LOCUS OF CONTROL AND SOCIAL VARIABLES AS THEY
RELATE TO DEPRESSION AT ABORTION

By

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ABSTRACT

Since its legalisation in this country, abortion has become a controversial subject in religious, social and judicial circles. However, little is known about the relationship between depression and the possible side effects that may be produced by the procedure. Indeed, the possible impact of social variables and personality traits have been receiving more attention in recent research in an effort to identify those at risk for negative symptoms. This study was carried out on a group of 42 women from the Soweto and Jeppe Street Marie Stopes clinics. The women were assessed according to locus of control, depression and certain psychosocial variables. As expected, the overall levels of depression among these women, who largely represent the underprivileged segment of the community, were very high. Although no significant relationship could be established between locus of control and depression following abortion, certain social variables were identified as possible risk factors for depression after having an abortion.
OPSOMMING

Sedert dit wettig verklaar is in Suid Afrika, is aborsie 'n kontroversiele onderwerp in geloofs-, sosiale- en regskringe. Daar is tans relatief min inligting beskikbaar met betrekking tot die verwantskap tussen depressie en ander moontlike neweeffekte wat deur aborsie veroorsaak word. Baie aandag word deur navorsers aan die potensiële impak van sosiale veranderlikes en persoonlikheidstrekke op die verwantskap tussen aborsie en depressie gegee. In hierdie studie is gepoog om risiko faktore, wat met simptome van depressie verband hou, te identifiseer. Die deelnemers was 'n groep van 42 vroue van die Soweto en Jeppe Straat Marie Stopes aborsie klinieke. Die vrouens is geëvalueer ten opsigte van die volgende faktore: lokus van kontrole, depressie en sekere psigo-sosiale veranderlikes. Die oorhoofse vlakke van depressie in hierdie groep vrouens, wat grootendeels vanaf die minderbevoorregde gedeelte van die gemeenskap afkomstig is, is in ooreenstemming met wat verwag is, baie hoog. Ten spyte van die feit dat geen beduidende verwantskap tussen lokus van kontrole en depressie gevind is nie, is sekere sosiale veranderlikes geïdentifiseer as moontlike risiko-faktore vir die ontwikkeling van depressie na aborsie.
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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The relationship between abortion and various social and personality variables has been the focus of several studies, especially over the last few decades. Depression has enjoyed a particular interest among researchers as it relates to various aspects of human life. Indeed, the concept of depression is so complex that the huge amount of research up until the present does not yet do it justice. It seems that as researchers piece together the picture of depression, abortion and various social issues, that the topic becomes more rather than less complex. This seems to be a reflection on the human condition and as more is discovered an ever increasingly complex picture emerges. In the limited scope of this study, several social and personality variables will be discussed, however, this does not at all imply that these are the only variables that affect abortion and depression. In fact, these variables represent but a few aspects identified in literature that may or may not have an influence on women's levels of depression following abortion. An attempt has been made to identify extraneous variables where possible and other influencing variables will be
discussed where they fall into the scope of the research. However, the total breadth of this topic is seemingly too vast to be exhausted and it is unlikely that all variables can ever be controlled for. As such, this research is presented as a single perspective on what is essentially an immensely complex subject.

Locus of control is a concept first defined by Rotter (1966) and is used to describe the beliefs that individuals hold regarding the source of control over reinforcements or outcomes. Individuals who are high on an internal locus of control tend to believe that they are in control of what happens to them and that they can affect outcomes in the future. People who hold an external locus of control generally believe that they cannot control what happens to them and they feel that outcomes are determined by sources outside of themselves for example, other people or chance.

