THE EFFECT OF RECEIVING PREPARATION FOR PROBABLE POST
BIRTH EXPERIENCES ON POSTPARTUM EMOTIONAL DISTRESS
IN FIRST TIME MOTHERS

by

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The purpose of this study was to examine the effect of receiving preparation for probable postpartum experiences on the emotional distress experienced by first time mothers. The study compared the distress during the postpartum period of mothers who received the preparation with that of mothers who did not. Distress was measured at between 1 and 2 months postpartum. Distress during the postpartum period was defined as an increase in depression and anxiety and a decrease in feelings of well being from pre- to post- birth. Depression was measured by the Beck Depression Inventory, anxiety by the A-State scale of the Spielberger State-Trait Anxiety Inventory and well being by the Bradburn Affect Balance Scale. Subjects were 32 first time mothers with little or no previous experience with babies, who were in a stable relationship with their partner, who had been engaged in work which they enjoyed prior to the pregnancy, and who would not be living in an extended family situation following the birth. All subjects attended childbirth preparation classes primarily aimed at preparing mothers for labour and childbirth. The experimental group also attended a 1-1/2 to 2-1/2 hour
session in which they received preparation for their first months postpartum. The hypothesis was that subjects in the experimental group, having received the preparation, would show significantly less emotional distress postpartum than the subjects in the control group. Subjects in the experimental group also completed questionnaires in which they rated the preparation and the overall effectiveness of the session in preparing them for the first weeks at home with baby and commented upon the ways in which the session was helpful as well as made suggestions for improvement. No statistically significant differences were found on the measures of distress between the group which received the preparation and the group which did not. However, members of the experimental group who received the preparation rated the preparation session as having been of benefit in preparing them for the adjustments which they had to make during their first months postpartum. It was thus concluded that despite the lack of significant differences on the measures employed, this type of preparation may be beneficial for new mothers.
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CHAPTER 1

The Experience of New Motherhood

Becoming a mother is a transition which is romanticized and idealized in our society. From early childhood little girls are socialized to regard the achievement of motherhood as a primary goal in their lives (Oakley, 1974, Leifer, 1980). However, a number of studies have found that, contrary to the media image of new motherhood, it can be a difficult and stressful experience. The various studies that have dealt with this subject have produced inconsistent findings on the issue of the amount of stress which is typically experienced during this transition. Early studies carried out by LeMasters (1957) and Dyer (1963) found new parenthood to be a time of moderate to severe crisis for the majority of subjects in their studies. Russell (1974) found that there was only a slight to moderate degree of crisis associated with the birth of the first child which was greater for wives than for husbands. As well, she found that the experience of new parenthood provides many gratifications as well as difficulties. Hobbs (1965) and Hobbs and Cole (1976) devised a checklist by which they asked new parents the extent to which they were bothered by common experiences of new parenthood. They concluded, on the
basis of the responses, that the birth of the first child is not experienced as a crisis by most parents but rather as a period of transition accompanied by some difficulty.

Miller and Sollie (1980) employed before and after measures to examine changes in personal well being, personal stress and marital stress during the transition to parenthood. They found that new parents scored higher on personal stress measures after the birth than during pregnancy and that this change was more marked at 8 months than at 1 month postpartum. They concluded that the experience of new parenthood results in a slight to modest decline in personal well being and an increase in personal stress in the first year postpartum and that the effects are more pronounced in mothers than fathers.

Leifer (1980) found that women's expectations about the experience of new motherhood were often very unrealistic and that contrary to expectation, the normal experience of early motherhood is often difficult and stressful.
The Role of Expectation in the Experience of New Mothers

Carlson (1976) identified a number of experiences of new motherhood that are unexpected and unprepared and thus contribute to feelings of disorientation and bewilderment often experienced during the early postpartum period. Kach and McGhee (1982) studied the general accuracy of the expectations of new parents about parenthood. They found that while most new parents in their study were generally prepared for the realities of parenthood there were some who were not. They further found that there was a negative relationship between the accuracy of a mother's prediction of what parenthood would be like and problems experienced in adjustment. This was not found to be the case for new fathers.

Levitt, Coffman, Guacci-Franco, and Loveless (1993) found that the primary determinant of change in the quality of the marital relationship from 1-13 months postpartum was the degree to which the mother's expectations concerning the amount of support she would receive from her partner were or were not confirmed. The expectancy confirmation or disconfirmation was more
significant than the amount of support actually provided in determining change in the quality of a relationship postpartum.

Belsky (1985) investigated the relationship between violated expectations and marital change during the transition to parenthood. He also examined the accuracy of prenatal expectations about the effect of parenthood on various aspects of individual and family functioning. He hypothesized that the stress of bearing and caring for a first baby would be greatest for those with over-optimistic expectations and that this stress would result in a greater decline in the marital relationship. Generally, the researcher found that prenatal expectations and postnatal experiences were similar. Most individuals in the study did not experience violated expectations. However, Belsky (1985) did find that expectations about the effect of the first baby on the marital relationship were significantly more positive than the actual experience and that new parents expected fathers to be more involved in caregiving than they actually were. He also examined the effect of violated expectations on marital change and found that the more events were
experienced as less positive than anticipated, the more marital satisfaction decreased. Further, the relationship between violated expectations and marital change was found to be greater for wives than for husbands.

Preparation for a Stressful Experience

Brislin (1974) found that preparation for an aversive event lowers the impact of the event in that it will be experienced as less severe than if no preparation had taken place. This approach had been applied to post-surgical experience of medical patients by Egbert (1964), who found that if patients were prepared for the pain which they would experience post-surgery, they tended to recover more quickly and experience less pain. Similar results were found in the area of preparation for childbirth (Charles, Norr, Block, Meyering, & Meyers (1978), in which it was found that prepared women were able to use techniques to reduce pain effectively during labour, reported significantly lower levels of pain in labour and delivery, and had a significantly higher level of enjoyment of childbirth.
Depression, Anxiety and Well Being as Measures of Distress

According to Hislop (1991) failure to cope with changes brought about by stress (defined as a life change that must be adapted to) can lead to feelings of distress. According to Mirowsky and Ross (1989) the subjective states of depression and anxiety are the most prevalent indicators of distress. Further, they contend that well being is on the opposite pole to distress on a continuum in that "more well being means less distress and more distress means less well being". Distress postpartum was thus operationally defined in this study as an increase from pre- to post- birth in feelings of depression and anxiety and a decrease from pre- to post- birth in feelings of psychological well-being.

Purpose of the Study and Hypothesis

The purpose of this study was to examine the effect of receiving preparation for probable postpartum experiences on the experience of distress at 1-2 months postpartum.

The preparation consisted of a private counselling
session (the "Preparation Session") 1-1/2 to 2-1/2 hours long. It was given approximately 1 month before the due date of the baby and was attended by both members of the couple. The Preparation Session was designed to provide information about what to expect during the postpartum period, to provide strategies and skills for coping with difficulties and to promote communication between the new parents.

The hypothesis to be tested was that women in the experimental group who receive the preparation for postpartum experiences will experience less distress postpartum, in the form of depression as measured by the Beck Depression Inventory (BDI) and anxiety as measured by the Spielberger State-Trait Anxiety Inventory (STAI) and more feelings of well-being as measured by the Bradburn Affect Balance Scale (ABS), than those in the control group who do not receive the preparation.

Ancillary Information

In addition to the quantitative data in the study, the subjective evaluations of the subjects in the experimental group and in some cases of their partners concerning the Preparation Sessions were examined.
CHAPTER 2

Literature Review

The Experience of New Motherhood

A number of studies have been conducted which have found that, contrary to the romanticized image of parenthood typically conveyed by the media, the transition to parenthood can be a stressful experience. As noted by Hampson (1989), the birth of a baby is a significant life event in that it requires a "disruption of past patterns and demands a reordering of roles as well as reorganization of the family" (p.116). As well, Hampson (1989) notes that the demands and concerns of the first weeks at home with a new baby are great. The new mother must cope with the generally unpredictable nature of a newborn baby at a time when she is recovering from the physical effects of the birth.

The findings of research on the transition to parenthood have been inconclusive and even divergent on the issue of the amount of stress experienced by new parents in the early postpartum period. LeMasters (1957) interviewed 46 middle class, white couples and
found that 83% had experienced what was described as an extensive or severe crisis in adjusting to parenthood. Dyer (1963) obtained similar results in a study in which data was collected by questionnaire rather than by interview. Of 32 couples who participated in the study, 53% were found to have experienced a severe crisis and 38% a moderate crisis.

Hobbs (1965) reported results which were very different on this issue. He employed a checklist on which new parents indicated the extent to which they were bothered about common experiences of new parenthood. He found that 86.8% of the first time parents in his study were classified in the slight crisis category and none reported extensive or severe crisis. Hobbs and Cole (1976) essentially replicated the results of the Hobbs (1965) study using the same checklist. They concluded that adjustment to the first child is not experienced as a crisis for most parents and that a shift away from a crisis orientation in the investigation of transition to parenthood was warranted. In his view the beginning of parenthood could be more accurately viewed as a transition which is accompanied by some difficulty.
Miller and Sollie (1980) questioned the validity of responses obtained on the types of self report instruments employed by Hobbs (1965) and Hobbs and Cole (1976). They pointed out that when reactions to new parenthood are assessed by asking parents how bothered they are or how much change they have experienced, there is reason to doubt the willingness of participants to be truthful. They speculated that when a researcher connects children with problems and parents' feelings in this way, the social desirability of responses may become relevant. They also pointed out that most transition to parenthood research to date had been conducted after the fact and suggested that before and after measures may produce more valid results.

