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SUBJECTIVE STRESS, COPING AND SUBJECTIVE WELL-BEING

IN WOMEN BEFORE AND AFTER THE BIRTH

OF THEIR FIRST CHILD:

A LONGITUDINAL CASE-STUDY APPROACH

A thesis presented in partial fulfillment of

the requirements for the degree of

Master of Arts in Psychology

at Massey University

Edward John Mason

To motherhood: The hardest job in the world

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ABSTRACT

A longitudinal case-study approach was adopted to explore the changes in subjective stress, coping and subjective well-being in women before and after the birth of their first child. Subjects were 16 women due to have their first baby. It was planned to see them at ten weeks, six weeks and two weeks before the expected date of birth of their baby, and two weeks, six weeks and ten weeks after the actual date of birth. Demographic information was collected in the first session. At each contact semi-structured interviews were conducted and subjects were asked to complete a questionnaire designed to measure subjective stress, coping, appraisals, and subjective well-being. The specific approach was descriptive, and the specific aim was to look for patterns and themes. However, while there were no well-defined hypotheses, it was expected that subjective stress would decrease before the birth, increase in the first month to six weeks after and decrease again towards the end of the study period. The use of coping strategies were expected to follow a similar pattern to that of subjective stress. Subjective well-being was expected to follow the opposite pattern to subjective stress and coping. It was felt that making specific predictions about appraisal emotions would not be productive since it was expected that emotional lability would cloud the data and general patterns would not emerge. Results showed that subjective stress generally decreased as the expected date of birth neared, except for those women who experienced a specific stressor unrelated to the pregnancy as such. It increased dramatically immediately after the birth and decreased gradually as

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the final contact approached. The predictions about coping and subjective well-being were also generally fulfilled. As expected there were no obvious general patterns for appraisal emotions. Empirical, theoretical, methodological and policy implications were discussed, and suggestions for future research were made.

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CHAPTER 1

INTRODUCTION

The aim of the present research thesis is to explore the changes in subjective stress, coping and subjective well-being (SWB) over the course of a major life event. A secondary aim is to explore the changing relationships between these variables. The emphasis on change implies a need to capture variability. Since the literature shows that there is considerable variability in women's psychological responses to different stages of the pregnancy and birth of a first child and early motherhood, this event was chosen as the object of study.

Within the stress field, the traditional life events approach (cf. Holmes & Rahe, 1967) does not account for the intervening person processes of appraisal and coping. Most research in this area investigates the relationships between objective characteristics of events and adaptational outcomes, while largely ignoring intervening subjective processes (e.g., Dohrenwend & Dohrenwend, 1974). Stress is defined as an objective environmental event or a particular style of response. Actual attempts of the organism to cope with objective stressors are downplayed, as are cognitive evaluations of experience.

Recently, however, the Berkeley Stress and Coping Project has redressed the balance somewhat (e.g., Folkman & Lazarus, 1981,

1985; Kanner, Coyne, Schaefer & Lazarus, 1981). The theoretical and methodological thrust of the Berkeley model is directed toward measuring and conceptualising the role of the intervening person processes of appraisals and coping. Stress is not presumed, but is viewed as the result of cognitive evaluations of the significance of the event and the person resources available for coping with it. Coping is not conceptualised as a particular type of response or as an outcome, but is conceived as a dynamic, changing process. The coping strategies employed at any given point or for any given experience will depend on the transactions between multifarious person and environment variables. Sophisticated and naturalistic research designs are needed, therefore, to map the relationships between these variables.

In the SWB area, current evidence suggests that personally significant and subjective variables, as opposed to objective life circumstances and demographic variables, have significant impact on SWB (e.g., Andrews & Withey, 1976; Diener, 1984). A life event such as the birth of a first child, which apriori seems to be an event of immense personal significance, would therefore be expected to have a substantial effect on SWB. While life events do correlate with SWB (e.g., Headey, Holmstrom & Wearing, 1984; Reich & Zautra, 1981; Warr, Barter & Brownbridge, 1983; Zautra & Reich, 1980), most research in this area is concerned with measuring the effects of minor life events on SWB (e.g., Reich & Zautra, 1981; Zautra & Reich, 1980), and establishing correlations between dimensions of SWB and different types of life events (e.g., Headey,

Holmstrom & Wearing, 1984; Warr, Barter & Brownbridge, 1983). There is also little research which examines the impact of major life events on SWB.

Although some research has been published recently from the perspective of adaptation-level theory (e.g., Cameron, 1974; Reich & Zautra, 1981; Zautra & Reich, 1980), this does not address itself to coping as a process, but to SWB as an outcome and indicator of adaptation. There is also little longitudinal research in the area.

Research into the role of psychological variables in pregnancy, birth and early motherhood contains only a small body of literature which studies person processes during pregnancy and after the birth, and which studies the relationships between pregnancy and postnatal psychological processes (e.g., Entwisle & Doering, 1981; Grossman, Eichler & Winickoff, 1980; Leifer, 1980; Shereshefsky & Yarrow, 1973). As Leifer (1980) argues, much of the research examines the effects of isolated variables such as anxiety on birth complications (e.g., Davids & DeVault, 1962; Davids, DeVault & Talmadge, 1961; Gorsuch & key, 1974; Grimm, 1961; McDonald & Christakos, 1963; Winokur & Werboff, 1956; Zuckerman, Nurnberger, Gardiner, Vandiveer, Barrett & Breeijen, 1963), a consequence of which is that there is insufficient empirical data on which to base a comprehensive hypothesis-testing investigation. Furthermore, while variables such as adaptation have been studied in some detail (especially Shereshefsky & Yarrow, 1973), processes

such as subjective stress and coping have been given little or no attention. Subjective well-being has been similarly neglected.

Therefore, a longitudinal case-study research design was adopted to explore the changes in subjective stress, coping and SWB in women before and after the birth of a first child. It was planned to conduct semi-structured interviews and administer a questionnaire at 10 weeks, six weeks and two weeks before the expected date of birth of the child, and at two weeks, six weeks and 10 weeks after the actual date of birth.

The present thesis is divided into four sections. The present chapter and the following four comprise the introduction. Inchapters 2, 3 and 4 the literature relevant to the three main content areas of the present thesis will be reviewed. Chapter 2 examines the literature on the Lazarus model of stress, appraisal and coping, chapter 3 examines the literature on SWB, and chapter 4 examines the literature on the psychological correlates of the first birth. In chapter 5 the specific aims of the present research will be discussed. Chapter 6 presents a description of the method and design of the present study. The results are presented in chapter 7, and chapter 8 will present a discussion of the implications of the findings and discuss suggestions for future research.

CHAPTER 2

THE LAZARUS MODEL OF STRESS, APPRAISAL AND COPING

The purpose of the present research is to explore changes in subjective stress, coping and subjective well-being in women before and after the birth of their first child. Consequently, it is necessary to conceptualise stress and coping as processes rather than as outcomes or environmental events. While a number of stress theories exist in the literature (cf. e.g., Coelho, Hamburg & Adams, 1974; Cox, 1978; Dohrenwend & Dohrenwend, 1974; Kutash & Schlesinger, 1980; Monat & Lazarus, 1977) none conceptualises stress, appraisal and coping as processes so comprehensively as the Lazarus model. Also, research conducted by the Lazarus group (e.g., Folkman & Lazarus, 1980, 1985; Kanner, Coyne Schaefer & Lazarus, 1981; DeLongis, Coyne, Dakof, Folkman & Lazarus, 1982) provides empirical support for this model. The purpose of the present chapter is to describe the Lazarus theory, the major findings, and the methods Lazarus and his colleagues have developed to measure stress, appraisal and coping.

Lazarus and his colleagues have been developing a theory of appraisal and coping processes since the 1960s (e.g., Coyne & Lazarus, 1980; Folkman, Schaefer & Lazarus, 1979; Lazarus, 1966, 1981, 1984; Lazarus, Coyne & Folkman, 1982; Lazarus & Folkman, 1984; Lazarus, Kanner & Folkman, 1980; Lazarus & Launier, 1978), and conducting empirical research into the role of stress (DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Kanner, Coyne, Schaefer & Lazarus, 1981; Lazarus, 1984; Lazarus & DeLongis, 1983; Lazarus, DeLongis, Folkman & Gruen, 1985), appraisals (e.g., Folkman & Lazarus, 1981, 1985; Folkman, Lazarus, Gruen & DeLongis, 1986) and coping strategies (Folkman & Lazarus, 1981, 1985) in more recent years. The emphasis of their theory is on process rather than outcome, and their research designs reflect this orientation. Their empirical findings largely support the model, and they have developed a number of measuring instruments from this research (Folkman & Lazarus, 1981, 1985; Kanner et al., 1981).

THEORY

The Lazarus model differs from other theories in several ways. Traditionally, stress is viewed either as a stimulus (cf. Holmes & Rahe, 1967; Dohrenwend & Dohrenwend, 1974) or as a response. Neither perspective accounts for the entire picture, however, and both are question-begging. Stimulus approaches beg the question of what it is about the stimulus that produces a particular response, and response approaches beg the question of what it is about the response that indicates a particular stressor (Lazarus & Folkman, 1984, p. 15).

In the Lazarus model stress is conceptualised neither as a stimulus in isolation nor as a response in isolation. The Lazarus model is a transactional approach and conceptualises stress as a

product of the unique relationship between particular persons and particular environments.

The Lazarus model also differs from other theories of coping in its process orientation. Achievement and ego theories both confound process and outcome, while ego theories, and theories which view coping as either a personality trait or as a set of common responses triggered by specific characteristics of similar events all ignore empirical evidence which indicates that coping is multidimensional and changes across circumstances and persons (Folkman & Lazarus, 1980).

In the Lazarus model coping is neither an achievement nor a trait, and is not static. It refers to the process of attempting to manage specific demands appraised as taxing or exceeding resources (Lazarus & Folkman, 1984, p. 141). This has three implications. First, what people actually do rather than what they usually do is the object of study. Second, coping strategies are examined in the context of a specific encounter. Therefore, specific coping strategies can be linked to specific demands. Third, process implies change in coping strategies, both as a single encounter unfolds and different demands are imposed, and as different encounters are dealt with. Thus, coping refers to the things we do to influence transactions in order to achieve an adaptational outcome.

In the Lazarus model both stress and coping are mediated by appraisals. Primary appraisal is the process of evaluating the significance of a transaction for one's well-being. A transaction can be either irrelevant, benign-positive or stressful. Irrelevant and benign-positive transactions impose no demands and therefore do not require coping. There are three types of stressful appraisals. A harm refers to a loss already sustained, such as the death of a loved one. A threat refers to the possibility of future harm, such as a serious illness. A challenge refers to a transaction having the potential for mastery, such as a college examination. А transaction may also be appraised as both a threat and a challenge simultaneously. For example, uncertainty about the outcome of a college examination may elicit both harm and mastery expectations. All stressful appraisals impose demands and therefore require resources to be mobilised to cope with them.

The process of evaluating what resources are available to cope with a stressful transaction is called secondary appraisal. The outcome of this evaluation could have an influence on primary appraisal. For example, a college examination could be appraised either as a threat or as a challenge depending on the confidence students have. If they feel they have studied hard and there is every possible chance of getting a good grade, they will probably appraise the examination as a challenge. On the other hand, if they know they have done very little study, and think therefore a fail is likely, the examination is more likely to be viewed as a threat.

Variables such as salience and personal commitments can also influence primary appraisal. For example, the examination may be appraised as irrelevant if little meaning or importance is attached to the outcome. If the student's entire career hangs in the balance the examination is most likely to be regarded as having immense significance. It is more likely therefore to be appraised as threatening than irrelevant. On the other hand, if nothing of importance depends on the outcome it is more likely to be appraised as irrelevant than as threatening. Even in the latter case, however, a particular student may pride himself on passing every examination regardless of its career significance. In this case, whatever the significance of the outcome in terms of the student's career prospects, the examination is more likely to be regarded as a threat than irrelevant.

Feedback from the person-environment transaction can influence the appraisal and coping process. This is called reappraisal. In the Lazarus model, however, appraisal and coping are ongoing processes and do not have discrete start or end points.

EMPIRICAL RESEARCH AND MEASUREMENT INSTRUMENTS

Methodological Issues: In addition to constructing a theory of coping, Lazarus and his colleagues have developed a unique approach to the measurement of stress, appraisal and coping processes. The emphasis in this model is on measuring processes that occur over

time and across encounters. There are two methodological issues which Lazarus notes in this context.

Consistent with the idea that appraisal and coping processes occur within the context of an ongoing life experience, Lazarus suggests that these processes should be measured in vivo to retain validity. The traditional laboratory method is inadequate for a number of reasons. First, the laboratory cannot generate accurate descriptive data about natural processes. Laboratory-derived data is of necessity somewhat contrived and artificial. Second, laboratory studies are typically of only short duration. Since adaptational encounters frequently emerge over an extended period of time, it is impossible to capture the full flavour of an entire encounter. Third, ethical and practical considerations preclude recreating many experiences in the laboratory. Finally, the laboratory offers only an illusion of control. It is impossible to be certain that laboratory results are due to the manipulation of the independent variable, and not some unknown third variable. Laboratory research always begs the question. In order to preserve validity naturalistic methods should be employed.

A second methodological issue centres on the normative tradition. Lazarus suggests this approach ignores both individual differences and situational differences. It abstracts an individual's behaviour on a single dimension and attempts to give meaning to it totally divorced from its context. The ipsative approach serves a supplementary role. Processes are measured and are given meaning for the same person both over time and across encounters. In this way the context is preserved. With these considerations in mind Lazarus and his colleagues have designed a number of instruments to measure stress, appraisals and coping.

Measurement of Stress: Lazarus and his colleagues (Kanner, Coyne, Schaefer & Lazarus, 1981; DeLongis, Coyne, Dakof, Folkman & Lazarus, 1982; Lazarus and DeLongis, 1983; Lazarus, 1984) argued that the life events approach to stress measurement is inadequate. This involves measuring the effects of life events on adaptational outcome variables, for example, physical health status, psychological symptomatology and morale. Assuming that this method does not measure everyday sources of stress, Lazarus and his colleagues reasoned that a substantial amount of the variance is unaccounted for. In response they designed a daily hassles scale. Daily hassles are the minor demands we meet every day. Examples are misplacing or losing things, concerns about inconsiderate smokers, the health of family members, and so on.

Kanner, Coyne, Schaefer and Lazarus (1981) administered the Daily Hassles scale, the Berkman Life Events scale, the Hopkins Symptom Checklist (HSCL), and the Bradburn Morale scale to 100 community residents several times over a year. The Daily Hassles scale was significantly more correlated with both the HSCL and the Bradburn Morale scale, than was the Berkman Life Events scale. Daily hassles also accounted for more variance than did life events when life events were statistically controlled for, and also added

unique variance of their own. Similar results were found by DeLongis, Coyne, Dakof, Folkman and Lazarus (1982) who studied the relationship of daily hassles and life events with somatic symptoms. DeLongis et al. (1982) also found that the relationship between daily hassles and life events was relatively weak, and they concluded that daily hassles make a unique contribution to adaptational outcomes.

Measurement of Appraisals: Two instruments to measure appraisals have also been designed and tested. One of these instruments (Folkman & Lazarus, 1980) asks subjects to indicate which of four statements best describes the target encounter. The encounter can be appraised as one which could be changed, one which had to be accepted, one which needed more information before anything could be done, or one in which the subject had to hold back from acting. Folkman and Lazarus (1980) examined the relationship between these statements and the Ways of Coping Checklist (see below). Results showed that situations which were appraised as either could be changed or which needed more information generated higher levels of problem-focused coping than situations appraised as had to be accepted. Conversely, situations appraised as had to be accepted or in which subjects had to hold back from acting generated higher levels of emotion-focused coping than those situations which could be changed. Folkman and Lazarus (1980) concluded "These findings offer clear support for the theory of cognitive appraisal as a determinant of coping." (p. 232).

A second instrument designed to measure primary appraisals (Folkman & Lazarus, 1985) required students to rate the extent to which they had experienced fifteen emotions at three stages of a college examination. Folkman and Lazarus (1985) argued that the quality and intensity of particular emotions is determined by appraisals. For example, the anticipation of harm or death might evoke anxiety or foreboding. The expectation of success on an examination might evoke excitement or eagerness. An appraisal of harm might elicit anger or disappointment, and an appraisal of benefit might elicit satisfaction or happiness. Folkman and Lazarus (1985) administered their instrument to the students at three points: before the examination (T1), after the examination but before results were issued (T2), and after results were issued (T3). Since threat and challenge emotions are anticipatory, they expected these emotions to be experienced most intensely before the examination, and to decrease in intensity as the encounter unfolded. Conversely, since harm and benefit appraisals indicate an event that has already occurred, they expected harm and benefit emotions to be most intense after results were issued.

Folkman and Lazarus (1985) also expected ambiguity to influence anticipatory emotions. They reasoned that ambiguity was at its highest before the examination when students did not know what the outcome would be. The ambiguity would be reduced somewhat after the examination but before results were issued. After results are issued there is little or no ambiguity since the outcome is known. Therefore, Folkman and Lazarus (1985) hypothesised that the students would experience both threat and challenge emotions before the examination. The correlation should decrease at T2 and be at its minimum at T3.

In contrast to threat and challenge appraisals which are anticipatory, harm and benefit appraisals are evaluations of an outcome. They are more likely to be made towards the end of an encounter than at the start. Folkman and Lazarus (1985) therefore expected that during the highly ambiguous anticipatory stage before the examination the correlation between harm and benefit emotions would be low, reflecting the high degree of uncertainty about the outcome. The correlation would become increasingly negative as the students learned more about the outcome. The greatest magnitude would be after the results are issued. At this time the students would be clear how well they had done.

Results showed that the intensity of threat and challenge emotions did not change significantly from T1 to T2, but decreased significantly from T2 to T3. Harm and benefit emotions, in contrast, increased significantly from T1 to T2, but did not change from T2 to T3. Ninety-four per cent of students reported both threat and challenge emotions at T1, confirming the prediction that ambiguity would elicit both types of appraisals. There was no relation between harm and benefit emotions at T1, but at T2 the correlation was significant in a negative direction, and increased at T3.

Folkman and Lazarus (1985) concluded that the results supported their theoretical position that as appraisals of a stressful encounter change, emotions will also change. Thus, some specific emotions may serve as indicators of appraisals. They reasoned that if emotions are aggregated across an entire encounter, important information would be lost. Situational and cognitive bases of different emotions would be ignored. Changes in emotional state reflecting changes in the person-environment transaction would be masked. Thus, the process nature of appraisals would be buried. In contrast, the longitudinal approach to the measurement of appraisals employed by Folkman and Lazarus (1985) supports the notion that adapting is a more complex process than traditional theories admit.

Measurement of Coping: Folkman and Lazarus (1980) also used a longitudinal approach to the measurement of coping strategies. They administered the Ways of Coping Checklist to 100 community residents regularly over a year. The Ways of Coping Checklist is a 68 item inventory of a variety of thoughts and actions used as coping strategies. For example, hope a miracle will happen, find new faith, seek advice from a relative or friend, jog or exercise, and so on. Analyses included correlating the Ways of Coping with primary appraisal, determining whether coping was multidimensional, and assessing the degree of variability of intraindividual coping.

Results showed that both problem-focused and emotion-focused coping were used in virtually every stressful event. This

confirmed the hypothesis that coping is multidimensional. Intraindividual use of coping strategies was extremely variable, supporting the theory that coping is best understood as determined by the person-environment transaction. Also, those situations appraised as having to be accepted were significantly correlated with emotion-focused coping, while those situations appraised as could be changed were positively correlated with problem-focused coping.

The Ways of Coping Checklist was subsequently revised (Folkman & Lazarus, 1985). In the study about the college examination a revised checklist was administered to the students at the three stages of the examination. A factor analysis of the revised checklist produced eight scales in contrast to the two which were assumed to exist in the original checklist. Results confirmed previous findings (Folkman & Lazarus, 1980) that both problemfocused and emotion-focused coping is used in any given encounter. Folkman and Lazarus (1985) also found that a wide range of strategies were used at each stage. Problem-focused coping, seeking social support, emphasising the positive, and selfisolation decreased significantly from T1 to T2, whereas distancing increased significantly. Wishful thinking and distancing decreased significantly from T2 to T3. No significant increase was found in any form of coping from T2 to T3. Folkman and Lazarus (1985) reasoned therefore that coping tasks at T3 may have been determined more by individual differences in reaction to the grades than by consensually perceived demands. Examining the affects of coping on

the grade received, they found that the means on wishful thinking, seeking social support, self-blame, tension-reduction, and selfisolation increased as the grades decreased. As with research on appraisals, the longitudinal and ipsative approaches to the measurement of coping supports the contention that adaptational processes are vastly more complex than traditional theories admit.

THE PRESENT RESEARCH

The utility that the Lazarus model has for the present research centres on the changing nature of the life event chosen for study. The object of the present research is the birth of a . first child. The method is a longitudinal case-study approach with regular observations from 10 weeks before the birth until 10 weeks after. Presumably, different stages of this experience will impose changing demands. As the encounter unfolds appraisals are likely to signal the need for changes in coping strategies. Thus, the transaction-process orientation of the Lazarus model appears ideal for conceptualising and measuring the stress and coping process during this life event. At this point, an example will illustrate how the theoretical constructs of the Lazarus model can account for the experience of stress and coping during such an experience.

As a particular encounter unfolds, such as pregnancy and the birth of a child, the circumstances at different points of the encounter may impose different demands. For example, in the early

months morning sickness may be the biggest demand. Later, anxiety over the impending labour and delivery will assume major importance. The person will appraise these changing demands and respond by using different coping strategies.

In addition to changing and evolving over time to meet the changing demands of this apparently discrete encounter, the processes of appraisal and coping will also be shaped by the presence of other encounters. At any point in time a person has not just one encounter to deal with, but a whole host of apparently discrete encounters. The pregnant woman not only has her pregnancy to deal with, but might also have to cope with extra demands at work imposed by recent promotion. The demands placed on her by the extra responsibilities at work may affect the availability of resources she has to cope with the pregnancy. Knowing this she may decide to take early maternity leave. In this case her appraisal and coping processes will be different had she not been promoted.

In the same vein encounters come and encounters go, but not all at the same time. A person has to continually juggle coping resources and priorities to meet continually changing needs and demands. After the pregnancy, the woman will have to meet the demands of looking after her baby. At the same time she may have to cope with a terminally ill mother, and eventually come to terms with her grief. Later she will return to work and soon her child will be teething. And so on. The myriad encounters which we live with every day all have an interactive effect on never-ending appraisal and coping processes.

CRITICAL COMMENT

While the Lazarus theory of stress, appraisal and coping is widely accepted as the most comprehensive model of stress processes, research conducted by the Lazarus group into the measurement of stress has been severely criticised in recent years. Although the present thesis is not the place to engage in a detailed criticism of the Lazarus model, it is important at least to be aware of the main evidence and arguments, and to assess their relative merits.

A number of authors (Dohrenwend, Dohrenwend, Dodson & Shrout, 1984; Dohrenwend & Shrout, 1985; Dohrenwend & Shrout 1986; Green, 1986; Lazarus, DeLongis, Folkman & Gruen, 1985; Lazarus & Folkman, 1986) have debated the conceptual and methodological appropriateness of measuring stress by the use of the Hassles Scale, and the theoretical implications this has for the Lazarus model of stress. The principal argument centres around the claim that the Hassles Scale is largely confounded with symptoms. Dohrenwend, Dohrenwend, Dodson and Shrout (1984) found that 371 clinical psychologists rated at least one third of the items from the Hassles Scale as likely to be symptoms of psychological disorder, and only less than 25 percent of the items were rated as likely not to be symptoms of psychological disorder. The corresponding figures for the Holmes and Rahe Social Readjustment Rating Scale were 19 percent and 71 percent respectively. Dohrenwend, Dohrenwend, Dodson and Shrout (1984) concluded that since hassles were largely confounded with symptoms the Hassles Scale was not a valid measure of stress conceived as a variable independent of distress.

Arguing against these findings Lazarus, DeLongis, Folkman and Gruen (1985) calculated correlations between those hassles items rated by the 371 clinicians as confounded, and those rated as unconfounded with the HSCL using the data from a previous study (Folkman & Lazarus, 1980). They found that the two correlations were almost identical (0.56 for confounded items and 0.50 for unconfounded items). They also conducted a factor analysis of the Hassles Scale based on the Folkman and Lazarus (1980) data, and found that it could be subdivided into eight subscales each with different types of hassles, e.g., time pressures hassles and future security hassles. Those subscales containing items which described environmental events correlated equally highly with the HSCL as those subscales containing items which described inner concerns.

Furthermore, they argued that the method used by Dohrenwend, Dohrenwend, Dodson and Shrout (1984) to assess whether hassles items were confounded was methodologically and theoretically flawed. The clinicians' ratings of the hassles items were made in isolation of any specific context or person. Lazarus, DeLongis,

Folkman and Gruen (1985) argued that since it is illegitimate for a clinician to attempt diagnosis without such a context, and since respondents rate each hassles item within a specific person and situational context, the ratings of each hassles item as a potential symptom in this manner is meaningless. Also, a respondent to the Hassles Scale is asked to say how much he or she has experienced each hassle in a circumscribed period of time, such as a week or month. Lazarus, DeLongis, Folkman and Gruen (1985) note that for something to be regarded as a symptom it usually must be more chronic than a week or month. Thirdly, only one of the three items rated as most likely to be regarded as a symptom contained reference to an emotion. Since most (64.9 percent) of the disorders in DSM III have either a central or associated symptom of emotional deviance, (Thoits, in press; cited by Lazarus, DeLongis, Folkman and Gruen, 1985) it seemed odd that many nonemotion related items were rated as symptoms.

Lazarus, DeLongis, Folkmand and Gruen (1985) concluded that the hypothesis proffered by Dohrenwend, Dohrenwend, Dodson and Shrout (1984) did not explain the high correlation between hassles and symptoms.

In response to this article Dohrenwend and Shrout (1985) conducted their own factor analysis of the Hassles Scale using the same data and found that each of the eight subscales loaded equally highly onto a second order factor. They argued that this second order factor was a distress factor based on the nature of the instructions on the Hassles Scale. These required respondents to rate each "hassle" on a three point Likert scale from "Somewhat severe" to "Extremely severe", with no zero option. Dohrenwend and Shrout (1985) argued that the absence of a zero option meant that "Positive responses are highly likely, therefore, to indicate the presence of maladaptive psychological distress and disorder." (p. 781). It should be noted here that subsequently the Hassles Scale was amended to include a zero option, and it is the latter instrument used in the present research.

A related theoretical debate centred on the claim that it is theoretically and methodologically necessary to separate the influences of the external event (Dohrenwend and Shrout, 1985, 1986; Green, 1986) and variables such as social circumstances and personal commitments (Dohrenwend and Shrout, 1985) from the influences of the person's response. Lazarus, DeLongis, Folkman and Gruen (1985) countered by arguing that to separate events and responses was to ignore the central point that stress is not a single variable as such, but is a rubric consisting of several different variables such as events, appraisals and coping attempts. It is precisely the relationship between these variables that stress is.

Dohrenwend and Shrout (1985) and Green (1986) also cited evidence that major disasters such as earthquakes, rape, death of a loved one, etc., elicited almost universally similar distress responses, thus demonstrating the importance of separating the events from the response. Lazarus and Folkman (1986) responded by arguing that while such major disasters were more likely to have a "leveling" effect on individual differences in terms of their responses, major disasters did not happen to most people, and in terms of minor disasters or events that were potentially stressful, it was precisely the differences between people's responses that were essential to study.

It could also be argued that all Dohrenwend and Shrout (1985) and Green (1986) have demonstrated by citing such evidence is that most people respond to such events in similar ways, and therefore in such circumstances appraisal and coping processes must be remarkably similar also. Conversely, it is also true that not everybody does respond in precisely identical ways to such "disasters", and it is the differences that would make the really interesting object of study. For example, Lazarus and Folkman (1986) reported research by Gal and Jones (1985; cited by Lazarus & Folkman, 1986) who found that in the Arab-Israeli war of 1973 commanders had four times the chance of being killed than the enlisted men, but were five times less likely to suffer psychiatric illness. Gal and Jones suggested that the officers' command and leadership role led to a greater sense of mastery and increased bravery. It is because there are such differences in responses to so called environmental stressors that person variables must be an integral part of any theory and research into human stress.

In addition to the foregoing, it has been suggested (Spicer, 1986) that the Lazarus method of measuring appraisals with a list of emotions is circular. That is, emotions are supposed to be the outcome of appraisals, and yet their presence is used to argue for the existence of appraisals. Lazarus, DeLongis, Folkman and Gruen (1985) have argued, however, that circularity "...is not only inevitable in exploratory research, but... it can also prove ultimately valuable in advancing knowledge and understanding." (p. 772). It seems intuitively reasonable to suggest that this argument could be applied to the appraisal-emotions scale (Folkman & Lazarus, 1985), at least in the present exploratory research study.

Whatever the final word on these disputes, however, in the present state of research in the stress area the Lazarus model is the most comprehensive theory of stress processes, has the widest acceptance, and is most ideally suited to conceptualising and measuring these processes in the present research.

SUMMARY

In summary, the Lazarus model of stress, appraisal and coping is the most comprehensive theory of stress processes available, and has empirically well developed measuring instruments. Despite the theoretical and methodological drawbacks and criticisms that this theory suffers, it is the most ideal theory for use in the present

study.

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CHAPTER 3

SUBJECTIVE WELL-BEING

The empirical literature on SWB suggests that variables which are more subjective and personally significant correlate highest with SWB. Objective life circumstances and demographic variables have relatively small correlations. This implies that events and experiences which have the potential to impact forcefully on the subjective life of a person will have a significant influence on SWB. The birth of a first child seems apriori to be a case in point. The purpose of the present chapter is to review the empirical literature to determine what specific variables impact most on SWB, with especial regard to life events and coping, and to elucidate the structure of SWB.

EMPIRICAL FINDINGS

General Findings: In a recent review, Diener (1984) claimed that the evidence indicated that satisfaction judgments tend to correlate higher with SWB than do objective conditions. He argued that the evidence supported the following conclusions. The specific domain which correlates highest with SWB is the self. Although standard of living and family also correlate highly with SWB, work correlates only moderately, and health and community correlate lowest. Unemployment correlates highly, and, even when

income differences are controlled, the evidence shows that unemployed people are the unhappiest. Religious faith, importance of religion and religious traditionalism all have high correlations with SWB, as does church attendance and participation in religious groups. Marriage and family are also amongst the strongest predictors of SWB, even when education, income and occupational status are controlled. It appears that social contact also correlates highly with SWB, although this is not a clear area. Evidence suggests both that there is a correlation between objective measures of social contact and SWB, and that increases in social contact over time lead to increases in SWB. Life events are modestly correlated with SWB. It seems that positive events correlate with positive affect, and negative events correlate with negative affect. There is also evidence that ability to take action to influence or control events is related to their impact on SWB. (This area will be discussed in more detail below.) Although there are mixed findings with regard to activity, longitudinal evidence indicates that changes in activity are accompanied by concurrent changes in SWB. As already noted, self-esteem is one of the strongest predictors of SWB. Other personality variables to correlate highly with SWB are internal locus of control, extroversion, sensation seeking, sociability and neuroticism.

Diener (1984) concluded that there was only a small proportion of variance accounted for by demographic variables, and, although subjective variables account for more variance, no key single or key set of variables are likely to ultimately account for most or all the variance. He also concluded that a major problem in the area of SWB research is that there are many methodological shortcomings. There have been few experimental, quasi-experimental or longitudinal research designs reported, and therefore it is difficult to draw causal inferences.

Diener's (1984) conclusions regarding the variables which most influence SWB were supported by Andrews and Withey (1976) who, in a comprehensive study of social indicators of well-being in America, found that the more subjective and personally significant variables had more impact on SWB than did objective life circumstances and demographic variables. Family and friends were the highest correlates of SWB in their study, followed by the domains of neighbourhood, community, the economy and media entertainment, and, lastly, the national government, which had only negligible correlations with SWB. Andrews and Withey (1976) concluded that there is an ordering of importance from "...near to far and from private to public and from things one might personally influence to circumstances of our common situation." (p. 274).

Life Events and Subjective Well-Being: A small body of literature on the relationship between life events and SWB has some interesting implications both for SWB research and for research and theory on adaptation. Headey, Holmstrom and Wearing (1984) found positive correlations between positive events and positive affect, and between negative events and negative affect, but found also that positive events had no effect on negative affect, and negative events had no influence on positive affect. Warr, Barter and Brownbridge (1983) also found modest correlations between positive affect and desirable life events (r = 0.25), and between undesirable life events and negative affect (r = 0.31). Correlations between positive affect and undesirable life events (r= -0.01) and between negative affect and desirable life events (r =-0.09) were very low and insignificant.

Zautra and Reich (1980) found that subjects who experienced more positive origin events (an origin event is one in which the person had significant causal influence) rated the pleasantness of mundane events higher than those who had fewer positive origin events. Neither positive pawn events (a pawn event occurs by chance), nor negative events had any effect on event pleasantness. A positive correlation was found between negative event scores and psychiatric distress, and between positive pawn events and psychiatric distress, but there was no correlation between positive origin events and psychiatric distress. There was a negative correlation between negative event scores and perceived quality of life, and a positive correlation between positive origin scores and perceived quality of life.

