S. sufferers.

INDIVIDUALS WITH MENTAL DISABILITIES AND P.M.S.

Women with mental disabilities who exhibit non-compliant behavior are the individuals being studied. Staff members in institutions and group homes have reported that behavioral problems consistently rise prior to and during menses (Ghaziuddin, M., Elkins, McNealy, & Ghaziuddin, N., 1993).

Women with mental disabilities begin to show higher occurrences of non-compliant behavior during puberty. In a longitudinal study on Rhett's syndrome, there was a noted increase in non-compliant behavior when the menstrual cycle first occurred. The behavior decreased over time, but some non-compliant behavior, such
as aggression, occurred more frequently during menses than other non-menstrual times (Holm, 1985). Louis Rowitz (1988) stated in an editorial that problems become more acute when children with mental disabilities become physically older but remain mentally young because they are often rejected by the peer group they played with as youngsters. Therefore, in discussing matters such as the onset of menses, individuals with mental disabilities are left with few choices to vent their concerns.

Stress is also a major factor in difficulties surrounding P.M.S.. Demands that challenge or stress women result from the stresses and strains of daily living, while resources act as a buffer to the demands (Mitchell, Woods, Lentz, 1994). These resources, such as socialization with peers, are not available to women with mental disabilities who live in institutions. Although recreational activities are provided, these activities cannot be considered as equal to a normal populations diversions.

As stated previously, a possible reliever of P.M.S. may be aerobic exercise. In a study performed on community based adults with mental disabilities and the effects of aerobic exercise, there was an increase in flexibility, but no significant change in body weight or body composition (Pommering, et al., 1994). From this evidence it may be possible to conclude aerobic exercise will have no effect on P.M.S. for women with mental disabilities. It has been proven that aerobic exercise reduces the symptoms of P.M.S. in a normal population of women. This may be due to, among other factors, higher self esteem because of lower body weight and improved body composition. Lower body weight and improved body composition was not a benefit from this study.
P.M.S. DOES NOT EXIST

There are many professionals who believe that P.M.S. does not exist. Pugeliesi (1992) believes that P.M.S. has become medicalized due to the deviation from gender differentiated feelings and expressions between men and women. Rodin (1992) argues that the inconclusiveness surrounding P.M.S. is symptomatic of the persistence of cultural beliefs in the production of medical knowledge. Bancroft (1993) states that P.M.S., as currently applied, has no heuristic or clinical value due to the biological complexities of menstrual cycle related problems.

In a study performed by McFarlane and Williams (1994), it was found that both men and women pass through cyclic changes. In the study, two thirds of the men and women surveyed reported having one or more menstrual or lunar phases or days of the week that were marked positive and or negative relative to their own range.

More controversy occurred when P.M.S. was classified as a psychiatric abnormality, late luteal phase dysphoric disorder (L.L.P.D.D.) in the Diagnostic and Statistical Manual-IV. According to Parlee (1992), P.M.S. should not be classified as a psychiatric disorder due inadequate research. She also believes the classification is a stereotype that will hurt the views on women in society.

SUMMARY

Studies with a normal population have demonstrated that there is an increase in
maladaptive behavior in women with P.M.S. Therefore, it is logical to conclude that there would be a possible increase in non-compliant behavior in women with mental disabilities during the menstrual cycle. Research in this specific field is limited. That which does exist further supports this theory by supplying possible reasons, such as the lack of buffering resources and coping mechanisms. This study will attempt to prove the correlation of the results on a normal population to a disabled population while providing more specific data on women with mental disabilities.
CHAPTER THREE

METHOD

DESIGN

The design of this study is a one way analysis of variance. The focus of this study will be concerned with a possible increase in non-compliant behavior during the menstrual cycle with women with mental disabilities. This will be accomplished through charting the behaviors of these women daily for a six month period. Incidences of behavior during cyclic and non-cyclic periods of the menstrual cycle will be compared to see if there is an increase in behavioral episodes.

SUBJECTS

A total of 50 women who reside in a state facility for developmental disabilities in the state of New Jersey participated in this study. These women are part
of a multicultural mix with representation from the Afro-American, Latin-American, and Euro-American races. Age for these women range from 21 to 45. Their intelligence quotient is classified as ranging from profound (see definition #4) to severe (see definition #5). These women were selected due to their record of non-compliant behavior and increases of this behavior during the menstrual cycle, possibly due to menstruation.

MATERIALS

This study is occurring in an institution for individuals with developmental disabilities in the state of New Jersey. This institution provides twenty-four hour care to meet the needs these individuals cannot meet themselves. These individuals are sufficiently provided for during their stay at this long term care facility.