Miller and Sollie (1980) studied 109 volunteer middle class couples during the transition to parenthood. Questionnaires measuring personal well-being, personal stress and marital stress were completed by first time parents midpregnancy (time 1), and at approximately 1 month (time 2) and 8 months (time 3) postpartum. They found that new mothers and fathers scored higher on the personal stress measure at.
times 2 and 3 than at time 1. Most of the differences were found to be between time 1 and time 3 and between time 2 and time 3. This finding provided support for the notion of a "baby honeymoon" which was described by Feldman (cited by Hobbs, 1968). Similarly, personal well-being scores were lower at time 3 than time 2 for mothers and at time 3 than times 1 or 2 for new fathers. New mothers reported higher marital stress scores at time 2 than time 1 and even higher at time 3. New fathers' scores on marital stress remained essentially unchanged throughout the period studied. Miller and Sollie (1980) concluded that the experience of new parenthood includes a slight to modest decline in personal well-being and an increase in personal stress during the first year postpartum. These changes are more pronounced in mothers than in fathers. In commenting upon their results, the researchers noted that the considerable demands of the new parenthood experience usually result in some degree of personal stress and stated that knowledge about the probable effects of children and a less romantic view of babies might be of assistance to new parents in coping with the stress of this transition.
Both the positive and negative experiences of new parenthood were investigated by Sollie and Miller (1980) in their study of 120 mostly young, middle class first-time parent couples during the transition to parenthood. At about 6 weeks and 8 months postpartum, participants in the study completed questionnaires in which they were asked to write "a few things, both positive and negative, about what the baby has meant in your life". From the responses received, the researchers identified several major themes regarding the positive and negative effects of parenthood. They grouped the negative effects into four major categories: 1) physical demands; 2) emotional costs; 3) strains on the husband-wife relationship; and 4) opportunity costs and restrictions. The positive effects included: 1) emotional benefits, 2) self enrichment and development, 3) sense of family cohesiveness, and 4) identification with the child.

Russell (1974) examined the extent of the "crisis" experienced during the transition to parenthood and, like Sollie and Miller (1980) found that the experience of first time parenthood involves problems as well as gratifications. The researcher employed Hobbs' (1965)
checklist to measure the degree of crisis experienced as well as a second checklist to measure gratifications experienced during this time. Russell (1974) found that there is a slight to moderate amount of crisis experienced with the birth of the first child and that this crisis is greater for wives than for husbands. It was found that individuals were less likely to experience a high degree of crisis if 1) there was a high level of marital adjustment; 2) the child was planned; 3) the couple had been married for a longer time (significant for women only); 4) the individual was older (significant for men only); 5) the role of "parent" was high in the individual's reported hierarchy of identities (significant for men only); 6) the parent was of excellent health (significant for women only); 7) the pregnancy and delivery were problem free; and 8) the baby had a quiet temperament. Russell (1974) also found that degree of education is inversely related to gratification in new parenthood.

Leifer (1980) noted that although there was evidence that the birth of the first child can be experienced as a crisis by both parents and especially by the mother, little was known about the way in which
normal women experience pregnancy and motherhood. In order to explore this subject, Leifer studied a small group of women (n=19) throughout their pregnancies and early months of motherhood. Her objective was to describe the experience of pregnancy and to identify common issues or important themes expressed by women as they experienced the psychological, social, and biological changes associated with pregnancy and motherhood. Leifer also sought to describe the experience of early motherhood, and to assess the extent to which motherhood is experienced as a time of psychological crisis.

The subjects of the study were white women, pregnant for the first time, who were clinic or private patients at a university hospital's obstetrical outpatient unit. All women who contacted the unit over a period of two months who were married, between the ages of 20 and 35, and who had no notable psychiatric, medical or gynaecological problems, were invited to join the study.

All of the women in the study participated in a series of five intensive interviews, each of which took up to four hours and consisted of both structured and
open ended questions. The interviews were conducted at each trimester of pregnancy, on the third day after the birth of the baby, and at six to eight weeks postpartum. A brief telephone interview was also conducted during the week that the woman first experienced the movement of the fetus and a follow up questionnaire was mailed at seven months postpartum.

The results indicated that the participants in the study showed little recognition of the difficulties that they may face in the role of housewife and mother. The most typical view was that a woman at home is in control of her own life, can be her own boss, set her own schedule and priorities, and be freer since her life is not regulated by the restrictions of a job. Although aware of the concept of being "tied down" by a baby, most of the women expressed the feeling that it would not happen to them. Many reported plans to develop hobbies and to initiate friendships with other mothers at home as ways of escaping the monotony. The preponderant feeling was that being at home would create the potential for a more relaxed and creative way of life than most were currently experiencing.

However, the experience of the majority was, in
fact, that the work of caring for a new baby in the early months postpartum is lonely and difficult, though engrossing. Almost all cited being exclusively at home as one of the most difficult adjustments they had had to make. Words such as "confined", "restricted", and "tied down" were consistently used to describe the women's feelings about being home. While many had expected that being a housewife would provide an outlet for creative expression, almost without exception women described their lives at home as "mundane," or "menial". Most women were too fatigued and too involved in the routines of caring for their infants, to have much time or energy for creative activities. The women found that caring for their babies added considerably to household work, and that husbands now tended to leave more of the housework to them because they were at home. It was found that normal day to day activities often involved major logistical planning around the baby's schedule. Rather than being the relaxed time that they had envisioned during pregnancy, in which they would have time to prepare elaborate meals, sew, or entertain, most women felt extremely pressured about completing even minimal household
As the newness and challenge of the maternal role began to wear off, almost half of the sample reported increased dissatisfaction and boredom with the routines of child care. Although there were many gratifications received in seeing the baby develop and thrive, women were commonly dissatisfied with the endless chores. Feelings of constriction as a result of centering life on the maternal role became more prominent toward the end of the second postpartum month. The comments of a woman, who throughout her pregnancy had looked forward to the "freedom" of being at home, captured the feelings of many:

"I've often felt depressed because I didn't realize the extent to which I'd have to throw myself into being a mother. I didn't think it would take as much time as it does. It's constant care at this point, and the things I do seem endless and aren't backed up by any kind of work that can be completed so I'd get the feeling of accomplishment instead of this continuous cycle. My days are all the same, it's monotonous. At times I think I'm really very bored, and I'm not going to spend all my time just taking care
of him for very much longer or I'm really going to go crazy."

Motherhood entailed abrupt social discontinuity for many of these women who had spent much of their lives involved in jobs or studies in which they were accustomed to numerous relationships with other people. They had to now shift their social relationships to a new peer group consisting of other mothers who were also at home during the day. By two or three weeks postpartum, the women generally found themselves spending most of their days alone with their babies. Feelings of isolation often became intense.

Leifer (1980) also found adaptation to a changed marital relationship to be a major adjustment for the women in the study. The strains of incorporating the child into the marriage, and of developing an identity as a family rather than as a couple, added considerably to the emotional turbulence experienced in the postpartum months. As Lopata (1971) has pointed out, the American marriage is generally based upon emotion and sentiment and is very different from the service orientation required for parental roles, so that the birth of a baby usually necessitates a change in the
foundation upon which many marriages are based.

Leifer (1980) noted that the typical woman enters pregnancy fully believing that motherhood will provide the ultimate satisfaction and fulfilment, that development of other aspects of the self is insignificant in comparison with the gratification obtained from becoming a mother. She enters into the maternal role firmly believing that her life will be enhanced by the experience and that it will provide meaning and purpose not experienced in other areas of her life. Leifer was surprised at the extent to which motherhood was romanticized during pregnancy.

Leifer rated responses to interview questions asked during the second month postpartum regarding reactions to the maternal role on a 3 point scale. Of the 17 women, only two reported experiencing low stress, seven reported moderate stress, and eight reported high stress in coping with the maternal role. The scores obtained on a semantic differential test measuring perception of motherhood indicated that ambivalence to negative perceptions of the maternal role was most typical of the group. Thus, the reality of motherhood quite dramatically shattered the
romanticized view that was so prevalent among these women during pregnancy.

Leifer's (1980) study is instrumental in providing information about the normal experience of early motherhood. She found that the women in her study had expectations regarding motherhood which were unrealistic. Their experience of early motherhood, contrary to expectation, was often difficult and stressful. The sample which she studied is undoubtedly very small and predominantly middle class so there is some question as to the extent of the generalizations which can be made from the results. However, Dyer (1963) also found that 80% of couples interviewed indicated that parenthood was not what they expected it would be, especially with respect to the time and attention that the baby required.

The Role of Expectation in the Experience of New Mothers

Carlson (1976) examined the role of expectations in the experience of new mothers. In her view, the fact that certain common experiences of new mothers are usually unexpected contributes to feelings of
disorientation and confusion which are often experienced during the early postpartum period. For example, she observed that many new mothers do not experience the degree of maternal feelings which they expected to feel in the early postpartum period and that this often comes as a worrying surprise to them. As well, a baby frequently does not conform to the fantasies and expectations which the mother might have had about it and in achieving eventual acceptance of and affection for the baby, the new mother has to overcome feelings of disappointment she may have.

Carlson (1976) also observes that new mothers are often bewildered by the unexpected but dramatic physical changes that are brought about by the delivery of the baby. She contrasts the experience of the physical changes resulting from delivery which are abrupt and often unexpected, with those resulting from pregnancy which are gradual, and, for the most part, anticipated. She notes that first time mothers often express surprise at the trauma and discomforts which are associated with the birthing process and early postpartum. She recounts the comments of one first time mother as typical:
"It's so different from what I expected. All the pictures show new mothers walking around, holding their babies, and I can't even turn over. This morning I fainted just trying to go to the bathroom. I thought when delivery was over you were all right". Carlson (1976) notes that the feeling of disorientation which results from the experience of these unexpected physical difficulties commonly results in a search for information about the normality of the experience and assertions that the difficulties were not expected.