These findings were supported by Reich and Zautra (1981). Pawn events were more likely to be negative, and had higher correlations with psychiatric distress and Beck depression scores than did origin events. There were no differences between correlations of origin and pawn events with pleasantness and

frequency of life events. Origin events led to higher ratings on perceived quality of life, and neither type of event was correlated with a decrease in distress, although positive origin events on their own were correlated with less distress.

Reich and Zautra (1981) made other interesting findings when their subjects were instructed to engage in either 12, 2 or no pleasant events. Those instructed to engage in 12 or 2 pleasant events later scored higher on quality of life and pleasantness than controls, although there was no difference between the two experimental groups. Subjects told to engage in 12 activities reported less distress than those told to engage in only 2, but only if they had many prior stressful experiences. Those who engaged in 2 activities were less distressed than controls. Subjects told to engage in 12 activities reported greater pleasantness than those who engaged in only 2 activities, but only if they had a high number of prior negative life experiences. Many prior positive pawn experiences lead to a reduction in the positive effects associated with the instructions.

Zautra and Reich (1980) and Reich and Zautra (1981) concluded that their results had important implications for adaptation-level theory. Adaptation-level theory predicts that levels of happiness and distress will increase immediately after a major desirable or undesirable life event respectively, and then level off to a more normal level. The findings of Zautra and Reich (1980) and Reich and Zautra (1981) support these expectations, but they also suggest

that personal control has significant theoretical import since it clearly influences the impact that life events have on SWB. In the latter study (Reich & Zautra, 1981) they found this relationship to be much more complex, "...involving both prior life event history and the frequency of origin events performed." (p. 1010).

Other findings also support adaptation-level theory. Cameron (1974) found that handicapped people were equally as satisfied with life as normal controls, had similar moods, felt equally frustrated, were equally optimistic about the future, and valued life as much as normal controls. Cameron (1974) also found that there was a higher rate of contemplated suicide amongst the normals than amongst the handicapped. Handicapped people, however, did see their lives as more difficult than normals, but appeared to accept their limitations and carried on with what they had. These findings suggest that Cameron's handicapped subjects had adapted to their circumstances, in line with adaptation-level theory.

Brickman, Coates and Janoff-Bulman (1978) studied well-being in lottery winners, accident victims and controls. They found that lottery winners rated seven ordinary events as less pleasurable than did controls, and accident victims rated everyday events as less enjoyable than controls. There was no difference, however, in how lottery winners and controls rated how happy they were now, how happy they were before winning, and how happy they expected to be in a couple of years. Accident victims rated their past as happier than did the controls, their present as less happy and their future

as equally happy. In explaining the finding that accident victims were lass happy in the present, Brickman et al. (1978) suggested that not enough time had elapsed between their accidents and the study for the leveling off effect predicted by adaptation-level theory to have had its full impact (the study was conducted less than a year after the victims' accidents in each case).

One of the problems in this area, however, is the lack of a clear classification system of life events. Diener (1984) points out that it may be important to distinguish between the impact of major life events, such as those included in the Holmes and Rahe Social Readjustment Rating Scale (Holmes & Rahe, 1967), and the cumulative impact of smaller daily events, such as those included in Zautra and Reich (1980) and Reich and Zautra's (1981) research. Diener (1984) also suggests that it is important to consider specific features of events, such as whether they are controllable. It may turn out that other mediating variables will also need to be accommodated in designing future studies.

THE STRUCTURE OF SUBJECTIVE WELL-BEING

Literature on the structure of SWB supports the division into a cognitive evaluation factor and two affective factors, positive and negative affect. In their reviews Diener (1984) and Chamberlain (1984) both conclude that the evidence points in this direction. Andrews and Withey (1976) found that a three component

model accounted for the data best. Their model consisted of life satisfaction judgments, and positive and negative affect. A number of other researchers (Beiser, 1974; Campbell, 1981; Bryant & Veroff, 1982; cited by Chamberlain, 1984) all found that similar models accounted for the data using factor analyses.

Positive and Negative Affect: There is some dispute, however, as to the independence of positive and negative affect. It would seem common sense that they are inversely related. Bradburn (1969, cited by Diener, 1984), however, found that they were not correlated. Diener (1984) reports that this finding has been supported by other research. An article by Diener, Larsen, Levine and Emmons (in press, cited by Diener, 1984) suggests that the picture is somewhat more complex, however. They argued that since overall correlations are calculated on mean affect scores, the lack of correlation found between positive and negative affect is due to the fact that the inverse correlation between frequency of positive and negative affect is cancelled out by a positive correlation between intensity of positive and negative affect.

The situation has been clouded even more by evidence which indicates that positive and negative affect correlate with different personality factors and life domains. Headey, Holmstrom and Wearing (1985) found that satisfaction with health had more impact on ill-being than on well-being. Satisfaction with friends, leisure and supportive social networks was found to have much more impact on well-being than on ill-being. Headey, Holmstrom and

Wearing (1985) also found that self-esteem was strongly linked to friendship and leisure satisfaction, but not to satisfaction with health, and had more impact on well-being than on ill-being. Personal competence, however, had more impact on ill-being than on well-being. Material standard of living was also related to illbeing and not to well-being. They also found that favourable life events were correlated with increased positive affect, but not with decreased negative affect, and unfavourable life events were correlated with increased negative affect, but had no impact on positive affect.

The findings of Headey, Holmstrom and Wearing (1985) were supported by Warr, Barter and Brownbridge (1983). They found that ... negative affect was correlated with anxiety, worry, poor health, recent interpersonal difficulties and undesirable life events. These variables did not, however, correlate with positive affect. Positive affect was found to correlate with social contact, participation in new activities and desirable life events. Again, the variables which correlated with positive affect did not correlate with negative affect. Also, Emmons and Diener (1985) found that sociability and extroversion correlated with positive affect, while emotionality, neuroticism and external locus of control correlated with negative affect. There was no correlation between positive and negative affect.

It seems sensible to conclude, then, that positive and negative affect are empirically distinguishable components of SWB,

and will be influenced by or influence different factors.

The Cognitive Factor: The main body of evidence for the independence of a cognitive factor comes from McKennell and Andrews (1983) and Andrews and McKennell (1980; cited by McKennell & Andrews, 1983), McKennell (1978; cited by McKennell & Andrews, 1983), and McKennell and Andrews (1980; cited by McKennell & Andrews, 1983). McKennell and Andrews (1983) reported that in an estimated variance components model for measures of global SWB the cognitive factor could be statistically differentiated from both positive and negative factors. For example, they found that Life-1 (Andrews & Withey, 1976; cited by McKennell & Andrews, 1983), designed as a cognitive and affective measure of SWB, had 33 percent of its variance explained by a cognitive factor, and 26 percent explained by positive and negative affect combined. The Satisfaction-7 Point scale (Andrews & Withey, 1976; cited by McKennell & Andrews, 1983), designed as a cognitive measure of SWB, had 32 percent of its variance explained by the cognitive factor, and 24 percent explained by the combined affective factors.

McKennell and Andrews (1983) also found that in a series of structural factor models of SWB the cognitive factors "retained a consistent meaning across the separate models. Moreover, in all the major comparisons, models that contained the cognitive factor fitted the data better than models that did not" (p. 106). Furthermore, in a series of factor-path models with and without a cognitive factor, an affect-cognitive model fitted the data better than a domain only model and an affect only model. They also argued that the affect-cognitive model made more theoretical sense than the other models, since both other models ignored important theoretical assumptions, whereas the affect-cognitive factor incorporated all important theoretical notions.

Other Models: Some researchers, however, have extended the three-factor model further. For example, Veit and Ware (1983) found that their Mental Health Inventory was conceptualised most efficiently as an overriding mental health factor which could be divided into two correlated factors, psychological distress and psychological well-being. Psychological distress was further divided into three components called anxiety, depression and loss of emotional/behavioural control. The well-being component was subdivided into two factors called emotional ties and general positive affect. Tanaka and Huba (1984) found empirical support for Veit and Ware's (1983) hierarchical structure in an independent analysis.

In contrast, Stones and Kozma (1985) found that 50 per cent of the variance could be accounted for by a single score index. Stones and Kozma (1985) concluded that their results supported previous findings by Laing and Bollen (1983, cited by Stones & Kozma, 1985) and Laing (1984, cited by Stones & Kozma, 1985). Chamberlain (1984) also reported findings by a number of researchers (Kammann, Farry & Herbison, 1983; Andrews & Withey, 1976, cited by Chamberlain, 1984) that a major general well-being

factor accounted for most of the variance. Chamberlain (1984) reasoned, however, that these findings were not surprising in view of the fact that both researches used relatively large numbers of scales all directed at measuring the same thing. It should be pointed out in this context that Stones and Kozma (1985) also used a number of different SWB scales.

This apparent conflict between those who advocate a multidimensional model and those who claim SWB is best conceptualised as a single dimension may not be a crucial issue, however. Diener (1984) suggests that the choice of measurement instrument will depend on the purpose of the research. This argument may be applied equally to the question of how the structure of SWB is to be conceptualised, at least until the whole area of SWB research has more clarity. It may be that more scientific progress will be made if it is accepted at this stage that there is no panacea, and different accounts of SWB are appropriate for different research questions.

THE PRESENT RESEARCH

Although adaptation-level theory seems to have some application, the question of which theory is most appropriate for the purposes of the present research is difficult. The purpose of the present research is to explore SWB over the course of a major life event, and no definite expectations are harboured. Furthermore, as Diener (1984) concluded, theoretical work in the SWB field is very unsophisticated. Constructs are ill-defined, in many cases propositions are not falsifiable, and no attempt has yet been made to integrate theories which do exist. Chamberlain (1984) also argued that the theoretical framework for SWB is relatively undefined, too general, and vague. Different theories, he argued, may be most appropriate for different research purposes. Hence, the field is largely in scientific infancy. Consequently, and in light of the exploratory nature of the present research, theoretical sophistication is neither appropriate nor possible here.

In the present research the structure of SWB is presumed to consist of the two affective factors and a cognitive factor since the weight of the evidence supports this division. The instruments used in the present study to measure SWB include the Mental health Inventory (Veit & Ware, 1983), Life-1 (Andrews & Withey, 1976) and the adjective checklist of Affectometer 2 (Kammann & Flett, 1983). Details of reliability and validity of these instruments will be given in chapter 6. The Mental Health Inventory is a 38-item measure of psychological well-being and distress, which measures both affective and cognitive dimensions of SWB. Life-1 also measures both dimensions, but is a single-item measure of satisfaction with life-as-a-whole. The adjective checklist of Affectometer 2 is a measure of positive and negative affect.

SUMMARY

In summary, personally significant and subjective variables correlate with SWB more than do objectively defined life circumstances and demographic variables. There has been little longitudinal research concerning the relationship between life events and SWB, or between major life events and SWB, and what research does exist is mainly concerned with the relationship between minor life events and SWB. The evidence suggests that SWB is best conceptualised in terms of two affective factors and a cognitive factor, and consequently the present research will use the Mental Health Inventory, Life-1 and the adjective checklist of Affectometer 2 to measure SWB.

CHAPTER 4

PSYCHOLOGICAL CORRELATES OF THE FIRST BIRTH

The purpose of the present research is to explore the changes in subjective stress, coping and subjective well-being in women before and after the birth of their first child. In order to map these changes comprehensively the ideal research design would be longitudinal with repeated measures, commencing sometime before conception and continuing until sometime after the birth. Unfortunately, even in the best of circumstances, such a generous longitudinal design would pose considerable practical and methodological difficulties. Indeed, most of the published literature is not this ambitious, although it is generally recognised that such a design would be ideal. Given the inherent limitations of the present research project, especially the time constraints, these difficulties apply all the more so. It was decided, therefore, to encompass a more circumscribed period of time in the present research, which explores these phenomena from 10 weeks before the expected date of birth until 10 weeks after the actual date of birth.

The purpose of the present chapter is to review the existing literature to map the process of psychological change of the primipara from the pregnant state to the maternal state, with especial regard to subjective experience of stress, coping, SWB, general mental health and overall adaptation.

The literature reviewed in the present chapter is based on several different research approaches. Nine of the studies reported are longitudinal with repeated measures both before and after the birth (Doering, Entwisle & Quinlan, 1980; Entwisle & Doering, 1981; Grossman, Eichler & Winickoff, 1980; Henneborn & Cogan, 1975; Lederman, 1984; Leifer, 1980; Miller & Sollie, 1980; Nuckolls, Cassell & Kaplan, 1972; Shereshefsky & Yarrow, 1973). Sample sizes ranged from 19 (Leifer, 1980) to 170 (Nuckolls, Cassel & Kaplan, 1972). All of these studies used structured or semistructured interviews supplemented by standardised psychological tests to collect data. The aims of these studies ranged from Leifer's (1980) exploratory and hypothesis-generating study to Shereshefky and Yarrow's (1973) comprehensive statistical study of the relationships between adaptation in pregnancy and maternal Three further studies were retrospective accounts of adaptation. adaptation in labour (Doering & Entwisle, 1975; Norr, Block, Charles, Meyering & Meyers, 1977) and early motherhood (Larsen, 1966). Colman and Colman (1971) reported mainly impressionistic evidence about the course of pregnancy gathered from prenatal classes with primiparae.

The literature on the role of psychological variables in the first birth generally suggests that the primipara is about to enter a new developmental stage of her life (e.g., Grossman, Eichler & Winickoff, 1980; Lederman, 1984). She is likely to experience profound changes in her lifestyle, the way she looks at the world, and in her values and commitments. She will probably be forced to change herself in many ways to adjust and adapt to the new demands in her life. The principal theme of the literature, then, is change. The primipara is seen as moving from one state to another. As Lederman puts it, pregnancy is viewed as "...a period of transition between two lifestyles - two states of being: the womanwithout-child and the woman-with-child...." (Lederman, 1984, p. 12). And Grossman, Eichler and Winickoff suggest "A pregnancy is a critical turning point in the life of a woman...." (Grossman et al., 1980, p. 4).

DESCRIPTION OF PREGNANCY AND EARLY MOTHERHOOD

A number of authors suggest that pregnancy itself is a stressful event in that it places enormous demands on the pregnant woman's resources (e.g., Colman & Colman, 1971; Entwisle & Doering, 1981; Grossman, Eichler & Winickoff, 1980; Lederman, 1984; Leifer, 1980; Shereshefsky & Yarrow, 1973). Not only does pregnancy place both physical and psychological demands on the woman, it also has practical and psychological implications for the future, which add to the stress already being experienced. All of these demands require the woman to devote resources in order to cope and adapt.

The first trimester is perhaps the most demanding time of the pregnancy. Physical symptoms may include nausea and vomiting, tender breasts, and painful sex (Colman & Colman, 1971; Entwisle &

Doering, 1981). These symptoms may exacerbate any ambivalence about the pregnancy (Colman & Colman, 1971). The single most important psychological task in the first trimester is deciding whether to accept or reject the pregnancy (Colman & Colman, 1971). This is an especially important task if the pregnancy was unplanned or unwanted. Other psychological stresses which may arise include anxieties about being a good mother, doubts about being able to cope financially with the baby, and the ramifications a baby might have for an established career (Colman & Colman, 1971). Leifer (1980) also mentions the fears of miscarriage, a deformed baby, and sex causing harm to the baby as being characteristic of the first trimester. Colman and Colman (1971), Grossman, Eichler and Winickoff (1980), Leifer (1980), and Shereshefsky and Yarrow (1973) all refer to the need to develop a mothering identity which may create many conflicts, and has far reaching consequences for the woman's adjustment in the rest of her pregnancy and in early motherhood. For the primipara there is also the prospect that having a baby will lead to profound changes in the relationship she has with her spouse.

There are also positive psychological changes in early pregnancy. Colman and Colman (1971) suggest that for many women the very knowledge that they are pregnant is a joyful experience. This is not restricted to those women who have deliberately become pregnant, but is true also of some women who did not plan their pregnancies. Leifer (1980) says that the first trimester is

characterised by joy and pride, and a sustained sense of purposiveness and satisfaction.

The second trimester has been described as the "quiet months" by Colman and Colman (1971). The danger of miscarriage is over, nausea and vomiting have usually disappeared, and the primipara has by this time usually accepted the pregnancy and resolved any conflicts. In this period her experience becomes more tangible (Colman & Colman, 1971). Quickening (sensations produced in the uterus by fetal movements) provides the woman with a physical identification of her state. Changing body shape also signifies physically to the primipara that she is pregnant. These experiences can have both positive and negative connotations. On the one hand they may be welcomed since they signify to herself and the world that she is pregnant. If the primipara is looking forward to the birth then this will be her primary response. On the other hand, if some ambivalence remains, quickening may remind the primipara of the responsibility that is imminent, or may lead to fears of deformity (Leifer, 1980). Changes in body shape may make her feel unattractive and unwanted by her husband. Conversely, Leifer (1980) states that happiness about the pregnancy is at its zenith, and many women experience a sense of heightened sexuality.

The third trimester is a time of waiting. For many women it is a time of "anxious anticipation of the imminent unknown" (Colman & Colman, 1971). Physically, it is a very uncomfortable time, especially in the eighth month when the baby is at its largest, but has not engaged the pelvis yet. This discomfort will ease by the ninth month after the baby has engaged. Colman and Colman (1971) and Leifer (1980) suggest that anxieties increase markedly during the third trimester. Specific anxieties include fears for the self in labour and delivery, and fears of deformity. There is also commonly a fear of death (Leifer, 1980). Leifer (1980) also suggests that the outside world may be perceived as threatening, and the primipara will become more cautious, and may fear losing her husband. As the expected date of birth nears, the primipara will typically feel uneasy and uncertain about what to expect in labour.

In addition to issues specific to different trimesters, a number of authors suggest that the pregnant woman will experience heightened emotionality and emotional lability throughout pregnancy, which increases as the pregnancy progresses (Colman & Colman, 1971; Grossman, Eichler & Winickoff, 1980; Leifer, 1980; Shereshefsky & Yarrow, 1973). She becomes upset much easier over minor hassles, and there will be a marked decrease in her ability to cope with stress.

As suggested above, labour is an uncertain time for the primipara. It is an entirely new experience. Grossman, Eichler and Winickoff (1980) suggest that primiparae may have difficulty in recognising labour pains, and may even mistake other cramps and pains for labour. From the time labour does begin, and until the

baby is born, pain is perhaps the most pervasive stressor the woman will have to deal with. Related to this, and almost equal in importance, is the primipara's need to maintain a sense of control over her experiences (Grossman, Eichler & Winickoff, 1980; Lederman, 1984).

The birth itself can be an intensely emotional experience, although a woman's reaction to this event is affected by a number of factors, including how much medication she has in labour, the presence or absence of her spouse, and her relationship with the hospital staff (Entwisle & Doering, 1981; Grossman, Eichler & Winickoff, 1980; Leifer, 1980).

The first few days after the birth, especially with a hospital birth, can perhaps be the most stressful time of the pregnancybirth-motherhood experience. The new mother is not only recovering from the physical and psychological rigours of the labour and birth, but she must also learn rapidly how to care for her new baby. While she may want to sleep all night, she must be prepared to wake several times during the night to feed her charge. Other stressors she may have to cope with include conflicting advice from staff members about breast feeding and other cares. Leifer (1980) suggests the new mother will become much more emotionally labile at this time than she had been at any time during pregnancy, and may experience feelings of depersonalisation, loneliness, and isolation. These feelings will be exacerbated if her husband does not or cannot stay with her for long.

The first two to three months at home can also be very demanding. The new mother must spend most of her time and energy looking after her baby (Grossman, Eichler & Winickoff, 1980; Leifer, 1980). She must learn a new routine, adapt her marital relationship to accommodate the child (Grossman, Eichler & Winickoff, 1980), and she must redirect her attentions away from herself, as they had been centred in late pregnancy, towards her child. Larsen (1966) suggests many women will have diffculty adjusting to their babies' needs, and many women also worry about their own ability to cope. In addition, Leifer (1980) suggests that mood will be markedly more negative at two months postpartum than it was during pregnancy, and negative moods will be more pervasive and intense than they were in pregnancy.

Pregnancy, birth and early motherhood, then, are times of rapid and profound change. In pregnancy, the primipara has to cope with radical changes in the now, and the prospect of more, and even more radical, changes in the near future. Labour and birth is an intense time when maximum attention is needed to cope with the pain and to maintain psychological control. The early months of motherhood are "a time of maximum upheaval and disruption" (Grossman, Eichler & Winickoff, 1980, p. 78), which require inordinate amounts of energy to cope successfully.

ADAPTATION IN PREGNANCY AND EARLY MOTHERHOOD

Coping and adaptation over this time is by no means a passive phenomenon. The woman must actively work to achieve mastery over her experiences. She must invest huge amounts of time and energy if she is to adjust successfully to the demands of pregnancy, delivery and motherhood. Indeed, many authors report that her efforts to cope and adapt in pregnancy, and to learn about what to expect in delivery and early motherhood, will pay off for the primipara in all phases of her experience (e.g., Doering & Entwisle, 1975; Doering, Entwisle & Quinlan, 1980; Entwisle & Doering, 1981; Grossman, Eichler & Winickoff, 1980; Lederman, 1984; Leifer, 1980; Shereshefsky & Yarrow, 1973).

Leifer (1980) reported that most of her 19 subjects felt that pregnancy was a time for psychological preparation for motherhood. Adapting to the idea of motherhood was crucial if they were to be able to visualise themselves as mothers by the end of pregnancy. Those who invested less emotional energy in adapting to pregnancy and the prospect of motherhood were not as able to visualise themselves as mothers.

Shereshefsky and Yarrow (1973) also found that adaptation to pregnancy was significantly positively correlated with the ability to visualise self as a mother measured at three months gestation. Visualisation of self as a mother at three months was also significantly negatively correlated with overall number of stresses

experienced during pregnancy. Visualisation of self as a mother measured at seven months gestation was significantly positively correlated with overall reaction to pregnancy. Shereshefsky and Yarrow (1973) also found that adaptation to pregnancy was significantly positively correlated with the personality factors of ego strength and nurturance, and pregnancy related medical symptoms were significantly negatively correlated with adaptation to pregnancy. Shereshefsky and Yarrow (1973) concluded that these findings imply an overriding significance during pregnancy for the woman's psychological health and adaptive capacity.

Other findings by Shereshefsky and Yarrow (1973) supported the suggestion that pregnancy adaptation is a predictor of maternal adaptation. Adaptation to the pregnancy experience measured at three months gestation was significantly positively correlated with acceptance of the maternal role, responsiveness to the infant, and acceptance of the infant and maternity role. Adaptation to pregnancy measured at seven months gestation was significantly positively correlated with confidence in the maternity role, acceptance of the maternal role, acceptance of the infant, responsivness to the infant, and individuation of the infant. Reaction to pregnancy fears measured at seven months gestation was significantly positively correlated with individuation of the infant, responsiveness to the infant, confidence in and acceptance of the maternity role, and acceptance of the infant. Overall reaction to the pregnancy correlated with individuation and acceptance of the infant, and confidence in and acceptance of the

maternity role. Ego strength and nurturance measured at three months gestation correlated with acceptance of the maternity role. Visualisation of self as a mother was significantly positively correlated with acceptance of the maternity role and acceptance of the infant.

Grossman, Eichler and Winickoff (1980) also found significant correlations between adaptation in pregnancy and maternal adaptation. The number and severity of various physical and emotional pregnancy related symptoms were predicted by general life adaptation, initially lower anxiety and depression, and better adaptation to early pregnancy. Adaptation to labour and delivery was predicted by negative feelings toward maternity expressed on a modified TAT administered in pregnancy. A strong negative correlation was found between scores on life adaptation in the first trimester and anxiety and depression in the first six months postpartum. A higher motivation for pregnancy predicted less postpartum anxiety and depression. Those who did well in labour and delivery were less anxious and depressed at two months postpartum. Motivation for pregnancy measured at eight months gestation and adaptation to the labour and delivery predicted maternal adaptation at two months postpartum. There was a high positive correlation between anxiety and depression in the first trimester and at two months postpartum. Those women who were more anxious and angry toward the fetus at eight months gestation were judged to be less adequate overall at mothering.

After delivery, those women who felt they had handled the delivery experience less well were rated as handling their babies less well. Maternity adaptation was correlated with well-being and less anxiety and depression. Adaptation to labour and delivery was strongly predictive of maternal adjustment, and those primiparae whose life adaptation was better and who felt better about themselves and in their new role as mothers were judged to be relating more closely and reciprocally with their babies at two months postpartum.

Nuckolls, Cassel and Kaplan (1972) found an interaction effect between psychosocial assets, life change measured during pregnancy, and complications in delivery. They found that for women with high life change scores, those with high psychosocial assets had only one third the complication rate of those with low psychosocial assets. There was no difference in the complication rate for women with low life change scores but with different psychosocial asset scores.

Other evidence suggests that those women who actively attempt to come to terms with their pregnancy and the conflicts inherent in the experience are more likely to adapt successfully. Leifer (1980) reasoned, for example, that anxiety serves an adaptive function. There are real dangers and conflicts involved in pregnancy, labour and motherhood that the primipara must come to terms with. Avoiding these issues can only lead to maladaptation. Leifer (1980) suggested that this is supported by the fact that there is an orderly sequence of specific fears during pregnancy. She also found that women who formed an emotional attachment to their fetuses were most likely to express anxiety about its wellbeing (p. 47).

This reasoning is supported by a number of authors who have developed Janis's theory of stress to incorporate pregnancy and birth (Doering & Entwisle, 1975; Doering, Entwisle & Quinlan, 1980; Entwisle & Doering, 1981). Janis's theory predicts that the "work of worrying" is crucial to future adaptation in the context of a stressful experience. It was found that those women who actively sought information and advice in pregnancy about the birth experience were more likely to adapt well to labour and delivery and early motherhood than those women who did not prepare (Doering & Entwisle, 1975; Doering, Entwisle & Quinlan, 1980; Entwisle & Doering, 1981). Norr, Block, Charles, Meyering and Meyers (1977) also found that attendance at preparation classes predicted improved birth experience. They also found that social support during labour, especially from the husband, lead to reduced pain and more enjoyment of the birth experience. Henneborn and Cogan (1975) also found that husband participation in the labour and delivery was related to less pain, less medication, and more positive feelings about the total birth experience.

Although there is little evidence relating to what coping strategies are most successful in dealing with early motherhood, Miller and Sollie (1980) reported that coping mechanisms adopted by 109 women included becoming more flexible about routines, learning patience, becoming more organised, seeking social support, taking time away from the baby, looking to the future, and knowing that their feelings are normal and are experienced by most new mothers.

CRITICAL COMMENT

The main criticism which can be aimed at almost all of these studies is that their samples were biased in favour of a middle class selection. This is not a major drawback, however, in terms of the present research since the subjects who participated in the present study were themselves middle class. The exceptions are Doering, Entwisle and Quinlan (1980) and Entwisle and Doering (1981) who ensured that half their sample was middle class and half lower class. The retrospective studies are naturally handicapped precisely because they are retrospective. The study by Colman and Colman (1971) is limited in terms of both reliability and validity because it was not well controlled. The nine longitudinal studies, however, were well controlled apart from the sampling bias. The prospective nature of these studies implies that causal inferences can legitimately be drawn.

SUMMARY

In conclusion, pregnancy, birth and early motherhood for the

primipara is a demanding set of experiences with predictable stressors at each stage. If she is to adapt well to her experiences she must actively attempt to come to terms with her conflicts, uncertainties, and fears. Successful adaptation in pregnancy is predictive of successful adaptation during the labour and birth, and afterwards in early motherhood. Coping strategies required at each stage of her experience change in relation to the particular demands the primipara faces. Before the birth, she is mainly centred on herself and her own needs. After the birth she must accommodate a profound shift in this orientation since her new baby is now an independent biological being, and requires constant care.

CHAPTER 5

PREDICTIONS AND EXPECTATIONS

The present research project is exploratory. The aim is to shed some light on the changes in subjective stress, coping and SWB in women from 10 weeks before until 10 weeks after the birth of their first child. Therefore, there are no definite hypotheses or firm expectations. The approach in the present research is similar to Leifer's (1980) who conducted a much more wide-ranging study into women's responses to first pregnancy and motherhood. As Leifer (1980) puts it:

"The general methodological approach is exploratory, descriptive and hypothesis-generating rather than hypothesis-testing.... Rather than focusing on particular independent-dependent relationships, this method seeks to discover patterns or systems in the area under investigation. This research strategy is especially useful for studying women's responses to pregnancy and motherhood, since a large body of data upon which to test hypotheses does not yet exist." (p. 6).

In the present research, then, the aim is to look for patterns and themes within and between the variables under study in the experiences of the subjects.

Despite the limitations in the current literature, however, some directions are indicated by the research reviewed in the preceding chapters. The purpose of the present chapter is to outline these directions. First, it is expected that there will be certain relationships between subjective stress, coping and SWB. As subjective stress increases in frequency and intensity, the frequency and intensity of coping strategies will also increase. This is based on the Lazarus model which predicts that as more demands are imposed on the person (i.e., more stress is experienced) more resources must be mobilised to deal with these demands (i.e., more coping is required). Conversely, when subjective stress decreases, the use of coping strategies will also decrease.

Also as subjective stress increases positive affect will decrease, negative affect will increase, and overall cognitive evaluations of SWB will become more negative. Conversely, when subjective stress decreases, positive affect and the overall cognitive evaluation of SWB will increase, and negative affect will decrease.

During the third trimester subjective stress will either decrease or increase as the birth date gets closer. The expectation that it will decrease is based on the findings of Colman and Colman (1971) and Leifer (1980) that most conflicts will have been resolved by the end of the second trimester. On the other hand, Leifer (1980) suggests that anxieties about labour and the birth will increase in the third trimester as the birth date gets closer, so it may be expected that subjective stress will increase as a result.

Both of these scenarios presume, however, that the pregnancy is the only event or experience that the mother-to-be will have to cope with. It may be that some women have other events occurring in their lives in late pregnancy which will affect subjective stress. For example, some women may leave their jobs during the final weeks of their pregnancy, and this in itself may pose considerable stress. Therefore, it would be expected that subjective stress would increase, but not as a result of the pregnancy as such.

At two weeks after the birth subjective stress should be at its zenith. This expectation is based on the findings of several researchers (Grossman, Eichler & Winickoff, 1980; Leifer, 1980; Shereshefsky & Yarrow, 1973) which indicates that the primipara experiences immense stress and the greatest degree of emotional lability immediately following the birth for about two to six weeks. At six weeks subjective stress may have reduced somewhat, but will still be comparatively high.

At 10 weeks postpartum subjective stress should have decreased from it's peak at two weeks postpartum, and most women will have developed specific coping strategies to deal with the peculiar stresses inherent in the mothering role. Subjective well-being will increase between two weeks and 10 weeks postpartum as the mother learns to cope more successfully, and has more time and resources to enjoy her experience. This general pattern of "recovery" in the postpartum period is predicted on the basis of theory and findings in the area of adaptation-level theory.

The changes in appraisal emotions and relationships between appraisals and the other variables are much more difficult to predict, and it is expected they will be much more difficult to interpret. While research by Folkman and Lazarus (1985) suggests that anticipation emotions should increase as the birth gets closer, and outcome emotions should be more dominant after the birth, other research (Colman & Colman, 1971; Grossman, Eichler & Winickoff, 1980; Leifer, 1980; Shereshefsky & Yarrow, 1973) suggests that women become much more emotionally labile than usual during pregnancy, and this lability increases as the pregnancy progresses, and is all the more so immediately after the birth. It would be difficult, then, to distinguish between changing emotions experienced as a consequence of changing cognitive assessments of a woman's ability to cope with the pregnancy-birth-motherhood experience, and emotions which are a consequence of emotional lability.

Furthermore, as the Lazarus model itself suggests, stress processes do not consist of appraising and coping with single discrete encounters which occur in isolation from life's other myriad experiences and demands. That is, pregnancy, birth and motherhood cannot be expected to be the only events occurring in the lives of the subjects over the course of the study, even though it can be expected that these experiences will be the dominant

events in their lives. For example, in late pregnancy some women may leave their jobs, and this event in itself may pose considerable stress and anxiety. It will be difficult in this context, then, to assess whether changes in appraisal emotions are due to assessments of ability to cope with the pregnancy-birthmotherhood experience, or some other event. Similarly, after the birth, while a woman's major emotions may be happiness and joy at having given birth, there may also be considerable anxiety and fear about looking after the baby. It is unlikely, therefore, that there will be any neat and tidy patterns in different appraisal emotions across time.

Throughout the study period the information gleaned from interviews should be of considerable utility since quantitative measuring instruments are inherently limited in the range of responses that are permitted, and in the sorts of experiences and events which they try to measure. Qualitative measurements can add important data to the picture, and consequently it is expected that interviews will yield information about peculiar stresses and coping strategies not covered in the quantitative instruments. For example, during the final stages of pregnancy some women may feel stressed due to anxieties peculiar to their experience. These anxieties are not included in the Hassles Scale. Furthermore, during labour and after the birth stresses and coping strategies may be quite unique to this particular life event. Again, such items are probably not covered in the questionnaire instruments used in the present study. It is hoped that a consequence of this

uniqueness will be that suggestions can be made for developing scales specifically designed for this population and life event.

CHAPTER 6

METHOD

SUBJECTS

Subjects were recruited by advertising in the local media, and via the local Parent Centre organisation and a local General Practice. Sixteen women agreed to participate. Fifteen were married and middle class. Of these, 14 were caucasian and one was chinese. Ages ranged from 21-31 years. The other subject was single, part maori and 19 years old. This subject moved to another town and left the study after the first interview.