The equipment being used for this study are behavior tracking sheets, more commonly known as frequency sheets (see definition #6). These sheets are used to record how often a behavior occurs during the day. These sheets chart every hour of a twenty four hour day, seven days a week, 365 days a year (see Appendix A).

INDEPENDENT VARIABLE

The independent variable for this study is the menstrual cycle, which will be broken down into three time periods, one week before the menstrual cycle, the week
of the menstrual cycle, and a one week non-menstrual time period.

DEPENDENT VARIABLE

The dependent variable for this study is the comparison of the number of non-compliant behavior incidences during the three different time periods.

PROCEDURES

Each individual in this study is on a behavior modification program plan (see definition #7) for non-compliant behavior designed by a certified psychologist (see Appendix B). Each program plan carries specific instructions on how to treat each behavioral incident and how to record the occurrence of each behavior.

All program plans are inserviced to staff by the psychologist or other psychology staff members approved by the psychologist. The procedures of the program plan are clearly explained so that all staff will handle each behavior occurrence in the same manner and all records of the behavioral incident will be recorded in the same fashion on the frequency sheets.

For this study, the frequency sheets will be examined monthly. Information will be provided from medical professionals as to the occurrence of the menstrual cycle. The frequency sheets and the menstrual cycle will then be compared to the number of behavioral occurrences during each of the previously stated time periods.
All data on non-compliant behaviors will be collected by staff according to the defined terms of the behavior modification program plan. The collection of data on frequency sheets is universal to all behavior modification program plans at the institution where these individuals reside.
The analysis of results is based upon the testable hypothesis which states that
"the incidents of behavior during the premenstrual phase of the menstrual cycle will
show a statistically significant increase as compared to the incidents of behavior during
nonmenstrual times." The results were analyzed by using different multiple analysis of
variance tests. Each test found that there was no statistically significant difference
between the premenstrual behaviors and the nonmenstrual behaviors.

Each of the following tables below will state the test and the results of the test.
Table 4.1 presents the means for each group, premenstrual (1), menstrual (2), and
nonmenstrual (3). Even though the general MANOVA tests showed no statistically
significant difference, the means of the three dependent variables do show a downward
trend. All tests were performed at the $p = .05$. N equals 50 for each group.
Table 4.1

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Table 4.2 shows the results of the Summary of all Effects

Table 4.2

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MS Error           F           p-level
.727213            2.303225   .105322
Table 4.3 shows the results of the Scheffé test; probabilities for Post-Hoc Tests.

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Table 4.4 shows the results of the Tukey HSD test; Probabilities for Post-Hoc Tests.

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<tr>
<td>3</td>
<td>.103393</td>
<td>.864955</td>
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Graph 4.1 shows a graph of the means of pre-menses, during menses, and post-menses behavior.
SUMMARY

As previously stated, the results show no statistically significant difference.

Out of the 50 groups tested, 33 of the groups (66%) had more behavioral episodes during the nonmenstrual phase than during the premenstrual phase.

As stated previously, there is a downward trend. From studying the scores of the subjects in this study, those with a higher tally of behavioral episodes, seemed to be have more behavioral episodes during the premenstrual phase than during the nonmenstrual phase. This could be a reason why no statistically significant difference was found.
CHAPTER 5

SUMMARY

Pre-Menstrual Syndrome has been a mystery. There are professionals who argue the existence of this phenomena. These professionals believe P.M.S. is real and can effect the daily lives of many women. According to research, P.M.S. can effect a woman's mood, personality, and family life.

There are others who believe that P.M.S. does not exist. These professionals believe the phenomena of P.M.S. was created so that women have an excuse to rebel against the rules of society. Some research has shown that P.M.S. is strictly a United States phenomena.

This thesis was not designed to prove whether or not P.M.S. exists. It was designed to investigate whether the menstrual cycle has an effect on behavioral episodes with women with mental disabilities. It was believed that behavioral episodes escalated during the menstrual cycle.

Fifty women with mental disabilities from an institution for women with mental disabilities in the State of New Jersey participated in this evaluation. A one way
analysis of variance was used to interpret the results after the behaviors of each female was charted over a six month period. The results showed no statistically significant difference in behavior during cyclic and non-cyclic times.

DISCUSSION

There have been numerous debates as to the existence of P.M.S.. As stated previously, this thesis was not designed to prove whether or not P.M.S. exists. It was designed to see whether the cycle had an impact on behavior. The results were found not statistically significant.