A third contributor to the feeling of disorientation experienced by new mothers described by Carlson (1976) is difficulty with the burden of the new responsibility which they often feel, as well as feelings of incompetence and unreadiness to mother the baby. She describes the characteristic behavior of such new mothers as a search for information and an attempt to achieve perspective and stability.

Kach and McGhee (1982) studied the general accuracy of new parents' expectations about various aspects of parenthood. The aim of their study was to determine how problems experienced by new parents were related to their expectations about the demands of
parenthood. They examined the kinds of expectations held prior to the birth of the baby in the areas shown in previous research to be common sources of concern to new parents (e.g. Sollie and Miller, 1980), and compared these to postpartum perceptions about the reality of parenthood. They hypothesized that higher discrepancies between expectations and reality would be positively related to the number of problems mentioned by husbands and wives. They found a lack of significant differences between pre-test and post-test scores in all of the potential problem areas represented and interpreted this finding to mean that the parents in their study were generally prepared for the realities of being a parent. However, they also found that some parents did have considerably less accurate expectations of parenthood than others. They found a relationship between the lack of accuracy of the prediction of what parenthood would be like, and the extent of problems experienced by mothers in adjusting to parenthood (r. = .74). This was not found to be the case for fathers. Thus, mothers whose expectations about parenthood differed from their ultimate experience of parenthood tended to experience
difficulties in adjusting to the experience.

The researchers were also interested in those aspects of parenting for which mothers were least prepared and that became the biggest problems. The post birth questionnaire utilized in the study included requests to: (1) list the five most difficult problems encountered following the child's birth; (2) list the things associated with parenthood that were least expected, and (3) rate the following ten areas in terms of the extent to which they were a problem (ratings ranged from extreme through moderate to slight, using a 1-5 scale). The following items were most commonly listed by mothers as being "least prepared for" were: lack of sleep and energy (44%); time and responsibility involved in caretaking for the baby (39%); the difficulty involved in getting out and going places (28%), and the difficulty of getting used to the baby's schedule (22%). The specific problems most frequently mentioned by mothers were lack of sleep and energy (56%), extra work required by the baby (56%), knowing what to do when the baby cried or was sick (39%), lack of time for self (33%), and lack of time for spouse (28%).
Other problems which the study found were commonly encountered during the transition to parenthood included the loss of identity which a woman must often cope with if she leaves a job outside the home, as well as the reduction of contact with friends or other adults in the working world. Confinement to the house and difficulty in getting out were reported as problems by 25% of the mothers tested.

The researchers found that attitudes toward parenthood were generally positive but that women who experienced the greatest decrease in positive attitudes following the birth of the baby had the greatest difficulty in adjusting to parenthood. They concluded that unrealistic expectations play a significant role in adjustment difficulties which take place during transition to motherhood. The researchers concluded that programs designed to prepare people for childbirth need to focus beyond the delivery of the child to the early months postpartum. It was their view that if parents have accurate expectations and thus are prepared mentally for the day to day demands of parenting, many of the adjustment problems reported in their study could be eliminated. They also suggested
that childbirth preparation classes may be the best forum for producing more accurate expectations.

In discussing their failure to find significant differences between parents' prior expectations about parenthood and their perceptions of parenthood after the birth of the child, the researchers noted the fact that they had not controlled for the extent of their subjects' prior exposure to babies in other capacities than as parents. Thus, it may well be that many of the subjects in the study did have realistic expectations of early parenthood because of previous exposure to babies, as, perhaps, siblings, friends, or the like.

Levitt, Coffman, Guacci-Franco, and Loveless (1993) examined the role of expectancy confirmation in the maintenance of supportive relationships across the transition to motherhood. They proposed that the quality of a close relationship would change as a function of the extent to which the mother's expectations concerning the amount of support she would receive from the close relation were not confirmed regardless of the amount of support which was actually provided by the relation. They found, as expected, that the primary determinant of change in the quality of a
relationship from 1 month to 13 months postpartum was expectancy disconfirmation and that the effect of expectancy on relationship change was more significant than the amount of stress experienced by the mother and the level of support actually provided. Mothers were most likely to show a reduction in satisfaction with their relationship when their partner did not meet their expectations regarding the provision of emotional support, affection, interest and shared time. The researchers suggested that efforts to prevent relationship deterioration after life transitions should include the clarification of support expectations between partners and facilitation of resolution of any conflicting expectancies.

Belsky (1985) investigated the relationship between violated expectations and marital change over the transition to parenthood. He hypothesized that the stress of bearing and caring for a child would be greatest for those whose expectations were overly optimistic relative to the actual postpartum experience. This stress, he further hypothesized, would result in a greater decline in the marital relationship. Belsky (1985) also examined the general
accuracy of prenatal expectations about the effect of parenthood on the following domains of individual and family functioning: marital conflict and cooperation; overall marital relationship; personal opinion of self; relations with extended family; relations with friends and neighbours; and shared caregiving arrangements.

The subjects in the study were 61 white middle class first time parents. Information on prenatal expectations and actual experiences of parenthood was gathered by questionnaires given during the last trimester of pregnancy and at 3 and 9 months postpartum. The marital relationship was also assessed as part of the pre and postnatal questionnaires.

Generally, Belsky (1985) found that prenatal expectations and postnatal experiences were similar. Most individuals in the study did not experience violated expectations. However, Belsky (1985) did find that expectations about the effect of the first baby on the marital relationship were significantly more positive than the actual experience and that new parents expected fathers to be more involved in caregiving than they actually were. With regard to the effect of violated expectations on marital change
Belsky (1985) found that the more actual events were experienced as less positive than had been anticipated, the more marital satisfaction decreased. Further, the relationship between violated expectations and marital change was found to be greater for wives than for husbands.

**Preparation for a Stressful Experience**

The helpfulness of preparation for a new experience has been found in various areas. Brislin (1974) found that preparation for an unpleasant or aversive event lowers the impact of such an event in that with preparation, it will be experienced as less severe than if no preparation had taken place. Egbert, (1964) applied this approach to the post surgical experience of medical patients. He observed that if patients were prepared for the post surgical pain they might realistically expect to experience, they tended to recover more quickly and report less pain than those who had not been provided with the information.

Similar results were found in the area of preparation for childbirth (Charles, Norr, Block, Meyering, & Meyers (1978). These researchers found
that the differences between the women who took classes and those who did not were dramatic. Of the prepared women, 72% reported that they were able to use techniques such as breathing to reduce pain effectively during active labour and transition compared to 15% of unprepared women. As well, prepared women reported significantly lower levels of pain in labour and delivery. The greatest difference between the two groups was the degree of enjoyment derived from the birth. Prepared women had a significantly higher level of enjoyment. The researchers concluded that psychoprophylactic training for childbearing appeared to offer substantial psychological benefits.

Conclusion

The previous research demonstrates that the experience of new parenthood is a life transition which typically involves a decline in feelings of personal well being and an increase in stress, particularly for new mothers. It involves challenges and difficulties which are often unexpected and thus not prepared for. There is some evidence to suggest that unrealistic expectations can exacerbate problems which occur during
the postpartum period. Finally, there is evidence to suggest that preparation for stressful experiences can help alleviate the stress experienced by someone coping with them. Therefore, the aim of the present study was to examine the question of whether preparation for probable postpartum experiences is helpful in alleviating distress in first time mothers.

**Depression, Anxiety and Well Being as Measures of Distress**

It is necessary to clarify the terminology of stress, distress and coping. Hislop (1991) defined stress as "...a life change to which the person must adapt....If the individual can cope, the stress will be tolerated. Failure to adapt to the changes brought about by such events, on the other hand, may lead to feelings of distress"(p.9). Mirowsky and Ross (1989) observed that the two most prevalent indicators of distress are the unpleasant subjective states of depression and anxiety. They further note that feelings of well-being and distress are "opposite poles on a single continuum: more well-being means less distress and more distress means less well-being."
Well-being is a general sense of enjoying life and feeling happy, hopeful about the future, and as good as other people." (p.24).

Thus, in this study, distress was operationally defined as feelings of anxiety, as measured by the Speilberger State-Trait Anxiety Inventory (STAI), and depression, as measured by the Beck Depression Inventory (BDI), and a lack of feelings of psychological well-being, as measured by the Bradburn Affect Balance Scale (ABS).

Difference Scores as Measures of Change

This study is concerned primarily with examining changes in distress which occur as a result of the transition to motherhood. Thus, scores were obtained on measures of anxiety, depression and well-being at approximately the 7th month of pregnancy and again at approximately 1-2 months postpartum and difference scores were calculated for each subject on each measure.
Ancillary Information

To supplement the data which was collected, ancillary information about the efficacy of and responses to the intervention was also gathered. Members of the experimental group provided their subjective evaluations of their experience of the Preparation Sessions as well as ratings of the helpfulness of the sessions. Evaluations were obtained from subjects and their partners shortly after taking part in the preparation session before the birth of the baby (the "Pre-birth Evaluation) and also from the mothers at 1-2 months postpartum (the "Post-birth Evaluation"). The Preparation Session was designed to provide prospective parents with information about what realistically to expect during the postpartum period, to provide coping strategies for commonly experienced difficulties, and to promote communication between the partners with respect to issues relating to the postpartum period. The format of the session was a private counselling session with both members of the expectant couple present and, with one exception, it was given approximately 1 month prior to the estimated delivery date.
Hypothesis

The hypothesis to be examined is that subjects in the experimental group who receive preparation for postpartum experiences will experience less distress postpartum than subjects in the control group who do not receive the preparation. Less distress is defined as a smaller increase or a larger decrease in depression; a smaller increase or a larger decrease in anxiety, and a smaller decrease or greater increase in feelings of well-being compared with pre-birth measures.
CHAPTER 3

Method

The research involved a quasi-experimental design with a matched delayed treatment control group.

