the potential for a behaviour to occur or that the need potential (NP) of an individual is a function of the expectancy of reinforcement (ER) or that a behaviour will lead to satisfaction, and the degree to which this reinforcement is needed or valued (NV).

ii. Locus of control and postpartum depression

A causal link has been suggested between locus of control and postpartum depression. Indeed, the concept of locus of control is emerging as an increasingly popular one in discussions concerning depressive aetiology.

Hayworth, Little, Carter, Raptopoulos, Priest and Sandler (1980) conducted a study based on Rotter's (1966) theory of locus of control. They assumed that 'external' individuals who saw themselves as less in control of their lives and generally displayed poorer coping behaviours, would show higher levels of postpartum depression. Women were assessed at 36 weeks pregnant on anxiety, hostility, and locus of control. Predictions were tested by assessing depression 6 weeks after birth. Intropunitive was not significantly related to subsequent depression. The most depressed women were those who had been the more extrapunitive as well as the more hostile. Women who perceived themselves as less in control of their lives were likely to rate higher on depression postnataally, as were younger women.
A further predictive study was undertaken by the same group of researchers (Little, Hayworth, Carter, Dewhurst, Raptopoulos, Sandler and Priest, 1981). Postpartum depression was again associated with women demonstrating an external locus of control. In their conclusion, the researchers cite situational factors that may also be important in the aetiology of postpartum depression. In particular they describe the change from a stimulating work environment, a new routine and a possibly isolated situation, and the lack of practical and social support, as factors requiring research in relation to locus of control and postpartum depression.

There has been considerable debate about the relationship of locus of control to mental health (Phares, 1976). The above studies suggest that a high internal locus of control reflects good mental health. This view is supported by Smith (1970) in discussing life crisis resolutions. However, others argue that in certain circumstances beliefs that others control events can be a successful and more healthy coping mechanism (Chodoff, Friedman and Hamburg, 1979), in situations, for example, where a person has been bereaved following a loved one's prolonged terminal illness.

Scott-Palmer and Skevington (1981) argue that the prolonged psychological disturbance associated with both uncontrollable painful diseases, and the protracted distress preceding
bereavement, could be compared with the long-term wait and psychological changes which occur between conception and childbirth. Feelings about uncontrollability are likely to be the predominate beliefs. They state that this seems to be particularly true when the procedures of pregnancy and childbirth are examined in more detail. Once pregnant, women are subject both to the inevitable physiological and biological changes leading up to childbirth, as well as to the authoritative controls of others - the medical profession. In these times of high technology and regular working hours, control of the date, time, place and speed of labour are as much in the hands of the medical profession as Mother Nature or the woman herself (Scott-Palmer and Skevington, 1981).

On the basis of this argument, Scott-Palmer and Skevington (1981) predicted that women with an external locus of control would cope better with pain and labour during childbirth. This hypothesis was validated in their findings. They showed that those who believed events to be controlled by others reported less pain during labour, supporting the idea that beliefs about uncontrollability may well be a less painful coping strategy for women in labour than the more inaccurate beliefs about a high degree of personal control. Although unexplored, these results may have implications for postpartum depression. Oakley and Chamberlain (1981) have shown that women experiencing less satisfactory labours tend to be more
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depressed after birth. It is possible that women expect to be more in control of childbirth than they actually are, and are therefore dissatisfied to find that they are not. Most births in the West take place in hospital under the control of the medical team and not under that of the mother herself. Therefore mothers with a high internal locus of control may also become depressed.

2.2.2(b) Learned Helplessness:

"Nothing ever seems to work out for me, so I'm not surprised at how I feel now."