MATERIALS

A research contract outlined the responsibilities of the subject and researcher. This was amended since an initial request to see subjects alone proved impracticable, and it was necessary to include a request to conduct interviews at each contact. A request in the amended contract to see subjects' husbands once before and once after the birth also could not be fulfilled in all cases. The initial contract was presented to the first four subjects, and the amended contract was then presented to all subjects. Appendix A presents the two versions of the contract. A questionnaire was constructed using a number of scales to measure stress, coping, appraisal, and subjective well-being (see Appendix B). The scales were the Hassles Scale (Kanner, Coyne, Schaefer & Lazarus, 1981) the Ways of Coping Checklist (Revised) (Folkman & Lazarus, 1985), a checklist of appraisal-related emotions (Folkman & Lazarus, 1985), the Mental Health Inventory (Veit & Ware, 1983), Life-1 (Andrews & Withey, 1976), and the adjective checklist of Affectometer 2 (Kammann & Flett, 1983). A measure of social support (Abbey & Andrews, 1985) was added to generate preliminary data for a future research study.

The Hassles Scale: The Hassles Scale (Kanner et al., 1981) is a 117 item checklist designed to measure the frequency and intensity with which minor everyday demands are experienced as a "hassle". Two items about problems with the menstrual cycle and problems with getting pregnant were considered inappropriate and removed. Respondents were asked to indicate on a four point Likert scale ranging from "Not at all" to "Extremely" to what extent each item had been experienced as a hassle in the past month.

The items were generated to cover the areas of work, health, family, friends, the environment, practical considerations, and chance occurrences (Kanner et al., 1981). Subsequently the Hassles Scale was factor analysed by Lazarus, DeLongis, Folkman and Gruen (1985). They summed each item over nine successive monthly administrations of the scale to yield scores on each item of 0 to 27. Forty-five items which had been endorsed by less than 50 per cent of the sample, and eight items that had low or unstable factor pattern loadings were excluded from the final analysis. The analysis of the remaining items yielded eight hassles factors, which, with reliability alphas, were called household (0.91), health (0.91), time pressure (0.91), inner concern (0.89), environmental (0.89), work (0.83), future security (0.80), and financial responsibility (0.79) hassles.

Kanner et al. (1981) reported test-retest correlations for the frequency of hassles of 0.76, and for the intensity of hassles of 0.48. These figures were means calculated over nine successive monthly administrations of the Hassles Scale. Mean hassles frequency was found to decrease over the nine months. Kanner et al. (1981) suggested that rather than being a result of decreasing hassles as such, this finding is more likely to reflect growing boredom and inattentiveness with the task. Therefore, the testretest correlation for hassles frequency may be spuriously low.

The Ways of Coping Checklist (Revised): The Ways of Coping Checklist (Revised) (Folkman & Lazarus, 1985) is a 66 item checklist of cognitive and behavioural strategies people might use to cope with stressful episodes. Respondents were asked to rate to what extent they had used each strategy in the past month on a four point Likert scale ranging from "Does not apply and/or not used" to "Used a great deal". An extra item was added to generate preliminary data for a future research study. This item asked the respondent to indicate whether she had used any coping strategy

that was not in the checklist. This provided an opportunity to collect information about coping strategies not covered in the original checklist.

Subjects were required to complete the checklist six times: three times before the expected date of birth of their baby, and three times after the actual date of birth. In order to reflect the focus on a single episode the instructions on the checklist were altered at two points. On the three occasions before the expected date of birth respondents were asked to indicate what strategies they had used to deal with their pregnancy in the past month. On the fourth occasion they were asked to indicate what strategies they had used in dealing with looking after their baby since the birth. On the final two occasions they were asked what strategies they had used in dealing with looking after their baby in the past month.

The Ways of Coping Checklist originally had 68 items which were drawn from the domains of defensive coping, information seeking, problem-solving, palliation, inhibition of action, and magical thinking (Folkman & Lazarus, 1980). Folkman and Lazarus (1980) divided the items rationally into problem-focused and emotion-focused strategies. Inter-rater reliabilities and a factor analysis provided empirical support for this division. Internal reliabilities were calculated to be 0.80 for the problem-focused scale, and 0.81 for the emotion-focused scale. The checklist was subsequently revised by Folkman and Lazarus (1985). Redundant and unclear items were deleted or reworded, and several items were added. A factor analysis, excluding nine items which showed high skewness and restricted variance, yielded a sixfactor solution. Fifteen items that did not load clearly on any one factor were deleted. One of the six factors contained three distinguishable groups of emotion-focused items and was rationally divided into three factors. The resulting eight factors, with reliability alphas, were a problem-focused scale (0.85), six emotion-focused scales called wishful thinking (0.84), distancing (0.71), emphasising the positive (0.65), self-blame (0.75), tension-reduction (0.56), and self-isolation (0.65), and a scale which contained both problem-focused and emotion-focused items called seeking social support (0.81).

Appraisal Emotions: Respondents were asked to indicate on a five point Likert scale ranging from "Not at all" to "A great deal" the extent to which they had experienced each of fifteen emotions in the past month. An extra item was added to generate preliminary data for a future research study. This item was intended to tap possible appraisal emotions not covered by the original list.

This checklist was devised by Folkman and Lazarus (1985), who rationally divided it into four subscales to reflect anticipatory emotions (threat and challenge), and outcome emotions (harm and benefit). The reliabilities of these subscales were calculated for each of three administrations. The mean alphas were 0.80 for threat emotions, 0.59 for challenge emotions, 0.84 for harm emotions, and 0.78 for benefit emotions. Folkman and Lazarus (1985) also found the anticipation and outcome emotions to be predictive of the temporal stage of a stressful episode (see chapter 3 for details).

Although Folkman and Lazarus (1980) had earlier devised. another instrument to measure appraisals, it was not used in the present research. It appeared at the end of the Ways of Coping Checklist and asked respondents to indicate which of four statements best described their stressful episode. The episode -could be described as either one which you could do something about, one that had to be accepted, one in which more information was needed before action could be taken, or one in which you had to hold yourself back from doing what you wanted to do. This instrument was considered inappropriate in the present study since it is more suited to assessing appraisals in a discreet episode that has already ended, while the checklist of emotions is better suited to a process measure required in a longitudinal research design.

Mental Health Inventory: The Mental Health Inventory (MHI) (Veit & Ware, 1983) is a 38 item measure of psychological distress and well-being. Instructions required the respondents to rate on a five or six point Likert scale the extent to which they had had the experiences described in each item during the past month.

The MHI was based on Dupuy's General Well-Being Schedule (GWB) (Dupuy, 1972, cited by Veit & Ware, 1983). A factor analysis of 22 items of the GWB produced a six factor model consisting of anxiety, depression, general health, general positive affect, loss of behavioral/emotional control and vitality. A subsequent discriminant analysis showed the vitality and general health factors not to have discriminant validity, and they were eliminated from the MHI. The remaining 15 GWB items were supplemented with 20 items from other established instruments and three items independently identified to represent a fifth hypothesised factor, emotional ties.

The MHI was administered twice, a year apart, to six subsamples of the American population totalling 5,089. A principal components analysis showed that 43 per cent of the variance was accounted for by a global mental health factor, with loadings ranging from 0.42 to 0.80. Fifty per cent of the variance was accounted for by a two factor solution, consisting of a psychological distress and a psychological well-being factor. A five factor solution consisting of anxiety, depression, general positive affect, loss of behavioural/emotional control and

emotional ties, explained 60 per cent of the variance. All the items hypothesised to measure anxiety, depression and loss of behavioural/emotional control correlated highest with the psychological distress factor, while all the items hypothesised to measure general positive affect and emotional ties (with one exception) correlated highest with psychological well-being.

Further analyses showed that an overlapping five factor model consistently explained significantly more variance than a nonoverlapping five factor model, a four factor, a two factor and a single factor model. Veit and Ware (1983) concluded that the best interpretation of the MHI is a hierarchical factor model composed of an overriding mental health factor divisible into two correlated ⁻ factors, psychological distress and psychological well-being. Psychological distress was further divided into the three correlated factors referred to above as anxiety, depression and loss of emotional/behavioural control. Psycholgical well-being was subdivided into two correlated factors referred to above as general positive affect and emotional ties (Veit & Ware, 1983, p. 738).

Internal and one year reliability coefficients for the five lower order factors were 0.81 and 0.59 for emotional ties, 0.83 and 0.58 for loss of behavioural/emotional control, 0.86 and 0.56 for depression, 0.90 and 0.63 for anxiety, and 0.92 and 0.62 for general positive affect, respectively. The corresponding coefficients for the two higher order factors were 0.92 and 0.63 for psychological well-being and 0.94 and 0.62 for psychological

distress, while the coefficients for the general underlying mental health factor, called the mental health index, were 0.96 and 0.64. Correlations between the five subscales ranged from 0.34 to 0.75. Veit and Ware (1983) concluded that since these correlations were all lower than the reliability coefficients for the five subscales, the subscales contain unique reliable variance.

Life-1: Life-1 (Andrews & Withey, 1976) is a single item global measure of satisfaction with life-as-a-whole. Respondents were asked to rate how they felt about their life-as-a-whole on a seven point Likert scale ranging from "Terrible" to "Delighted".

Andrews and Withey (1976) categorised Life-1 as an absolute general evaluation of the full range of life. This is contrasted with other global measures which can be relative, address specific areas of life and cover only a part range.

Four reliability coefficients calculated over a ten to 20 minute delay ranged from 0.61 to 0.71 (Andrews & Withey, 1976, p. 77). A factor analysis of 13 global well-being measures produced a three factor solution consisting of a negative affect, a positive affect and a cognitive evaluation factor. Life-1 loaded 0.85 on the cognitive factor and negligibly on the two affective factors (Andrews & Withey, 1976, p. 89). A second factor analysis of 50 measures yielded a loading of 0.76 for Life-1 on a first principal component (Andrews & Withey, 1976, p. 103). Estimated construct validities for Life-1 ranged from 0.70 to 0.82 (Andrews & Withey, 1976, p. 204). Andrews and Withey (1976) concluded that Life-1 is one of the best measures of global well-being of the 68 that they evaluated.

Affectometer 2: The adjective scale of Affectometer 2 (Kammann & Flett, 1983) is a checklist of 20 adjectives which describe different feelings. There are 10 positive affect and 10 negative affect items. Respondents were asked to rate how often they had experienced each feeling in the past month on a five point Likert scale ranging from "Not at all" to "All the time".

Affectometer 2 was derived from Affectometer 1 (Kammann & Flett, 1983), which is a 96 item inventory of general happiness, containing positive and negative sentences and positive and negative adjectives (Kammann, Christie, Irwin & Dixon, 1979). Since cluster and factor analyses were unable to produce any reliably distinct groups of items on Affectometer 1, Kammann and Flett (1983) reasoned that it was valid to construct a shorter version by random selection of items. Four items each were selected to represent confluence, optimism, self-esteem, selfefficacy, social support, social interest, freedom, energy, cheerfulness and thought clarity. Each category was represented by a positive and negative affect sentence, and a positive and negative affect adjective. Validity coefficients for each item ranged from 0.33 to 0.76, with a median r of 0.57 (Kammann & Flett, 1983, p.263). Kammann and Flett (1983) reported that 16 research studies with both Affectometers had yielded no significant differences between scores on the sentence items and scores on the adjective items. Alphas for sentences and adjectives on Affectometer 2 were 0.88 and 0.93 respectively, with an overall alpha of 0.95. The correlation between the separate balance scores for sentences and adjectives was 0.87. Kammann and Flett (1983) concluded that it was reasonable to further shorten Affectometer 2, and to use either the sentences or the adjectives.

Additional Measure: Social Support: A measure of social support was added to the questionnaire to generate preliminary data for an intended future research study. Social support was measured by six items devised by Abbey and Andrews (1985). Three esteem social support items assessed how much subjects felt others loved and respected them, and three informational social support items assessed how much subjects felt others provided information and encouragement. A seventh item was added to tap modes of social support not covered by the previous six items. Respondents were asked to rate each item on a five point Likert scale ranging from "Not at all" to "A great deal".

Abbey and Andrews (1985) reported Cronbach alphas for informational and esteem social support of 0.71 and 0.77 respectively. They found social support to correlate 0.37 with internal control, -0.38 with role ambiguity, -0.27 with social conflict, 0.54 with social performance, and 0.14 with overall quality of life.

PROCEDURE

A longitudinal case-study approach was adopted. It was planned to see subjects at ten weeks, six weeks and two weeks before the *expected* date of birth (EDB), and two weeks, six weeks and ten weeks after the *actual* date of birth (ADB) of their baby. Variations in this design were due to a number of factors. Seven subjects did not join the study until after ten weeks before their EDB. Several other variations were due to the baby being born either before or after the EDB. All other variations were due to subjects being unavailable at the planned meeting times. Table 1 shows the actual number of days before and after the EDB and ADB that the subjects were seen. Table 1: Number of days before and after expected date of birth (EDB) and actual date of birth (ADB) 16 subjects were seen.

 Subject	Days before EDB/ADB Days after EDB/ADB						
	Interview Number						
	 1	2	3	11	4	5	6
	 69/61	41/33	 13/5	 <i> </i>	6/14	 33/41	 61/69
	 61/65	39/43	 11/15	11	19/15	 46/42	 73/69
	 63/88	42/67	 14/39	 <i> </i>	39/14	 67/42	 95/70
	 61/75	40/54	 14/28		28/14	 56/42	 87/71
	 58/63	43/48	 15/20		18/13	 53/48	74/69
	 69/74 	42/47	16/21	11	18/13	49/44	75/70
	 70/82	43/55	10/22	11	26/14	 50/38	82/70
	 NA/NA*	42/22	NA/NA+		-6/14	22/42	 50/70
9	 67/NA=/	NA/NA	NA/NA		NA/NA	NA/NA	 NA/NA
	70/64	42/36	14/8		8/14	36/42	64/70
	70/81	40/51	14/25	//	25/14	53/42	86/75
	67/89	42/64	11/33		49/27	78/56	97/85
	70/29	43/1	NA/NA@	 <i> </i> -	-27/15	1/43	28/70
14	56/53 /	35/32	14/11	 	12/15	40/43	68/71
	70/73 /	42/45	14/17		17/14	45/42	73/70
 16	 #NA/NA	 36/27	11/2		5/14	 33/42	 61/70

* Subject 8 did not join the study until six weeks to EDB.

+ Subject 8's baby was three weeks premature.

= Subject 9 moved to another town and left the study after the first session.

@ Subject 13's baby was six weeks premature.

Subject 16 did not join the study until five weeks to EDB.

Subjects were contacted by phone to arrange a meeting time as close to ten weeks before the expected date of birth as possible. The purpose of the study was outlined during this initial contact. During the first session the study was explained in detail, and the subject invited to ask questions on any aspect of the study. The contract was also presented and discussed. Subsequently the subject was interviewed, basic demographic information was collected, and the questionnaire was presented. The interviews took about half an hour to conduct, except the first and fourth interviews when more information was sought.

After the initial interview with the first two subjects it became evident that more structure was required, and an interview protocol was drawn up. Subsequently, semi-structured interviews were conducted with all subjects in each session. On each occasion the interview began with an open ended question, and narrowed down over the course of the interview to specific issues. The purpose of these interviews was to ascertain what aspects of the pregnancy, labour and birth, and looking after a baby, were stressful. They were also intended to obtain information about how subjects coped with these stressors, and what factors made them feel good. Appendix C presents interview protocols for each of the six sessions.

The questionnaire was completed by the subjects at each contact. In the initial session subjects were asked to complete it immediately to provide an opportunity to discuss any queries they

may have had. In subsequent sessions the questionnaire was left with the subjects to complete in their own time. This was necessary since subjects frequently did not have time to fill it out when the researcher was visiting. Subjects were specifically asked to fill the questionnaire out "sometime in the next few days", and it was collected at the next contact. Self-reported compliance with this request was high. In the final session a stamped addressed envelope was given to the subjects with the questionnaire, and they were asked to mail it back to the researcher within "the next few days". Fourteen of the final questionnaires were received within five days of the final interview, while the other was received within two weeks after a phone call to remind the subject to return it.

CHAPTER 7

RESULTS

The aim of the present research is to explore the changes in subjective stress, coping and SWB in women before and after the birth of their first child. To see how these variables fit together the purpose of the present chapter is to draw out the main patterns and themes in the experiences of the 15 subjects over the five months of data collection. Subject 9 is omitted from this analysis and the ensuing discussion since she left the study after the first contact.

Results are presented in three ways. Detailed quantitative data are presented in Appendix D. Tables D1-D16 present individual data for subjects 1-8 and 10-16, while table D17 presents mean group data. To highlight major themes and patterns within the group a description of each major variable (subjective stress, coping, appraisals and SWB) will be presented. The emphasis here will be on the qualitative information underpinned by the quantitative data. These presentations will start with a description of the mean trend of the variable. Individual data, both from the quantitative measures and from the interviews, will be described to support and corroborate the mean trend, and to point out specific counter-examples to the group pattern. The emphasis will be on describing changes within each variable, but some attempts will be made to describe how the relationships

between these variables change over time. An integration of all the data will summarise and conclude this section. Finally, two individual case descriptions will be presented to illustrate both typical patterns and themes and specific counterexamples. Pseudonyms are used throughout to maintain anonymity. These are listed in appendix D.

Sharon joined the study only by T2 and had her baby before T3. Consequently, she had only one interview and completed only one questionnaire before the ADB. It is not possible, therefore, to gauge changes in the major variables of the present study for this subject before the birth. Consequently, she will be excluded from the analysis of pre-birth data.

In the following pages each contact will be referred to as T1 (10 weeks before the EDB), T2 (six weeks before the EDB), T3 (two weeks before the EDB), T4 (two weeks after the ADB), T5 (six weeks after the ADB), and T6 (10 weeks after the ADB).

SUBJECTIVE STRESS

The mean trend for all scores on the Hassles Scale and the eight hassles subscales was to decrease between both T1 and T2, and T2 and T3. The mean scores increased between T3 and T4. Mean hassles total and hassles frequency both decreased at T5 and increased at T6, while mean hassles intensity increased at T5 and decreased at T6. Between T4 and T6 all mean overall hassles scores decreased. Mean time pressure and household hassles were higher than any other subscale at T5 and T6. Figure 1 presents mean data for hassles total from T1 to T6.

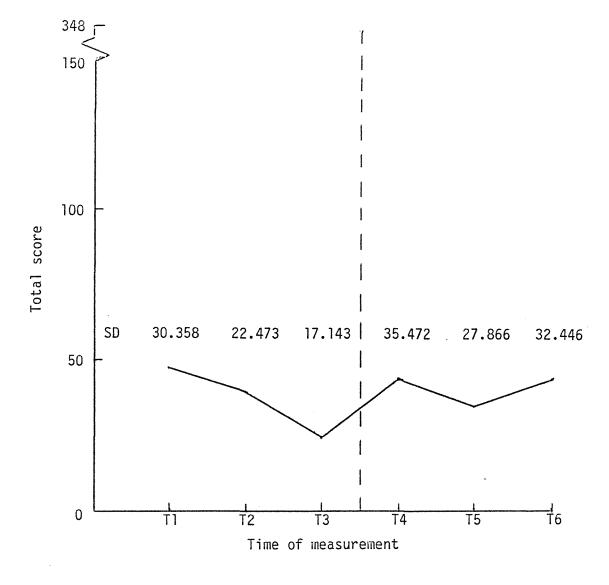


Figure 1. Mean hassles total from T1 - T6.

While the individual overall scores (hassles total, hassles frequency and hassles intensity) generally decreased between T1 and T3, the overall scores of only five subjects (Mary, Jill, Jocelyn, Diane and Audrey) decreased between both T1 and T2, and T2 and T3.

The distinguishing feature of these five subjects was that they expressed no particular hassles or stressors in interview at T2 or T3. For these women, late pregnancy was relatively anxiety and trouble free. For example, although Mary reported a tendency to "think a wee bit more about the labour and birth" at T3 she also said she was contented being pregnant, and at T3 described late pregnancy as "the best time in my life". Jocelyn said at T2 that although the labour and birth was becoming "more a reality ... I don't feel nervous", and at T3 she said "I'm not really anxious about it". There were some small increases for some subjects in this group in the scores on some hassles subscales, either at T2 or т3. However, apart from a small increase on the health hassles subscale for Audrey at T3 which could be associated with her having been "sick" in the preceding few weeks, none of these increases were accompanied by any specific stressors. It is perhaps possible that an increase in anxiety about the labour and birth was in fact responsible for these increases, but this was not obvious from the interviews.

Five subjects (Jane, Brenda, Felicity, Deirdre, Beryl and Catherine) whose overall hassles scores did not all decrease between both T1 and T2, and T2 and T3, each experienced an event

unrelated to the pregnancy as such which was appraised as a stressor in interview.

Jane, Brenda and Felicity left their jobs between T1 and T3, and this event seemed to have particular effects for each. For example, Jane finished work between T2 and T3. In interview at T2 it was clear that she was not looking forward to leaving her job. She said she was "happy in my career. I get lots of needs met at work. I will have to come to terms with losing that for a while". Her score on the work hassles subscale was slightly higher at this point than it had been at T1, perhaps reflecting anxiety at the prospect of leaving work. At T3 Jane said life was "really horrible the first week" after leaving work. She missed the company of her workmates and had to make an effort to keep herself entertained with other activities. A slight increase in overall hassles intensity at T3 may have reflected the stress of adapting to this new lifestyle, although it could equally as well be symptomatic of an increase in anxiety about the labour and birth.

Brenda was also upset at the prospect of leaving work, which she finished between T2 and T3. In interview at T3 she said "The week I gave up work was the most stressful since morning sickness (in the first trimester)". She was very angry and moody during this week, and anxious about losing her financial independence. A small increase on the financial responsibility hassles subscale score at T2, and on the future security hassles subscale score at T3 seemed to reflect this anxiety. Overall hassles intensity had also increased at T3, although, as in Jane's case, this may have been due to an increase in anxiety as the labour and birth loomed closer.

For Felicity increases at T2 on overall hassles intensity and on the time pressure, household and financial responsibility hassles subscale scores were also accompanied by leaving work. She had left work two days before the interview at T1, and at T2 said she and her husband were "adapting to the prospect of only one wage and the consequent change in lifestyle. For example we can't go out to the pictures whenever we feel like it".

Deirdre had both left work and discovered that her mother had terminal cancer by T3, although she did not discuss her mother's illness until after the birth. While she expressed no concerns or anxieties about having left work, at T5 (six weeks after the actual birth) Deirdre said that she had been very concerned at T3 that her mother would see the baby before she died. At T3 there was an increase in overall hassles total, hassles intensity and time pressure and household hassles subscale scores.

Beryl and her husband had been living with her mother at T1 and T2 while their own house was being renovated. They had moved into the uncompleted house by T3 since they wanted a home birth. At T3 there was an increase in overall hassles frequency and on the household hassles subscale score.

For three other subjects (Susan, Carol and Veronica) increases in overall and subscale scores were not obviously associated with specific events. Although both Carol and Veronica had left their jobs between T1 and T3, neither expressed any particular anxieties or hassles in relation to this. Increases in Veronica's scores on the health and inner concern hassles subscales at T2 may have been associated with her having been sick for a week between T1 and T2. At T3 her scores on overall hassles intensity and on four of the eight hassles subscales increased. This was accompanied by an expression of general fatigue, "feeling heavy, and it's hard to get around as well" and a "bit sick of being pregnant" in interview. Susan was also a "lot more tired lately" at T3 and was "quite tearful about everything and nothing", although she was also "quite relaxed, and not worried at all" about the labour and birth. Carol had a "bit of anxiety about the labour and birth" but felt she was experiencing "more excitement than anything else". She also said "I have a lot of knowledge and I'm not scared, but I just don't know my pain barrier and how I will perform actually in the situation."

Unlike all the other subjects, Catherine was admitted to hospital three days before T2 with ruptured membranes. Her doctor ordered bed-rest and told Catherine that the birth would be induced within two weeks if the baby had not already been born. For Catherine this was, naturally, a shock and a disappointment. She said in interview that she now had to readjust her expectations and her psychological preparation for the time of the birth. Having expected to give birth in approximately six weeks, she now had to expect at the most two more weeks of pregnancy. Added to this was the frustration of having to rest continually, although Catherine was very aware of her responsibility towards her unborn child, and felt that to be her top priority. At T2 overall hassles intensity increased, as did the scores on five of the eight hassles subscales.

After the birth at T4, the individual scores of seven subjects (Mary, Brenda, Susan, Jocelyn, Catherine, Veronica and Diane) were generally consistent with the trend between T3 and T4 (all mean overall scores increased at T4). While five subscale scores out of 56 for this subgroup decreased at T4, 38 subscale scores increased and 13 did not change. All overall hassles scores increased for these seven subjects.

Five of these seven subjects (Mary, Susan, Jocelyn, Catherine and Veronica) described their labour and birth experiences in negative terms. In contrast, Brenda and Diane described their experiences as "fantastic" and "a piece of cake". All these women, however, experienced pain at some point in the labour, and they coped by concentrating on using breathing techniques they had learnt in ante-natal preparation classes, and were supported by their husbands and hospital staff.

Mary and Veronica both found their stay in hospital very traumatic. Mary felt she had no control over her experiences during labour and delivery, and felt the staff were off-hand. Veronica described her stay "trying" and found sleeping very difficult. Both complained of receiving conflicting advice from nursing staff with respect to caring for the baby, especially in regard to breast feeding. Diane also had problems in hospital. She was unable to breast feed properly for a couple of days, and she received conflicting advice from staff. She was annoyed by relatives offering their "advice" about caring for the baby, and felt her husband was siding with her mother-in-law in respect of the advice she was giving.

Brenda, Felicity and Susan all had positive things to say about their stays in hospital. Brenda enjoyed the "rest and fuss", although she also complained that the staff were unsupportive and critical of her decision to organise the feeding regime herself. Susan said the staff "were helpful", although she too complained of receiving conflicting advice. Felicity described her hospital stay as "good, I loved it", and felt the nurses were "lovely".

Catherine's experience was unique. Her baby was born six weeks premature and had to be admitted to the neo-natal unit for three weeks. Catherine found this very stressful enough. She had to have a catheter inserted the day after the birth, could not get much sleep, and felt "emotionally traumatised" by her experience. She felt angry when the staff kept telling her that everything was

"normal, (since) I felt nothing was normal!" Problems breast feeding were an added stressor initially.

Of the six of these seven subjects who spent a week at home before T4, five found some difficulties with organising their time to care for the baby and attend to household chores. The exception was Diane who felt "great" at home and said "right from the start I was into a routine. I felt quite satisfied about this." It should be noted in this context that Diane's increases on the overall hassles scores at T4 were the least dramatic of the seven subjects in the present subgroup.

Mary and Veronica's experiences at home with the baby for the first week were very demanding. Mary was exhausted with the "nolet-up nature" of caring for her baby, entertaining visitors, answering the phone, and attending to the household chores. Veronica also complained that the constant business of caring for the baby was "a bit of a shock to the system". Their increases on the overall hassles scores were the most dramatic of the subjects in the present subgroup. The increases on Susan's scores were equally as dramatic. However, Susan felt she had "no particular hassles" at home, although it was "hardest to accept letting the housework take a back seat." Brenda described her first week at home as "hectic" and "tiring", and felt she was trying to do "a thousand things at once". She said the household chores were not getting done as frequently as she had done them before the birth, and she had some anxiety about what all the baby's cries meant. Jocelyn did not feel very stressed, but said things were "disorganised" and she had "no routine yet. But even now I feel I'm getting organised."

Four subjects (Jane, Jill, Carol and Audrey) had increases on only two of the three overall hassles scores at T4. The hassles total and hassles frequency scores of Jane, Carol and Audrey increased at T4, but their hassles intensity scores decreased. Jill's hassles intensity score did not change at T4, while her hassles total and hassles frequency scores both increased. There were no apparent differences between how these women experienced labour and birth, and the experiences of the previous subgroup.

Jane had a home birth which she described as having "went well", despite the pain of labour. She felt in control of her experience in her own home, and was pleased that she had no drugs to help her cope with the pain, although she felt she would have asked for drugs if she had been in hospital. Breast feeding began well, but she was having trouble producing milk at T4 "so (I was) not full of confidence". She found household chores and the constant routine of feeding very demanding, and in the first few days after the birth she had a lot of visitors and felt she had "too much to do."

Jill described her labour as "terrible", having had an epidural and an episiotomy for an induced forceps delivery. She had "no particular hassles" while she was in hospital, but "the first day at home was a bit difficult with a house full of people, and the baby was not settled." She found that it "took a couple of days for things to settle" and "Life is not the same anymore. I have to get used to the idea of working around the baby's needs."

Carol did not like her stay in hospital. She had "no peace", and although some nurses were "understanding, you have to stand up for yourself" in respect of organising the baby's cares. At home she felt "good" and was free to "do the daily routine in my own way." She had established a routine with washing the baby's nappies by T4, but had not yet got into a routine with the baby's cares. While she was also concerned with learning what each of the baby's cries meant, she said nothing had been especially stressful since she had been at home.

Audrey described her labour and birth as "Hell!" and "Horrible!", and wanted her husband to take over! She felt unable to take care of the baby for the first two days because she had a headache, and also had problems with the staff. She was annoyed that the charge nurse several times asked her visitors to leave, and she too was given conflicting advice by nurses. These experiences made her feel like she was "in prison" during her hospital stay. At home she felt "nervous" the first two days, was tired and found she could not "get everything done", but she did not find anything especially stressful.

Felicity's score on overall hassles intensity was the only overall hassles score to increase at T4. Hassles frequency decreased, while hassles total did not change. She described her labour and birth as "marvellous" and "very fast". She said the staff were "marvellous and made me feel quite important." She was happy that she had had no drugs, and felt she had control over her experience. Her husband's help and support was very valuable, and overall the labour and birth was not very stressful. Her stay in hospital was good, with no visitors until the fifth day, and good relationships with the staff. She did, however, miss her husband very much while she was in hospital. His support was invaluable during the first few days at home, and the only particular stressor she had experienced at home was having to wake during the night to feed the baby.

Beryl's score on hassles intensity also was her only overall hassles score to increase at T4, while hassles frequency and hassles total both decreased. She had a home birth, and although the pain was quite stressful she coped by using breathing techniques and felt supported by her husband. She felt a sense of achievement not having had drugs or other "interference", and felt she was in control throughout the labour and birth: "I could do what I wanted. You get to the stage where you just say 'Do this, do that' to the midwife and doctor, and I don't know if I would have been comfortable doing that in hospital." Since the birth life had been generally "tiring" although she had had both "good and bad days". Her mother had been very helpful in practical ways, for example preparing meals. She experienced no problems with breast feeding, and felt she had learnt what the baby's cries meant very quickly. She had to lower her expectations about how much housework she could get done in a single day, and the most stressful aspect of life since the birth was waking during the night to feed the baby.

Deirdre's overall hassles scores all decreased at T4. She described the labour and birth as "good" and felt "quite relaxed about the whole thing." The staff were "really nice" and the pain was easy to cope with in the beginning using breathing exercises. Although the pain got worse towards the end, she did not have drugs and was glad about this in retrospect. Her stay in hospital was "quite good" despite having problems with her blood pressure. Breast feeding was also a problem initially, which did not occur properly until the fifth day. The first day at home she wanted to return to hospital. She could not get the baby settled, who was very demanding, and made Deirdre feel "exasperated". She felt her "routine was all out, and doing simple things like getting meals was difficult." By T4 she still had not established a routine, and felt unsure of how to answer all the baby's different cries. On the positive side, and seemingly much more significant, her mother had survived in time to see the baby.

All of Sharon's overall hassles scores decreased between T2 and T4. She had no scores at T3 since her baby was three weeks premature. Her labour was painful since she had to have a spinal

anaesthetic for a forceps delivery because the baby was not lying in the correct position. She also had to have an episiotomy and her perineum had torn. This subsequently became infected and was very painful. Consequently she felt very "rundown" and became frustrated that she was unable to "do much." Otherwise she did not find the stay in hospital very stressful, and found the staff very supportive. At home she had help with the household chores from her husband, and friends were helpful in practical ways by, for example, preparing food.

After T4, five subjects (Mary, Jane, Susan, Veronica and Diane) had overall hassles scores mostly consistent with the mean trend after T4 (mean hassles frequency and total both decreased at T5 and increased at T6, while mean hassles intensity increased at T5 and decreased at T6). Four subjects (Brenda, Deirdre, Sharon and Beryl) had at least two overall scores which increased at T5 and decreased at T6. Three subjects (Jill, Felicity and Audrey) had at least two scores which dropped at T5 and rose at T6. At least two out of three scores of three subjects (Jocelyn, Carol and Catherine) rose at T5 and T6. Time pressure and/or household hassles had the highest scores of the eight subscales at T5 and/or T6 for most subjects. The exceptions were Jocelyn whose scores on future security and work hassles were the highest, and Carol whose score on neighbourhood hassles was the highest.

All 15 subjects reported at T5 or T6, or both points, that the major hassle they had experienced was organising their time to fit

in life's myriad demands around the baby's cares. For example, Mary said at T6 that organising time to herself was difficult: "I'd love to just get out and go somewhere, but I can't. This is a major hassle. Just getting the groceries is a hassle." At T6 Jane said that the main change in her life was "learning my time isn't mine!" One especial hassle was organising time to do the housework. Most subjects felt they had to lower their expectations in respect of what they could hope to achieve in one day. Generally, this was considerably less than what they were used to before the birth. The degree of stress this imposed, however, depended on how committed they were to keeping a timetable. For example, Catherine found this process very difficult since she had high expectations and felt guilty if she did not get everything. done which she had planned for the day. In contrast, Carol had no problems in this respect since she confessed to having no expectations to begin with.