Subjects

The subjects were 31 women expecting their first baby who were recruited from childbirth preparation classes held at the British Columbia Women's Hospital. The majority of the subjects were middle class and all but 2 were Caucasian. The age range for members of the experimental group was 24 to 41 years and for the control group 21 to 39 years. In both cases the majority of the participants were between 30 and 39 years of age.

The members of the experimental group were recruited from childbirth preparation classes they attended weekly for several weeks and the curriculum they received included some information concerning the early postpartum period. The members of the control group were recruited from childbirth preparation classes that took place in a single day long session and provided very little or no information about the
early postpartum period. In both cases, with the permission of the hospital and the prenatal instructor, the researcher attended a class, provided an overview of what would be required of participants in the study and invited those interested to participate. Target subjects for the experimental group were offered a Preparation Session to take place prior to the birth of the baby to assist them in preparing for the first weeks at home with baby. Target subjects for the control group were offered a similar session to take place at 1 month postpartum.

After hearing the overview of the study, target subjects for the experimental group were provided with a recruitment letter which contained a contact telephone number and were invited to contact the researcher if they were interested in participating. For the control group, the recruitment letter was handed out to the target subjects prior to the giving of the overview of the study. After the overview of the study was completed, including emphasis on the criteria for participation, interested class members were invited to provide their names and addresses on a sheet which was passed around. In both groups, the
only criteria for participation in the study were that both members of the couple had had little or no experience with babies, were in a stable relationship, the expectant mother had, prior to pregnancy, been in employed in a job which she enjoyed, and the couple would not be living in an extended family situation after the birth.

While the depression, anxiety and well-being measures were obtained for mothers only and thus they were strictly speaking the subjects of the study, both members of each couple were recruited for the study and fathers attended and participated in the Preparation Sessions. It was believed that many coping behaviours which were recommended for the mother both before and during the postpartum period would require the cooperation and participation of her partner. Also, it was considered that for some of the communication and coping skills imparted in the session, preparation of the mother involved preparation of the couple. This was true, for example, for communication skills and expression and negotiation of mutual expectations.

Each suitable couple that volunteered was accepted for participation. Sixteen couples volunteered for the
experimental group and 15 for the control group.

Pre-Treatment Procedures

Between approximately the 6th and 7th months of pregnancy, all subjects in the study were asked to complete the Beck Depression Inventory (BDI) (Beck & Steer, 1978), the A-State Scale of the Spielberger State-Trait Anxiety Inventory (STAI) (Speilberger, Gorsuch & Lushene, 1978), and the Bradburn Affect Balance Scale (ABS) (Bradburn, 1969). The instruments were mailed to the subjects together with an stamped addressed envelope. Subjects were asked in a covering letter to complete the instruments and return them to the researcher by mail as soon as possible.

Treatment

At approximately the 8th month of pregnancy, the researcher attended the home of each couple in the experimental group and provided a 1-1/2 to 2-1/2 hour Preparation Session attended by both members of the couple.

The format of the Preparation Session involved providing the couple with information, engaging in
discussion with the couple about the information and promoting and instigating communication between the partners about matters related to the postpartum period. The material in the session dealt primarily with issues and problems which have previously been reported by new parents (Sollie & Miller, 1980; Kach and McGhee, 1982; Carlson, 1976; Levitt et al., 1993). These included: **physical demands**—loss of sleep, fatigue, slow physical recovery from delivery, extra housework, drain on physical and emotional strength, many discomforts commonly experienced in the postpartum period; **emotional difficulties**—burden of total responsibility for the child, uncertainty about competence as a parent, and feelings of depression, frustration, and resentment toward both child and spouse, possibility of not bonding with child immediately, possibility of child not conforming to expectations; **strains upon the marital relationship**—reduced time spent together as a couple, changes in the sexual relationship, expectancy disconfirmation, and the fact that the baby's needs will have priority over those of self and spouse; and **opportunity costs and restrictions**—reduced social and other activities,
financial restrictions and pressures, and career restrictions. In addition to dealing with these issues, couples were also encouraged to ask questions and focus on any issues of particular concern to them.

The Preparation Session was intended first to provide the new mother and her partner with information sufficient to impart realistic expectations about the demands of caring for the new baby and the life changes, and physical, emotional and marital challenges which they will likely confront postpartum. The session was also aimed at encouraging the couple to physically prepare for the birth and to conduct themselves in such a way following the birth as to encourage effective coping. For example, the session was designed to encourage the new mother to organize her life so as to maximize rest and recuperation time postpartum. It was assumed that this would encourage physical healing and minimize sleep deprivation. The couple was advised to reduce or minimize obligations that compete with a mother's new duties while she is recuperating physically and becoming accustomed to her new role. The couple was encouraged to organize resources such as babysitters and housecleaners in
advance of the baby's birth so that they are available if needed postpartum. Couples were taught and encouraged to practice certain communication skills. They were told to expect and be tolerant of various emotional reactions to the event which they may experience. They were encouraged to, on an ongoing basis, communicate with each other about feelings and reactions they may have to their experiences so as to maximize feelings of closeness and mutual support during the postpartum period. During the session, the couple, with the assistance of the researcher, discussed their expectations about their own and each other's involvement and participation in the duties pertaining to the care of the household and the care and nurturing of the baby. It was strongly suggested that the mother avoid becoming isolated and continue as much as possible to carry on with enjoyable activities after the baby's birth and strategies for achieving this were discussed. The Preparation Session was thus designed to help the couple minimize the possibility of experiencing difficulties and to cope more effectively when difficulties were experienced.

After the session, subjects were given evaluation
questionnaires (the "Pre-Birth Evaluation Questionnaires") (see Appendix A) and an addressed stamped envelope. As the researcher was interested in the reaction of both the prospective mother and father to the format and content of the session, both were asked to provide feedback by completing and returning the form. In an effort to ensure anonymity and thus encourage honesty in respect to the feedback, the couple was told to not put their names on the evaluation form or their return address on the envelope. In light of the anonymity of the evaluations, the subjects were strongly encouraged to be very honest.

Post-Treatment Procedures

BDI, STAI and ABS instruments were mailed to all subjects at one month postpartum. After ascertaining the subjects' willingness to continue their participation, the researcher informed them that the measures would be sent to them. The instruments were then mailed to the subjects with an addressed stamped envelope and a covering letter which asked them to complete the measures and return them by mail as soon
as possible. Included with the instruments for members of the experimental group only was an evaluation questionnaire (the "Post-Birth Evaluation Questionnaire") (see Appendix B) and a second, smaller stamped addressed envelope. In the covering letter, experimental subjects were asked to complete the Post-Birth Evaluation Questionnaire, which canvassed their subjective opinion about the helpfulness of the Preparation Session after having experienced the first postpartum month. Subjects were asked to mail the Evaluation in the smaller envelope provided separately from the instruments which they were also returning. To ensure the anonymity of their responses and their awareness of this anonymity, they were told that they should not identify themselves on the form or the envelope in any way. They were again urged to thus be very honest in their evaluation of the Preparation Session.
**Measures**

The assessment of the helpfulness of the Preparation Sessions was based, in part, on data collected using the Beck Depression Inventory (Beck & Steer, 1978), the Spielberger State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Luchene, 1970) and the Bradburn Affect Balance Scale (Bradburn, 1969).

**Beck Depression Inventory**

The Beck Depression Inventory (BDI) (see Appendix C) was developed to provide a quantitative indicator of the intensity of depression. It has been demonstrated to be useful for assessing depression in both psychiatric and normal populations (Beck, Steer & Garbin, 1988). The 21 items in the inventory cover various cognitive, physiological, affective and motivational symptoms commonly associated with depression. Each item consists of 4 alternatives, graded from 0 to 3 on a continuum of severity. The subject is asked to indicate which of the four choices best describes his or her current state. A choice is made for each item.

There has been extensive research which supports
the reliability of the BDI. Beck et al. (1988) reviewed a number of studies which addressed the internal consistency of the instrument, and reported a mean alpha of 0.86, with a range of 0.73-0.92 for non-psychiatric samples. Split-half reliability estimates have ranged from .53 to .93 (Beck et al., 1961).

The BDI has been shown to have construct validity (Beck et al., 1988), and has been used extensively to support the construct validity of other instruments (Steer et al., 1986). The BDI has also been demonstrated to be sensitive to changes in depression produced by different therapies (Steer et al., 1986). Beck et al. (1988) reviewed 35 studies which demonstrate that the BDI shows concurrent validity with a number of other measures of depression.

**Spielberger State-Trait Anxiety Inventory-A-State Scale**

The Spielberger State-Trait Anxiety Inventory, which was developed by Spielberger, Gorsuch, and Lushene (1970), has been used more widely in psychological research than any other measure of anxiety. It consists of 2 twenty item scales. The A-Trait scale measures trait anxiety while the A-State
scale (see Appendix D) measures state anxiety or anxiety which is a response to situations. It has been shown repeatedly to differentiate individuals in stress versus non-stress conditions (Spielberger, 1983).