"I think I am to blame for feeling like this."

i. Defining the concept

The Learned Helplessness Hypothesis (Abramson, Seligman, and Teasdale, 1978) holds that when faced with uncontrollable events, individuals make attributions about the cause of uncontrollability. This 'learned helplessness' is a concept similar to Rotter's 'externality'. The model specifies three relevant attributional dimensions: internal-external, stable-unstable, and global-specific. Seligman, Abramson, Semmel and von Baeyer (1979) hypothesize that some individuals have a particular attributional style that predisposes them to depression following stressful events. A depressive attributional style is characterized by the tendency to make internal, stable and global causal attributions for
uncontrollable negative events that, in turn, lead to the symptoms of depression.

Seligman's (1975) work originated in studies with animals, where dogs pre-treated with inescapable shock showed poorer escape behaviour when later given escapable shock. He concluded that during the first phase of the experiment, when the shocks were inescapable, the dogs had learnt that shock termination was independent of their behaviour. After further research on learned helplessness in animals and humans, Seligman noted that this phenomenon closely resembled depression in its symptoms and hypothesized cause. On the basis of this resemblance, he proposed that depression, like learned helplessness, was the result of inescapable or seemingly inescapable traumas, which served to teach the individual that she or he lacked control over reinforcement and which therefore discouraged any adaptive responses.

There are certain weaknesses in the learned helplessness model of depression (Bootzin, 1980). Seligman points out that the model might explain the inactivity characteristic of depression, but it does not explain the equally characteristic sadness and guilt. Nor does it account for the fact that different cases of depression vary considerably in intensity and duration. To fill these gaps the investigators have refined the theory. According to their new formulation, depression depends not simply on a belief in lack of control over reinforcement but also on the person's
explanations for this lack of control (Bootzin, 1980). Only people who see their lack of control as due to causes that are (1) permanent rather than temporary; (2) internal (part of their personality) rather than external (part of their environment); and (3) generalized over many areas of their functioning rather than specific to one area of functioning are likely to become depressed (Abramson et al., 1978). The likelihood and severity of depression depends on how individuals explain to themselves their lack of control.

ii. Learned helplessness and postpartum depression

The learned helplessness model of attributional style has been investigated in relation to postpartum depression. As stated, the model specifies three relevant attributional dimensions: internal-external, stable-unstable, and global-specific. A hypothesized depressive attributional style consists of internal, stable and global attributions for undesired outcomes. This leads to an expectation of future noncontingency and thus to symptoms of helplessness. Individuals with this type of attribution style are more likely to become depressed when faced with the stressful event of childbirth. The idea of perceived control (Abramson, et al., 1978; Seligman, 1975) has been frequently noted as an important variable in terms of both the psychological and obstetric outcome of pregnancy and childbirth (Charles, Norr, Block, Meyering and Meyers, 1978).
Postpartum depression in relation to the learned helplessness model was researched by O'Hara, Rehm and Campbell (1982). They found a significant, yet small relationship between attribution style and postpartum depression. According to the authors it is debatable whether this study lends support to the hypothesis of learned helplessness as a predictor of postpartum depression. In their discussion, the authors pose that social support may be a powerful buffer between stressful deliveries and depression. The relationships between the combined effects of attribution style, social support and stressful deliveries has yet to be investigated.

Manly, McMahon, Bradley and Davidson (1982) assessed whether women's prenatal attributional style would be predictive of depression in the first week postpartum. Their results provide negligible support for the notion of depressive attributional style as defined by the learned helplessness hypothesis. They question whether the learned helplessness hypothesis has validity in predicting postpartum depression and whether it can be generalized to all population groups. Cutrona (1983) conducted further research to test predictions from the learned helplessness model of depression in the context of postpartum depression. Her conclusions were consistent with those of Manly et al. (1982) and O'Hara et al. (1982). Her findings lend minimal support to the hypothesis that pre-existing attributional style predicts women's levels of depression following childbirth.
Conclusion

From the preceding discussion it is apparent that the Locus of Control Theory has greater support in the literature than the Learned Helplessness Theory. To date, however, no studies have assessed the combined effects locus of control and social variables as suggested by Little et al. (1982). The present study has taken up this challenge and locus of control is included as an independent variable.
2.3 The Social Realm

The quality of the social environment has far-reaching effects on the human capacity to cope (Mechanic, 1974). These effects have aroused much interest in the field of postpartum depression and psychological health in general. A number of social factors have been explored in their relationship to postpartum depression. Culture, socio-economic factors, marital status, religion, parity, age and employment are the major dimensions that have yielded relatively cohesive findings.