By and large, then, the first month to six weeks after the birth were the most stressful in the study period.

APPRAISALS

Figure 2 presents data for mean appraisal emotions from T1 to T6.

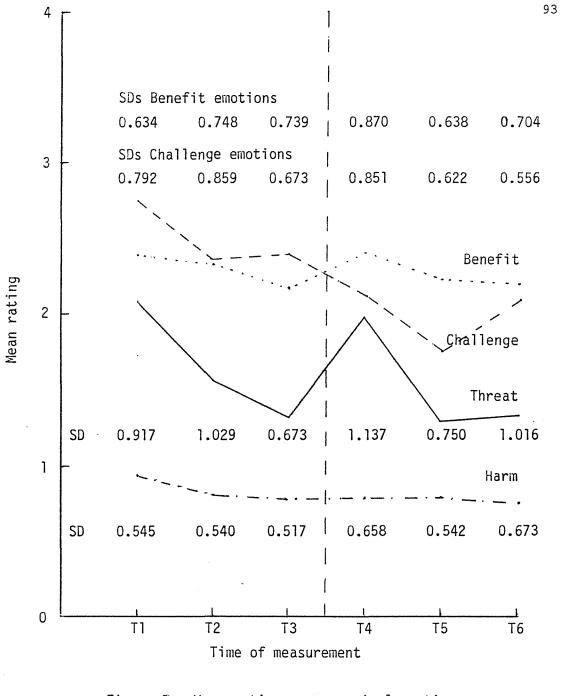


Figure 2. Mean ratings on appraisal emotions from T1 - T6.

Threat Emotions: The trend for mean scores on threat emotions was to decrease between T1 and T3. Mean threat emotions increased at T4, decreased at T5 and increased more moderately at T6, with a consequent overall decrease between T4 and T6.

The threat emotion scores of eight subjects (Mary, Jill, Felicity, Jocelyn, Beryl, Carol, Diane and Audrey) decreased overall between T1 and T3. It will be recalled that Mary, Jill, Jocelyn, Diane and Audrey reported no specific stressors between T1 and T3, and their overall hassles scores had decreased both at T2 and T3. Only Diane out of these five subjects had reported any particular hassles in relation to late pregnancy, who said she was feeling "uncomfortable" and "awkward" at T2 and T3. Scores on four of her coping subscales increased at T2, and those on five coping subscales increased at T3.

Felicity and Beryl had both reported specific stressors in interview before the birth. Felicity's scores on overall hassles intensity and on three hassles subscales increased at T2, as had the scores on four coping subscales. The scores on two coping subscales increased at T3. Beryl's scores on overall hassles frequency, one hassles subscale and five coping subscales had increased at T3. Carol had not reported any specific stressors before the birth, but had referred to "a bit of anxiety about the labour and birth" at T3. Her scores on overall hassles intensity and on one coping subscale had increased at T3, and the score on one coping subscale was elevated at T2.

For four subjects (Jane, Brenda, Susan and Catherine) threat emotions did not change overall between T1 and T3, although for three (Jane, Brenda and Susan) there were changes at T2 and T3. Jane's threat score decreased to zero at T2 and rose at T3. This was accompanied by a slight increase in overall hassles intensity at T3. Brenda's threat score increased at T2 and dropped at T3. Brenda had been due to leave work between T2 and T3, and had an increased score on the financial responsibility hassles subscale at T2, perhaps reflecting some anxiety at the prospect of losing her own income. Scores on most of the coping subscales had also increased either at T2 or T3. Susan's threat score decreased at T2 and rose at T3. The decrease at T2 was accompanied by decreases at T2 on most hassles and coping scores, while the increases at T3 were also accompanied by increases in most hassles and coping It will be recalled that in interview at T3 Susan said scores. she was "a lot more tired lately" and "quite tearful about everything and nothing."

Threat scores of two subjects (Deirdre and Veronica) increased overall between T1 and T3. Deirdre's threat score decreased at T2, but increased dramatically at T3. It will be recalled that Deirdre had discovered by T3 that her mother had terminal cancer, and her scores on overall hassles total and intensity had increased at T3, as had scores on two hassles subscales and one coping subscale. Deirdre had commented after the birth that her greatest worry at T3 was that the baby would be born before her mother died. Veronica's threat score increased both at T2 and T3. At T2 there were also increases in two hassles subscales and two coping subscales, and at T3 there were increases in four hassles subscales, overall hassles intensity and three coping subscales. Veronica had also expressed a great deal of discomfort and frustration with late pregnancy.

Eleven subjects (Mary, Jane, Jill, Felicity, Susan, Sharon, Jocelyn, Beryl, Catherine, Veronica and Audrey) had individual scores consistent with the mean trend at T4 (mean threat emotions increased at T4). Five of these (Mary, Susan, Jocelyn, Catherine and Veronica) had increases on all overall hassles scores at T4. Three more (Jane, Jill and Audrey) had increases on at least two hassles scores at T4. Felicity and Beryl had only one increase, while Sharon's three overall hassles scores all declined at T4. Brenda's and Carol's threat scores did not change at T4, while Deirdre's and Diane's both decreased. Brenda's and Diane's hassles scores all increased at T4, two of Diane's increased, and all of Deirdre's decreased. It will be recalled that Deirdre's terminally ill mother had survived to see her grandchild, and Diane felt confident and secure already in her ability to organise her life at T4.

The individual threat scores of all but three subjects (Beryl, Carol and Diane) decreased overall between T4 and T6 (mean threat emotions declined overall between T4 and T6). Beryl's score increased at T5 and dropped at T6, Carol's did not change either at T5 or T6, while Diane's score increased at T6. It will be recalled

that mean overall hassles scores decreased overall between T4 and T6 also.

Challenge Emotions: The mean score on challenge emotions decreased overall between T1 and T3. Mean challenge emotions decreased at T4 and T5 and rose at T6, with an overall decrease between T4 and T6.

For six subjects (Mary, Felicity, Jocelyn, Beryl, Catherine and Audrey) individual challenge scores also decreased overall between T1 and T3. The threat scores of five of these (Mary, Felicity, Jocelyn, Beryl and Audrey) had also decreased between T1 and T3, while Catherine's did not change at T2 (and she had her baby before T3).

For five subjects (Jane, Jill, Brenda, Veronica and Audrey) challenge emotions increased overall between T1 and T3. For three of these threat emotions had either not changed overall between T1 and T3 (Jane and Brenda), or had increased overall between T1 and T3 (Veronica). Although Jill's and Diane's threat scores increased overall between T1 and T3, it is perhaps interesting to note that they decreased at T3.

The challenge scores of three subjects (Deirdre, Susan and Carol) did not change overall between T1 and T3, although Susan's score increased at T2 and decreased at T3.

The individual scores of eight subjects (Jane, Brenda, Deirdre, Susan, Sharon, Veronica, Diane and Audrey) decreased at T4 (mean challenge scores decreased at T4). Carol's and Catherine's scores did not change, while those of five subjects (Mary, Jill, Felicity, Jocelyn and Beryl) all increased.

The challenge scores of seven subjects (Mary, Jane, Brenda, Felicity, Deirdre, Beryl and Carol) decreased overall between T4 and T6, although the scores of the latter five subjects increased at T6 (mean challenge scores decreased overall between T4 and T6). The scores of six subjects (Susan, Sharon, Jocelyn, Catherine, Diane and Audrey) increased overall between T4 and T6. Jill's score dropped at T5 and rose at T6, while Veronica's score rose at T5 and dropped at T6.

Harm Emotions: The mean score of harm emotions decreased overall between T1 and T3. Mean harm emotions increased only slightly at T4. There was almost no change in the mean score of harm emotions between T4 and T6. The mean score rose slightly at T5 and dropped at T6, with an overall slight decrease between T4 and T6.

The harm scores of four subjects (Mary, Jocelyn, Veronica and Diane) also decreased overall between T1 and T3. None of these subjects had reported specific stressors before the birth, although Veronica had described a lot of frustration and discomfort with late pregnancy. Her harm score increased at T2, at the same time

she reported in interview that she had been sick in the preceding few weeks.

Harm scores increased overall between T1 and T3 for seven subjects (Jane, Felicity, Deirdre, Susan, Beryl, Carol and Catherine). All of these subjects, except Carol, had reported specific stressors before the birth, while Carol had reported some anxiety at T3, which is when her harm score rose. The increases for Jane, Felicity and Susan also seemed more directly contiguous with anxiety about the labour and birth, rather than the stressors which they reported. The increases for Deirdre, Beryl and Catherine were contiguous with the stressors which they described in interview.

The harm scores of three subjects (Jill, Brenda and Audrey) did not change overall between T1 and T3. Jill's score had increased at T2 and dropped at T3, while Brenda's had dropped at T2 and rose at T3. Audrey's did not change.

Mary's, Jane's, Jill's, Felicity's and Veronica's harm scores all increased at T4, while those of Brenda, Susan, Sharon, Jocelyn, Beryl, Carol and Diane decreased. Deirdre's and Catherine's did not change (there was a slight mean increase at T4).

The scores of seven subjects (Mary, Jane, Jill, Deirdre, Susan, Beryl and Veronica) decreased overall between T4 and T6, although the scores of the latter four subjects rose at T5 (there

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was a slight overall decrease in mean harm scores between T4 and T6). The scores of six subjects (Brenda, Felicity, Sharon, Jocelyn, Catherine and Audrey) increased overall between T4 and T6. Brenda's and Sharon's scores increased at T5 and dropped at T6, while those of Felicity and Audrey dropped at T5 and increased at T6. There was no change in the scores of two subjects (Carol and Diane).

Benefit Emotions: Mean benefit emotions decreased overall between T1 and T3, increased at T4, and at T5 and T6 mean benefit emotions decreased.

The individual scores of seven subjects (Mary, Jane, Deirdre, Susan, Beryl, Diane and Audrey) decreased overall between T1 and T3, while the scores of four subjects (Jill, Brenda, Catherine and Veronica) rose overall. There was no change overall in the scores of three subjects (Felicity, Jocelyn and Carol).

Eight subjects (Brenda, Felicity, Deirdre, Susan, Jocelyn, Beryl, Diane and Audrey) all had increased benefit scores at T4. Those of Jane, Sharon and Veronica did not change, while those of Mary, Jill, Carol and Catherine decreased.

The scores of eight subjects (Mary, Brenda, Felicity, Deirdre, Jocelyn, Beryl, Veronica and Audrey) decreased overall between T4 and T6. The scores of five subjects (Jill, Susan, Sharon, Catherine and Diane) increased overall between T4 and T6, while the scores of two subjects (Jane and Carol) did not change overall between T4 and T6, although Jane's rose at T5 and dropped at T6.

COPING

The mean scores on all eight subscales of the Ways of Coping Checklist (Revised) decreased between T1 and T2, while the mean scores of only five subscales (problem-focused coping, wishfulthinking, focus on the positive, tension-reduction, and seeking social support) also decreased between T2 and T3. The mean scores on the other three subscales (distancing, self-blame and selfisolation) did not change between T2 and T3. When the six emotionfocused coping subscales were combined, the mean score decreased between both T1 and T2, and T2 and T3. The mean scores on problemfocused coping, combined emotion-focused coping and seeking social support all increased at T4. Mean problem-focused coping, emotionfocused coping and seeking social support all decreased at T5 and increased at T6. This was also the trend for all six emotionfocused coping subscales. Figure 3 presents mean data for problemfocused coping, emotion-focused coping and seeking social support from T1 to T6.

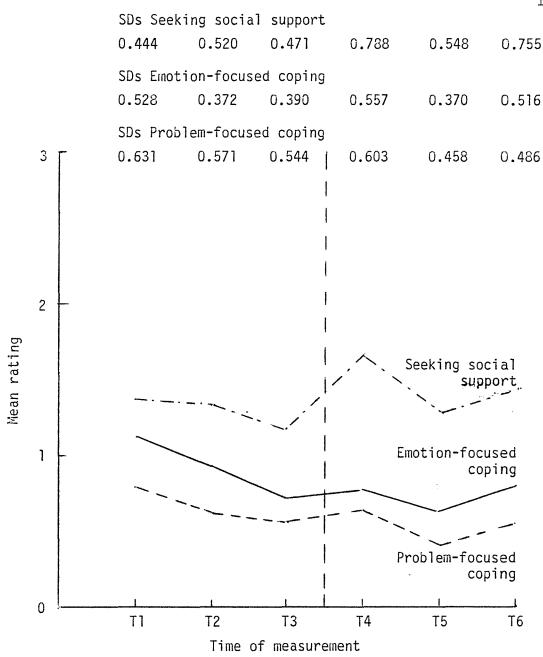


Figure 3. Mean rating on problem-focused coping, emotionfocused coping and seeking social support from T1 - T6.

For 10 subjects (Mary, Jane, Jill, Deirdre, Susan, Jocelyn, Beryl, Carol, Veronica and Audrey) at least two of the three scores out of the problem-focused coping, emotion-focused coping and seeking social support subscales decreased overall between T1 and T3 (there was a mean decrease overall in three main coping scales between T1 and T3).

Four of these subjects (Mary, Jill, Jocelyn and Audrey) were reported above as having expressed no particular stressful events between T1 and T3 in interview, and their overall scores on the Hassles Scale decreased between T1 and T2, and T2 and T3. Mary's scores on only problem-focused coping and wishful thinking increased slightly before the birth, between T2 and T3. All her other subscale scores either decreased between T1 and T2, and T2 and T3, or did not change. The only subscale scores of Jill's to increase were wishful thinking and seeking social support between T2 and T3. Jocelyn's scores on problem-focused coping, distancing. tension-reduction and seeking social support increased between T1 and T2. All of Audrey's subscale scores decreased between T2 and T3, except for self-isolation which was not used at all at either T2 or T3 (Audrey had no scores for T1 since she joined the study at T2).

Three subjects (Jane, Deirdre and Beryl) all reported specific events which were appraised as stressors in interview before the birth. For Jane, however, only the score on the self-blame subscale increased, between T1 and T2. All her other subscale scores either decreased or did not change at T2 and T3. Deirdre's score on the focus on the positive subscale increased slightly at T3, and it will be remembered that she said in interview after the birth that her main worry at T3 was that her mother would be able to see the baby before she died. Beryl's scores on the distancing, focus on the positive, self-blame, tension-reduction and selfisolation subscales all increased between T2 and T3. It will be recalled that Beryl and her husband had returned to their own house between T2 and T3 since renovations were started, and Beryl had a slightly increased score on the household hassles subscale at T3.

Susan, Carol and Veronica had not reported specific events that were appraised as stressful before the birth, but did have increased scores on overall hassles intensity, and some increased hassles subscale scores at T3. At T3 Susan's scores on the wishful thinking, distancing, self-blame, self-isolation and seeking social support subscales increased. At T2 Carol's score on the focus on the positive subscale increased, as did her score for problemfocused coping at T3. At T2 Veronica's scores on problem-focused coping and focus on the positive increased, as did those on wishful thinking, distancing and seeking social support at T3. In each of these three cases increases on coping subscales were contiguous with some expressed anxiety about the labour and birth, or frustration with late pregnancy.

At least two of the three scores from problem-focused coping, emotion-focused coping and seeking social support increased overall between T1 and T3 in the cases of four subjects (Brenda, Felicity, Catherine and Diane). Three of these subjects (Brenda, Felicity and Catherine) had reported specific events which they appraised as stressful in interview between T1 and T3. For Brenda the prospect of leaving work caused some anxiety at T2, and a lot of anger and moodiness in the week she actually left work, which was after T2. Her scores on seven of the eight coping subscales increased either at T2 or T3 or on both occasions.

Just before T1 Felicity had also left work, and some scores on the hassles scale had increased at T2. Her scores on wishful thinking, distancing, focus on the positive and seeking social support also increased at T2. At T3 her scores on seeking socialsupport and self-blame also increased, possibly associated with expressions of anxiety about the labour and birth in interview at T3.

Catherine, it will be recalled, was admitted to hospital three days before T2 with ruptured membranes. This was described in interview as stressful and frustrating, and five of Catherine's hassles subscale scores had increased at T2. Although scores on both problem-focused coping and the focus on the positive subscale decreased at T2, her scores on wishful thinking, distancing, seeking social support and the overall emotion-focused coping scale all increased at T2. The decrease on the focus on the positive subscale at T2 can perhaps be accounted for by the fact that she was still coming to terms with her new situation and was not feeling particularly positive about her admittance to hospital.

Diane expressed no particular stressful experiences between T1 and T3. However, her scores on distancing, focus on the positive, self-blame and self-isolation had increased at T2, as had those on problem-focused coping, wishful thinking, tension-reduction, selfisolation and seeking social support at T3. While it may be recalled that Diane had expressed no particular anxiety about the labour and birth in interview, she had referred to feeling "uncomfortable" and "awkward" at T2 and T3, and was keen to get the pregnancy over with during the final weeks.

At T4 the individual scores on at least two of the problemfocused coping, emotion-focused coping and seeking social support scales of seven subjects (Mary, Jill, Susan, Jocelyn, Carol, Catherine and Audrey) increased (there was a mean increase on the three main coping scales at T4). The three overall hassles scores of Mary, Susan, Jocelyn and Catherine also increased at T4, while Jill, Carol and Audrey had increases on at least two of the three overall hassles scores. While there were differences between these seven women in how stressed they felt at T4, all seven felt stressed to a greater or lesser extent by the demands of the baby and trying to organise time to do household chores. Establishing a routine was seen by each of these subjects as the most important thing to achieve, and their coping efforts were directed to this end.

Three subjects (Brenda, Deirdre and Veronica) had increases on only one of the three coping scales referred to above. Brenda's and Veronica's three overall hassles scores all increased at T4, while all of Deirdre's decreased. Each of these women experienced the same adjustment problems as the seven described above, while Deirdre had seen her terminally ill mother survive long enough to see her grandchild.

Felicity's and Diane's scores on problem-focused and emotionfocused coping decreased at T4, while their scores on seeking social support increased. Felicity had only one increase on an overall hassles scale at T4, while the three increases Diane had were all comparatively very moderate. Both these women felt positive about their labour and birth experiences. While Diane felt under some stress in hospital after the birth she felt "great" at home and had established a routine already by the contact at T4. Felicity was generally happy with her stay in hospital, and at home she found nothing particularly stressful except waking during the night to feed the baby.

The three coping scores of Jane, Sharon and Beryl all decreased at T4. Interestingly, both Jane and Beryl had home births, and even though both had increases on overall hassles scores at T4, they both felt in control of what happened during the labour and birth. Jane felt that organising the baby's cares and the household chores was very demanding, while Beryl felt she had adjusted to a new routine and interpreting her baby's cries. Sharon's three overall hassles scores had also decreased at T4, and she had a lot of support from her husband and friends during her first week at home after the birth.

At least two of the three main scale scores of six subjects (Mary, Felicity, Susan, Sharon, Diane and Audrey) decreased between T4 and T6 (the mean scores of all three main coping scales followed this pattern). At least two of the three scores increased between T4 and T6 for seven subjects (Jane, Jill, Brenda, Deirdre, Jocelyn, Catherine and Veronica). Beryl's problem-focused coping score increased between T4 and T6, while her emotion-focused coping score decreased between T4 and T6. Her score on seeking social support did not change overall, although it rose at T5 and dropped at T6. Carol's problem-focused coping and seeking social support scores did not change at either T5 or T6, while her score on emotionfocused coping increased at T5 and dropped at T6.

SUBJECTIVE WELL-BEING

Mental Health Inventory: Only the scores on the two higher order factors of psychological distress (psyds) and psychological well-being (pwb) will be described in detail here, since the scores on the three lower order factors which were correlated with psyds in Veit and Ware's (1983) factor analysis followed an almost identical trend to that of psyds, the scores on the two lower order factors that correlated with pwb were similar to those on pwb, and the scores on the overriding mental health index were also similar to those on pwb. Figure 4 presents mean data for psyds, pwb and the mental health index from T1 to T6.

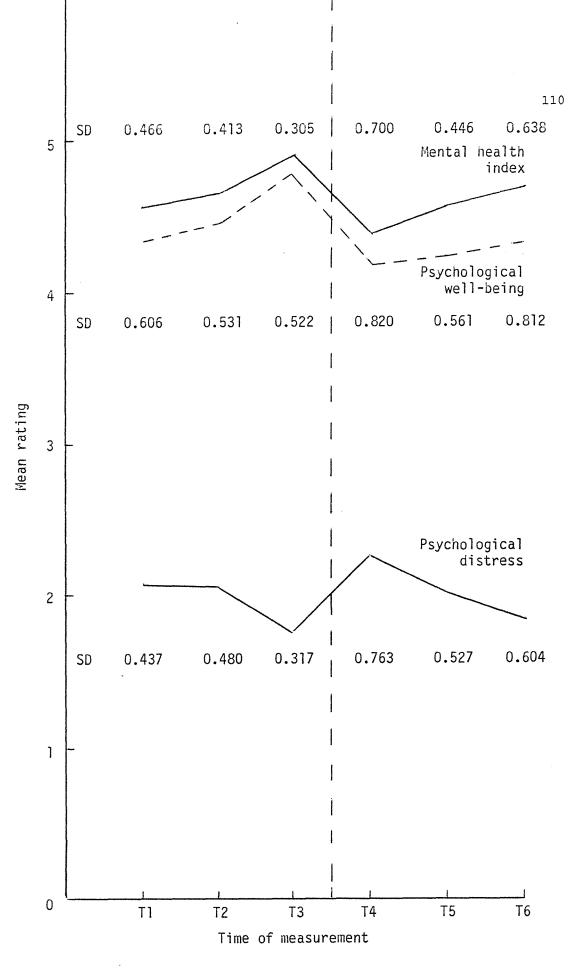


Figure 4. Mean ratings on the mental health index, psychological well-being and psychological distress from Tl - T6.

Mean scores on psyds decreased overall between T1 and T3, while those on pwb increased between T1 and T3. Mean psyds increased at T4, while mean pwb decreased. Mean psyds decreased at both T5 and T6, while mean pwb increased at both points.

The individual scores of 10 subjects (Mary, Jane, Jill, Brenda, Jocelyn, Beryl, Carol, Veronica, Diane and Audrey) were consistent with the mean trend before the birth. The scores of seven of these subjects (Mary, Jill, Jocelyn, Beryl, Carol, Diane and Audrey) were consistent with the mean trend at both T2 and T3, or did not change at one of these points. Among these, only Carol and Beryl had an increased overall hassles score before the birth. The scores of three subjects (Jane, Brenda, and Veronica) were inconsistent with this trend at either T2 or T3. For Jane and Brenda, the score on psyds increased at T2 and that on pwb decreased at T2. In both cases these scores occurred before they were due to leave their jobs, and may have reflected some anxiety or apprehension. Veronica's score on psyds increased at T3, at the same time that her score on overall hassles intensity increased slightly, possible reflecting anxiety about the labour and birth, and contiguous with expressed discomfort and frustration with the pregnancy.

At least one score of four subjects (Felicity, Deirdre, Susan and Catherine) was inconsistent with the mean trend. Felicity's score on psyds rose overall between T1 and T3, and her score on pwb dropped at T2, even though it increased overall between T1 and T3. Her scores on overall hassles intensity, time pressure, financial responsibility and household hassles subscales, and on four coping subscales had increased at T2. Felicity had mentioned in interview at T2 that she and her husband were adjusting to the loss of her income since she finished her job just before T1. Deirdre's score on psyds rose sharply at T3, as had her scores on overall hassles total, two hassles subscales and one coping subscale. It will be recalled that she had discovered by T3 that her mother had terminal cancer. Susan's score on psyds rose dramatically at T3, and her scores on pwb decreased at T3. She had expressed tiredness and tearfulness at T3, and her scores on all overall hassles measures, three hassles subscales and five coping subscales had also increased at T3. Catherine's score on psyds rose slightly at T2.

Ten subjects (Mary, Jane, Jill, Brenda, Felicity, Deirdre, Carol, Catherine, Veronica and Diane) had scores consistent with the mean trend at T4 (mean psyds increased and mean pwb decreased). All but two of these subjects (Felicity and Deirdre) had at least two increases on the three overall hassles scores at T4, while Felicity had only one increase, and all of Deirdre's decreased. Three subjects (Susan, Jocelyn and Beryl) had one score (psyds or pwb) inconsistent with the mean trend. Susan's psyds and pwb scores both decreased at T4, while those of Jocelyn and Beryl increased. Susan's and Jocelyn's scores on the hassles scale all increased at T4, while only one of Beryl's did. Sharon's and Audrey's psyds scores decreased, while their pwb scores both increased, in direct conflict with the mean trend. All of Sharon's overall hassles scores decreased at T4, while all of Audrey's increased.

The psyds scores of 14 subjects (the exception was Audrey) decreased between T4 and T6 (mean psyds also decreased). Of these 14 subjects, pwb increased for eight (Jane, Jill, Brenda, Deirdre, Susan, Catherine, Veronica and Diane) (mean pwb also increased). Of the other six, pwb either decreased or did not change between T4 and T6. For these six subjects (Mary, Felicity, Sharon, Jocelyn, Beryl and Carol), however, the mental health index score did increase between T4 and T6.

Life-1: Mean Life-1 scores increased overall between T1 and T3, decreased at T4 and T5 and increased at T6, with an overall increase between T4 and T6. Figure 5 presents mean data for Life-1 from T1 to T6.

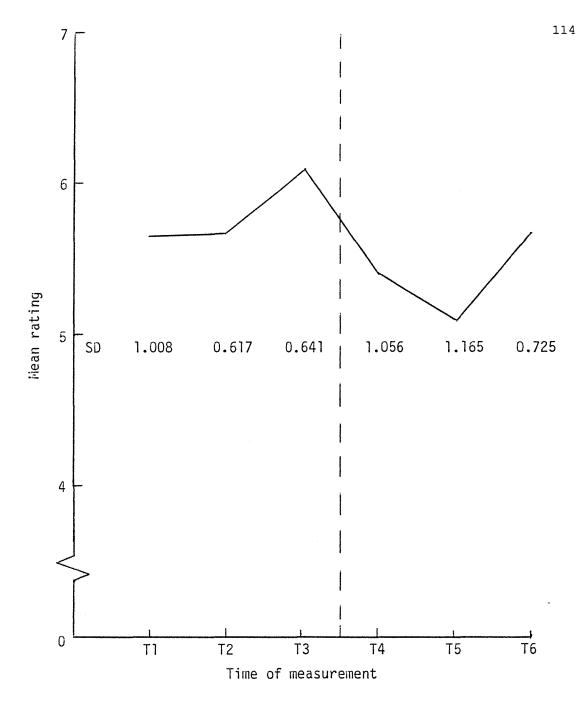


Figure 5. Mean rating on Life-1 from T1 - T6.

The scores of seven subjects (Mary, Jill, Jocelyn, Carol, Veronica, Diane and Audrey) also increased overall between T1 and T3. None of these subjects had reported specific stressors in interview before the birth. Only two of these (Carol and Veronica) had increases in overall hassles scores before the birth, and in both cases it was apparently related to anxiety about the labour and birth and frustration with late pregnancy. Six of these subjects had no increases in psyds or decreases in pwb between T1 and T3. Only Veronica's score on psyds rose slightly at T3.

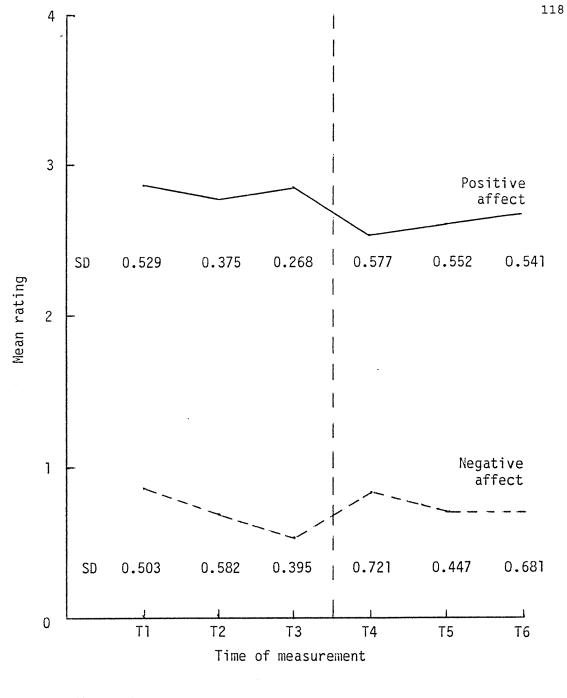
The Life-1 scores of Deirdre and Susan increased overall between T1 and T3. Surprisingly, Deirdre's increased at T2, but Susan's increased at T3, at the same time she had increases on all overall hassles scores and five coping subscales. She had also referred to tiredness and tearfulness in interview at T3.

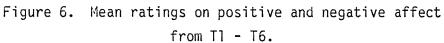
Brenda's and Felicity's Life-1 scores did not change overall between T1 and T3, but both had decreases at T2 and increases at T3. In both cases the decreases at T3 seemed related to leaving their jobs. Brenda had increases in financial responsibility and neighbourhood hassles and on four coping subscales at T2, perhaps reflecting some anxiety about leaving her job. Felicity had increases on overall hassles intensity, three hassles subscales and four coping subscales at T2, just over a month after she left her job. For three subjects (Jane, Beryl and Catherine) there were no changes in scores on Life-1 before the birth.

The scores of Mary, Jill, Deirdre, Carol, Catherine, Veronica and Diane were consistent with the mean trend at T4 (mean Life-1 decreased at T4). All these subjects had increases on psyds and decreases on pwb at T4. Six subjects (Brenda, Felicity, Susan, Jocelyn, Beryl and Audrey) had no changes in their Life-1 scores, while Jane's and Sharon's scores increased. Jane's Brenda's and Felicity's psyds scores all increased at T4, while their pwb scores all decreased. Sharon's psyds score decreased and her pwb score increased at T4.

The scores of six subjects (Mary, Brenda, Felicity, Jocelyn, Beryl and Carol) did not change overall between T4 and T6 (there was an overall mean increase between T4 and T6), although Brenda's and Beryl's scores dropped at T5 and rose at T6. The scores of six other subjects (Jill, Deirdre, Susan, Catherine, Veronica and Diane) increased overall between T4 and T6, although Jill's score dropped at T5 and rose at T6. The scores of the remaining three subjects (Jane, Sharon and Audrey) decreased overall betweem T4 and T6.

Affectometer 2: The mean trend for positive affect was to change very little before the birth. It decreased slightly at T2 and rose slightly at T3. Mean negative affect, however, decreased between T1 and T3. Mean positive affect decreased at T4, while mean negative affect increased. Mean positive affect increased between T4 and T6, while mean negative affect decreased. Figure 6 presents mean data for positive and negative affect from T1 to T6.





Seven subjects (Mary, Jill, Brenda, Jocelyn, Veronica, Diane and Audrey) had overall increases in positive affect between T1 and T3, and overall decreases in negative affect (Audrey's positive affect score was not valid at T3, but she has been included here since her negative affect score decreased). Only Brenda amongst these had reported a specific stressor before the birth, at T3 after she had left her job. However, her score on positive affect dropped slightly at T3, and her score on negative affect increased slightly at T2. Veronica's score on overall hassles intensity had increased at T3, but so had her score on negative affect.

Seven subjects (Jane, Felicity, Deirdre, Susan, Beryl, Carol and Catherine) had decreases overall on positive affect between T1 and T3 (except Catherine, whose score on positive affect did not change at T2). Four of these (Felicity, Deirdre, Susan and Catherine) also had increases in negative affect overall between T1 and T3. Jane's negative affect score did not change overall between T1 and T3, while those of Carol and Beryl decreased overall. Five of these seven subjects (Jane, Felicity, Deirdre, Beryl and Catherine) had experienced specific stressors before the birth, and had appropriate increased scores on the hassles scales and coping subscales. Susan and Carol also had some increases on hassles and coping scores, and both had experienced fatigue and tearfulnes or anxiety at T3.

Nine subjects (Mary, Jill, Brenda, Felicity, Deirdre, Carol, Catherine, Veronica and Diane) had scores consistent with the mean

trend at T4 (mean positive affect decreased and mean negative affect increased at T4). The psyds scores increased at T4 and pwb scores decreased for eight of these subjects (the exception was felicity whose psyds score decreased and pwb score increased at T4). The positive affect scores of two subjects (Susan and Sharon) did not change, while their negative affect scores decreased. Three subjects (Jocelyn, Beryl and Audrey) had no change in their negative affect scores, while their positive affect scores increased. Jane's positive affect score increased and her negative affect score decreased.

The scores of seven subjects (Jane, Jill, Deirdre, Susan, Sharon, Veronica and Diane) were consistent overall with the mean trend after T4 (mean positive affect increased and mean negative affect decreased after T4). The scores of Brenda, Beryl and Catherine both decreased between T4 and T6, while Jocelyn's scores both increased. Carol's scores did not change overall between T4 and T6, while those of Mary, Felicity and Audrey were overall inconsistent with the mean trend.