Spielberger et al. (1970) found test-retest reliabilities for the A-State scale ranging from .16 to .62 with a median reliability coefficient of .33. Relatively low reliability coefficients were expected because measures of state anxiety are intended to reflect the situational factors which exist at the time of testing. In other words, test-retest measures of reliability are not strictly applicable to the S-Anxiety scale since it is sensitive to fluctuations of anxiety in accordance with current situational factors. Instead, measures of internal consistency were determined to provide a more meaningful indication of the reliability of the scale (Spielberger et al., 1970). When these were carried out, all but one of the alpha coefficients for the samples of working adults, students, and military recruits in the normative samples were above .90 with a median coefficient of .93.

There is also evidence for the validity of the
measure. The S-Anxiety scale of the STAI distinguished military recruits tested shortly after they began highly stressful training programs from college and high school students of the same age under nonstressful conditions (Spielberger, et al., 1970). It also distinguished undergraduate students in an exam condition from those in normal conditions. The differences between the means of the two conditions were highly significant for both sexes. (Spielberger et al., 1970). The S-Anxiety scale also distinguished between undergraduate college students who were administered the instrument in a single testing session under the following conditions: normal, relaxation, during a "relatively easy IQ test" and after viewing a stressful film (Lazarus & Opton, 1966). The S-scale has also been repeatedly shown to be sensitive to emotional reactions to surgery. Scores have been shown to rise immediately prior to surgery and to decline as patients recuperate (Auerbach, 1973; Chapman & Cox, 1977; Spielberger, Auerbach, Wadsworth, Dunn & Taulbee, 1973).
Affect Balance Scale

The Affect Balance Scale (ABS) (see Appendix E) was developed by Bradburn (1969) to measure psychological well-being resulting from an individual's current life situation. The measure focusses the individual's attention on experiences and feelings in the recent past and is sensitive to variations in affect in nonclinical samples. The ABS is composed of two subscales—the Positive Affect scale and the Negative Affect scale, each of which contains 5 questions. According to Bradburn the 10 questions were selected because they were determined to be representative of affective experiences common throughout the population. Bradburn (1969) found the difference between the scores on the Positive and Negative Affect subscales is a valid indicator of an individual's level of psychological well-being or life satisfaction. Each individual's score on the ABS is obtained by subtracting his or her total score on the Negative Affect subscale from his or her total score on the Positive Affect subscale. Higher scores on the ABS indicate more positive affect.

Bradburn's (1969) model thus views an individual's
sense of happiness or well-being at any given time as a function of the degree to which positive affect predominates over negative in his or her life experiences. That is, "as the manner in which positive and negative affect averaged out over the recent past" (Bradburn, 1969, p. 14). Bradburn (1969) examined the relationship between scores on the ABS and self-reports of happiness. He reported that as one moves from a predominance of positive over negative feelings through a balance of the two to a predominance of negative over positive feelings, the percentage reporting that they were very happy declined. When there was a preponderance of negative feelings, the proportion of subjects reporting that they were not happy increased sharply. Correlations ranged from .45 to .51. Bradburn (1969) concluded that the difference between the scores on the positive and negative feelings indices is a good indicator of an individual's current level of psychological well-being.

Bradburn (1969) conducted a reliability study in which 200 respondents completed the ABS twice, 3 days apart. For each item, he computed coefficients of association (Q's) between the responses given during
the first and second times. Gamma coefficients were also computed between the scores at the two time periods. The Q-values for the individual items were uniformly high, with all except one over .90. Bradburn (1969) interpreted these results to mean that the stability of response is sufficient to enable identification of meaningful change when it occurs.

Data Collection
The scores obtained from each instrument, which were administered to the mothers only, provided the quantitative data to be analyzed. Scores for all subjects in the experimental group and the control group on the BDI, STAI, ABS were obtained at approximately 7 months pregnancy (pre-birth score) and again at between 1 and 2 months postpartum (post-birth score). Mean scores for each instrument within each group were also calculated. Difference scores were also calculated for each subject on each instrument by subtracting the subject's post-birth score on each instrument from the pre-birth score. That is, a difference score representing pre-birth to post-birth change was calculated for each subject in respect to
each instrument administered. If a subject's score on the BDI, STAI, or ABS increased from pre- to post-birth, the subject's difference score for that measure was positive. Conversely, if her score on an instrument decreased from pre- to post-birth, the subject's difference score for that instrument was negative. Mean difference scores for each instrument within each group were also calculated.

Data Analysis

For each instrument, the mean pre-birth score was compared to the mean post-birth score using a paired t-test, for the experimental and control groups separately. The post-birth mean scores on each measure for the experimental and control groups were also compared.

The mean change from pre-birth to post-birth in the experimental group was compared to the corresponding change in the control group for each instrument using a two-sample t-test. In addition, an assessment of the "direction" of change was carried out by categorizing each change for each subject as "decreased", "same", or "increased", and there was a
comparison of the experimental and control groups with chi-square tests of independence.

To augment the data collected in the study, the subjects' and their partners' (in the case of the Pre-birth Evaluation) and the subjects' only (in the case of the Post-birth Evaluation) subjective reactions to the Preparation Session that were obtained from the Evaluation Questionnaires were compiled and analyzed.

Finally, on the Post-birth Evaluation Questionnaire, subjects in the experimental group rated the Preparation Session on the degree to which it had prepared them for their adjustments during the first weeks at home with the baby. The session was rated on a 10 point scale ranging from the lowest point, 1 to the highest point 10. These ratings were averaged and examined.
CHAPTER 4

Results

Quantitative Data

The experimental group demonstrated lower mean scores for depression and anxiety and a higher mean score for well-being on the post-birth measures (see Table 1), although these differences were not statistically significant.

Table 1

Comparison of mean scores (pre and post birth) for depression (BDI), anxiety (STAI) and psychological well-being (ABS); experimental and control groups.
The mean BDI, STAI and ABS scores for the experimental and control groups are shown in Table 2. Both the experimental and control groups showed a mean reduction in depression from pre- to post-birth. The respective mean differences for the experimental and control groups on the BDI were -0.69 and -0.13. Both the experimental and control groups showed a mean increase in anxiety from pre- to post-birth. The respective mean differences for the experimental and control groups on the STAI were 2.73 and 1.60. The experimental group demonstrated a mean increase in well-being (ABS) from pre- to post-birth (0.06) and the control group showed a mean decrease (-0.07). However, none of the pre- to post-birth changes were statistically significant, for either the experimental or control groups.

There was a greater reduction in depression (BDI) scores for the experimental group than the control group, a greater increase in anxiety scores (STAI) for the experimental than the control group, and an increase in well-being scores for the experimental group compared to a decrease in well-being scores for
the control group from pre- to post-birth. However, none of the pre-birth to post-birth differences were statistically significant, for either the experimental or control groups (see Table 3).

---

**Table 2**

**Means (standard deviations) and paired t-tests, experimental and control groups**

<table>
<thead>
<tr>
<th></th>
<th>PRE</th>
<th>POST</th>
<th>DIFFERENCE</th>
<th>Paired t-stat</th>
<th>2-tailed P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPERIMENTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td>7.94 (5.01)</td>
<td>7.25 (6.21)</td>
<td>-0.69 (5.50)</td>
<td>0.50</td>
<td>.62</td>
</tr>
<tr>
<td>STAI</td>
<td>31.13 (11.14)</td>
<td>33.87 (9.93)</td>
<td>2.73 (6.17)</td>
<td>-1.72</td>
<td>.11</td>
</tr>
<tr>
<td>ABS</td>
<td>2.19 (2.23)</td>
<td>2.25 (1.61)</td>
<td>0.06 (1.61)</td>
<td>-0.16</td>
<td>.88</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>PRE</th>
<th>POST</th>
<th>DIFFERENCE</th>
<th>Paired t-stat</th>
<th>2-tailed P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONTROL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td>7.47 (5.03)</td>
<td>7.33 (4.55)</td>
<td>-0.13 (4.73)</td>
<td>0.11</td>
<td>.91</td>
</tr>
<tr>
<td>STAI</td>
<td>33.40 (9.07)</td>
<td>35.00 (8.68)</td>
<td>1.60 (3.85)</td>
<td>-1.61</td>
<td>.13</td>
</tr>
<tr>
<td>ABS</td>
<td>2.13 (2.50)</td>
<td>2.07 (2.12)</td>
<td>-0.07 (2.02)</td>
<td>0.13</td>
<td>.63</td>
</tr>
</tbody>
</table>
Table 3

Comparison of mean change between experimental and control groups (two-sample t-tests)

<table>
<thead>
<tr>
<th></th>
<th>EXPERIMENTAL DIFFERENCE</th>
<th>CONTROL DIFFERENCE</th>
<th>2-sample t-stat</th>
<th>2-tailed P-value</th>
<th>95% C.I. FOR DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI</td>
<td>-0.69 (5.50)</td>
<td>-0.13 (4.73)</td>
<td>-0.30</td>
<td>.77</td>
<td>[ -4.33 ; 3.23 ]</td>
</tr>
<tr>
<td>STAI</td>
<td>2.73 (6.17)</td>
<td>1.60 (3.85)</td>
<td>0.60</td>
<td>.55</td>
<td>[ -2.71 ; 4.98 ]</td>
</tr>
<tr>
<td>ABS</td>
<td>0.06 (1.61)</td>
<td>-0.07 (2.02)</td>
<td>0.20</td>
<td>.84</td>
<td>[ -1.21 ; 1.47 ]</td>
</tr>
</tbody>
</table>

There were no significant differences between the experimental and control groups with respect to the number of subjects who improved or worsened on any of the outcome measures. Approximately one-half of each group were less depressed post-birth than they were pre-birth; about one-third had less anxiety from pre-birth to post-birth and one third in each group had greater well being post-birth from pre-birth (see Table 4).
Table 4

Crosstabulations and chi-square tests to compare experimental and control groups on the direction of change.