There are many possibilities for these results. The first is medications. Many individuals with non-compliant behaviors are on psychotropic medications. These medications are designed to control whatever maladaptive behavior an individual may show. This might have had an influence on the results. If the behaviors are under control due to the medication, the effect of the menstrual cycle would not be seen.

A second possibility is the frequency of behavior. Individual scores in this study greatly varied. Some individuals had average scores of over twenty episodes per week, while others averaged less than one per week. Through looking at the data, the higher scoring individuals had a downward trend from pre-menstrual to post-menstrual, while the lower scoring individuals did not have this downward trend. This most likely influenced the findings.

The third possibility is that P.M.S. has no effect on individuals with mental
disabilities. These individuals do not face the normal pressures of everyday life. Although they do have their own pressures, such as attending classes and sharing living space with others, these institutionalized individuals do not have to worry about raising a family, cleaning a house, or working to pay the bills.

**IMPLICATIONS FOR FURTHER RESEARCH**

Future research on this subject could be focused on three different areas. The first area would be the area of medication. A possible study could be designed to focus on women with mental disabilities who are on no psychotropic medication or are on the same psychotropic medication.

The second area could focus on behaviors. A study designed to focus on individuals with high incidences of behavior may show better results. The problem may be finding an arbitrary number for behavior.

The third area would be using individuals in a group home setting for the focus of a study. These individuals are more exposed to the pressures of everyday life. A different result may be obtained from this study.
REFERENCES


APPENDICES
### Frequency Data Chart

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<th>Date</th>
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**Comments:**

- 1st Shift
- 2nd Shift
- 3rd Shift
Appendix B

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<tr>
<th>FACILITY</th>
<th>CLIENT</th>
<th>CLIENT ID</th>
<th>UP DATE</th>
<th>PROBLEM PLAN (1 of 1)</th>
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**Long-Term Goals:** To reduce non-compliant behavior or disruptive/aggressive episodes to a frequency of or near zero by 1999.

**Program Developer:**

**Program Implementator:**

**Collage Staff**

**Behavioral Objectives:** To reduce non-compliant/disruptive/aggressive episodes to no more than 25 incidents per month.

**Present Level of Functioning:**

A 26-year-old woman with a moderate I.Q. of 50I; current intellectual level is felt to be within the severely retarded range. Over the period 5/93-7/94 recorded data showed a monthly average of 25 episodes of non-compliant/disruptive/aggressive behaviors, with a range of 10-42.

**Program Frequency:**

Basis 1 line

**Intervention program to be used at all times by collage staff.**

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<tr>
<th>STEPS</th>
<th>BEHAVIOR STRATEGIES</th>
<th>MATERIALS</th>
<th>EVALUATION CRITERIA</th>
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<tbody>
<tr>
<td>1. To reduce non-compliant/disruptive/aggressive behaviors to no more than 20 episodes per month by Dec. 1994.</td>
<td>Environmental Enrichment/Sensory Stimulation activities and activities which should be provided to Linda to increase the level of daily functioning.</td>
<td>The reinforcement to be used with this behavior would include verbal praise, physical contact, hugs, shoulder pats, staff attention, and dinner play objects. Daily frequency data, x/r, reports, progress notes, and direct observations will be used to monitor effectiveness of this program.</td>
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<tr>
<td>2. To reduce non-compliant/disruptive/aggressive behaviors to no more than 15 episodes per month by March 1995.</td>
<td>Engage in activities such as watching TV or listening to music, playing with cards or other items which she enjoys, participating in recreational or social activities, going outdoors, and interacting with staff, especially enjoys receiving staff attention and praise, and likes to assist with other clients and to help staff with routine collage chores. In general staff should try to keep Linda stimulated and involved in pleasant activities for as much of the day as possible.</td>
<td>A variety of toys, activities and other sensory stimulation, motor activities, recreational and social functions should be provided to Linda on a daily basis.</td>
<td>Daily frequency data, x/r reports, progress notes, and direct observations will be used to monitor effectiveness of this program.</td>
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**Psychotropic Medication:**

Mellaril, Zantulal, Depakote.