SUMMARY

In summary, it seems clear that the women in this sample generally experienced progressively less stress in relation to their pregnancies in the last trimester as the EDB neared. Exceptions to this rule were women who experienced a specific

stressor unrelated to the pregnancy as such, for example leaving a job, women who became more anxious about delivery as the EDB neared, and one subject who was admitted to hospital with ruptured membranes six weeks before her EDB. Generally, as stress decreased on the hassles scale, the scores on the Ways of Coping Checklist also decreased. Positive affect tended to increase and negative affect tended to decrease, once again with appropriate exceptions.

At T4 subjective stress was at its highest point for most subjects. For others stress peaked at T5 or T6. All women experienced to a greater or lesser extent the stress of reorganising their lives around their babies needs. Generally, stress started to decrease towards the end of the study period as the subjects began to adjust and adapt to their new circumstances. At the same time the use of coping strategies declined and positive affect increased while negative affect decreased.

While all mean appraisal emotions decreased before the EDB, and there were some noticeable fluctuations after the ADB, there were no clearly discernible patterns which emerged as was the case with subjective stress, coping and SWB. This is not to say, however, that subjects did not make appraisals at all. Interview information clearly indicated that subjects were actively evaluating their experiences. The consequences of these points will be discussed in the next chapter. To illustrate the principle themes and patterns Mary's experience will be described in some detail since she seemed most to personify the "typical" pattern. To highlight how differences occurred, Deirdre's experiences will be described subsequently since she seemed to represent the most vivid counterexample to the rule.

SUBJECT ONE

Mary was a 24 year old married European. She had four years secondary and one year tertiary education. She was established in her home, having lived in it for nine years, and had lived in the same town for 11 years. The current pregnancy was her second, the first having ended in a miscarriage at three months gestation three years before. She said her miscarriage did not affect the way she had approached the current pregnancy. She and her husband had planned to be married for several years before having a baby, and had specifically planned for her to become pregnant when she did. Mary said she was both happy to be and enjoyed being pregnant, and felt "more contented than I've felt before". She was looking forward to motherhood, and felt she would be good in the role.

Mary felt the worst part of the pregnancy had been during the first trimester when she suffered from nausea. She reported no other problems with the pregnancy. She had been seeing her family doctor once a month up until the first contact, and was to see him

every two weeks in the last two months of the pregnancy. She had not seen a specialist obstetrician by the first contact. Her preparation included seeing a film shown by Parent Centre, and attending ante-natal classes at the local hospital. She had also been reading a lot about pregnancy, birth and child rearing.

Mary's questionnaire data are reported here for the three measurement points before the EDB (T1, T2 and T3) on all scales and subscales. Due to a mistake on her part only the Hassles Scale was filled in at the second postnatal measurement point (T5), therefore, postnatal data from the other scales and subscales at the first and third postnatal measurement points (T4 and T6) only are reported.

Mary's total hassles score declined between T1 and T3, increased sharply to a peak at T4, and declined steadily between T4 and T6. Figure 7 depicts this pattern graphically. The patterns for frequency of hassles and hassles intensity were similar. For the eight hassles subscales derived from a factor analysis (Lazarus et al., 1985) the overall trend to increase after the birth was repeated. Neighbourhood hassles was the exception, which decreased steadily from T2 to T6. Health and inner concern hassles largely repeated the pattern shown in figure 7, except they both peaked before the birth at T1. Work and financial responsibility hassles also followed this trend, but fluctuations were much more moderate. Future security hassles continued to increase between T3 and T6. Time pressure and household hassles peaked at T4 and T5, and decreased only slightly at T6. While neighbourhood hassles seemed of most concern to Mary before the birth, time pressure and household hassles dominated after.

All the coping subscales repeated the pattern in figure 7. Figure 8 presents the mean ratings for problem-focused coping, emotion-focused coping and seeking social support. Wishful thinking and seeking social support were used most as coping strategies before the birth, while self-blame and seeking social support dominated at the point of greatest subjective stress, two weeks after the birth. Seeking social support was still being heavily relied upon as a coping strategy at 10 weeks after the birth, while problem-focused coping, wishful thinking, distancing and focusing on the positive were being used more moderately. Self-blame and self-isolation were no longer being used at T6.

Threat, challenge and harm emotions also repeated a pattern similar to total hassles. Benefit emotions, however, declined steadily between T1 and T6. Figure 9 depicts these patterns for appraisal emotions. Threat and challenge emotions were higher than both benefit and harm emotions at both T1 and T6.

Psychological distress on the MHI followed a similar pattern to the overall Hassles scale, as did the three MHI subscales which correlated with the psychological distress factor. Psychological well-being increased between T1 and T3, declined sharply at T4 and continued to decline at T6. This pattern was also followed by the two MHI subscales that correlated with the well-being factor. The overall mental health index followed a similar pattern also, but increased slightly at T6. Both psychological well-being and the mental health index were rated higher than psychological distress at all measurement points. Figure 10 presents data for psyds, pwb and the mental health index from T1 to T6.

Life-1 did not change much between T1 and T6, but was rated consistently high. Figure 11 presents data for Life-1 from T1 to T6.

Figure 12 shows that positive affect only slightly increased between T1 and T2, decreased slightly to T4 and remained constant at T6. Negative affect decreased markedly between T1 and T2, and increased steadily between T2 and T6. As with the MHI, positive affect was at all times rated higher than negative affect.

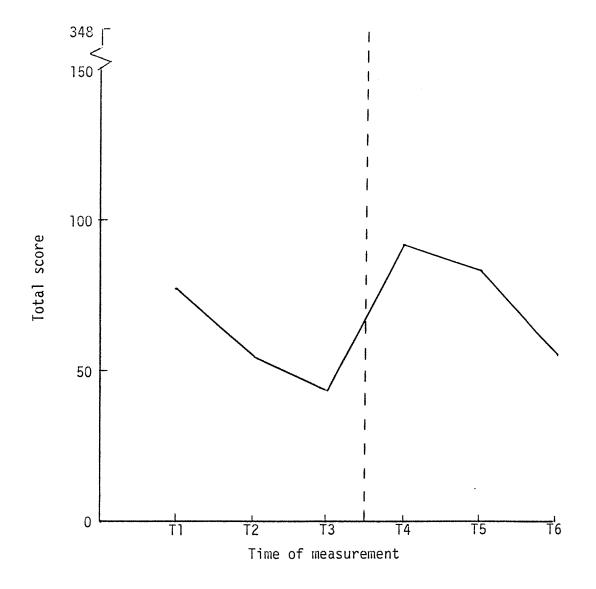


Figure 7. Hassles total for subject one from Tl - T6.

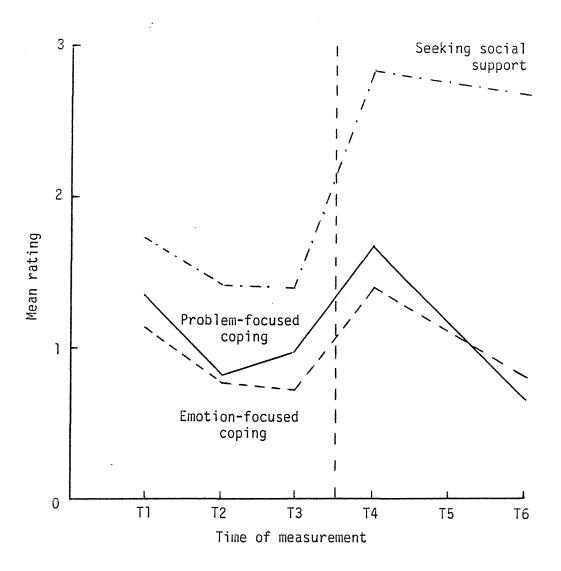


Figure 8. Mean ratings on problem-focused coping, emotion-focused coping and seeking social support for subject one from T1 - T6.

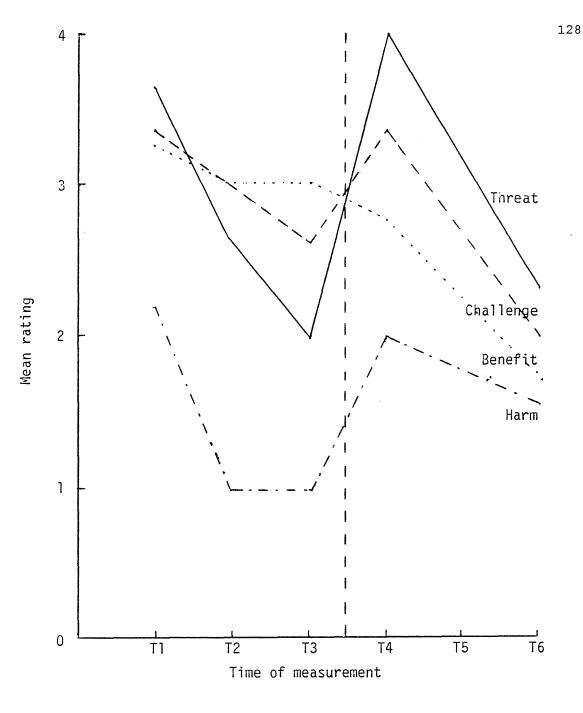


Figure 9. Mean ratings on appraisal emotions for subject one from Tl - T6.

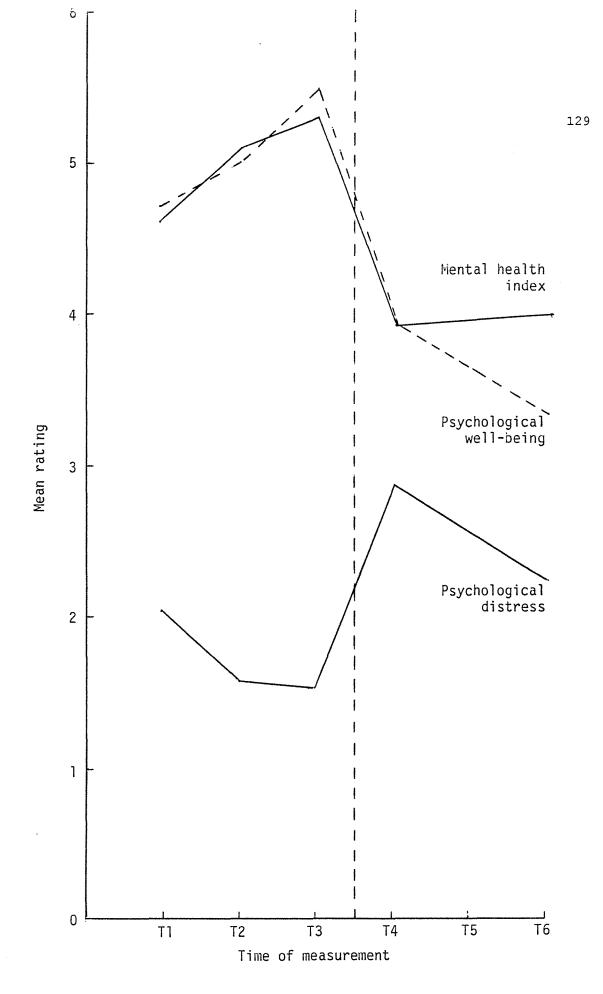


Figure 10. Mean ratings on the mental health index, psychological well-being and psychological distress for subject one from T1 - T6.

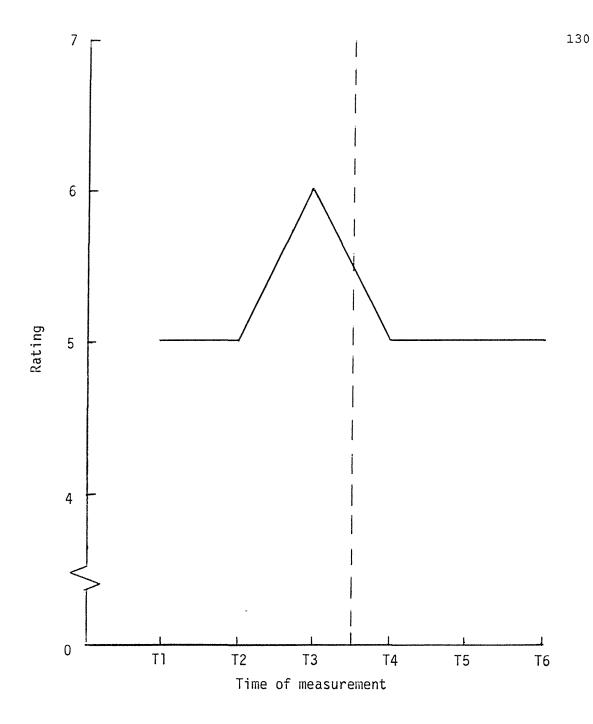


Figure 11. Rating on Life-1 for subject one from T1 - T6.

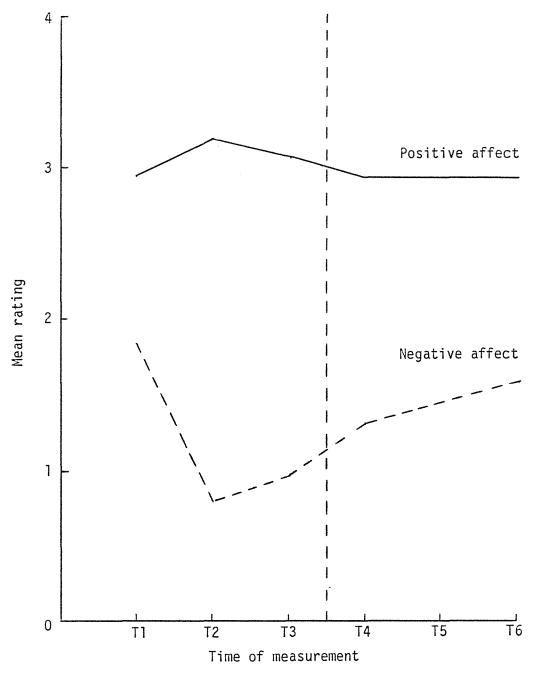


Figure 12. Mean ratings on positive and negative affect for subject one from T1 - T6.

No interview was conducted with Mary at T1. At T2 she reported feeling contended and looking forward to having her baby. She had little to worry about, and felt her husband was a very important source of support. At T3 Mary reported feeling "good" in the previous month, and described late pregnancy as "the best time in my life". She said she was thinking a little more about labour, but was philosophical about it, commenting "what will be will be". She was now seeing her family doctor weekly.

Mary described her labour as painful and difficult to cope with. Back ache was the worst aspect, which was relieved only a little by having her back rubbed. However, she felt she was imposing on nursing staff by continually asking for assistance since they were all "so calm and routine about it, they get sick of rubbing your back". Mary also said staff would not give her analgesia at her request until very late in labour, and consequently she was angry. She felt she had little control over decisions that were made about her and this resulted in resentment towards the staff. She said it was "frustrating that I couldn't take a part in decisions - that I wasn't consulted". After an epidural the birth went "smoothly" and she felt "quite calm". When her baby was born Mary felt "very calm, very tired" and "just wanted to hold her (the baby) and look at her".

In the first postpartum week Mary remained in hospital. She found this very traumatic. Waking several times during the night to feed her baby was an especial hassle since she was unable to get enough sleep herself. She said "nothing can prepare you for that". Constant interruptions by visitors and nurses were also stressful. Initial difficulty breast feeding caused much anxiety. Conflicting advice from different members of staff exacerbated these hassles. Mary said she would have liked her husband to have stayed in hospital with her overnight as a source of support. The final crowning insult to her hospital experience was that she was not permitted to carry her baby to the hospital entrance when she was discharged. A hospital rule dictated that a nurse do this. Overall, Mary felt lonely, tired and depressed while in hospital.

The first week at home was also stressful for Mary. She found the constant no-let-up nature of looking after her baby very demanding. Particular hassles were the phone ringing, spending time with visitors, and having to wake up several times during the night to feed her baby and change nappies. The main strategy she used to cope with these demands was to concentrate on the "basics" and trying not to "fluff around". Having her husband at home was very supportive, and Mary felt that things would improve once she had established a routine.

By six weeks postpartum (T5) Mary was much happier. She felt she was coping much more successfully with looking after her baby. A particular uplift had been establishing a routine. Mary said "we've adjusted now, we know what's what." Also, her baby was sleeping through the night more often. This enabled Mary herself to get more sleep, and consequently she had more energy and

generally felt better during her waking hours. She was not receiving so many phone calls or visitors, and had got into the habit of taking the phone off the hook whenever she put her baby down to sleep. This ensured an undisturbed sleep for the baby, which was a respite in itself for Mary. Getting to know her baby more and what her cries meant had positive effects since Mary was able to respond appropriately more often. Mary also said that it was "easier to love her (the baby) now because she's reciprocating". Mary had become somewhat philosophical about her emotional state at T4, saying "my emotions were exaggerated first thing at home" and "my hormones have come back down now". Overall, she felt she was "getting back to normal in myself".

The major hassle at this point was "trying to get time to myself, because you have to plan around the baby". One way she coped with this was to leave her baby in the care of her husband when he was not working (he was on shift work), at which times she would do something for herself such as walk into town. It was also particularly annoying for Mary if she had to disrupt the baby's routine to meet an external demand such as visiting friends or relatives. And when asked if she was concerned about getting her body back into shape, Mary commented "I used to be, but you don't concentrate on yourself; you don't get time".

Despite the demands and stresses of looking after her baby, Mary was very happy to be a mother. A comment of hers highlights this point especially well: "When I was rocking the baby to sleep and she went to sleep in my arms I thought if I never get anything for christmas it wouldn't matter now that I have her.".

At ten weeks postpartum (T6) Mary felt she had settled more into a routine, but expressed similar hassles and uplifts to those she experienced at T5. The major stress was organising time around the baby's needs, and the continuing no-let-up nature of the mothering task and the constant chores. She said specific hassles were washing nappies, organising time to get the groceries, and having to spend time to entertain her baby. Specific uplifts were having her husband to talk to, being invited out to dinner, and it was "just great to get out and walk around the garden". It was especially nice seeing her baby smile: "that makes up for everything".

When asked how she felt overall about having her baby, Mary said it was "wonderful to have her. I would hate to lose her. But I just wished I'd been warned about what it was going to be like the day-in-day-out chores and having no time to yourself, virtually. But she's worth it all, though." She had noticed changes in the way she responded to the questionnaire, and felt "more normalised" then than when she was first home from hospital. Mary said she would "hate to go through coming home again with all that hassle of getting into a routine". She felt she performs well as a parent and was willing to "give her (daughter) the best. And we are prepared to sacrifice for her". She also felt that parenthood had made her more self-confident. Her participation in the present research project did not make her feel particularly hassled, except at the first postpartum contact when she was especially sensitive to demands on her time.

In summary, Mary's subjective stress reduced between T1 and T3. Her pregnancy was relatively problem-free, and had been planned for some time. She was happy to be pregnant, enjoyed being so, and felt the final stages of pregnancy were the best time in her life. Her ratings on the questionnaire reflect this pattern. Hassles scores were at their nadir at T3, as were most coping subscales, and threat and harm emotions. SWB was at its peak.

The labour and birth was particularly stressful and difficult to cope with. Mary's stay in hospital was traumatic. She became angry and depressed because she felt she had little control. She also found the first week at home very stressful, despite generous support from her husband, as she was unsure of how to organise her time to cope with all the demands made on her by the baby, and friends and relatives who wanted to phone her or visit. T4, indeed, was by far the point of greatest subjective stress, as hassles scores and the ratings on the coping subscales and threat and harm emotions show. SWB was at its lowest point.

By six weeks postpartum Mary had regained her sense of control, felt less stressed, had developed a number of coping strategies to deal with specific hassles, and, when she had the time, was basking in the joy of motherhood. This pattern continued at ten weeks postpartum. Hassles were almost equal to their previous lowest point, as were most coping subscales. All appraisal emotions had also decreased considerably, SWB was not decreasing substantially, and increasing slightly on some measures.

Mary's overall assessment of her experiences was that while at first she felt unprepared to cope with all the demands of motherhood, she was rapidly coming to terms with the responsibilities, and all the effort was worthwhile.

In conclusion, T3 was the point of least subjective stress and greatest SWB. Appraisals show that Mary was not expecting any immense burdens in the weeks to come. She was happy in her pregnant state, little was troubling her, and she was awaiting the arrival of her newborn with eager anticipation. T4, in direct contrast, was the time of greatest subjective stress, and when most coping strategies were used. SWB was at its nadir. During this time events which would otherwise be experienced as minor hassles with little or no accompanying subjective stress were actually experienced as major stressors. Mary was devoting great amounts of energy and time to mothering and learning how to cope with strange and never-ending demands. This consumed practically all of her available resources. Therefore, extra demands exacerbated the stress she was already experiencing and were in themselves interpreted totally out of proportion to how they would otherwise be experienced. By T6, 10 weeks postpartum, Mary had learnt many

things about effective and efficient management of her time and resources, and, consequently, her subjective stress was accordingly reduced. The postpartum era was also a time when Mary experienced minor positive events as major uplifts. Seeing her baby smile or just walking in the garden were major sources of nourishment and respite.

SUBJECT SIX

Deirdre was a 21 year old married European, with education to School Certificate level and one University Entrance subject. She had lived in her home town all her life, and was resident in her current home for two years. She and her husband shared their house with a lodger. Deirdre's pregnancy was not "really planned". She and her husband had initially planned to start a family in the following year, but Deirdre was nevertheless happy to be pregnant.

Deirdre said that the first four months of her pregnancy were "not so good" with a lot of sickness both in the mornings and the evenings. Since then, however, things had "just been really good." Deirdre had been seeing her family doctor monthly, but had not seen a specialist by the first contact. She had been attending antenatal classes at the local Parent Centre, and had attended an antenatal class earlier in her pregnancy at the local hospital.

Deirdre's three overall hassles scores all followed a similar pattern. There was a decrease in the scores at T2, an increase at T3, a further decrease at T4, followed by another rise at T5, and a final decrease at T6. Figure 13 presents data for hassles total from T1 to T6. The only hassles subscales to be prominent throughout the study period were time pressures hassles which peaked at T1 and T3, and household hassles which followed a pattern similar to that of the overall hassles scores.

Problem-focused and emotion-focused coping were used very little by Deirdre throughout the study period, but seeking social support was used somewhat more, but followed a pattern opposite to that of the overall hassles scores. Figure 14 presents data for problem-focused coping, emotion-focused coping and seeking social support from T1 to T6.

Threat emotions decreased at T2 but peaked at T3, and decreased continually after the birth. There was no change in the score on challenge emotions before the birth, but it dropped to a low point at T5 and rose at T6. Harm emotions followed a similar pattern to that of the scores on overall hassles. The score on benefit emotions dropped dramatically at T2, but rose slightly at T3, with a further increase at T4, a dramatic decrease at T5 and no change at T6. Figure 15 presents data for appraisal emotions from T1 to T6. Psyds decreased at T2 but rose at T3 and again at T5 (there was no valid psyds score st T4), and decreased at T6. There was an overall increase in psyds before the birth and an overall decrease after the birth. Pwb dropped slightly at T2 and rose slightly at T3, but there was a dramatic decrease in pwb at T4 folloowed by a steady increase to T6. Figure 16 presents data for psyds, pwb and the mental health index from T1 to T6. Life-1 declined steadily between T1 and T4, but rose at T6. Figure 17 presents data for Life-1 from T1 to T6. Positive affect declined to T5 but increased at T6, while negative affect rose between T2 and T4 and decreased between T4 and T6. Figure 18 presents data for positive and negative affect from T1 to T6.

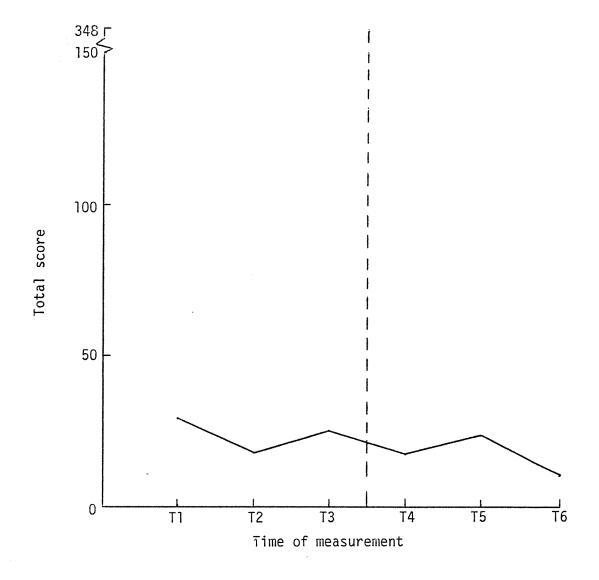


Figure 13. Hassles total for subject six from Tl - T6.

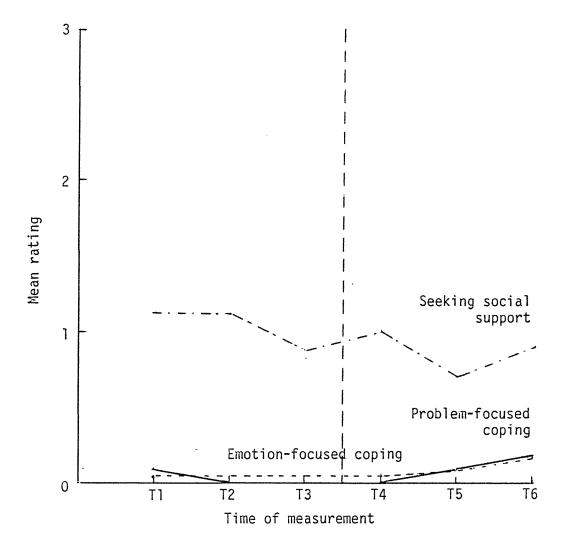


Figure 14. Mean ratings on problem-focused coping, emotion-focused coping and seeking social support for subject six from T1 - T6.

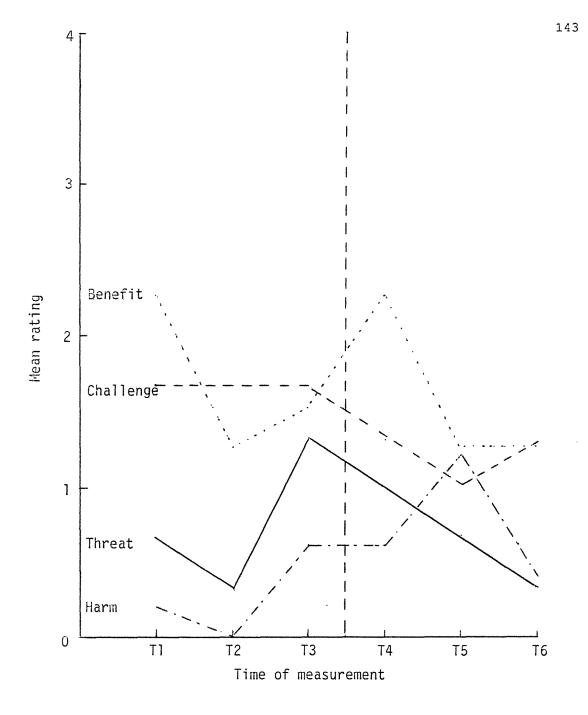
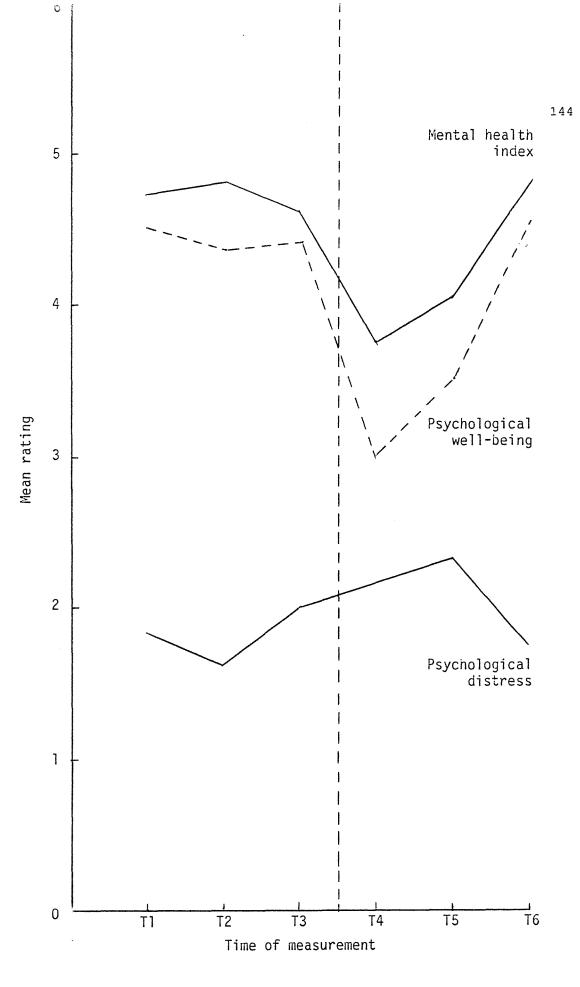
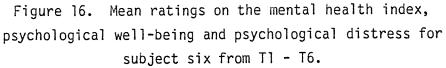


Figure 15. Mean ratings on appraisal emotions for subject six from T1 - T6.





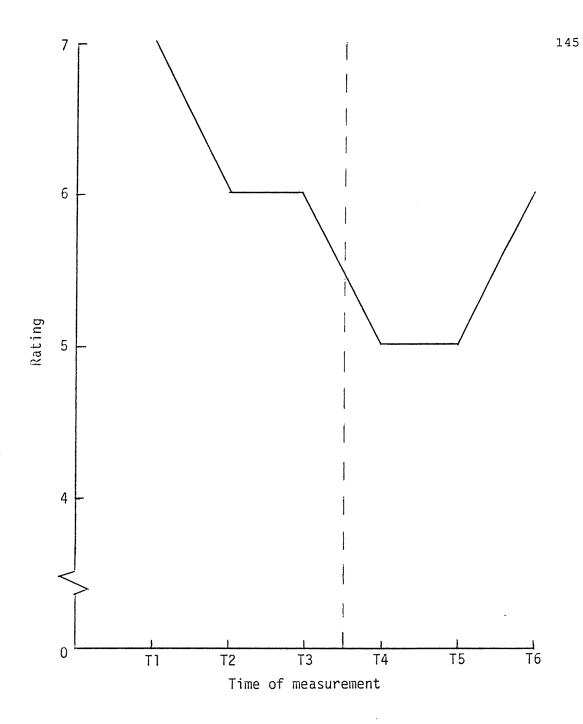


Figure 17. Rating on Life-1 for subject six from T1 - T6.

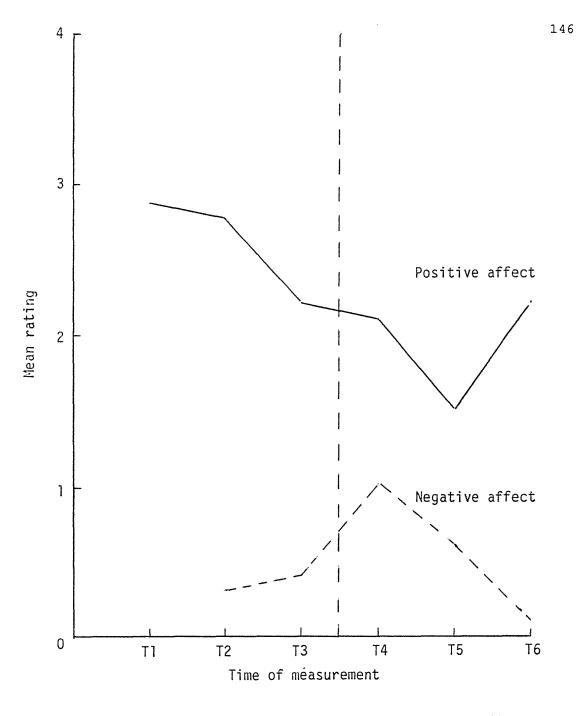


Figure 18. Mean ratings on positive and negative affect for subject six from T1 - T6.

At T1 Deirdre said she had had a "good" pregnancy despite the sickness in the early stages. She was feeling happy and said she was not thinking much about the labour and birth. At T2 things were much the same except she confessed that she "wouldn't mind getting rid of this bump!" At T3 Deirdre was impatient waiting for the pregnancy to end. She said "It's a bit of a hassle turning in bed and getting up" and she could not "wait til it's all over." She emphasised she was not so much anxious about the delivery as frustrated with being "immovable". Although she did not discuss the issue of her mother's terminal illness at this point, later in interview at T5 she said that her main concern at T3 was that her mother, who had terminal cancer, would live long enough in time to see her grandchild.

Deirdre described her labour as "good", although the pain became difficult to tolerate in the later stages. Initially the pain was easy to cope with using breathing techniques learnt in ante-natal classes. She found, however, that maintaining a comfortable position as she had been instructed was almost impossible because the staff regularly asked her to lie on the bed to conduct a fetal examination. Although Deirdre wanted medication towards the end of the labour, there was not enough time to administer any since the baby was alomst born. Deirdre said the staff were "wonderful, and everyone was very encouraging to me". She especially appreciated the efforts of the midwife who frequently rubbed her back to ease the pain during labour. Deirdre also spent a week in hospital after the birth. She was mostly happy with her stay, although she did find it difficult to sleep "because of too much noise". Breast feeding was difficult to begin with, and did not really begin properly until the fifth day. Unlike Mary, however, Deirdre said she received "lots of fantastic help from the staff". There were also a few problems with her blood pressure in the first few days postpartum, and she had to endure several injections and regular observations. Overall, however, Deirdre did not find the hospital particularly stressful, despite these hassles.