<table>
<thead>
<tr>
<th>CHANGE IN BDI</th>
<th>Exp't</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased</td>
<td>8</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Same</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Increased</td>
<td>5</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>15</td>
<td>31</td>
</tr>
</tbody>
</table>

Chi-Square (2 df) = 3.12  
P-value = 0.21

<table>
<thead>
<tr>
<th>CHANGE IN STAI</th>
<th>Exp't</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Same</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Increased</td>
<td>9</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>15</td>
<td>30</td>
</tr>
</tbody>
</table>

One missing observation in the Experimental Group

Chi-Square (2 df) = 0.44  
P-value = 0.80

<table>
<thead>
<tr>
<th>CHANGE IN ABS</th>
<th>Exp't</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Same</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Increased</td>
<td>6</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>15</td>
<td>31</td>
</tr>
</tbody>
</table>

Chi-Square (2 df) = 0.89  
P-value = 0.64
Ancillary Findings

To augment the objective data collected in the study, subjective evaluations of the Preparation Session were obtained by means of questionnaires before and after the birth of the baby. Those obtained from the members of the experimental group and their male partners in the case of the Pre-Birth Evaluation, and from the members of the experimental group only in the case of the Post-Birth Evaluation were compiled and examined.

Pre-Birth Evaluation Questionnaire

All 16 subjects in the experimental group and their 16 partners were invited to complete the Pre-birth Evaluation Questionnaire, which provided a subjective assessment of the Preparation Session from the perspective of having received the session but not yet having delivered the baby. Sixteen of the 32 individuals invited to provide this feedback ultimately completed and returned the forms. The responses to this questionnaire were provided by the subjects and by their partners and it was not indicated on the form whether the respondent was male or female. Thus, the data from the Pre-birth Evaluation Questionnaires
constitutes responses from subjects and their partners. A review of the responses given to the questions "What I found useful about the session...:" and "The best thing about the session was...:" revealed that the responses could generally be categorized under one of the following 3 headings: a. helpful for promoting beneficial communication and understanding between the partners; b. helpful for providing information which permitted realistic planning; c. helpful for normalizing feelings, doubts or fears. Thus, the Preparation Session was experienced as helpful to the extent that it assisted the subjects and their partners to communicate or understand each other's experience more clearly and thus had a positive effect on the relationship, it provided needed information and permitted or encouraged planning based on the information, and/or it normalized the subjects' or their partner's doubts, fears and feelings. Verbatim responses to the questions on the questionnaire are shown in Response Lists 1, 2, 3 and 4.

The responses of the subjects on the Pre-birth Evaluation Questionnaire generally indicated that the session was experienced as helpful. This is
particularly evident when the responses to the questions: "What was not useful about the session..." and "The worst thing about the session was..." are examined (see Response Lists 2 and 3). There were clearly more positive than negative feelings expressed about the session in the questionnaire.

Response List 1
Pre-birth Evaluation Questionnaire
Responses to Questions 1 and 2: What I found useful about the session/The best thing about the session was:
1. Encouraged Beneficial Communication between Partners
   -that we were reminded of our partner's expectations
   -confronting each other about our foremost concerns, reservations, attitudes towards caring for and bringing up baby in early months
   -the opportunity to openly consider and discuss feelings with my husband which were previously not discussed
   -the ability to discuss some of our expectations of each other for after the baby is born
   -listing things we felt were possibly bothering
our spouse
-open discussion between partners spawned by the session
-some suggestions as to how to plan the first few months, particularly with regard to the relationship
-trying to think of what my spouse was feeling; it made me stop and think about what she may be going through
-it provoked some discussion between my husband and I
-to realize what things my wife was concerned about
-its good to bring feelings out in the open
-identifying ways to handle and preserve the couple's relationship during a time of change
-the discussion on realistic expectations was very useful and I find can be applied to almost any situation or stage in life

2. Provided Information/Encouraged Realistic Planning
-honest and organized presentation of the reality of a newborn
-taking the time and effort to sit down and
evaluate the situation
-I learned about some coping mechanisms and potential problems of first time parents
-good suggestions and solutions to some of the difficulties new parents face-I found this very helpful
-it provided me with insight into some of the stresses new parents experience
-the presenter's honesty and delivery of information
-being able to ask questions
-asking questions
-awareness building as to some of the most common difficulties in bringing home baby-good possible solutions to the problems
-provided a broader insight of what to expect emotionally and physically after birth of baby
-giving formal time to actually think about becoming parents

3. Normalized Feelings, Doubts and Fears
-identifying to couples that doubts, fears, anxieties etc are quite normal feelings-that you're not alone
- confirmation of my fears and doubts and that this was OK
- realization of society's view that pregnancy and babies are 100% positive is a very 1 sided view - I had less guilt after our discussion
- good to discuss the fact that many feelings we feel are common to many new parents
- it was good to hear that many first time parents have similar concerns/fears
- it was nice to be able to express my fears and doubts about the responsibility of fatherhood and have someone listen - also nice to have honest and candid input
Response List 2

Pre-birth Evaluation Questionnaire

Responses to Question 2: What was not useful about the session?

-we did not find anything that was not useful about the session
-a bit repetitive of some of the information covered in the labour classes
-I found the session useful
-basically there was very little that I found not useful
-I found the entire session useful
-everything was useful-don't change in any way-valid points and discussions!
-it was all relevant
-n/a: even the parts of the session that just reviewed things that we covered in our pre-natal class were helpful

Four of the respondents left this space blank or in some way indicated n/a.
Response List 3

Pre-birth Evaluation Questionnaire

Responses to Question 4 - The worst thing about the session was:

- nothing bad really
- again, we did not find anything negative about the session - all information was helpful and informative
- focus on the negative
- focus on the negative aspects of having a baby
- basic assumption seemed to be that parenthood is stressful, difficult, exhausting, physically demanding etc. which are all negative things
- confirmation of my fears

Seven respondents left this space blank or indicated n/a in some way.
Response List 4

Pre-birth Evaluation Questionnaire

Responses to Question 5: How the Session Could Have Been Improved

- In a group situation—exchanging ideas and experiences of several couples
- Perhaps some follow-up session or meeting to received feedback on how the original information session was grasped or if any additional/help is required by the couple after the baby is here
- Written materials to refer to later
- Provide more information on how to deal with possible problems which may arise
- More discussion on research
- More positive affirmations on parenthood
- Stress positive aspects of parenthood
- More time
- Perhaps more discussion between husband and wife about expectations
- I think it was very well researched and planned and can pretty much help anybody's situation
- More interaction between the couple
- Give it to all prospective parents
-receiving handout which we could have referred to later would be helpful
-role play may help memory retention

Post-Birth Evaluation Questionnaire

Only the responses of the subjects in the experimental group (mothers only) to the Post-Birth Evaluation Questionnaire were examined. 13 of the 16 subjects in the experimental group completed and returned the Post-Birth Evaluation Questionnaire. They were asked to provide their subjective evaluations of the Preparation Session, from the perspective of having experienced the first 1-2 months postpartum. The first two questions were: "Do you think that you were more prepared than if we had not had any session at all? Explain:" and "In what way did our session help you?" A review of the responses to these questions revealed that they could be categorized in a manner which roughly corresponded to the categorization of responses to the first two questions of the Pre-birth Evaluation Questionnaire. The headings, "Helpful or beneficial to the couple's relationship", "Helpful for the provision of information/increase in awareness", and "Helpful for
normalizing the experience" were appropriate. Thus, the subjects still appeared to consider the session to have been useful for the same reasons as they considered it helpful before the birth of the baby. They indicated that the session facilitated or encouraged beneficial communication between the new parents, provided needed information about the reality of life with a newborn, and provided reassurance by normalizing the experiences of the early postpartum period.
Response List 5

Post-birth Evaluation Questionnaire

Responses to Question 1: In what way were you more prepared than if you had not had any session at all? In what way did the session help you?

1. Couples/Communication
   - learned not to transfer frustrations to my spouse
   - good hints, good to talk about issues with partner
   - gave us a new space to speak about issues
   - reminded us to be very patient with one another and to always keep our lines of communication open
   - opened dialogue between my husband and I to talk more openly

2. Information/Planning
   - re-emphasized the changes coming
   - simply covering all the different types of changes one can expect was a big help
   - being made aware of problems is always a good method of first defense
   - we both had done so much reading—nothing said was
new to me—but it was very useful to verbalize it—or to hear it from someone else
—none of our friends with children had given us the "straight goods"—they all painted a totally rosy (and unrealistic!) picture and were not honest about the first few weeks with a newborn—there were a few points that I hadn't come across in any of the books I had read.
—in reiterating some facts we already knew but in a more elaborated manner. Reminding me of the obvious but forgotten facts was also useful—gave me more understanding about dealing with expectations and anger.
—insights on what to expect given by someone who had experienced giving birth and motherhood—information and awareness helped me get through the insanity of 24 hours per day feeding

3. Normalizing
—finally someone was levelling with us about how hard it was going to be—when it was we knew we were normal!
—the session helped me to understand what were
normal feelings
-good to know others go through the same changes
-made me feel as though what I am going through is normal and not just me - misery loves company

Response List 6

Post-birth Evaluation Questionnaire

Responses to Question: How could the preparation be improved?