Postpartum blues and depression are viewed as supracultural in their manifestations (Harris, 1981). A number of cross-cultural studies show that the incidence, symptoms and recovery patterns of women suffering from postpartum depression is universal (Barzilai and Davies, 1972; Davidson, 1972; Harris, 1981). Religion, ethnic group, age and urban-rural residence have been shown to have minimal effect on the differing outcomes of the birth experience (Grossman et al., 1980). Illsley (1967), and Oakley and Chamberlain (1981), found socio-economic factors to be significantly related to postpartum adjustment. The latter study found a depressed mood after delivery to be associated with current social problems such as housing and not going out to work.
Parity and its relationship to postpartum depression has been investigated. The results are varied, but the general view is that primigravidae are at greater risk than multiparous women (Breen, 1975; Rich, 1976). This is largely explained by the fact that first-time mothers have greater changes to negotiate in the transition to parenthood than their more experienced counterparts.

2.3.1 Social Support Theories

"I feel really sad and I just wish that my husband could be with me all the time. I need his love so much now."

"The hospital staff have been amazing, I feel so content."

"I haven't seen my doctor once yet and I had my baby 5 days ago."

One element of the social environment, supportive relationships, is considered crucial in sustaining individuals through life crises (Caplan, 1974). Recently, behavioural scientists have begun to discuss and research the value of social support as a means of offsetting stress-generated physical and psychological disorders (Cobb, 1976; Erickson, 1977). At present social support is attracting the greatest interest in the area of social factors and postpartum depression. The recent surge of interest in social support hardly reflects discovery of a new idea. Social bonds, social integration, and primary group relations
in general, are central concepts within sociological theory and have long been prime considerations within sociological analysis. As Hammer (1981) has observed, these relationships "may be thought of as the basic building blocks of social structure; and their formation, maintenance and severance are universal and fundamental social processes" (Hammer, 1981, p. 52).

Although the view that social bonds and supportive interactions are important to a person's health and well-being seems to have been long and widely shared, only recently has hard evidence on the subject been developed and assembled (Cobb, 1976).

i. Defining the concept

Social support is a concept understood in a general sense, yet it gives rise to many conflicting definitions. Some writers have offered only the vaguest of definitions of social support. Beels (1981) for example, defines social support as

"whatever factors there are in the environment that promote a favourable course of the illness" (Beels, 1981, p. 60).

Lin, Ensel, Simeone and Kuo (1979) essentially define social support as support that is social,

"Social support may be defined as support accessible to an individual through societal ties to other individuals, groups and the larger community" (Lin et al., 1979, p. 109).
Such imprecision in conceptions of support is mirrored in operational measures that are conglomerations of anything that might protect people against stress and illness, including ego strength, social class (Nuckolls, Cassel and Kaplan, 1972) or job satisfaction (Lin et al., 1979).

Others have generated more explicit and appropriate, if somewhat disparate, definitions of social support. Cobb (1976) defines social support as information leading the subject to believe that he or she is cared for, esteemed, and a member of a network of communication and mutual obligation. Cobb (1976) refers to these three aspects of social support as (1) emotional support, (2) esteem support, and (3) network support.

Caplan (1974, 1981) while not neglecting the importance of affect, also stresses the cognitive aspects of support. He sees support as the guidance and feedback provided by others which enable a person to emotionally master a stressful life episode. Under the umbrella of social support, Caplan also includes instrumental support - the provision of tangible resources such as child care or money. This is very much in line with Kahn and Antonucci (1980), who define social support with 3 A's: affect, affirmation, and aid. Support may involve the expression of caring and emotional intimacy (affect), the provision of information about the rightness of wrongness of one's actions or thoughts (affirmation), and the
availability and use of direct help through money, time, effort and the like (aid).