Deirdre did find the first week at home very demanding, however. She said her "routine is all out with the baby. Just getting simple things like meals organised is difficult." The first night at home was especially stressful since the baby would not sleep during the night which made Deirdre feel "exasperated!" and very tired. In fact tiredness was a major problem during the first week which made Deirdre very irritable, and consequently she was short-tempered and abrupt when communicating with her husband. Deirdre said the baby had a lot of "wind and grissliness in the heat" and she felt "uncertain of how to please her". In contrast to these woes, a major uplift at T4 was that Deirdre's mother had survived long enough to see her granddaughter.

At T5 Deirdre reported that her mother had died "10 days ago". She had visited her mother as often as possible in the days before her death. However, she had become "brassed off with being at home all day" and felt she was not getting very much understanding and support from her husband. On one occasion she and her husband had been to dinner at a friend's place and had taken the baby with them. Deirdre said she spent so much time looking after the baby that she got nothing to eat herself. Consequently she was "brassed off!" Altogether Deirdre described the time between T4 and T5 as "quite a month really!"

At T6 Deirdre said she had "no hassles with the baby", though the last month had been "great and bad". She had been away to visit a friend for a few days while her husband went tramping and said "that was a good break". However, subsequently her father-inlaw had been admitted to a coronary care unit, and her mother-inlaw had been to stay with she and her husband during this time.

Overall, Deirdre said that although she "didn't realise all the responsibility involved and sometimes I wish I was single again, being a mother is a very fulfilling job." She said having the baby meant a "totally different lifestyle". It was "harder to get things done, and there is not as much time for myself" but "on balance I am happy to have her. She's been a real blessing to my life. She's given me so much joy! And after mum died she's kept me occupied and softened the blow. It's neat to see her growing and smiling and responding more, especially during breast feeding when she smiles."

In summary, Deirdre found late pregnancy largely trouble free, and her scores on the hassles and coping scales reflect this. There were a few minor hassles at T3, but these were insignificant compared to the news that her mother was soon going to die. She desperately wanted her mother to see the baby before she died. The labour and birth was not very stressful and her stay in hospital was a welcome respite. The first week at home was very difficult, however, and Deirdre was very tired and irritable. A major uplift was that her mother had survived to see her granddaughter. The month between T4 and T5 was especially difficult with her mother's death and funeral, and a lack of support from her husband. This improved at T6 which was relatively stress free in terms of looking after the baby. Deirdre's overall assessment was that although . life was more demanding she was happy to be a mother.

In conclusion Deirdre's experience of her first birth was complicated by the illness and death of her mother. Late pregnancy itself was not particularly stressful, but the knowledge that her mother was going to die was very stressful. Deirdre felt uplifted at T4 when her mother was still alive, and although caring for the baby was stressful at this time this did not show on the questionnaire data. At T5 the death of her mother and the stresses of caring for her baby increased Deirdre's scores on the hassles scale. By T6 Deirdre had adjusted to the demands of the baby and her new lifestyle comparatively well.

CHAPTER 8

DISCUSSION

The purpose of the present research was to explore the changes in subjective stress, coping and subjective well-being in women before and after the birth of their first child. A secondary aim was to explore the relationships between these variables. In the preceding chapter the main patterns and themes in the experiences of the subjects were described to draw out these changes and relationships. The purpose of the present chapter is to relate the patterns and themes described in chapter 7 to the predictions made in chapter 6, and to discuss theoretical and methodological ramifications. Implications for health care policy and suggestions for future research will also be discussed. Before this discussion, however, it is important to consider some methodological limitations to the present research.

METHODOLOGICAL LIMITATIONS

There are two main points to consider in this context. First, while the preceding chapter described changes in subjective stress, appraisals, coping and SWB, no consideration was given to magnitudes of change or absolute levels of each variable. There are three reasons for these omissions. The first is that the aim of the present research was to describe patterns and themes, and as such the direction of change was the most crucial aspect of the data to look for. This does not imply that other aspects are unimportant, but it is to say that they were relatively unimportant within the context of the purpose of the present study. The second point is that it would be more appropriate, more accurate and more reliable to use more sophisticated statistical analytic methods to assess differences in magnitudes and absolute levels than were employed in the present study. Third, it was felt that the present study was large enough and ambitious enough already, and it would be imposing unnecessary burdens to add more analyses.

The second issue is that the methods employed to measure key variables have peculiar limitations. Self-report inventories are open to a number of sources of error variance, particularly response bias. Also, the instructions on the questionnaire instruments asked respondents to rate items in relation to the last month. Human memory is not always accurate and itself is open to bias in the shape of selective remembering. In addition, the extent to which the effects of momentary response sets, such as momentary mood, can influence the reliability and validity of these Social desirability may also have instruments is not known. influenced the way subjects responded to the questionnaire items. Repeated measures may bias responses by a practice effect. The interview data is also inherently limited since it was not quantified and objective. However, considering that the present study is exploratory and hypothesis-generating rather than hypothesis-testing, these limitations can be tolerated. Research

which is hypothesis-testing must be more rigidly controlled. With these points in mind implications of the present research will be discussed.

PREDICTIONS

First, as expected, it seems clear that late pregnancy was a comparatively stress-free experience for most women. Subjective stress as measured by the Hassles Scale and corroborated by interview data decreased in the last trimester as the EDB neared. The exceptions were those women who experienced a specific stressor in the final weeks of pregnancy, or who became more anxious about the impending delivery. These exceptions, however, corroborate the rule rather than falsify it. The added stress experienced in late pregnancy was not due to the pregnancy as such, except in the case of Catherine who was admitted to hospital with ruptured membranes. But this also was an exception since most pregnancies in the present study did not end up this way, and, indeed, most pregnancies generally do not. For those women who experienced a specific event, such as leaving their job, which was experienced as stressful, their subjective stress increased precisely because they had to contend with an added stressor. Anxiety about the labour and delivery was not a sign of stress about the pregnancy as such, but concern about how the subject was going to cope with a very demanding experience to come in the near future. Those subjects who complained of discomfort in late pregnancy did not report

substantial amounts of subjective stress in relation to it.

In addition to the decrease in subjective stress between T1 and T3, it was clear from comments made by many subjects that the last trimester of pregnancy was less stressful than earlier stages, especially in the first trimester when nausea and vomiting were experienced by most subjects. It is difficult, however, to draw any definite conclusions from these retrospective accounts precisely because they are retrospective. A longitudinal study begun in the first weeks of pregnancy would establish a more reliable measurement. Even in such circumstances, however, this would not establish a reliable measure of how a woman normally (i.e., in a non-pregnant state) experiences and responds to stress. If this were the purpose of research a measurement of important variables before the pregnancy would be necessary in order to establish a reliable baseline. This will be discussed further below.

The second expectation was that subjective stress would increase after the birth. This was fulfilled in most cases. The exception was Deirdre who was relieved and felt uplifted to know that her terminally ill mother had survived to see her grandchild. Once again, however, this exception corroborates the rule rather than falsifies it, since even Deirdre reported considerable stress in relation to looking after her baby in the first weeks at home. For all women the unremitting of the mothering task came as a shock in the first weeks after the birth. Most of their time and energy

was spent learning how to care for their babies and coming to terms with a radically changed lifestyle. As expected time pressure and household hassles generally increased more than any other hassles subscales, and this was corroborated by interview data. One of the biggest stressors that most women faced was organising their time around their babies' needs to accomplish all of life's myriad demands, particularly the household chores. Almost universally, subjects had to lower their expectations for what they hoped to achieve in any given day. The exception was Carol who had no expectations to begin with. Again, this exception corroborates the rule rather than falsifies it since it does not make sense to say someone had to lower their expectations if they had none to begin with, and therefore it would not make sense to say this subject falsified the rule since she would have had to have had expectations to begin with in order to lower them subsequently.

It was expected on the basis of adaptation-level theory that eventually this level of subjective stress would decline as the subjects adapted and adjusted to their new circumstances. This prediction was also fulfilled as subjective stress of most subjects had declined by T6. This can be explained by the fact that the subjects had adapted to their circumstances as predicted. Specific coping mechanisms were learnt by most subjects to deal with the demands of motherhood.

It is interesting to note here that the period after the birth was a time when otherwise minor hassles and events not usually regarded as stressful, such as answering the phone, were experienced as very demanding and became major stressors. Equally, during the post-natal study period, otherwise minor events such as walking in the garden or seeing the baby smile were experienced as major uplifts and sources of psychological nourishment.

Another prediction to be fulfilled was that the scores on the Ways of Coping Checklist (Revised) followed a similar pattern to the scores on the Hassles Scale. This implies that as more demands were placed on the subject, there was more need to devote resources to cope with the demands. This is entirely in keeping with the Lazarus model which states that coping is a process, and when a person has adapted to a stressful event, by definition it is no longer stressful, that is demands are reduced, and the need to devote resources to cope is also reduced.

It was also predicted that SWB would be inversely related to subjective stress. This was also the case. As subjective stress increased positive affect declined and negative affect increased, while the overall cognitive evaluation was also more negative. Conversely, as subjective stress declined, so too did negative affect, while both positive affect increased and the overall cognitive evaluation became more favourable. It was also predicted on the basis of adaptation-level theory that SWB would decline immediately after the birth but recover and level off to a more normal level by T6. This also was the case.

In respect of appraisal emotions no obvious or clear patterns emerged in the present study. There seemed considerably more variability in the changes and patterns exhibited by each subject on this instrument than on any of the other instruments. This apparent lack of clarity may be explained by research (Colman & Colman, 1971; Grossman, Eichler & Winickoff, 1980; Leifer, 1980; Shereshefsky & Yarrow, 1973) which suggests that emotional lability increases as pregnancy progresses, and is exaggerated more immediately after the birth. This confusion was predicted. It may be that a more subtle instrument, perhaps directly tapping appraisals by measuring cognitions rather than indirectly by measuring emotions, would be a better instrument to assess appraisals with this particular target population and life event. Indeed, it must be said that there was clear evidence from the interview data that subjects actively appraised and evaluated their experiences for their ability to cope.

It was also expected that appraisal emotions would be influenced by appraisals of events other than the target life event. Furthermore, appraising the pregnancy-birth-motherhood experience was not expected to be a simple linear affair. On the contrary, it was predicted that anticipation emotions, for example, would be just as dominant after the birth in relation to looking after the baby than they would be before the birth in relation to the labour and delivery. It is important in future research to try to separate the differential effects of separate stages of an experience such as the birth of a first child, and it would seem that the instrument used in the present research is not the appropriate tool to use for this purpose.

THEORETICAL IMPLICATIONS

The foregoing discussion makes it clear that both the Lazarus model of stress, appraisal and coping, and adaptation-level theory are supported by the present findings. Although the data relating to appraisal emotions were difficult to interpret, the subjects in the present study did make active appraisals of their experiences, and subjective stress levels were influenced not only by the life event under study, but by other events occurring in subjects' lives. Also, subjective stress fluctuated between T1 and T6. These results would not have been predicted by a life events approach to stress measurement. Indeed, the life events approach to stress would not even have attempted to measure fluctuations in subjective stress across time during a life event, but would have only measured the total impact of the whole life event. The Lazarus model, in contrast, allows that subjective stress will fluctuate at different points of an event as different demands are imposed at different stages. The Hassles Scale is designed to measure these fluctuations whereas the Social Readjustment Rating Scale is not.

This is not to imply, however, that a single life event in its entirety does not have particular and predictable effects on

subjective stress or on long term adaptation. What the present research indicates is that such long term effects may be more complex than the Holmes and Rahe method assumes, and that the intermediate fluctuations that occur from day to day must be taken into account when explanations are given for these changes. Also, long term adaptation to a major life event or even several events is more complex than simply rating someone on the number of life events they have experienced in the last two years. A given life event may be complicated by other events occurring at the same Therefore, the way a person responds to this particular life time. event may be affected by the other events occurring simultaneously. Similarly, different people appraise their situations differently, despite similarities and commonalities. That is, the subjects in the present study experienced and responded to their pregnancies etc in different ways, as well as in similar ways. So, for example, even though labour was universally painful for these subjects, for some women it was enjoyable and for others it was It is precisely these differences, as well as the not. similarities, that must be taken into consideration and measured when accounting for such variables as stress and adaptation.

While the study of similarities will tell us what range of effects any given event will have generally in the population as a whole, the study of individual differences will tell us what specific effects a given life event will have for a given person. Perhaps, as Dohrenwend and Shrout (1985) suggested, a rapprochement between the Lazarus and life events approaches would be desirable.

The Lazarus model, then, is a far more sophisticated theory than the life events approach, and accounts for the complexities of a given life event. The challenge is to develop the theory and measurement approaches in order to account for long term effects of life events, both individually and cumulatively.

Adaptation-level theory was supported by the findings that both subjective stress and SWB returned to more normal levels after the event. This may not be as simple as it appears, however. As the pregnancy ends with the birth, the next challenge to face is looking after the baby and adapting to a whole new lifestyle. It is this ability to change and adapt to a new set of circumstances that is really the crux of the matter. What was normality before the pregnancy certainly will not be normality after. So, a person does not really return to a level exactly similar to a previous level, but learns to adjust their expectations and behaviour to fit in with their new circumstances. While things are back to "normal" they have certainly changed very substantially. It is this process of change, the process of learning new expectations and behaviours that must be the focus of attention in any research on stress, coping and adaptation.

This process can be illustrated by the experiences of a number of subjects after the birth who reported that certain specific events were seen as uplifts and sources of psychological nourishment. For example, Mary said at T6 that seeing the baby

smile and getting some time to herself by taking a walk in the garden were major sources of well-being. Ordinarily, that is before the birth, such events would have been taken for granted and no especial significance would have been attached to them. Indeed, many subjects stated after the birth that they could no longer take for granted many things which they had before. For example, preparing a meal was a major task having to work around the baby's needs. Going out to dinner was also a major undertaking since the baby's needs had to have first priority. The change that had taken place after the birth was that there was such a constant drain on the subjects' resources which they could not escape from that any minor uplift was experienced out of "normal" proportion. Also, as noted above, otherwise minor hassles such as answering the phone were regarded in the postnatal period as major sources of stress. Despite these changes of perception, subjective stress and SWB returned to prebirth levels as predicted by adaptation-level theory. It seems possible that it is precisely these changes in perception that are adaptation.

POLICY IMPLICATIONS

While it would be premature to draw any definitive conclusions for health care policy on the basis of the present research, there is a number of trends which should be considered further. First, while pregnant women generally seem to be well catered for in terms of prenatal care and education for birth, there seems to be some

gaps in postnatal care and education for parenthood. There are two specific issues here. The first is that the experiences of the subjects in the present study who had hospital births were variable. Some women said they enjoyed their stay and praised the efforts of the hospital staff. Others, in fact the majority, felt the hospital stay had its own peculiar difficulties and stresses. Perhaps the most disturbing aspect of hospital care was conflicting advice to mothers from the staff. This was especially stressful in relation to breast feeding. It seems obvious that having problems with breast feeding would be stressful enough without having three of four nurses telling you to do it in three or four different ways. Such conflicting advice cannot be productive either for the baby or for the psychological well-being of the mother, which ultimately affects the baby's well-being. In this context perhaps the primary nursing care system should be evaluated for use in maternity homes as opposed to the task oriented system (cf. e.g., This would avoid such conflicting advice and Miller, 1983). provide some continuity of care for each individual patient.

The second issue in this context is that several women noted that they had to be assertive in respect of organising their baby's cares in their own way. Some women even reported that they were criticised by staff for taking initiative. In view of the fact that within a few days after the birth the new mother will leave hospital with her baby and will be the primary care giver for her child for the next 15 to 20 years, it seems silly to suggest either explicitly or implicitly that she is incompetent while she remains in hospital. Common sense suggests that each woman will have certain life skills that she brings with her and will have to use in order to adapt to the role of being a mother. These skills should be fostered and her initiatives should be encouraged to bolster her sense of self-efficacy (cf. Bandura, 1977). This is not to say that she will not need to learn new skills, but it is to suggest that putting her down for her initiatives in the first days of motherhood can only be destructive since it is precisely her own initiative and willingness to learn new skills that will lead eventually either to her success or failure in motherhood.

The second major point is that most subjects were at a loss initially about how to cope with all the demands the baby placed on them and at the same time organise other aspects of their lives. While new mothers in New Zealand enjoy the services of the Plunket nurses there nevertheless appears to be a gap in preparation for *motherhood* as opposed to labour and delivery. The suggestion being made here is not that mothers-to-be should be inundated with information about how to be mothers before they give birth, but that new mothers need more support in the first month to six weeks after the birth than they get. Postnatal support groups seem an ideal avenue, as perhaps would be parent education education classes along the same lines as antenatal classes.

FUTURE RESEARCH

A number of suggestions for future research are justified. First, since many specific stressors or hassles experienced by the subjects in the present study were not included in the Hassles Scale, it seems reasonable to suggest that some attempts should be made to develop a Hassles Scale designed specifically for this target population and life event along the lines of Dewe (1985a, 1985b). The same point can be made for the use of specific coping strategies not included in the Ways of Coping Checklist (Revised), and for specific uplifts.

On the other hand, it is not surprising that many hassles and coping strategies reported by the subjects in the present study did not appear in their respective scales since the Hassles Scale and the Ways of Coping Checklist (Revised) were designed for general use. While it seems sensible to use an instrument that is designed to measure specific and unique experiences and events, this approach in isolation may also lead to the loss of crucial data. One of the aims of any research into stress and related variables in the context of a specific life event must be to collect data which is comparative with data about other events. In such a context, then, it might be more reasonable and productive to supplement the general scales with a list of items covering more specific issues, either as an appendix to the general scale or in a structured interview.

With this in mind, it seems important that normative data be collected with larger and more representative samples, both in regard to this life event and with others. At the same time differences should be noted. Sophisticated statistical and longitudinal designs would seem promising avenues. In this context it should be noted, as indicated above, that the time period covered in the present study was circumscribed. Future studies should be longitudinal but preferably beginning sometime before pregnancy and continuing past 10 weeks postnatal, perhaps as much This would provide data against which to compare as a year. performance in a "normal" non-pregnant state with performance in both the pregnant state and in motherhood. Continuing data collection for a year or more would provide an opportunity to gauge long term adaptation.

Third, the role of stress, appraisals, coping and SWB should be investigated in the context of other major life events to provide comparative data with those on this life event. This will facilitate greater theoretical and empirical clarity in these areas.

Fourth, in light of the social support issues which were discussed by subjects in interview, the role of social support and the relationships which exist between it and stress, coping and SWB should be studied in the context of the birth of a first child, particularly with regard to the first month to six weeks after the birth. More detailed research should also be conducted into the policy issues discussed above. One hallmark of a civilised society must be the way it provides for the well-being of its children. If the well-being of mothers is not fostered and facilitated by health care practices and social services then inevitably the welfare of their children, *our* children, will suffer.

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APPENDIX A

RESEARCH CONTRACTS

Initial Research Contract

RESEARCH CONTRACT

Thank you for agreeing to participate in my thesis research project. The following is a statement of what I, as the researcher, would like you to do, and what you, as a participant, can expect from me.

WHAT I WOULD LIKE FROM YOU

I would like to see you initially ten weeks before the expected date of birth of your baby. This initial session will probably last for about 90 minutes to two hours. In this session I will ask you some questions about your life-history and your current living circumstances which will be useful as background information when I analyse the final data. I will also ask you to complete a questionnaire.

In the following two sessions I will only ask you to complete the questionnaire. I would like these two sessions to be approximately six and two weeks before the expected date of birth of your baby.

After your baby has been born, I would like to see you a further three times, at two weeks, six weeks, and ten weeks after the birth. During these sessions I will only ask you to complete the questionnaire.

It is important that the questionnaire sessions occur as close to the times stipulated as possible to ensure standardisation between participants, and to ensure that the time intervals between sessions are as similar as possible. It is also important that the questionnaire sessions be conducted in your own home and without any other persons present, for similar reasons.

In addition to the initial interview and subsequent questionnaires, if you have anything you wish to add, or have any comments to make about any aspect of your experiences or the questionnaire, your comments will be gratefully received.

WHAT YOU CAN EXPECT FROM ME

There is a number of ethical considerations which you should know about. First, you have a right to complete confidentiality at all times. Consequently, nobody but me will know who you are or where you live, etc. In addition, to preserve confidentiality and your anonymity my thesis will be withheld from the public domain for at least two years following its submission for marking. Naturally, when I write my thesis I will use pseudonyms throughout to maintain anonymity.

Second, you have the right to withdraw from participation at any point. Naturally, I would hope to avoid such circumstances, and I would hope we could discuss any qualms you have before you decided to withdraw.

Third, you have the right to see the final research report and to have its contents explained by me.

TED MASON RESEARCHER

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Amended Research Contract

RESEARCH CONTRACT

Thank you for agreeing to participate in my thesis research project. The following is a statement of what I, as the researcher, would like from you, and what you, as a participant, can expect from me.

WHAT I WOULD LIKE FROM YOU

I would like to see you initially ten weeks before the expected date of birth of your baby. This initial session will probably last for about 90 minutes. In this session I will ask you some questions about your life-history and your current living circumstances which will be useful as background information when I analyse the final data. I would also like you to complete a questionnaire. In addition I would like to talk about anything which seems of importance in the way you are experiencing your pregnancy.

In the following two sessions I would like to talk generally about your experience, in addition to you completing the questionnaire. I would like these two sessions to be approximately six and two weeks before the expected date of birth of your baby.

After your baby has been born, I would like to see you a further three times, at two weeks, six weeks, and ten weeks after the birth. During these sessions I would like to talk generally about your experience, and for you to complete the questionnaire.

If possible, I would like to see your spouse with you at least once before and once after the birth.

It is important that our meetings occur as close to the times stipulated as possible to ensure standardisation between participants, and to ensure that the time intervals between meetings are as similar as possible.

In addition to the initial interview, the questionnaire and our conversations, if you have anything you wish to add, or have any comments to make about any aspect of your experiences or the questionnaire, your comments will be gratefully received.

WHAT YOU CAN EXPECT FROM ME

There is a number of ethical considerations which you should know about. First, you have the right to complete confidentiality at all times. Consequently, nobody but me will know who you are or where you live, etc. In addition, to preserve confidentiality and your anonymity my thesis will be withheld from the public domain for at least two years following its submission for marking. Naturally, when I write my thesis I will use pseudonyms throughout to maintain anonymity.

Second, you have the right to withdraw from participation at any point. Naturally, I would hope to avoid such circumstances, and I would hope we could discuss any qualms you have before you decided to withdraw.

Third, you have the right to see the final research report and to have its contents and meaning explained by me.

TED MASON RESEARCHER

APPENDIX B

LIFE-EVENT QUESTIONNAIRE

People are different. They live in a variety of situations and they don't respond the same way to the things that happen to them.

In this study I am trying to find out about how women respond to the pregnancy and birth of their first child.

The questions I will be asking will look at how you perceive your experience and how you respond to it. There are no right or wrong answers; an answer is "right" if it is true for you. It is important that you answer all the questions as carefully and honestly as possible.

All the information I gather will be kept strictly confidential.

Thank you for agreeing to participate in my study.

TED MASON RESEARCHER -1-

HASSLES

FOR OFFICE

Card 1

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USE ONLY

We experience many hassles in our daily lives. These hassles are irritants that can range from minor annoyances to fairly major pressures, problems or difficulties. They can occur few or many times.

Listed below are a number of ways in which a person can feel hassled. We want you to indicate the hassles that have happened to you in the past month. If a particular hassle did not happen to you in the last month, circle the 0 in the "Not at all" column below. If a particular hassle did occur in the last month, indicate how much of a problem it was for you by circling 1, 2, or 3 to indicate whether it was somewhat. moderately or extremely severe.

		0 1 2 3	Not a Somew Hoder Extre	hat ately	
1.	Misplacing or losing things	0.	. 1	2	3
2.	Troublesome neighbours	0	1	2	3
3.	Social obligations	0	1	2	3
4.	Inconsiderate smokers	0	1	2	3
5.	Troubling thoughts about your future	0	1	2	3
6.	Thoughts about death	0	1	2	3
7.	Health of a family member	0	1	2	3
8.	Not enough money for clothing	0	۱	2	3
9.	Not enough money for housing	0	1	2	3
10.	Concerns about owing money	0	1	2	3
11.	Concerns about getting credit	0	1	2	3
12.	Concerns about money for emergencies	0	1	2	3
13.	Someone owes you money	0	1	2	3
14.	Financial responsibility for someone who does not live with you	0	1	2	3

O Not at all 1 Somewhat 2 Moderately 3 Extremely 15. Cutting down on electricity, water, etc 1 2 3 16. Smoking too much 3 2 17. Use of alcohol 2 3 18. Personal use of drugs 2 3 19. Too many responsibilities 2 3 20. Decisions about having children 0 2 3 21. Non-family members living in your house 2 3 22. Care for pet 2 3 23. Planning meals 0 2 3 24. Concerned about the meaning of life 2 3 25. Trouble relaxing 2 3 26. Trouble making decisions 2 3 1 27. Problems getting along with fellow workers 0 2 3 1 28. Customers or clients giving you a hard time 2 3 29. Home maintenance (inside) 2 3 Concerns about job security 30. 2 3 31. Concerns about retirement 2 3 32. Laid-off or out of work 2 3 33. Do not like current work duties 2 3 34. Do not like fellow workers 0 1 2 3 35. Not enough money for basic necessities 2 3 36. Not enough money for food 2 3 37. Too many interruptions 2 3 38. Unexpected company

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	-3-						- 4 -				
		1 :	Not ut Gomewn Moderu Extrem	ut tely				2 Mo	ot at mewh dera trem	at tely	
39.	Too much time on hands	0	1	2	3	65.	Problems on job due to being a woman or man	0	1	2	3
40.	Having to wait	0	1	2	3	66.		0	1	2	3
41.	Concerns about accidents	0	1	2	3	67.	Being exploited	0	1	2	3
42.	Being lonely	0	1	2	3	68.	Concerns about bodily functions	0	,	2	3
43.	Not enough money for health care	0	1	2	3	. 69.	Rising prices of common goods	0	1	2	3
44.	Fear of confrontation	0	1	2	3	70.	Not getting enough rest	0	1	2	э З
45.	Financial security	0	1	2	3	70.	Not getting enough sleep	0	1	2	3 3
46.	Silly practical mistakes	ò	1	2	3			0	1	2	3
. 47.	Inability to express yourself	0	1	2	3	72.	Problems with aging parents	0	1	2	-
48.	Physical illness	0	1	2	3	73.		U	•	۷	3
49.	Side effects of medication	0	1	2	3	74.	Problems with persons younger than yourself	0	1	2	3
50.	Concerns about medical treatment	0	1	2	3	75.	Problems with your lover	0	1	2	3
51.	Physical appearance	0	1	2	3	76.	Difficulties seeing or hearing	0	1	2	3
52.	Fear of rejection	0	1	2	3	17.		-			_
53.	Sexual problems that result from						responsibilities	0	1	2	3
	physical problems	0	1	2	3	78.	Too many things to do	0	1	2	3
54.	Sexual problems other than those resulting from physical problems	0	1	2	3	79.	Unchallenging work	0	1	2	3
55.	Concerns about health in general	0	1	2	3	80.	Concerns about meeting high standards	0	1	2	3
56.	Not seeing enough people	0	1	2	3	81.	Financial dealings with friends or				
57.	Friends or relatives too far away	0	, 1	2	3		acquaintances	0	1	2	3
58.	Preparing meals	ň	1	2	-	82.	Job dissatisfactions	0	1	2	3
59.	Wasting time	0	1	-	3	83.	Worries about decisions to change jobs	0	1	2	3
	-	-	1	2	3	ЯШ	Trouble with reading, writing, or	Ŭ	•	-	,
60.	Auto maintenance	0	1	2	3	04.	spelling abilities	0	1	2	3
61.	Filling out forms	0	1	2	3	85.	Too many meetings	0	1	2	3
62.	Neighbourhood deterioration	0	1	2	3	86.		0		2	2
63.	Financing children's education	0	١	2	3	a	separation	0	1	2	3
64.	Problems with employees	0	1	2	3	87.	Trouble with arithmetic skills	0	۱	2	3

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-5-		-6-	
	O Not at all 1 Somewhat 2 Moderately 3 Extremely	O Not at all 1 Comewhat 2 Moderately 3 Extremely	
88. Gossip	0 1 2 3	8 112. Noise 0 1 2 3	32
89. Legal problems	0 1 2 3	113. Crime 0 1 2 3	Π
90. Concerns about weight	0 1 2 3	10 · 114. Traffic 0 1 2 3	Π
91. Not enough time to do the things you		115. Pollution 0 1 2 3	35
need to do	0 1 2 3	116. Have we missed any of your hassels? Yes No	
92. Television	0 1 2 3	If so, please write them in here, and indicate their severity.	
93. Not enough personal energy	0 1 2 3		
94. Concerns about inner conflicts	0 1 2 3		
.95. Feel conflicted over what to do	0 1 2 3	15	
96. Regrets over past decisions	0 1 2 3		
97. The weather	0 1 2 3		36
98. Nightmares	0 1 2 3		
99. Concerns about getting ahead	0 1 2 3		
100. Hassles from boss or supervisor	0 1 2 3		
101. Difficulties with friends	0 1 2 3		
102. Not enough time for family	0 1 2 3		
103. Transportation problems	0 1 2 3		
104. Not enough money for	V 1 2 3		
transportation	0. 1 2 3		
105. Not enough money for entertainment and recreation	0 1 2 3	25	
106. Shopping	0 1 2 3		
107. Prejudice and discrimination from others	0 1 2 3		
108. Property, investments or taxes	0 1 2 3		
109. Not enough time for entertainment and recreation	0 1 2 3		10 4
110. Gardening or outside home maintenance	0 1 2 3		
111, Concerns about news events	0 1 2 3		

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-7-	-8-	
WAYS OF COPING	0 Does not apply and/or not used 1 Used somewhat 2 Used quite a bit 3 Used agreat deal	
Below is a list of ways people cope with a wide variety of things that happen to them. Please indicate by circling the appropriate number the strategies you have been using in dealing with LOOKING AFTER YOUR BABY in the past month.	12. Go along with fate; some- times I just have bad luck 0 1 2 3 13. Go on as if nothing is happening 0 1 2 3	48 1
0 Does not apply and/or not used 1 Used somewhat	nappening 0 1 2 3 14. I try to keep my feelings . 0 1 2 3 . to myself 0 1 2 3]] 50
2 Used quite a bit 3 Used a great deal 1. Just concentrate on what I	15. Look for the silver lining, so to speak; try to look on the bright side of things 0 1 2 3	ļ
have to do next - the next step0123	16. Sleep more than usual 0 1 2 3 37 17. I express anger to the	ļ
 I try to analyze the situation in order to understand it better0 1 2 3 	person(s) who caused the problem]
 Turn to work or substitute activity to take my mind off things0123 	standing from someone 0 1 2 3 19. I tell myself things that) 1
 I feel that time will make a difference - the only thing 	20. I am inspired to do something creative] 55]
to do is wait 0 1 2 3 5. Bargain or compromise to get somethinbg positive from the	40 21. Try to forget the whole thing]
situation 0 1 2 3 6. I am doing something which I do not think will work, but	22. I am getting professional help0 1 2 3	J
at least I am doing something 0 1 2 3 7. Try to get the person	23. I am changing or growing as a person in a good way 0 1 2 3	-
responsible to change his or her mind0 1 2 3	2 ³ h. 1 am waiting to nee what will happen before duing anything 0 1 2 3 25. Apologize or do something to] 60
 Talk to someone to find out more about the situation 0 1 2 3 O fittation a situation 	25. Approprize or do something to make up]
 9. Criticize or lecture myself0 1 2 3 10. Try not to burn my bridges 	45 and following it 0 1 2 3	
but leave things open somewhat0 1 2 3	to what 1 want	
11. Hope a miracle will happen 0 1 2 3	47 29. Bealtze 1 brought the problem on myself	, ₆₅

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	-9-	0 Doe::	not HD	niv			-10-				
			r not somewh quite	used at a bit				D Does n and/or 1 Used s 2 Used g 3 Used a	not omewh uite	used at a bit	
30.	I will come out of the experience better than when I went in	0 1	2	3	66	47.	Take it out on other people	0 1			
31.	Talk to someone who can do something concrete about the problem	0 1	2	3		48.	Draw on my past experiences; I was in a similar situation before		2	2	
32.	Get away from it for a while; try to rest or take a vacation	0 1	2	3		. 49.	I know what has to be done, so I am doubling my efforts			-	
33.	Try to make myself feel better by eating, drinking, smoking, using drugs or medication, etc	0 1	2	3		50.	to make things work Refuse to believe it will happen	0 1		3	
34.	Take a big chance or do some- thing risky	01	2	3	70	51.	Make a promise to myself that things will be different next				
	I try not to act too hastily or follow my first hunch	0 1	2	3		52.	time Come up with a couple of different solutions to the	0 1	2	3	
	Find new faith	0 1	2	3			problem	0 1	2	3	
	Maintain my pride and keep a stiff upper lip	0 1	2	3		53.	Accept it, since nothing can be done	0 1	2	3	
	Rediscover what is important in life	0 1	2	3		54.	I try to keep my feelings from interfering with other things too much	0 1	2	3	
	Change something so things will turn out all right Avoid being with people in	0 1	2	3	75	55.	Wish that I can change what is happening or how I feel	0 1	2	3	
40.	general	0 1	2	3		56.	Change something about myself	0 1	2	3	
41.	Do not let it get to me; refuse to think too much about it	0 1	2	3		57. ;	l day dream or imagine a better time or place than the one I am in	0 1	2	3	
	Ask a relative or friend I respect for advice	01	2	3		58.	Wish that the situation would go away or somehow be over with	0 1	2	3	
	Keep others from knowing how bad things are	0 1	2	3		59.	Have fantasies or wishes about how things might turn out	0 1	2	3	
44.	Make light of the situation; refuse to get too serious about it	0 1	2	3	80	60.	I pray	0 1	2	3	
45.	Talk to someone about how 1			_	Card 3	61.	I prepare myself for the worst	0 1	2	3	
b 6	am feeling	0 1	5	3		62.	I go over in my mind what I will say or do	U 1	2	3	
ч ч.	what I want	0 1	2	3	2						

	-11-			-12-	
63.	I think about how a person I	O Does not apply and/or not used 1 Used somewhat 2 Used quite a bit 3 Used a great deal		SOCIAL SUPPORT Please indicate the response that best represents your feelings about the frequency of occurence of events described below by circling the appropriate number. You need not think of the same person involved in each event.	
	admire would handle this situation and use that as a model	0 1 2 3	19	O Doesn't apply/ no opinion 1 Not at all 2 Just a little	
64.	I try to see things from the other person's point of view	0 1 2 3	20	3 Some 4 Quite a bit 5 A Great deal	
	I remind myself how much worse things could be	0 1 2 3		1. In the past month, how much could you count on some one person to give you useful information and advice if you wanted	
	I jog or exercise I try something entirely different from any of the	0 1 2 3		it?	24
	above. (Please describe).			 How much could you count on some one person to be a source of encouragement and reassurance if you wanted it? 	
					25
		0 1 • 2 3	23	3. How much did some one person listen if you wanted to confide about things that were important to you?	
				0 1 2 3 4 5	
				 How much did some one person act in ways that showed he or she appreciated you? 	
				····· 0 1 2 3 4 5	
				5. How much did some one person treat you with respect?	
				0 1 2 3 4 5	
				6. Now much did some one person show that he or she cared about you as a person?	
				····· 0 1 2 3 4 5	
				7. Is there any other way you have felt supported by another person in the past month? If so please tell us what it is.	187
				0 1 2 3 4 5	30

EMOTIONS

-13-

People experience different emotions at different times. Please indicate how frequently you have experienced these emotions in the past month by circling the appropriate number.