-in a group situation with more couples
-a home visit after the birth going over or covering all the things that were discussed prior to the birth would be very helpful.
-talk more about expectations of each other and of changes to come
-more questions and answers between the couple; I feel this may encourage each couple to perhaps communicate better and think of how the other spouse may be feeling.
-more about the worry a mother will have possibly about the health of baby ie. so fragile not used to baby
-more positive, less negative
- spend more time and perhaps have more "counselling"
- give them a copy of the material discussed: your suggestions and ideas—more sessions!
- the participants should be encouraged to interact in a more dynamic manner—otherwise things could be easily forgotten
- maybe have more specific questions for each information area
- more sessions—perhaps individual ones

Actual Postpartum Difficulties Experienced

The Post-birth Evaluation Questionnaire asked subjects to report areas in which they had actually experienced difficulties postpartum. The responses to this question are contained in Response List 7. A review of the list indicates that the bulk of the difficulties which had been experienced at 1-2 months postpartum by the new mothers were individual losses, emotional difficulties and physical difficulties. Only one subject referred to having experienced a marital difficulty.
Response List 7

Post-birth Evaluation Questionnaire

Responses to Question: In which areas did you have difficulties making adjustments? (circle those applicable: Physical, Emotional, Marital, Individual Losses)

Comments?...

1. Individual Losses

- not talking to adults for the whole day
- loss of a fairly organized household and lifestyle
- loss of ability to do things on my own schedule or as needed ie. eat, sleep, shower etc.
- I felt I was thrown into another life and to some extent was mourning my previous lifestyle
- loss of personal freedom
- not being able to pick up and go as readily as before
- certain activities I am unable to do right now (ie. skiing)
- time management and change in lifestyle (male)
2. Marital
   - new person in our lives

3. Emotional
   - my emotional state was pretty unbalanced - post partum depression
   - emotional difficulties stemmed from being exhausted which led to being more easily upset or moody
   - painful emotional sensations the first 2 weeks

4. Physical
   - brutal, slow repair
   - the birth was difficult - loss of blood and many stitches - so physical recovery was long - I was anemic due to loss of blood so I was very tired and had to sleep a lot
   - physical exhaustion!
   - felt very tired for longer than I expected
   - rough time recovering from C-section
   - sleep deprived - find that difficult to cope with
   - painful physical sensations the first 2 weeks
   - sleep deprivation
Rating of Session

Subjects in the experimental group were asked to rate, on a scale of one to ten, the degree to which the session in which they participated prepared them for the adjustments which they had to go through during their first weeks at home with the baby and 13 of the 16 new mothers in the experimental group responded. Of those who responded, 7 rated the sessions as an 8, one subject rated it as a 7, two as a 5, two as a 4 and one as a 1. The mean rating was 6.30. The individual who rated the session as a 1 commented "I feel the session was excellent, but I don't think anyone can really prepare you until you've actually gone through it yourself". She also commented that she had experienced an unbalanced emotional state in the form of postpartum depression after the birth of her baby.

It is thus apparent that the majority of subjects in the experimental group regarded the Preparation Session in which they participated as having been of benefit in preparing them for the adjustments which they ultimately had to make during their first months postpartum.
CHAPTER 5
Discussion

The purpose of the study was to determine whether preparation for the experience of new parenthood, which is virtually universally acknowledged to be somewhat stressful, reduces distress experienced postpartum by first time mothers. Measures of depression, anxiety, and well-being were used to compare the emotional distress of first time mothers who received preparation with those who had not. It was believed that adequate preparation for probable postpartum experiences would increase a first time mother's ability to cope with the stresses of the experience and thus increase feelings of well being and decrease distress in the form of feelings of anxiety and depression postpartum.

It was assumed that subjects who received the preparation would engage in effective planning and implement some or all of the recommendations provided so as to minimize the degree of change in their lives. It was also assumed that they would utilize some or all of the coping strategies which they had learned when they did encounter difficulties. A third assumption
was that couples who received the preparation would communicate more effectively with each other and thus be available to each other as support during the postpartum period rather than experience a deteriorating relationship as another source of stress during this time. Thus, it was assumed that members of the experimental group would generally, in a variety of ways, conduct themselves so as to minimize stress during the first months postpartum. This, it was presumed, would result in less distress which would be reflected in lower depression and anxiety scores as well as higher well being scores compared to subjects in the control group who did not receive the preparation.

An examination of the responses provided in the Pre-birth and Post-birth Evaluation forms reveals that the sessions were in fact generally experienced as having conveyed information, and provoked thought, communication and discussion. They appear to have had the effect of opening up communication between partners, helping partners to understand each others' experiences, and facilitating discussion about expectations, attitudes and worries about the baby. It
also appears to have provided information which the subjects perceived as honest and helpful regarding the reality of life with a newborn, including information about the common difficulties experienced by new parents, what to expect emotionally and physically, and solutions and suggestions for coping with difficulties. Finally, the session provided some reassurance to participants in the sense that some derived comfort in knowing that the feelings, worries, doubts and anxieties which they were experiencing were normal. A review of the responses to the Post-birth Evaluation Questionnaire confirms that the goals of conveying a realistic image of the reality of the newborn plus providing coping and communication strategies were achieved in some measure.

However, despite the responses on the evaluation questionnaires and despite the fact that the majority of subjects who received the preparation indicated their subjective opinion that it helped to prepare them for the adjustments which they had to go through in their first weeks at home with the baby, there were no significant differences found between the new mothers who received this preparation and those who did not on
the experience of distress postpartum. There were no significant differences in the changes in depression, anxiety or feelings of well-being for the experimental group as compared to the control group from pregnancy to 1-2 months postpartum.

There thus appears to be some contradiction between the results obtained from the quantitative data and the subjects' subjective comments about their experiences expressed in the questionnaires. That is, the subjects who received the preparation report it as having been helpful, but this was not reflected in differences between those subjects and subjects in the control group on the measures employed.

There is thus some reason to suspect that either the instrument data and/or the questionnaire responses were not reliable indicators of the helpfulness of the preparation. The data obtained from the instruments will be examined first. There are a number of possible explanations for the lack of significant differences between the experimental and control groups on the instruments which were employed as measures of distress during the first months postpartum. One possibility is that when the measures were taken post-birth, not
enough time had yet elapsed since the birth of the baby for the emotional impact of the stress experience to have emerged. This would be consistent with the findings of Miller and Sollie (1980) who reported few significant differences between groups at one month postpartum but significant differences by 8 months postpartum. One could speculate that by 8 months postpartum, members of the control group may have demonstrated significantly higher depression and anxiety scores and lower well-being scores than the subjects who received the preparation. If this were the case, the results of this study would provide support for the notion of the "baby honeymoon" which has been observed during the early postpartum period (Miller and Sollie (1980).

It is important to note that the very wide variability in scores may have had some impact on the failure to observe significant differences between the groups. BDI scores in the experimental group range from 3 to 21 (pre-birth) and from 0 to 23 (post-birth). Difference scores for the experimental group (BDI) range from -9 to 11. Similar spreads can be observed for the STAI for which difference scores for the
experimental group range from 7 to 18. It should be noted that the size of the sample was small and with a larger sample size, different findings may have resulted.

As well there are undoubtedly unaccounted for variables which may make the groups less homogeneous than expected, and which may thus dampen the effect of the intervention. That is, emotional reactions to new motherhood are significantly affected by many factors which were not controlled for in the study. For example, new mothers' emotional reactions will differ following childbirth depending on such variables as whether they experienced complications during the pregnancy, the difficulty of the delivery, the quality of the relationship with their partner, their partner's physical availability to them during the postpartum period, whether the baby was wanted or unwanted, availability of help with the baby and household tasks, availability of relatives or friends for advice and assistance, experience of losses, hurts and failures in the past, age, education, self concept and personality traits, and the ease or difficulty of the infant's temperament, to name some of these. It was also
impossible to control for the amount of individual preparation, such as by reading or other forms of self education which members of the control group may have engaged in. These variables undoubtedly all exert some influence upon a new mother's emotional reaction to the experiences of the early postpartum period which very likely dampened the effect of the intervention, particularly in view of the very small sample studied. When viewed in this light, it is not surprising that statistically significant results would not have been obtained, even if the Preparation Sessions were effective.

It is also conceivable that the intervention made no difference to the experience of the experimental group and that the subjects in the experimental group overrated the degree to which they were prepared by the session for the first weeks at home with the new baby. This could have been a type of "rationalization" given that the sessions appear to have been experienced as positive and may have provided some assistance to the mother. There are definitely limitations to the benefits which can be derived from one session which is 1-1/2 to 2-1/2 hours in length and which is based on an
instruction and discussion format. It is conceivable that the session did not provide sufficient preparation to have reduced the level of distress experienced by subjects in the experimental group. It was hypothesized by Sollie and Miller (1980) that no amount of preparation and rehearsal can fully simulate the constant and immediate needs of an infant. This view is supported by the comments of the subject that "nobody can prepare you for the experience" but that you have to go through it yourself. While it is apparent from the generally enthusiastic comments of the members of the experimental group that the session was of some benefit, it may not have been of sufficient power to affect the distress level postpartum of the subjects who experienced it.

It is also conceivable that the sessions did make a significant impact on the emotional well being of the subjects in the experimental group postpartum, but that the measures of anxiety, depression and well-being which were chosen were not sensitive to the effects of the positive benefits of the sessions reported by the subjects in the experimental group.