Last reviewed 7/2.
<table>
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<tr>
<th>STEP</th>
<th>TEACHING STRATEGIES</th>
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<tr>
<td>1.</td>
<td>STAFF ATTENTION AND CONCERN: At the end of any disruptive/aggressive outbursts, staff should require her to make restitution for whatever damage she has done. For example, this would include having her pick up any items which she may have thrown onto the floor, or upright/rearrange any furniture that may have been overturned by her. Explain to her that she must straighten up any mess which has been caused by her behavior. She should be praised if she cooperates in restoring the area. When finished she should have her attention directed to some positive behavior for which she can receive attention/positive reinforcemt if she responds appropriately.</td>
</tr>
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</table>

| 2. | RESPONSE COST: Following outbursts of aggressive or disruptive behaviors, staff may choose to deny some special privileges. This would include, for example, not allowing her to watch T.V. or listen to music, not allowing her to look at magazines or catalogs, or not allowing her to participate in recreational or out-of-school activities which other clients may be engaged in. These activities/materials may be withheld for up to one hour for each episode of disruptive/aggressive behavior. Make sure that the objects/activities are being withheld because of her unacceptable behaviors. |
### Teaching Strategies

<table>
<thead>
<tr>
<th>Step</th>
<th>Teaching Strategies</th>
<th>Materials</th>
<th>Evaluation Criteria</th>
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<td>1.</td>
<td>Can try. When calls, redirect her attention to some positive activity or subject, and praise any positive behavior which is shown by her.</td>
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<tr>
<td>2.</td>
<td><strong>Differential Reinforcement of Appropriate Behavior:</strong> Staff should prompt, shape, and reinforce the absence of noncompliant, disruptive, or aggressive behaviors in all times. Do this by encouraging positive behavior, and by consistently rewarding positive behavior when it is shown. Avoid reward, or give any unnecessary attention to when she displays any of her targeted behaviors. Since she greatly enjoys personal attention from staff, rewards may include verbal praise, physical affection (hugs, pets, etc.), helping with an activity, or talking with her about something. Other reinforcers are listed in the Materials section. Rewards should be given throughout the day, at least once every hour, when she is behaving appropriately. Staff should verbally point out to what they are pleased with and give attention, and that the rewards are being given because she has been good.</td>
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<td>3.</td>
<td><strong>Prompt Prizes:</strong> Other clients in immediate area should be consistently praised, and consistently receive positive attention from staff, when their behavior has been good. Encouraged attention given to other clients who are behaving appropriately may help to see that positive behavior by her is one she will be able to obtain attention herself.</td>
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<td>4.</td>
<td><strong>Extinction:</strong> When is noncompliant, begins to disrobe, or shows other negative behaviors which are not seriously disruptive or aggressive, the initial staff response should be to ignore these behaviors. She should simply be encouraged to respond more appropriately, but otherwise be ignored and left to cool down on her own. Often covers her head, becomes receptive to efforts to engage her, and will cool down in her own time. While simultaneously ignoring these behaviors, which may be attention-seeking at times, staff should verbally praise or give attention to another person in the area who is acting more appropriately (as described above). If the begins to show disruptive behaviors she should be ignored whenever possible, while following the above strategy. When shows a sign that she is more receptive/positive (puts her hands up and into)</td>
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<tr>
<td>STEP</td>
<td>TEACHING STRATEGIES</td>
<td>MATERIALS</td>
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<tr>
<td>1.</td>
<td>smiles, asks a question, responds appropriately to staff, etc. Staff should immediately try to focus her attention and encourage her to engage in some positive activity (perhaps pet talking with staff), and give her praise/reward her if she responds positively.</td>
<td></td>
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<tr>
<td>2.</td>
<td>CORRECTION (VERBAL AND PHYSICAL PUNCHES): If she begins to show behaviors which cannot be ignored, such as aggressive behaviors or if she begins to act on her own, she may be given an immediate and firm verbal command to stop. If she does not stop immediately, staff should provide a physical prompt (e.g., hold her hands down to her sides to prevent her from hitting or throwing furniture) and repeat the verbal command to stop. Redirect her attention if possible, or ask her to sit down and relax.</td>
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<tr>
<td>3.</td>
<td>TIME-OUT (CONTINGENT EXCLUSION, 10-60 MINUTES): Should overturn any furniture, or if she continues to act aggressively or disruptively after being given verbal/physical prompts, she should be immediately placed into a time-out area with as little fuss as possible. This could be a hallway, far expression corner, or other quiet area away from other clients and unnecessary stimulation. She needs to be monitored continuously while in time-out. should remain in time-out for at least a 10-15 minute period, until she is able to calm down. She should be returned to the client area when her actions and expressions indicate that she will no longer be aggressive or disruptive. When returned from time-out, she should be prompted/directed into some form of positive behavior/activity, and given attention/praise if she acts appropriately. Time-out cannot exceed 60 minutes for any one incident.</td>
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<td>4.</td>
<td>ATTENTION TO THE VICTIM: During any of these situations, staff should make a pointed effort to give attention/comfort/protection to any other person who is threatened by her actions (e.g., if she throws her shoes and they land near another person, will hopefully learn that the victim of her aggressive behavior, not herself,</td>
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