> 0 Not at all 1 A little 2 Some 3 Quite a bit 4 A great deal

> > 31

35

40

45

46

1.	Worry	0	1	2	3	4
2.	Confidence	0	۱	2	3	4
3.	Anger	0	1	2	3	4
4.	Exhileration	0	1	2	3	4
5.	Fear	0	1	2	3	4
6.	Норе	0	1	2	3	4
7.	Sadness	0	1	2	3	4
8.	Pleased	0	1	2	3	4
9.	Anxious	0	1	2	3	4
10.	Eager	0	1	2	3	4
11.	Disappointment	0	1	2	3	4
12.	Нарру	0	1	2	3	4
13.	Guilty	0	1	2	3	4
14.	Relieved	0	1	2	3	4
15.	Disgusted	0	1	2	3	4

16. Are there any other emotions you have experienced in the past month which we have missed? If so, please tell us what they are.

0 1 2 3 4

PERSONAL WELLBEING

-14-

These next questions are about how you feel, and how things have been with you mostly within the past month. For each question, please circle a number for the one answer that comes closest to the way you have been feeling.

1. How happy, satisfied, or pleased have you been with your personal life during the past month?

Extremely happy, could not have been more satisfied or pleased..... 1 Very happy most of the time 2 Generally satisfied, pleased 3 Sometimes fairly satisfied, sometimes fairly unhappy . 4

2. How much of the time have you felt lonely during the past month?

All of the time 1
Most of the time 2
A good bit of the time
Some of the time
A little of the time
None of the time

3. How often did you become nervous or jumpy when faced with excitement or unexpected situations during the past month?

Always	 • •	• •	•	 •••	 • •	• •	• •	 •	• •		 							•		
Very often	 		•	 	 					 ÷					Ţ		Ţ			
Fairly often	 									ľ		Ĵ				•	•	•	•••	•
Sometimes	 				 					 Ì			•	• •		•	•	•		•
Almost never	 • •			 	 							Ī				Ţ				•
Never	 									 -		-	•				•			•

4. During the past month, how much of the time have you felt that the future looks hopeful and promising?

All of the time	1
Most of the time	2
A good bit of the time	2
Some of the time	5
A little of the time	5
None of the time	6

47

188

-15-	-16-	
5. How much of the time, during the past month, has your daily life been full of things that were interesting to you?	10. During the past month, how much of the time have you felt loved and wanted?	
All of the time	All of the time 1 Most of the time 2 A good bit of the time 3 Some of the time 4 A little of the time 5 None of the time 6	56
6. How much of the time, during the past month, did you feel relaxed and free of tension?	11. How much of the time, during the past month, have you been a very nervous person?	
All of the time	All of the time 1 Most of the time 2 A good bit of the time 3 Some of the time 4 A little of the time 5 None of the time 6	
During the past month, how much of the time have you generally enjoyed the things you do?	12. When you got up in the morning, this past month, about how often did you expect to have an interesting day?	
All of the time	Always 1 Very often 2 Fairly often 3 Sometimes 4 Almost never 5 Never 6	
8. During the past month, have you had any reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel or of your memory?	13. During the past month, how much of the time have you felt tense or "high-strung"?	
No, not at all	All ot the time	
9. Did you feel depressed during the past month?	14. During the past month, have you been in firm control of your behaviour, thoughts, emotions, feelings?	
Yes, to the point that I did not care about anything for days at a time	Yes, very definitely 1 Yes, for the most part 2 Yes, I guess so	189 609

-17-

15. During the past month, how often did your hands shake when you tried to do something?

Always	 	 	• • •	 	 	••	••	 	 	1
Very often	 	 		 	 			 	 	2
Fairly often	 	 		 	 			 	 	2
Sometimes										
Almost never										
Never										

61

65

16. During the past month, how often did you feel that you had nothing to look forward to?

Always 1	í .
Very often	
Fairly often	
Sometimes	i i
Almost never	
Never	

17. How much of the time, during the past month, have you felt calm and peaceful?

All of the time	L
Most of the time	2
A good bit of the time	
Some of the time	
A little of the time	5
None of the time	6

18. How much of the time during the past month, have you felt emotionally stable?

All of the time 1
Most of the time 2
A good bit of the time
Some of the time 4
A little of the time
None of the time

19. How much of the time, during the past month, have you felt downhearted and blue?

All of the time	1
Most of the time	
A good bit of the time	
Some of the time	4
A little of the time	5
None of the time	6

- 18-	
20. How often have you felt like crying, during the past month?	
Always 1 Very often 2 Fairly often 3 Sometimes 4 Almost never 5 Never 6	64
21. During the past month, how often did you feel that others would be better off if you were dead?	
Always 1 Very often 2 Fairly often 3 Sometimes 4 Almost never 5 Never 6	
22. How much of the time, during the past month, were you able to relax without difficulty?	
All of the time1Most of the time2A good bit of the time3Some of the time4A little of the time5None of the time6	
23. During the past month, how much of the time did you feel that your love relationships, loving and being loved, were full and complete?	
All of the time1Most of the time2A good bit of the time3Some of the time4A little of the time5None of the time6	
24. How often, during the past month, did you feel that nothing turned out for you the way you wanted it to?	
Always 1 Very often 2 Fairly often 3 Sometimes 4 Almost never 5 Never 6	190
	- · ·

-19-	-20-	
25. How much have you been bothered by nervousness, or your "nerves", during the past month?	30. During the past month, how much of the time have you been moody or brooded about things?	
Extremely so, to the point where I could not take care of things	All of the time 1 Most of the time 2 A good bit of the time 3 Some of the time 4 A little of the time 5 None of the time 6	76
26. During the past month, how much of the time has living been a wonderful adventure for you?	31. How much of the time, during the past month, have you felt cheerful, lighthearted?	
All of the time 1 Most of the time 2 A good bit of the time 3 Some of the time 4 A little of the time 5 None of the time 6	All of the time 1 Most of the time 2 A good bit of the time 3 Some of the time 4 A little of the time 5 None of the time 6	
27. How often, during the past month, have you felt so down in the dumps that nothing could cheer you up?	32. During the past month, how often did you get rattled, upset, or flustered?	
Always 1 Very often 2 Fairly often 3 Sometimes 3 Almost never 4 Never 6	Always 1 Very often 2 Fairly often 3 Sometimes 4 Almost never 5 Never 6	
28. During the past month, did you ever think about taking your own life?	33. During the past month, have you been anxious or worried?	
Yes, very often	Yes, extremely so, to the point of being almost sick1 Yes, very much so	
29. During the past month, how much of the time have you felt restless, fidgety, or impatient?	34. During the past month, how much of the time were you a happy person?	
All of the time	All of the time 1 Most of the time 2 A good bit of the time 3 Some of the time 4 A little of the time 5 None of the time 6	80 191

-21-

....

Card 4

1

5

35. How often during the past month did you find yourself having difficulty trying to calm down?

Always Very often Fairly often Sometimes Almost never Never	2 3 4 5
36. During the past month, how much of the time have you be in low or very low spirits?	en

All of the time 1
Most of the time 2
A good bit of the time
Some of the time
A little of the time
None of the time

37. How often, during the past month, have you been waking up feeling fresh and rested?

Always, every day 1	
Almost every day 2	,
Most days	
Some days, but usually not 4	
Hardly ever	
Never wake up feeling rested 6	5

38. During the past month, have you been under or felt you were under any strain, stress, or pressure?

Yes, almost more than I could stand or bear 1
Yes, quite a bit of pressure 2
Yes, some, more than usual
Yes, some, but about normal 4
Yes, a little bit 5
No, not at all

Now, I would like to know how you feel about your life as a whole. Please indicate how you feel about your life as a whole by circling the appropriate number below.

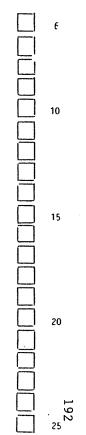
fied or dissatisfied
· · · · · · · · · · · · · · · · · · ·

-22-

These items are adjectives which describe different feelings about yourself and your life. For each item please circle the number that best describes how often you have had that feeling over the last month.

0 Not at all

		1 2	Occasionally			
		3	Some of the time Often			
		4	All the time			
1.	Satisfied	0	1	2	3	4
2.	Lonely	0	1	2	3	4
3.	Free and easy	0	1	2	3	4
4.	Clear-headed	0	1	2	3	4
5.	Helpless	0	1	2	3	4
6.	Impatient	0	1	2	3	4
7.	Useful	0	1	2	3	4
8.	Depressed	0	1	2	3	4
9.	Loving	0	1	2	3	4
10.	Hopeless	0	1	2	3	4
11.	Optimistic	0	1	2	3	ц
12.	Withdrawn	0	1	2	3	4
13.	Enthusiastic	0	1	2	3	4
14.	Good natured	0	1	2	3	4
15.	Discontented	0	1	2	3	4
16.	Confused	0	1	2	3	4
17.	Confident	0	1	2	3	4
18.	Tense	0	1	2	3	4
19.	Understood	0	1	2	3	4
20	Insignificant	0	1	2	3	4



APPENDIX C

INTERVIEW PROTOCOLS

Interview One: T1, 10 weeks before EDB

- 1) Was this a planned pregnancy?
- 2) Are you happy to be pregnant?
- 3) How has your pregnancy been so far?
- 4) How do you feel about the prospect of the responsibility of looking after a baby?
- 5) Do you feel anxious about the labour and birth?

Interview Two: T2, 6 weeks before EDB

1) How has the last month been?

- 2) How do you feel about the change in your body shape?
- 3) How do you feel now about the labour and birth?

Interview Three: T3, 2 weeks before EDB

1) How has the last month been?

2) How do you feel now about the labour and birth?

Interview Four: T4, 2 weeks after ADB

1) What was the labour and birth like?

2) How did you cope with the pain of labour?

3) What was your stay in hospital like?

4) Did you have any problems with breast feeding?

5) What has the time at home since you left hospital been like?

Interview Five: T5, 6 weeks after ADB

1) How has the last month been?

2) Have you been concerned about getting your body back into shape?

Interview Six: T6, 10 weeks after ADB

- 1) How has the last month been?
- 2) How do you feel now about the responsibility of looking after your baby?
- 3) What has parenthood done for you?
- 4) How has having a baby changed your life?
- 5) Has participating in this research project been at all stressful?

APPENDIX D

DETAILED QUESTIONNAIRE DATA

The data presented here are full scale scores for hassles total, hassles frequency, hassles intensity, and Life-1. All other data are means of the various subscales. Means are presented as opposed to raw subscale scores since this provides data which are comparable. This would not be possible with raw subscale scores since most subscales have an unequal number of items.

KEY:

Hassles Scale (Kanner et al., 1981)

Has T = Total hassles score
Has F = Frequency of hassles
Has I = Intensity of hassles
Has AM = Mean future security hassles
Has BM = Mean time pressure hassles
Has CM = Mean work hassles
Has DM = Mean household hassles
Has EM = Mean health hassles
Has FM = Mean inner concern hassles
Has GM = Mean financial responsibilities hassles
Has HM = Mean neighbourhood/environmental hassles

Ways of Coping Checklist (Revised) (Folkman & Lazarus, 1985)

Cop AM = Mean problem-focused coping Cop BM = Mean wishful thinking Cop CM = Mean distancing Cop DM = Mean focusing on the positive Cop EM = Mean self-blame Cop FM = Mean tension-reduction Cop GM = Mean self-isolation Cop HM = Mean seeking social support Cop IM = Mean emotion-focused coping

Appraisal Emotions (Folkman & Lazarus, 1985)

App AM = Mean threat emotions App BM = Mean challenge emotions App CM = Mean harm emotions App DM = Mean benefit emotions Mental Health Inventory (Veit & Ware, 1983)

Anx M = Mean anxiety
Dep M = Mean depression
Emi M = Mean loss of emotional/behavioural control
Pos M = Mean positive well-being
Tie M = Mean emotional ties
Psy M = Mean psychological distress
Pwb M = Mean psychological well-being
Mhi M = Mean mental health index

Life-1 (Andrews & Withey, 1976)

Life-1 = Life-1

Affectometer (Kammann & Flett, 1983)

Paf M = Mean positive affect
Naf M = Mean negative affect

* = Subject did not complete the questionnaire at this time.

= Subject did not respond to all scale or subscale items.

Figures in parentheses refer to the maximum score or maximum mean score possible on the scale or subscale.

Table D1. Questionnaire data for Subject 1 (Mary)

 Scale or	Time of measurement						
subscale	T1	T2	T3	T4	T5	T6	
 Has T (348)	76.0	56.0	1 46.0	 93.0	 85.0	64.0	
 Has F (116),	47.0	38.0	33.0	46.0	 48.0	41.0	
 Has I (3)	1.62	1.47	 1.39	 2.02	1 1.77	1.56	
 Has AM (3)	0.5	0.75	0.0	0.25	0.5	0.75	
 Has BM (3)	0.33	0.67	0.67	1.78	0.78	1.22	
 Has CM (3)	0.33	0.17	0.17	0.5	0.33	0.5	
 Has DM (3)	0.82	0.55	0.73	1.55	1.55	1.36	
 Has EM (3) 	1.3	0.5	0.3	0.9	0.8	0.5	
 Has FM (3)	1.11	0.22	0.33	1.0	0.33	0.11	
Has GM (3)	0.43 /	0.43	0.43	0.71	0.57	0.43	
Has HM (3)	1.5 /	1.63	1.5	1.5	1.25	1.25	
Cop AM (3)	1.36	0.82	1.0	1.73	· * /	0.73	
Cop BM (3)	2.2 /	1.0	1.2	1.8	* 	1.6	
Cop CM (3)	1.0 /	0.5	0.5	1.17	/ * /	0.83	
Cop DM (3)	1.0 /	1.0	1.0	1.5	· * /	1.0	
 Cop EM (3)	1.33	1.0	1.0	2.33	 *	0.0	
Cop FM (3)	0.33	0.33	0.33	0.67	* /	0.33	
 Cop GM (3)	0.67 /	0.67	0.33	 1.33	/ * /	0.0	
Сор НМ (3)	1.71 /	1.43	1.43	2.86	 *	2.71	
 Cop IM (3)	 1.17	0.79	0.75	1.46	' *	0.83	

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App AM (4)	3.67 2.67	/ 2.0 / 4.0	*	2.33
App BM (4)	3.33 3.0	2.67 3.33	/ *	2.0
 App CM (4)	2.2 1.0	1.0 2.0	/ *	1 1.6
 App DM (4)	3.25 3.0	3.0 2.75	/ *	1.75
 Anx M (6)		5 1.56 2.33	/ *	1 2.0
 Dep M (6)	2.5 1.5	1.25 3.25	/ *	1 2.25
 Emi M (6)	2.0 1.78	8 1.67 2.67	/ *	2.33
 Pos M (6)	4.5 4.9		/ *	1 3.0
 Tie M (6)		1 6.0 1 5.0	/ *	4.5
 Psy M (6)	2.08 1.58	8 1.5 2.83	/ *	2.21
 Pwb M (6)	4.71 5.0	5.5 3.93	/ *	3.29
 Mhi M (6)	4.66 5.08	8 5.32 3.89	/ *	4.05
 Life-1 (7)	1 5.0 1 5.0	16.0 15.0	<u> </u> * .	1 5.0
 Paf M (4)	2.9 3.2	3.1 2.8	/ *	1 2.8
 Naf M (4)	 1.8 0.8		/ *	1.6

Table D2. Questionnaire data for Subject 2 (Jane)

Scale or		Time of measurement						
subscale	/ T1	<u>T</u> 2	T3	T4	T5	 T6		
Has T (348)	45.0	 29.0	 25.0	33.0	28.0	19.0		
 Has F (116)	37.0	26.0	 21.0	 20.0	14.0	18.0		
 Has I (3)	1.22	1.12	1.19	 1.65	2.0	1.06		
 Has AM (3)	1.5	0.5	0.25	 0.25	10.0	0.0		
Has BM (3)	0.78	0.44	0.0	1.0	0.78	0.44		
 Has CM (3)	0.33	0.5	0.5	0.33	0.5	0.33		
Has DM (3)	0.73	0.45	0.09	0.55	1.0	0.27		
Has EM (3)	0.3	0.3	0.2	0.5	0.4	0.3		
Has FM (3)	0.33	0.33	0.33	0.0	0.0.	0.0		
Has GM (3)	0.43	0.29	0.29	0.29	0.0	0.43		
Has HM (3)	0.25	0.13	0.13	0.0	0.0	0.0		
Cop AM (3)	0.55	0.36	0.27	0.18	ا 0.09 ا	0.73		
Cop BM (3)	0.2	0.2	0.2	0.0	0.2	0.0		
Cop CM (3)	0.33 /	0.33	0.17	0.17	0.33	0.33		
Cop DM (3)	1.0 /	0.5	0.5	0.25	0.5 /	0.25		
Cop EM (3) 	0.0 /	0.33 /	0.0	0.0	0.0 /	0.0		
Cop FM (3) 	0.67	0.0 /	0.0	0.0	0.0 /	0.0		
Cop GM (3) 	0.0 /	0.0 /	0.0 /	0.0	0.0 /	0.0		
Cop HM (3) 	1.29	1.14 /	0.71	0.43	0.57	0.71		
Cop IM (3)	0.38	0.25	0.17	0.08	0.25	0.08		

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	App	AM	(4)	1	0.67	1	0.0 /	0.67	1.33 /	0.67	0.0
	App	BM	(4)	1	1.67	1 / 1	1.67 /	2.33 /	2.0 /	2.0 /	1.67
	App	СМ	(4)	1	0.2	(0.4 /	0.4 /	0.6 /	0.6	0.2
	App	DM	(4)	1	1.75	 	1.5 /	1.5 /	1.5 /	2.0 1	1.5
	Anx	М	(6)	1	1.78	1	1.67 /	1.89 /	1.89	1.78 /	1.44
	Dep	М	(6)	1	1.75	1	1.75 /	1.25 /	1.0 /	1.5 /	1.0
	Emi	М	(6)	1	1.67	 	1.89	1.67 /	1.78 /	1.67	1.67
	Pos	М	(6)	1	4.3	1	3.8 /	4.3 /	3.9 /	3.6 /	4.2
	Tie	М	(6)	1	4.5	1	5.0 /	5.5 /	5.0 /	4.5 /	5.0
1	Psy	М	(6)	1	1.71	 	1.96	1.67 /	1.75 /	1.71 /	1.5
	Pwb	М	(6)	1	4.36	 	4.07 /	4.57 /	4.07 /	3.79	4.36
	Mhi	М	(6)	1	4.76	1	4.55 /	4.87 /	4.63	4.55 /	4.89
1	Life	e−1	(7)	1	5.0	1	5.0 /	5.0 1	6.0 /	6.0 1	5.0
	Paf	М	(4)	1	3.1	1	2.9 /	2.8 /	3.1 /	2.8 1	3.1
]	Naf	М	(4)	1	0.5	1	0.2 /	0.5 /	0.6 /	0.7 /	0.5

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Table D3. Questionnaire data for Subject 3 (Jill)

 Scale or	l	Time of measurement							
subscale 	T1	Т2	ТЗ	T4	T5	T6			
 Has T (348)	 108.0	39.0	23.0	 30.0	24.0	29.0			
 Has F (116)	85.0	38.0	 23.0	30.0	24.0	29.0			
 Has I (3)	1.27	1.03	1 1.0	1.0	1 1.0	11.0			
 Has AM (3)	0.5	0.25	1 0.0	0.25	0.0	0.25			
 Has BM (3)	1 0.67	0.44	 0.11	0.22	0.0	0.11			
 Has CM (3) 	1.17	0.17	 0.0	10.0	0.17	0.17			
 Has DM (3)	1.27	0.73	0.55	0.73	0.82	0.73			
 Has EM (3)	10.7	0.5	1 0.3	0.4	0.3	0.4			
 Has FM (3)	 1.11 ⁻	0.33	1 0.22	1 0.33	1.0.11	0.22			
 Has GM (3)	1.29	0.29	10.0	0.14	0.14	0.14			
 Has HM (3)		0.63	0.63	0.38	0.25	0.38			
 Cop AM (3)	1.82	1.0	0.91	1 1.0	0.91	1.18			
 Cop BM (3)		0.2	0.4	0.6	0.4	0.2			
Cop CM (3)	1.17	0.17	0.17	0.67	0.17	-0.5			
Cop DM (3)	1.5	1.0	0.5	1.5	0.75	1.0			
Сор ЕМ (3)	0.67	0.67	0.67	1.0	0.33	0.67			
Cop FM (3)	1 1.0 /	0.67	0.33	0.0	0.67	1.0			
Cop GM (3)	0.67	0.33	0.33	0.33	0.33	0.67			
Сор НМ (3)	0.71	0.86	0.86	0.57	0.86	1.0			
Cop IM (3)	0.88	0.46	0.38	0.71 /	0.42 /	0.58			

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l	Арр АМ	(4)	2.0 1	1.0 /	1.0 /	2.33	1.33	2.0
1	Арр ВМ	(4)	2.0 /	2.67 /	2.33 /	2.67	2.33	2.67
1	Арр СМ	(4)	1.0 /	1.4 /	1.0 /	1.6	1 1.2	1.2
	App DM	(4)	2.25 /	2.5 /	2.5 /	2.25	1 2.5	2.75
	Anx M	(6)	2.0 /	1.56 /	1.56 /	2.33	1.89	1.67
1	Dep M	(6)	2.25	2.0 1	2.0 /	2.0	 1.75	1.25
1	Emi M	(6)	2.11 /	1.78	1.78 /	1.78	 1.78	1.56
1	Pos M	(6)	4.8	5.0 /	5.0 <i> </i>	4.6	1 5.0	5.0
1	Tie M	 (6)	5.0 I	5.0	 5.0	4.5	 5.0	
1	Psy M	 (6)	 2.08	 1.75	 1.75	2.04	 1.83	 1.58
1	Pwb M	(6)	 4.86	5.0 /	 5.0	4.5	 4.86	 5.0
	Mhi M	(6)	4.76	 4.97	 4.97	4.71	 4.92	 5.08
	Life-1	 (7)	5.0 I	6.0	 6.0 · ·	5.0	 2.0	
 	Paf M	 (4)	 2.8	 2.9	 3.0	2.3	 2.7	 2.8
 	Naf M	 (4)	 0.9	 0.5	 0.8	0.9	 0.9	0.6

Table D4. Questionnaire data for Subject 4 (Brenda)

Scale or subscale	1	Tir	ne of me	easurem	ent	
Subscale	T1	/ T2 _.	T3	<u>T</u> 4	T5	Тб
Has T (348)	24.0	/ 22.0	1 11.0	1 1 28.0	33.0 	1 1 30.0
Has F (116)	20.0	1 19.0	9.0	21.0	/ <i>32.0</i>	 27.0
Has I (3)	1.2	1.16	1.22	1.33	1.03	1 1.11
Has AM (3)	0.25	# _	0.5	0.25	0.25	0.5
Has BM (3)	0.22	0.22	0.22	0.67	0.56	0.22
Has CM (3)	0.17	0.0	0.0	0.33	0.17	0.0
Has DM (3) /	0.45	0.27	0.18	0.82	0.64	0.55
Has EM (3)	0.5	0.3	0.0	0.2	0.4	0.5
Has FM (3)	0.0	0:0.	0.0	0.0	0.0	0.0
Has GM (3)	0.29	0.43	0.0	0.0	0.29	0.14
Has HM (3) /	0.25	0.5	0.0	0.13	0.5	0.13
Cop AM (3) /	0.45	0.45	0.82	0.82	0.73	0.82
Cop BM (3) /	0.2	0.4	0.4	0.4	0.4	0.2
Cop CM (3) /	0.0	0.17	0.5	0.83	0.67	0.17
Cop DM (3) /	0.0	0.75	1.0	1.0	1.0	1.0
Cop EM (3) /	0.0	0.0	0.33	0.33	0.33	0.0
Cop FM (3) /	0.33	0.33	0.67	0.33	0.33	0.0
Cop GM (3) /	0.0	0.0	0.0	0.33	0.0	0.0
Cop HM (3) /	1.0	1.29	1.43	1.0	1.43	1.29
Cop IM (3) /	0.08	0.33	0.46	0.58	0.5	0.25

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A <u>1</u>	op A	М	(4)	1	1.67	2.67	1	1.67	1	1.67	1	1.33	1	0.67
Aj	op E	M	(4)	1	3.0 1	3.0	1	3.33	1	3.0	1	1.67	' / I	2.0
 A <u>1</u>	op C	M	(4)	1	0.6 /	0.4	 	0.6	1	0.4	1	1.4	ι / ι	0.8
 Aj	op D	M	(4)	1	2.5 /	3.0	1	3.25	1	4.0	1	2.75	 	2.75
 Aı	nx M	ſ	(6)	1	1.67	1.89	 	1.78	1	2.44	1	2.33	 	1.67
 De	ep M	ſ	(6)	 	1.75 /	2.0	 	2.0	1	2.25	1	2.75	 	1.75
 E1	ni M	ſ	(6)	 	1.44 /	1.67	 	1.67	1	2.0	1	2.44	 	1.33
 Po	s M	ſ	(6)	 	4.6	4.9	 	5.3	 	4.3	1	4.5	 	4.9
 T:	ie M	ſ	(6)	 	5.0 I	5.0	 /	6.0	1 7	6.0	1	5.0	 	5.5
 P:	sy M	ſ	(6)	 	 1.75	1.83	 	1.71	 	2.29	 	2.58	 	1.54
 P1	vb M	ſ	(6)	 	 4.79	4.86	 /	5.29	 	4.64	 	4.5	 	5.0
 Mi	ni M	f	(6)	 	 4.89	4.87	 /	5.11	 	4.55	1	4.32	 	5.16
 L:	ife-	1.	(7)	 	 7.0	6:0	 	7.0.	 	7.0	 .	6.0	1	7.0
 Pa	af M	ſ	(4)	 	2.5 /	3.0	 	2.7	 	2.7	 	2.6	 	2.5
 Na	af M	1	(4)	 	 0.4	0.6	 	0.3	 	0.6	 	0.7	 	0.3

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Table D5. Questionnaire data for Subject 5 (Felicity)

 Scale or		Ti	me of me	easureme	ent	
subscale	 T1	T2	T3	T4	T5	 T6
 Has T (348)	63.0	67.0	1 39.0	 41.0	25.0	31.0
 Has F (116)	43.0	34.0	1 28.0	 26.0	16.0	20.0
Has I (3)	1.47	1.97	 1.39 	 1.58	1.56	1.55
Has AM (3)	0.25	0.0	1 0.0	1 0.0	10.0	0.0
Has BM (3)	1.0	1.22	1 1 0.33	0.89	0.22	0.78
Has CM (3)	0.5	0.5	0.17	0.33	0.33	0.5
Has DM (3)	1.09	1.82	1.09	1.18	1.09	0.91
Has EM (3)	0.4	0.3	0.3	0.2	0.0	0.0
Has FM (3)	0.67	0.11	0.22	0.0	0.0	0.11
Has GM (3)	0.29	1.14		0.29	0.0	0.29
Has HM (3) 	0.63	0.0	0.5	0.63	0.38	0.0
Cop AM (3)	0.91 /	0.91	0.64	0.27	0.27	0.09
Cop BM (3)	1.4	1.6	0.8	1.2	0.0	0.4
Cop CM (3)	0.33	1.33	0.83	0.33	0.17 /	0.0
Cop DM (3)	0.75 /	1.5	1.25	0.0	0.5 /	0.25
Cop EM (3)	1.67 /	1.33	1.67	0.67	0.67	0.33
Cop FM (3) 	0.0 /	0.0	0.0	0.0	0.0 /	0.0
Cop GM (3) 	0.33	2.0	0.67	0.0	0.0 /	0.0
Cop HM (3)	1.43 /	1.43	1.71	1 2.29 	1.57	2.29
Cop IM (3)	0.79	1.29	0.96	0.54	0.17 /	0.17

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	Арр АМ	(4)	3.0 1	2.67	2.0 1	2.33	1.67 /	2.0
	Арр ВМ	(4)	4.0 /	3.67 /	2.33	3.33 /	1.67 /	2.67
1	Арр СМ	(4)	0.8 /	0.8 /	1.0 /	1.2	0.8 /	1.8
	App DM	(4)	3.5 1	3.5 /	3.5 /	4.0 /	3.25 /	3.25
1	Anx M	(6)	1.89	2.67 /	2.56 1	3.22	2.56 /	2.56
	Dep M	(6)	1.25 /	2.75 /	2.0 1	2.0 1	2.25 /	2.5
1	Emi M	(6)	1.78 /	2.22 /	1.78 /	2.56 /	2.11 /	2.22
	Pos M	(6)	4.5 /	4.1 /	4.8 /	4.4 /	4.6 /	4.3
	Tie M	(6)	6.0 1	6.0 /	6.0 1	6.0 1	5.0 1	5.5
	Psy M	(6)	1.67 /	2.42 /	2.08 1	2.63 /	2.29	2.33
	Pwb M	(6)	4.86	4.29 /	5.0 /	4.57 /	4.5 /	4.5
]	Mhi M	(6)	5.03 /	4.34 /	4.82	4.37 /	4.5 /	4.47
	Life-1	(7)	7.0 /	6.0 I	7.0 /	6.0 /	6.0 /	6.0
	Paf M	 (4)	3.6 I	2.7 /	2.9	2.8 /	2.9 1	2.6
	Naf M	 (4)	 0.7	 1.2	0.8	0.9	1.0 /	1.0

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Table D6. Questionnaire data for Subject 6 (Deirdre)

 Scale or		Tir	me of me	easureme	ent	
subscale	T1	T2	T3	T4	T5	 T6
Has T (348)	29.0	 / 17.0	 24.0	 16.0	22.0	 10.0
 Has F (116)	27.0	 17.0	 17.0	 13.0	17.0	9.0 9.0
Has I (3)	1.07	 / 1.0	 1.41	 1.23	1.29	1.11
Has AM (3)	0.0	1 0.0	1 0.0	1 0.0	0.0	0.0
 Has BM (3)	0.67	 / 0.11	 0.56	1 0.22	0.22	0.22
Has CM (3)	0.17	 0.17	0.17	1 0.33	0.17	0.17
 Has DM (3)	0.45	0.36	0.55	1 0.36	0.55	0.27
Has EM (3)	0.5	0.3	0.3	0.2	0.3	0.1
Has FM (3)	0.0	 / ∹0°. 0	0.0	10.0	0:33	0.0
Has GM (3)	0.29	0.0	0.0	0.14	0.0	0.0
Has HM (3)	0.13	0.13	1 0.0	0.0	0.25	0.0
Cop AM (3)	0.09	0.0	0.0		0.09	0.18
Cop BM (3)	0.0	0.0	/ #	0.0	0.0	0.0
ן (3) Cop CM	0.0	0.0	1.0.0	0.0	0.17	0.17
Cop DM (3) 	0.25	0.0	0.25	0.25	0.0	0.5
Cop EM (3)	0.0	0.0	0.0	0.0	0.0	0.33
Cop FM (3)	0.0 /	0.0	0.0	0.0 /	0.33 /	0.33
ן Cop GM (3) 	0.0 /	0.0	0.0	0.0	0.0 /	0.0
Сор НМ (3)	1.14 /	1.14	0.86	1.0 /	0.71 /	0.86
Cop IM (3)	0.04 /	0.0 /	'#/	0.04 /	0.08 /	0.17