Others have treated support as rather distinct resources such as "a secure base" (Bowlby, 1969), "intimacy" (Brown and Harris, 1978; Weiss, 1974) and "reassurance of worth" (Weiss, 1974). Only one study to date has collected data on how lay people see support (Gottlieb, 1978). In Gottlieb's typology, "emotionally sustaining behaviour" is the largest category of support activities, a type of support with overtones from Cobb (feeling loved), Caplan (emotional mastery), and Kahn and Antonucci (affect and affirmation). Pinneau (1976) distinguishes emotional support as "the communication of information which directly meets basic social-emotional needs" (Pinneau, 1976, p. 12).

Conclusions can be drawn from the varying definitions of the social support concept. Fundamental in all definitions is the notion of emotional support. According to House (1981), this involves providing empathy, caring, love, trust and resources which protect the ego from the negative effects of stressful situations. He writes that when individuals think of people being "supportive" towards them they refer essentially to emotional support. Other forms of support are less universally recognized in both theoretical discussions and reports of lay people (House, 1981).
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The definitions so far limit themselves to social support activities and their qualities. Another important issue is the existence and availability of the interpersonal ties themselves. Social network analysis provides a means to measure this aspect of support. A social network refers to the ties one has with a group of people and the links within the group. It is a way to objectively measure the structure of a person's social resources and examine how structure varies across a range of settings (Mitchell and Trickett, 1980). For example, the interconnectedness of network relationships, referred to as "density", could be investigated to see how, or if, behaviour changes systematically in settings of different network intensity (Turner, 1981). Network analysis offers the appeal of a structural approach. Structure can be reliably measured and some have suggested the abandonment of the concept of "social support" and its inherent subjectivity in favour of strict network analysis (Hammer, 1981). This suggestion has not received support in the field, as many researchers believe that the concept of "social support" is effective only to the extent it is subjectively perceived by the recipient.

Leavy (1983) states that this dichotomy is overly restrictive. He points out that support has a quantitative element (having no friends or relatives on which to rely obviates the need for assessing the supportiveness of one's network). He states that merely counting people and computing ratios concerning density and other structural variables does
not touch the depth of the concept "support". A large, interconnected network such as an extended family can be mobilized for support, but also for condemnation and ostracism. Social support must therefore be seen as the availability of helping relationships and the quality of those relationships - both the structure and the content of the the phenomenon (Leavy, 1983).

Cobb (1976) states that social support begins in utero, that it is best recognized at the maternal breast, and that it is communicated in a variety of ways, but especially in the way the baby is held (supported). He points out that as life progresses, support is derived increasingly from other members of the family, then from peers at work and in the community, and perhaps in case of the special need, from a member of the helping professions.

Current opinion (Cobb, 1976; Paykel, et al., 1981; Turner, 1981) holds that social support facilitates coping with crisis and adaptation to change. The transition to parenthood constitutes a crisis period (Dyer, 1963; Rapaport, 1965). Many potentially stressful changes occur. Kahn (1980) identifies these as (1) responsibility for the well-being of the infant; (2) reallocation of financial resources; (3) shift of the communication system from dyad to triad; and (4) reorientation of relationships within the social network. Little training and preparation for this
transition to motherhood and increased social isolation may render the changes as greatly stressful. The need for effective social support increases at this time (Kahn, 1980). The majority of studies evaluating social support in the transition to motherhood have also assessed its relationship to postpartum depression.

ii. Social support and depression

The impetus for work linking depression and social support comes from Brown and his associates in Great Britain who have studied the mediators of stress and psychological disorder for almost a decade (Brown 1974; Brown, Bhrolchain and Harris, 1975; Brown and Harris, 1978, Brown, Harris and Peto, 1973). Their position is that while stressful life events can be triggering mechanisms for disorder, many contextual factors can either immunize individuals against symptoms or increase their vulnerability to them. Brown et al. (1975) reported that, among women, the single most powerful factor mediating negative life changes and serious clinical depression was having an "intimate, confiding relationship with a boyfriend or husband" (Brown et al., 1975, p. 225). Women without an intimate who experienced life stress were almost ten times more likely to manifest serious depression than those similarly stressed who had a confidant.