It is also possible that the subjects in the
experimental group, while obtaining some positive benefit from the Preparation Session, were at some level resistant to and were not able to fully accept the message that new parenthood is difficult, stressful, exhausting etc. Because of the existence of some degree of disbelief, they may not have followed through with preparations which would have reduced the stress of the postpartum period. It is interesting to note that of the six responses to Question 4 of the Pre-birth Evaluation Questionnaire which were obtained (Response List 3), "the worst thing about the session was...", four responses referred to the fact that the session "focussed on the negative aspects of having a baby". It is apparent that, to some pregnant couples, the message that the path which they have embarked upon may not be an easy one is undoubtedly a somewhat disturbing message to hear. These individuals are clearly more desirous of learning about the positive aspects of having a baby. This attitude may have affected their willingness to fully believe and act upon the information provided in the session, thus adversely affecting the results of the study.

Finally, the failure to obtain significant results
might simply indicate that the experience of new motherhood is not sufficiently stressful for the intervention to have had an impact on measures of depression, anxiety and well being. While the responses to Question 7 of the Post-Birth Evaluation Questionnaire "In which areas did you have difficulties making adjustments?" (see Response List 7) indicate that the subjects did experience some difficulties during the postpartum period, the measures of depression, anxiety and well being postpartum did not indicate the experience of a great amount of distress postpartum nor an increase in distress from pre-birth measures. In fact, for both the experimental and the control groups, depression decreased and for the experimental group, well being increased from pre- to post-birth. Only anxiety increased for both groups. None of these changes were statistically significant. The mean depression scores for the experimental and control groups postpartum were 7.25 and 7.33 respectively. On the BDI, scores of from 0 to 9 are considered within the normal range (Beck, 1978) and not indicative of depression. Similarly, the mean anxiety scores for the experimental and control groups
postpartum were 33.87 and 35 respectively. For the STAI, scores can range from a minimum of 20 to a maximum of 80. The mean anxiety score for females in the 19-39 age group in the normative sample was 36.17 (Speilberger, Gorsuch, and Lushene, 1970). Thus, the means for both groups were indicative of relatively low levels of anxiety postpartum.

These findings are consistent with studies which have tended to show that the transition to new parenthood is experienced, not as a crisis, but as a transition with some difficulties (Hobbs, 1965; Hobbs and Cole, 1976; Kach and McGhee, 1982). The Preparation Session could have been experienced as merely additive in that it was helpful in respect of difficulties which were encountered postpartum. This would be consistent with the subjective evaluations of the majority of the subjects in the experimental group. However, if the experience being prepared for is not sufficiently stressful to create distress, the preparation will not impact scores on anxiety, depression and well-being measures which are measures of distress.
CHAPTER 6
Summary and Conclusions

This study was designed to test whether having received preparation for probable postpartum experiences reduced the emotional distress of first time mothers as they coped with the stress of the early weeks postpartum. Women who received the preparation were compared with women who did not at 1-2 months postpartum on measures of anxiety, depression and psychological well-being. As well, experimental and control groups were compared regarding differences in the amount of change in these measures from pre- to post- birth. Both before and after the birth of the baby, the subjects in the study who received the preparation (and their male partner in the case of the pre-birth evaluation) also completed questionnaires in which they provided their subjective evaluations of the preparation which they had received.

There were no significant differences between the experimental and control groups on measures of anxiety, depression and psychological well-being at 1-2 months postpartum and no significant differences in the amount
of change in depression, anxiety and well-being from pre- and post-birth. However, because of limitations in the design of the study, the results obtained were inconclusive. The responses to the questionnaires indicated that the women regarded the preparation which they had received as helpful. It appears to have facilitated communication between themselves and their partners on matters concerning the pregnancy and postpartum period, provided helpful information and normalized feelings, worries and experiences which they had. There is thus some basis upon which to conclude that despite the lack of significant differences which were found on the measures employed, this kind of preparation provides benefits for new mothers, both before and after the birth.

Implications for Practice and Directions for Future Research

The implications of this study are very practical. If preparation for postpartum experiences is helpful for first time mothers, there is justification for offering to pregnant women either prenatal classes or counselling sessions in which the type of preparation
provided to the experimental group in this study is offered.

While the intervention did not produce statistically significant results, it is significant that the majority of subjects who received it reported having benefitted. In view of the enthusiasm of the participants regarding the experience which they received, and their rating of the session as having been helpful in their ability to cope postpartum, there is justification for examining the issues dealt with in this study further. If this were to be done by means of an experimental design as was employed in this study, however, it would be crucial that it control many more variables than was possible in this study. However, as noted herein, it is very difficult to control for the vast number of variables which may be very influential in producing and preventing postpartum emotional distress. It may thus be very difficult to obtain a clear indication of the influence of preparation alone by means of this type of experimental design. As well, it is suggested that any measures of psychological distress/well-being which are employed be taken much later than was done in this study, perhaps at
approximately 8 months postpartum.

As well, the format and content of the preparation could be amended to incorporate some of the suggestions provided by the subjects in the experimental group. For example, subjects may be more receptive to information about the negative aspects of the experience of new parenthood if more emphasis is also placed upon the positive aspects. A more balanced format in which more positive information is interspersed with negative may be warranted. As well, a group format and the provision of follow-up sessions postpartum might be considered.

Finally, in view of the discrepancy between the subjective ratings obtained from the subjects in the experimental group concerning the helpfulness of the Preparation Sessions and yet the absence of significant differences between the groups on the measures employed, there is some reason to question the appropriateness of the measures used in this study. The presence or absence of psychological distress in the form of increased depression and anxiety and decreased well being postpartum may not be the best indicator of the usefulness to the participants of the
preparation. It may well be that the best measure of
the efficacy of this type of program is simply the
subjective evaluation of the participant. In view of
the difficulties involved in choosing appropriate
measures and in controlling crucial variables, one
suggestion would be that a purely qualitative study may
be more appropriate than an experimental design for
determining the helpfulness of preparation for
postpartum experiences to first time mothers.
If first time mothers subjectively experience the
preparation as helpful and, in their subjective
evaluation, derive positive benefits from it, then,
based upon further investigation with improvements in
methodology, such preparation may well be justified.
REFERENCES


Appendix A

Pre-birth Evaluation Questionnaire

1. What I found useful about the session
2. What was not useful about the session
3. The best thing about the session was
4. The worst thing about the session was
5. How the session could have been improved
Appendix B

Post-Birth Evaluation Questionnaire

On a scale of one to ten, how much would you say our session together prepared you for the adjustments which you had to go through during your first weeks at home with your baby
(Circle one)
(least) 1 2 3 4 5 6 7 8 9 10 (most)

Explain

In what way did our session help you?

In retrospect, can you give any suggestions for me in how to prepare couples more effectively

In which areas did you have difficulties making adjustments (circle those applicable)

Physical    Emotional    Marital    Individual Losses

Comments?

Please send this evaluation in the small envelope, do not put your name on it and do not put a return address on it. I will not know who sent it- so please....be honest!
Appendix C

Beck Depression Inventory

This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2 or 3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. If several statements within a group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

0  I do not feel sad.
1  I feel sad.
2  I am sad all the time and I can't snap out of it.
3  I am so sad or unhappy that I can't stand it.

0  I am not particularly discouraged about the future.
1  I feel discouraged about the future.
2  I feel I have nothing to look forward to.
3  I feel that the future is hopeless and that things cannot improve.

0  I do not feel like a failure.
1  I feel I have failed more than the average person.
2  As I look back on my life all I can see is a lot of failures.
3  I feel I am a complete failure as a person.

0  I get as much satisfaction out of things as I used to.
1  I don't enjoy things the way I used to.
2  I don't get real satisfaction out of anything any more.
3  I am dissatisfied or bored with everything.

0  I don't feel particularly guilty.
1  I feel guilty a good part of the time.
2  I feel quite guilty most of the time.
3  I feel guilty all of the time.
0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry but now I can't cry even though I want to.

0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time.
3 I don't get irritated at all at the things that used to irritate me.

0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.
0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all any more.

0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance and they make me look unattractive.
3 I believe that I look ugly.

0 I can work about as well as before.
1 It takes extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

0 I can sleep as well as usual.
1 I don't sleep as well as I use to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I get too tired to do anything.

0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetitie is much worse now.
3 I have no appetite at all any more.

0 I haven't lost much weight, if any, lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.
I am purposely trying to lose weight by eating less.
yes___ no___
0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.

0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.
Appendix D

Spielberger State-Trait Anxiety Inventory

A-State Scale

A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you feel right now, that is, at this moment. There are not right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

1. I feel calm
2. I feel secure
3. I am tense
4. I feel strained
5. I feel at ease
6. I am upset
7. I am worrying over possible misfortunes
8. I feel satisfied
9. I feel frightened
10. I feel comfortable
11. I feel self-confident
12. I feel nervous
13. I am jittery
14. I feel indecisive
15. I am relaxed
16. I feel content
17. I am worried
18. I feel confused
19. I feel steady
20. I feel pleasant

The subject indicates how he or she feels at a particular moment in time by checking one of four alternatives: "not at all", "somewhat", "moderately so", or "very much so".
Appendix E

Bradburn Affect Balance Scale

During the past few weeks did you ever feel...

1. Pleased about having accomplished something?_______
2. That things were going your way?_______
3. Proud because someone complimented you on something you had done?_______
4. Particularly excited or interested in something?_______
5. On top of the world?_______

1. So restless that you couldn't sit long in a chair?_______
2. Bored?_______
3. Depressed or very unhappy?_______
4. Very lonely or remote from other people?_______
5. Upset because someone criticized you?_______