App AM	(4) 0.	67 / 0.33	1.33	1.0	0.67	0.33
App BM	(4) 1.	67 1.67	1 1.67	1.33	1.0 /	1.33
App CM	(4) 0.	2 / 0.0	10.6	0.6	1.2 /	0.4
App DM	(4) 2.	25 1.25	1 1.5	2.25	1.25 /	1.25
Anx M	(6) 1.	67 1.33	1.78	#	1.78 /	1.33
 Dep M	(6) 1.	75 / 1.25	1 2.25	2.0 1	3.0 /	2.0
 Emi M	(6) 1.	89 2.0	2.11	2.44	2.33 /	2.0
 Pos M	(6) 4.	4 4.3	4.4	13.01	3.4 /	4.6
 Tie M	(6) 5.	0 / 5.0	1 5.0	13.0 1	4.5 /	4.5
 Psy M	(6) 1.	83 1.63	1 2.0	#	2.33 /	1.75
 Pwb M	(6) 4.	5 4.36	4.43	13.0 1	3.5 /	4.57
 Mhi M	(6) 4.	74 4.82	4.61	3.76	4.05 /	4.82
 Life-1	(7) 7.	0 1 6.0	1 6.0	5.0 1	5.0 /	6.0
 Paf M	(4) 2.	9 2.7	2.2	2.1	1.5 /	2.2
 Naf M	(4) #	 0.3	0.4	1 1.0 1	0.6	0.1

Table D7. Questionnaire data for Subject 7 (Susan)

 Scale or		Tiı	me of m	easurem	ent	1
subscale	T1	T2	T3	T4	T5	T6
Has T (348)	84.0	44.0	54.0	 87.0	 80.0	56.0
	62.0	37.0	41.0	1 64.0	 53.0	49.0
Has I (3)	1.35	1.19	 1.32	 1.36 	1.51	1.14
Has AM (3)	1.0	1.0	1 1.0	1 1.0	1.75	0.75
Has BM (3)	1.33	0.44	0.33	1 0.89	0.67	1.11
Has CM (3)	0.67	0.33	1.33	 1.33	1.67	0.17
Has DM (3)	1.18	0.73	0.73	1 1.27	1.09	0.73
Has EM (3)	0.7	0.4	1 0.5	 1.0	0.3	0.2
	1.11	0:56	 0.33 ·	 0.89	0.67	0.44
 Has GM (3)	0.71	0.57	0.43	1 0.71	1.0	1.14
Has HM (3)	0.5	0.25	0.38	0.75	0.25	0.38
Cop AM (3)	2.09	1.82	1.45	1.91	1.27	1.36
Cop BM (3)	1.4	1.0	1.4	1 1.2	0.8	1.6
Cop CM (3)	1.5	1.17	1.33	 1.33	0.67	1.0
Cop DM (3)	2.0	1.5	1.25	1.75	1.75	1.5
 Cop EM (3) 	1.33	0.67	1 1.0	1.33	0.67	1.33
 Cop FM (3) 	1.33	1.0	1.0	1.33	0.33	0.67
 Cop GM (3) 	1.33	0.67	1.33	2.0	0.67	0.33
 Cop HM (3) 	2.0 /	1.71	1.86	2.29	1.86	1.57
 Cop IM (3)	1.46	1.0	1.21	1.42	0.88	1.13

1	App AM	(4)	2.0 1	1.67 /	2.0 /	2.33 /	1.67 /	1.33
1	App BM	(4)	3.0 1	3.33 /	3.0 /	2.33	3.0 /	3.0
	Арр СМ	(4)	1.0 /	1.4 /	2.2 /	1.2 /	1.4 /	0.8
	App DM	(4)	2.75 /	2.75 /	2.25 1	3.0 1	3.25 /	3.25
	Anx M	(6)	2.0 1	1.89 /	2.44 /	2.44 /	1.78 /	1.78
	Dep M	 (6)	2.25 /	2.25 /	2.75 /	2.5 /	2.25 /	2.25
 	Emi M	 (6)	 1.89	 1.67	2.11 /	2.11	2.0 /	1.56
 	Pos M	 (6)	 4.4	 4.7	 4.4	4.4 /	4.6 /	5.0
 	Tie M	 (6)	 5.0	 5.0	5.5 /	 5.0	5.0 /	5.5
	Psy M	 (6)	 2.08	 1.88	 2.42	 2.38	 2.04	1.75
	Pwb M	 (6)	 4.5	 4.79	 4.64	 4.5	 4.57	 4.93
	Mhi M	 (6)	 4.63	 4.82	 4.47	 4.45	 4.63	4.95
	Life-1	 (7)	6:0	 6.0	5×.0 /	 5.0	1 5.0 /	6.0
1	Paf M	 (4)	 3.0	 3.1	1 3.0	 3.0	 3.0	1 3.0
	Naf M	(4)	1	1	 1.3	1.0 /	 0.7 /	 0.9

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Table D8. Questionnaire data for Subject 8 (Sharon)

 Scale or subscale		Ti	me of m	easurem	ent	
	/ T1	T2	T3	T4	T5	T6
Has T (348)	/ *	59.0	 / *	 33.0	1 42.0	36.0
 Has F (116)	*	32.0	 / *	23.0	24.0	23.0
Has I (3)	*	1.84	 / *	 1.43	1.75	 1.57
 Has AM (3)	*	0.5	 / *	 0.0	0.0	0.25
Has BM (3)	*	1.0	 * .	0.22	1.11	1.11
 Has CM (3)	* /	0.17	*	0.33	0.17	1.17
 Has DM (3)	*	0.64	*	0.36	0.55	0.64
 Has EM (3)	' * j	0.7	*	1.2	0.8	0.6
 Has FM (3)	*	0.22	/ *	0.0-	0.0	0.22
 Has GM (3)	' * /	1.29	*	0.29	0.71	0.43
 Has HM (3)	* /	0.38	/ *	0.0	0.0	'#
 Cop AM (3)	* /	0.91	/ * /	#	0.27	0.18
 Cop BM (3)	' * /	0.6	/ *	#	0.0	0.2
Cop CM (3)	* /	0.17	/ *	/ #	0.5	0.0
Cop DM (3)	* /	1.5	/ *	0.25	0.25	0.5
 Cop EM (3)	* /	0.0	/ * /	#	0.0	0.0
 Cop FM (3)	* /	1.67	/ * /	/ #	0.0	0.67
 Cop GM (3)	* /	0.33	*	0.0	0.0	0.0
 Cop HM (3)	* /	2.29	/ *	/ #	2.0	 1.86
 Cop IM (3)	* /	0.71	* ,	#	0.25	0.25

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App AM (4)	/ *	1.33	*	1.67	1.0	0.67
 App BM (4)	*	1.67	*	/ 1.0	1.67	2.33
 App CM (4)	 *	1.2	*	1 0.2	10.81	0.6
 App DM (4)	*	1.5 /	*	1 1.5	2.25	2.0
 Anx M (6)	*	2.22	*	 1.89	1.78	1.67
 Dep M (6)	*	3.0	*	1 1.75	1.0	1.0
 Emi M (6)	 *	2.56	*	 1.89	 1.56	1.56
 Pos M (6)	*	3.6	*	4.4	 3.8	4.1
 Tie M (6)	 *	5.0	*	1 5.0	 4.0	5.5
 Psy M (6)	 *	2.58	*	1.92	 <i> 1.71 </i>	1.58
 Pwb M (6)	 *	 3.79	*	 4.5	 3.79	4.21
 Mhi M (6)	 *	 4.05	*	 4.68	 4.55	4.79
 Life-1 (7)	 *	 5.0	*	 6.0	 5.0	5.0
 Paf M (4)	 *	2.2	*	 2.2	2.6	2.8
 Naf M (4)	 *		*	 0.7	 1.1	0.7

Table D10. Questionnaire data for Subject 10 (Jocelyn)

 Scale or	Time of measurement							
subscale	T1	T2	T3	T4	T5	T6		
 Has T (348)	44.0	 28.0	 19.0	 31.0	38.0	40.0		
 Has F (116)	33.0	 22.0	 18.0	25.0	1 29.0	30.0		
 Has I (3)	1.33	 1.27	 1.06	1.24	 1.31	 1.33		
 Has AM (3)	0.75	0.75	 0.25	0.25	0.75	0.75		
 Has BM (3)	0.56	0.0	10.0	0.33	 0.44	0.33		
 Has CM (3)	0.33	0.67	1 0.5	1 1.0	1.17	1.17		
 Has DM (3)	0.27	0.09	0.27	0.45	0.36	0.64		
 Has EM (3)	0.2	0.0	0.0	0.3	0.2	0.3		
Has FM (3)	0.22	0.11	10.0	0:0	0:0	0.11		
Has GM (3)	0.43	0.29	0.14	0.14	0.57	0.43		
Has HM (3)	0.25	0.38	0.13	0.38	0.5	0.5		
Cop AM (3)	1.36	1.64	0.36	0.27	1.0	1.09		
Cop BM (3)	0.2	0.0	0.0	0.0	0.0	0.0		
Cop CM (3)	0.0 /	0.17	0.0 - /	0.0	0.0	0.0		
Cop DM (3)	1.0 /	1.0	0.25	0.25	0.25	0.25		
	0.0 /	0.0	0.0	0.0	0.0	0.0		
	1.0 /	1.33	0.0	0.67	0.67	0.33		
	0.0 /	0.0	0.0	0.0	0.0	0.0		
Cop HM (3) 	1.86 /	2.29	1.57	1.86	2.0	2.29		
Cop IM (3)	0.33	0.38	0.04	0.13	0.13	0.08		

App AM (4)	2.0 1.0	1.0	2.33	0.33	0.33
App BM (4)	13.0 13.0	1.67	2.0 1	2.33 /	2.33
 App CM (4)	1 1.0 1 0.4	10.4	0.0 1	0.0 1	0.2
 App DM (4)	1.5 2.7	5 1.5	3.0 1	2.25 /	2.5
Anx M (6)	2.0 1.8	9 1.89	1.56 /	1.44 /	1.33
 Dep M (6)	2.0 1.0	1.0	1.0 /	1.0 /	1.0
 Emi M (6)	2.11 1.7	8 1.56	1.78 /	1.67 /	1.44
 Pos M (6)	4.0 4.6	4.7	4.8 /	4.6	4.5
 Tie M (6)	1 3.0 1 5.0	5.0	6.0 /	5.0 /	5.0
 Psy M (6)		7 1.54	1.63 /	1.46	1.33
 Pwb M (6)	3.86 4.6	4 4.79	5.0 /	4.71 /	4.71
 Mhi M (6)	4.34 4.8	9 5.08	5.05 /	5.05 /	5.13
 Life-1 (7)	15.0 16.0	16.01	6.0 /	6.0 1	6.0
 Paf M (4)		3.0	3.1 /	3.0 /	3.1
 Naf M (4)	 0.5 0.1		0.0 1	 0.1 /	0.0

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Table D11. Questionnaire data for Subject 11 (Beryl)

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Scale or subscale		Tir	me of me	easureme	ent	
	T1	T2	T3	T4	T5	T6
Has T (348)	42.0	24.0	21.0	18.0	33.0	25.0
Has F (116)	28.0	16.0	19.0 	14.0	18.0	17.0
Has I (3)	1.5	1.5	1.11	1.29	1.83	1.47
Has AM (3)	0.5	0.0	10.0	0.0	0.0	0.0
Has BM (3)	0.78	0.67	0.33	0.67	1.33	1.0
Has CM (3)	1.17	0.67	0.17	0.33	0.5	0.33
Has DM (3)	0.73	0.36	0.64	0.64	1 1.0	
Has EM (3)	0.2	0.0	0.1	0.1	0.4	0.1
Has FM (3)	0.11	0.22	0.11	0.0··	1.0.0	0.0
Has GM (3)	0.29	0.29	0.14	0.0	0.14	0.14
Has HM (3)	0.88	0.25	0.25	0.0	0.0	0.0
Cop AM (3)	0.73	0.55	0.36	0.18	0.27	0.36
Cop BM (3)	0.2	0.0	0.0	0.0	0.0	0.0
Cop CM (3)	1.17	0.17	0.67	0.5	0.5	0.33
Cop DM (3)	1.5 /	0.75	1.0	0.75	0.25	0.5
Cop EM (3)	0.67 /	0.0	0.33	0.33	0.0	0.33
Cop FM (3)	1.0 /	0.0	0.33	0.0	0.0	0.0
Cop GM (3)	1.33 /	0.33 /	1.0 /	0.33	0.0	0.0
Cop HM (3)	2.14 /	1.29	1.29	1.0 /	1.29 /	1.0
Cop IM (3)	0.96	0.25 /	0.54 /	0.33 /	0.17 /	0.25

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	Арр АМ	(4)	1.67 /	0.67 /	0.33	0.67 /	1.67 /	1.0
	App BM	(4)	4.0 /	1.0 /	3.0 /	3.33 /	1.0 /	1.67
	Арр СМ	(4)	0.6 1	0.6 /	1.0 /	0.2 /	0.4 /	0.0
	App DM	(4)	2.75 /	1.0 /	2.5 /	3.0 1	1.75 /	2.25
1	Anx M	(6)	2.33	1.78	1.33 /	1.67 /	1.22	1.44
	Dep M	(6)	1.75 /	2.0 /	1.0 /	1.0 /	1.75 /	1.0
	Emi M	(6)	1.89	2.22	2.11 /	1.89	1.67 /	1.78
1	Pos M	(6)	4.3 /	4.5 /	4.6 /	4.9	4.3 /	4.9
1	Tie M	(6)	5.5 /	6.0 /	6.0 /	6.0	6.0 /	5.5
	Psy M	(6)	2.04 /	2.0 1	1.54 /	1.71 /	1.58 /	1.46
	Pwb M	(6)	4.57 /	4.71 /	4.86	5.14 /	4.5 /	5.0
	Mhi M	(6)	4.74 /	4.71 /	5.05 /	5.05 /	4.89	5.16
	Life-ļ	(7)	7.0 1	7.0 /	7.0 /	7.0 /	6.0	7.0
 	Paf M	 (4)	3.2	2.7 /	2.7 /	3.2 /	3.0 /	3.0
	Naf M	 (4)	0.4 /	0.5	0.3	0.3 /	0.5 /	0.2

Table D12. Questionnaire data for Subject 12 (Carol)

Scale or	Time of measurement						
subscale 	Tl	T2	/ T3	T4	/ T5	 T6	
 Has T (348)	16.0	4.0	6.0	 9.0	12.0	15.0	
Has F (116)	12.0	4.0	4.0	7.0	10.0	11.0	
Has I (3)	1.33	1.0	1.5	1.29	1.2	1.36	
Has AM (3)	0.0	0.0	0.0	0.0	0.0	0.0	
Has BM (3)	* /	0.0	0.0	0.0	0.11	0.0	
Has CM (3) 	0.33 /	0.0	0.0	0.0	0.0	0.0	
Has DM (3) 	0.09	0.0	0.0	0.0	0.0	0.0	
Has EM (3) 	0.0 /	0.0	0.0	0.0	0.0	0.0	
Has FM (3) 	0.22 /	0:11	0.11	0.11	0.22	0.22	
Has GM (3) 	0.0 /	0.0	0.0	0.0	0.0	0.0	
Has HM (3) 	0.88	0.38	0.63	0.75	1.0	1.38	
Cop AM (3) 	0.36	0.18	0.36	0.45	0.45	0.45	
Cop BM (3) 	0.2 /	0.0	0.0	0.2	0.0	0.0	
Cop CM (3) 	0.33 /	0.0	0.0	0.0	0.0	0.0	
Cop DM (3) 	0.5 /	0.75	0.25	0.5	1.0	0.75	
Cop EM (3) 	0.0 /	0.0	0.0	0.33	0.33	0.33	
Cop FM (3) 	1.0 /	0.67	0.67	0.67	0.67	0.67	
Cop GM (3) 	0.0 /	0.0	0.0	0.0	0.0 /	0.0	
Cop HM (3) 	0.71 /	0.29	0.29	0.71	0.71 /	0.71	
Cop IM (3)	0.29	0.21	0.13	0.25	0.29	0.25	

App AM (4)	2.0 1	0.33 /	0.33	0.33 /	0.33 /	0.33
App BM (4)	'#/	1.33 /	1.33 /	1.33 /	1.0 /	1.33
App CM (4)	!#/	0.0 /	0.2 /	0.0 /	0.0 /	0.0
App DM (4)	# /	2.0 1	2.0 /	1.5 /	1.5 /	1.25
Anx M (6)	1.78	1.44 /	1.22 /	1.33 /	1.33 /	1.22
Dep M (6)	1.75	1.0 /	1.0 /	1.75 /	1.5 /	1.0
Emi M (6)	1.67	1.67 /	1.67 /	2.11 /	1.78 /	1.78
Pos M (6)	4.9	4.9 /	4.9 /	4.7 /	4.8 /	4.8
Tie M (6)	5.0 /	5.0 /	6.0	5.0 /	5.0 /	5.0
Psy M (6)	1.75	1.42	1.38	1.67 /	1.58 /	1.42
Pwb M (6)	4.86	4.93 /	5.07 /	4.79 /	4.86 /	4.79
Mhi M (6)	 4.97	5.16 /	5.24 /	4.95 /	5.03 /	5.11
Life-1 (7)	5.0 1	5.0 /	6.0 1	5.0 /	5.0 /	5.0
Paf M (4)	4.0 /	3.3 /	3.2 /	2.4 /	2.8 /	3.1
 Naf M (4)	0.2 1	0.0 1	0.0 /	0.0 /	0.2 /	0.1

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Scale or subscale	1	Time of measurement							
	/ T1	T2	T3	T4	T5	T6			
Has T (348)	1 78.0	1 78.0	 *	/118.0	/ *	1139.0			
Has F (116)	1 58.0	 52.0	 *	1 66.0	*	 82.0			
Has I (3)	1 1.34	 1.5	 *	1.79	*	1.7			
Has AM (3)	10.5	0.5	 *	1 0.5	*	1 1.0			
Has BM (3)	1 0.56	1.11	 / *	1.56	*	1 1.78			
Has CM (3)	1 0.17	0.5	 / *	1 0.5 /	*	10.5			
Has DM (3)	1.45	1.73	 / *		*	2.45			
Has EM (3)	1 1.0	1.5	 / *	2.2	*	1 1.6			
Has FM (3)	1.44	0.78	 *	1.78	*	1.1.56			
Has GM (3)	0.43	0.71	 * 	0.71	*	1.29			
Has HM (3)	0.75	0.38	 * 	0.88 0.88	*	1 0.75			
Cop AM (3)	1.18	1.0	 * 	1.27	*	1 1.73			
Сор ВМ (3)	1 1.0 1	1.6	 *	2.8	*	1 2.2			
Сор СМ (З)	 0.67	0.83	*	1.0 1.0	*	1 1.67			
Cop DM (3)	 1.75	0.75	/ *	 1.5	*	1 2.0			
Cop EM (3)	1 1.0 /	1.0	* 	1.0 1.0	*	1 1.0			
Cop FM (3)	0.67	0.67	 *	 1.0 	*	1 1.0			
Сор GM (3)	0.33	0.33	 *	 0.67	*	1 2.0			
Сор НМ (З)	 1.14	1.57	*	2.57 2.57	*	1 2.43			
Cop IM (3)	 0.92	0.96	 *	 1.46	*	 1.79			

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l	App AM	(4)	3.0 1	3.0 1	* /	3.67	* /	3.33
	App BM	(4)	2.0 /	1.33 /	* /	1.33 /	* /	1.67
	Арр СМ	 (4)	1.2 /	1.8 /	* /	1.8 /	* /	2.2
 	App DM	 (4)	 2.5	3.0 1	* /	1.5 /	*	2.5
	Anx M	(6)	 3.44	3.33	* /	4.33	*	2.89
	Dep M	 (6)	 3.0	 3.25	* /	 4.5	 *	 3.75
	Emi M	 (6)	 3.22	 3.33	* /	 3.78	* /	 3.56
	Pos M	 (6)	 2.6	 4.1 /	* /	 2.2	* /	 2.5
	Tie M	 (6)	 3.5	 4.5	* /	 5.0	* /	 3.0
	Psy M	 (6)	 3.29	 3.33	+ /	 4.21	 * /	 3.33
	Pwb M	 (6)	 2.79	 4.07	* /	 2.5	*	2.57
	Mhi M	 (6)	 3.24	 3.74	* /	 2.66	* /	 3.13
	Life-1	 (7)	ا 6.0 /	 6.0	* /	4.0 /	* /	5.0
I		(4)	1	 2.0	* /	 1.7 /	* /	1.4
I		(4)	1	 2.4	*	2.7 /	 *	2.5

Table D14. Questionnaire data for Subject 14 (Veronica)

 Scale or	Time of measurement							
subscale	TI .	T2	T3	T4	T5	T6		
Has T (348)	60.0	46.0	 42.0	1 103.0	1 1 84.0	69.0 69.0		
Has F (116)	44.0	39.0	 33.0	 56.0	 52.0	48.0 48.0		
Has I (3)	1.36	1.18	1 1.27	1 1.84	1 1.62	1.44		
Has AM (3)	0.0	0.0	0.25	1 0.5	0.25	0.25 0.25		
Has BM (3)	0.78	0.44	0.67	2.11	1 1.56	1 1.0 1		
Has CM (3)	1.0	0.17	0.17	0.67	0.83	0.83		
Has DM (3)	0.91	0.64	0.73	 1.73	1 1.64	1.36		
Has EM (3)	0.7	0.8	0.7	1 1.6	1 1.0	1.0		
Has FM (3)	0.11	0.56	0.22	 1.33	1 0.89	0.67		
Has GM (3)	0.71	0.14	0.29	0.71	0.71	0.57		
Has HM (3)	0.75	0.63	0.75	0.63	0.88	0.75		
Cop AM (3)	1.73	2.0	1.64	1.0	1.45	1.18		
Cop BM (3)	0.6	0.2	10.4	1.8	1.6	1.6		
Cop CM (3)	1.17	0.83	1.0	1.33	1.33	1.17		
Cop DM (3)	1.0 /	1.5	1.25	1.0	1.0	1.25		
Cop EM (3)	1.0 /	1.0 /	1.0	0.33	1.67	1.0		
Cop FM (3)	1.33 /	1.0 /	1.0	0.67	0.67	1.33		
Cop GM (3)	1.0 /	0.67	0.67	1.0	1.0	1.0		
Cop HM (3)	1.57	1.43	1.57	1.57	 1.71	1.71		
Cop IM (3)	0.96	0.79	0.83	1.17	1.29	1.25		

App AM	(4) 1.	0 1.67	1 2.0 1	3.67	3.0 /	3.0
App BM	(4) 2.	33 3.0	1 3.0 1	1.67 /	2.0 /	1.67
App CM	(4) 0.	6 / 1.0	10.4 1	1.0 /	1.4 /	0.6
 App DM	(4) 1.	25 2.5	1.5	1.5 /	1.75 /	1.25
 Anx M	(6) 3.	33 2.22	2.67	3.78 /	3.67 /	3.22
 Dep M	(6) 2.	25 2.25	2.0	2.75 /	3.0 /	2.25
 Emi M	 (6) 2.	 33 1.89	2.0	3.11 /	2.78 /	2.89
 Pos M	 (6) 3.	 5 4.0	4.3	2.3 /	2.7 /	2.8
 Tie M	 (6) 5.	 0 5.5	 6.0	6.0 I	6.0 I	5.0 I
 Psy M	 (6) 2.	 71 <i> 2.</i> 17		 3.38	3.25 /	 2.92
 Pwb M	 (6) 3.	 71 4.29	 4.64	 2.86	 3.14	 3.07
 Mhi M	 (6) 4.	 05 4.5	 4.66	 3.26	3.5 /	3.63
 Life-1	 (7) 5.	0 5.0	 6.0	 3.0	 4.,0	 5.0
 Paf M	 (4) 2.	 2 2.4	 2.6	 1.1 /	 1.4	 1.7
 Naf M	 (4) 0.	 9 0.7	 0.8	 1.9	 1.7	 1.3

Table D15. Questionnaire data for Subject 15 (Diane)

Scale or Time of measurement								
subscale 	T1	T2	T3	T4	т5	T6		
 Has T (348)	49.0	43.0	 22.0	 31.0	*	28.0		
 Has F (116)	32.0	1 32.0	17.0	20.0 20.0	*	15.0		
Has I (3)	1.53	1.34	1.29	1.55 1.55	*	1.87		
Has AM (3)	0.25	0.0	0.25	0.25 0.25	*	0.0		
Has BM (3)	0.22	0.33	0.0	0.22 0.22	*	0.11		
Has CM (3)	0.17	0.17	0.0	0.17 0.17	*	0.0		
Has DM (3)	0.64	0.36	0.27	0.45 0.45	*	0.27		
Has EM (3)	0.2	0.2	0.2	0.0 0.1	*	0.0		
Has FM (3)	0.33	0.44	0.0	0.0 0.1	*	0.11		
Has GM (3)	0.86	0.57	0.43	0.29 0.19	*	0.29		
Has HM (3)	1.13	1.63	1.0	1.88 1.88	*	2.0		
Cop AM (3)	1.27	11.0	1.45	1.27 1.27	*	1.18		
Cop BM (3)	1.4	11.0	1.4	0.0 0.1	*	1.6		
Cop CM (3)	0.67	1.17	1.17	0.33 0.33	*	1.0		
Cop DM (3)	1.0	1.25	1.0	0.0	*	1.0		
Cop EM (3)	0.67	11.0	0.67	0.0 0.1	*	0.33		
Cop FM (3)	0.67	0.67	1 1.0	0.0	*	0.0		
Cop GM (3)	0.33	0.67	1.0	0.0 	*	0.67		
Cop HM (3)	1.14	0.86	1.0	1.14	*	1.0		
Cop IM (3)	0.83	1.0	1.04	0.08	*	0.88		

App AM (4)	3.0 3.0	2.0 / 0.67 /	* /	1.33
App BM (4)	2.33 3.0	2.67 / 2.0 /	* /	3.0
App CM (4)	1.6 1.2	0.6 / 0.2 /	* /	0.2
App DM (4)	2.5 2.75	2.0 2.25	* /	2.75
Anx M (6)	1.67 1.67	1.44 1.67	* /	1.0
Dep M (6)	2.0 / 2.0 /	1.5 / 2.0 /	* /	1.25
 Emi M (6)	1.89 1.89	1.44 1.67	* /	1.33
 Pos M (6)	4.5 4.8	5.1 / 5.0 /	* /	5.4
 Tie M (6)	5.0 / 6.0 /	5.0 / 5.0 /	* /	5.0
 Psy M (6)	1.92 1.83	1.46 1.75	* /	1.21
 Pwb M (6)	4.64 4.93	5.07 / 5.0 /	* /	5.29
 Mhi M (6)	4.74 4.89	5.18 5.03	* /	5.42
 Life-1 (7)	5.0 / 6.0 /	6.0 1 5.0 1	*: /	6.0
 Paf M (4)	2.5 / 2.6 /	2.9 2.5	* /	3.1
 Naf M (4)	 1.1 0.5	0.2 / 0.3 /	* /	0.2

Table D16.	Questionnaire	data	for	Subject	16	(Audrey)

 Scale or subscale	Time of measurement						
	T1	Т <u>2</u>	T3	T4	T5	T6	
	*	62.0	1 1 39.0	1 1 41.0	1 40.0	48.0	
Has F (116)	*	41.0	 29.0	 39.0	39.0	45.0	
 Has I (3)	*	1.51	1.34	1.05	1.03	1.07	
 Has AM (3) 	*	0.75	0.25	0.25	0.25	0.25	
 Has BM (3)	*	0.67	0.56	0.67	0.56	0.78	
 Has CM (3)	* ,	1.17	0.17	0.5	0.17	0.33	
Has DM (3)	* 1	0.64	0.55	0.73	0.64	0.73	
Has EM (3)	*)	0.4	1.0	0.6	0.4	0.2	
Has FM (3) 	*)	0.33	0.0.	0.11	0:11	0.44	
Has GM (3)	* ;	0.57	0.43	0.71	0.57	0.43	
Has HM (3)	* /	0.75	0.38	0.25	0.25	0.63	
Cop AM (3)	* /	0.91	0.09	0.64	0.64	0.64	
Cop BM (3)	*)	0.8	0.6	0.2	0.4	0.2	
Cop CM (3)	* /	0.83	0.17	0.17	0.5	0.33	
Cop DM (3)	*)	1.0	0.0	#	#	0.5	
	*)	0.67	0.0	0.0	0.0	0.33	
	* /	1.0	0.67	1.0	0.33	0.33	
	*)	0.0	0.0	0.0	0.0	0.0	
	*]	1.0	0.71	1.0	0.71	0.14	
Cop IM (3)	* /	0.75	0.25	#	#	0.25	

1	App	AM	(4)	1	* /	1.33	0.67	1.67	1.67	1.33
	App	BM	(4)	1	*	1 2.0 1	1.33	1.0	1.33 /	2.0
	App	СМ	(4)	1	* ;	0.4	0.4	10.61	0.2 /	0.8
1	App	DM	(4)	1	* 1	12.0 1	1.25	1 2.0 1	2.0 1	1.75
	Anx	М	(6)	1	*	1.89	1.67	1.89	1.78	1.44
 	Dep	М	(6)	1	*	1 2.0 1	2.0	1.5	1.5 /	2.0
 	Emi	М	(6)	 	*	2.11	1.89	1.67	1.67	2.11
	Pos	М	(6)	 	*	2.8	3.2	 3.6	4.2	3.7
 	Tie	М	(6)	 	* ;	 4.5	4.5	 5.0	4.0 /	3.0
	Psy	М	(6)	 	* ,	2.04	1.79	 1.71	 1.67	1.88
 	Pwb	М	(6)	 	* /	 3.14	3.36	 3.93	 4.21	3.71
	Mhi	М	(6)	 	* 1	 4.11	4.34	 4.66	 4.74	4.42
	Life	≥-1	(7)	 	* ;	 5.0	6.0	 ·6.0	5.0 /	 5.0 .~.
 	Paf	М	(4)	 	* ,	 2.6	#	 2.8	 2.8	2.1
	Naf	М	(4)	 	 * /	 0.5	0.3	 0.3	 0.2	 0.5

Table D17. Mean scale and subscale scores for Subjects 1-16

Scale or Time of measurement						
subscale 	Tl	T2	T3	T4	T5	T6
 Has T (348)	48.9	38.6	23.2	44.5	 34.1	40.0
 Has F (116)	35.1	28.0	18.2	29.4	23.5	29.0
Has I (3)	1.39	1.34	1.27	1.44	1.45	1.35
 Has AM (3)	0.48	0.36	0.21	0.25	0.29	0.32
 Has BM (3)	0.61	0.52	0.29	0.76	0.72	0.68
Has CM (3)	0.5	0.36	0.26	0.44	0.47	0.34
Has DM (3)	0.75	0.62	0.49	0.82	0.84	0.78
Has EM (3)	0.52	0.41	0.3	0.63	0.41	0.39
Has FM (3)	0.54	0.29	0.14	0.37	0.20	0.28
Has GM (3)	0.47	0.47	0.2	0.34	0.36	0.41
Has HM (3)	0.7	0.53	0.48	0.54	0.42	0.58
Cop AM (3)	1.13	0.90	0.72	0.79	0.62	0.79
Cop BM (3)	0.86	0.57	0.57	0.73	0.32	0.65
Cop CM (3)	0.75 /	0.52	0.5	0.56	0.42	0.5
Cop DM (3)	1.12 /	0.98	0.73	0.75	0.66	0.82
	0.67 /	0.51	0.51	0.55	0.33 	0.44
	0.74 /	0.62	0.46	0.45	0.33	0.44
Cop GM (3) 	0.55 /	0.4	0.41	0.4	0.17 /	0.31
ו Cop HM (3) 	1.34 /	1.33	1.18	1.45	1.29	1.44
Cop IM (3)	0.79 /	0.61	0.56	0.63	0.4	0.55

App AM (4) .	2.07 1.56	1.31 / 1.9	8 1.28	1.33
App BM (4) .	2.72 2.36	2.36 / 2.1	1 1.75	2.09
App CM (4)	0.92 0.8	0.75 / 0.7	7 / 0.78 /	0.76
App DM (4) .	2.38 2.33	2.17 2.4	2.21	2.18
Anx M (6) .	2.1 1.93	1.83 2.3	4 1.94	1.78
Dep M (6) 2	2.02 2.0	1.69 / 2.0	8 1.94	1.75
	1.97 2.03	1.8 / 2.2	1 1.95	1.94
Pos M (6)	4.22 4.33	4.64 4.0	1 4.17	4.25
Tie M (6)	4.71 5.2	5.5 / 5.1	7 4.92	4.83
Psy M (6) 2	2.08 2.01	1.77 2.2	 8 2.0	1.95
Pwb M (6) -	4.34 4.46	4.79 4.1	9 4.24	4.33
Mhi M (6)	4.56 4.63	4.9 4.3	 8 4.56	4.68
Life-1 (7) .	5.64 5.67	6.08 / 5:4	5.08	5:67
	2.85 2.77	2.84 / 2.5.	2 2.59	2.62
 Naf M (4)	 0.85 0.68	 0.51 / 0.8.	 3 0.7	0.7

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