This report led to other studies of depression (Miller and
Ingham 1976; Paykel et al., 1980; Roy, 1978; Slater and Depue, 1981; Surtees, 1980). In all cases, having a confiding relationship correlated with reduced depression, although the confidant did not need to be of the opposite sex in some cases. Depression was particularly prevalent in women when instrumental and emotional support from husbands was absent or inadequate. Paykel et al. (1980) reported that although the experience of negative life events was a principal means of differentiating clinically depressed from non-depressed postpartum women, among those experiencing one or more negative life events, ten times more of the depressed women received "no help" from their husbands than the non-depressed women. Slater and Depue (1981), acknowledging the varieties of depressive disorder, used careful screening procedures to arrive at two small samples of primary depressives: one which made serious suicide attempts and one which did not. The attempters were significantly more likely than controls to lack a supportive confidant.

There is evidence in the literature that aspects of the interpersonal relationship between husband and wife may well be the most important context within which the woman's pregnancy unfolds and into which a new baby is born. (Wenner and Cohen, 1968). The quality of the marital relationship, as well as features of its styles of support play a vital role in influencing the psychological nature of the events for both man and woman, and ultimately influencing the infant.
Wenner and Cohen (1968) found that, contrary to their initial expectation that successful adaptation to birth was more related to the woman's physical and emotional health, for their sample an uncomplicated pregnancy and birth was more related to the success of the marital relationship. Deutscher (1970), in his clinical study of ten middle-class couples, found that the seven with good marital relationships had little postpartum difficulty, in contrast to the three couples in his study with inadequate communication, feelings of emotional distance and alienation, and discomfort about the decision to have a baby, all of whom experienced some degree of postpartum depression.

Using psychoanalytic perspectives, Benedek (1970), and Jessner, Weigert and Fay (1970), looked specifically at the role the husband needs to play during pregnancy in order to adequately support his wife. Lewis and Weinraub (1976) studied this problem from a family systems orientation. All emphasize the importance of the father's providing reassurance to the mother, reducing her anxiety about pregnancy, birth and child-rearing in order to allow her to carry out these activities comfortably and effectively. In Shereshefsky and Yarrow's (1973) study, the overall marital adjustment of the couple was strongly related to a variety of measures of maternal adaptation. Meyerowitz (1970) reported that women in his study who were dissatisfied with their childbirth experiences were also dissatisfied with their sexual role.
In his data, wives accepted the pregnancy and birth if they felt it brought them closer to their husbands and tended to reject it if they felt it alienated them from their husbands.

In the only study to use a prospective design, Surtees (1980), measured support and depressive symptoms upon admission to a psychiatric institution and again following significant improvement. Support was measured in terms of the existence of a confiding relationship, and the individual's perception of its quality. Having a close, reciprocal confiding relationship proved to be a significant predictor of improvement in symptoms. In addition, the quality of the confiding relationship was particularly important for patients who experienced high levels of "residual adversity"—continuing stress after the onset of symptoms.

O'Hara et al. (1983) assessed the extent to which social network variables and frequency of stressful life events distinguish between women experiencing mild to moderate postpartum depression and those women making a successful adjustment. The relationship between stressful life events and postpartum depression was supported. They found no relationship between delivery stress specifically and postpartum depression. A number of structural characteristics of subject's social networks were examined, including total size, proportion of kin, number of confidants, proximity of network members to subject, frequency of contact, and