In the past certain theories have held that cognitive constructs and attributions have a causative or maintaining effect on depression. Attributing certain negative outcomes to internal, stable and global causes would be said to have more negative outcomes than attributing negative outcomes to external, unstable and specific causes (Burger, 1984). The way in which individuals attribute outcomes may be situation specific or it may also form part of a greater pattern for making attributions. For example, an individual may have learned that certain outcomes are outside their control and that
they are therefore helpless to effect a different outcome. Although many studies in the past have focussed on the relationship between attributional styles and depression, (Cozzareli, 1993; Gomez, 1998; Major, Mueller & Hildebrand, 1985; Mueller and Major, 1989) the exact nature of the relationship is not yet clearly understood. One reason for this is that very few longitudinal studies have been done and so it is difficult to assume any kind of causal nature between attributional style and depression. The focus of this study is not to assess situation specific attributions, but rather to investigate the relationship between the cognitive style of the individual and depression following abortion. According to Rotter (1966) individuals tend to fall along a continuum of internal vs. external locus of control and that these patterns of attribution remain fairly stable across different situations. This can then be said to be a cognitive style or rather part of the cognitive style of an individual. Locus of control has also been implicated in a wide variety of psychological disturbances ranging from anxiety and feelings of guilt to relatively more serious problems such as depression (Gomez; Robinson, 1996; Henson and Chang, 1998; Major et al.; Burger 1984).

There has also been substantial research on the effects of social variables on depression (Cozzarelli and Major, 1994; Hobfoll and Walisch, 1984; Holahan and Moos, 1991). Indications are that the relationship between social variables and depression are extremely complex. For example, social support impacts on depression, but might be moderated by personality
variables. Similarly, other social variables also tend to have confounding and interacting factors.

1.2 Aim

The aim of this study is to identify certain factors which predispose women towards developing negative symptoms after an abortion.
CHAPTER TWO

REVIEW OF THE LITERATURE

2.1 Abortion

With the recent legalisation of abortion on demand in South Africa and the United States of America, the debate around the possible harmful effects on the mother and the family has become intense. One has only to survey the literature to see just how divergent the research has been over the last two decades to gauge the extent of the difference of opinion and research findings. Speckhard and Rue (1992), site the rise of Postabortion Syndrome as a major health concern while researchers such as Adler, David, Major, Roth, Russo & Wyatt (1990) dispute this finding as being too generalised and over-dramatic. It is further evident from the literature that while certain women do experience emotional distress after having had an abortion, others experience no such trauma (Adler et al.; Bracken, Hachamovitch & Grossman, 1974; Hobfoll, Ritter Lavin, Hulsizer & Cameron 1995). The general consensus about the woman's experience of abortion (with certain exceptions as stated above) appears to be that certain women are at a higher risk of developing negative psychological symptoms after an abortion than others. This has opened the field to a host of research which focussed
on the variables which place women at greater risk for negative psychological symptoms after abortion. This is an avenue of the research that is far from exhausted as yet and it is hoped that this research may contribute something towards the existing body of knowledge. As such, various social aspects will be discussed as well as the effect of locus of control and related issues.

2.2 Depression

Depression is listed in the Diagnostic and Statistical Manual-IV (APA, 1994) as a mood disorder. Although the term can be used in a variety of ways, the clinical context of the usage denotes a state that is much more than just a transient feeling of being sad or dejected. The lifelong prevalence of the disease seems to have been on the increase over the last years, with figures as high as 15-25% being quoted for women (Kaplan and Sadock, 1994). Two subcategories of major depression have been identified: 1) single episode (no previous episode of the disorder), and 2) recurrent (one or more previous episodes). Furthermore, depression may have an acute onset after either a severe psychological trauma but in most instances, it is characterised by a gradual decline. The DSM-IV (1994), lists the diagnostic criteria for depression as follows:
a) The presence of either depressed mood (in children or adolescents depressed or irritable mood) or loss of interest or pleasure in all or most activities, and

b) The presence of at least four criterion symptoms for a period of at least two weeks. These include

- Appetite disturbance
- Sleep disturbance
- Psychomotor agitation or retardation
- Decreased energy
- Feelings of worthlessness or inappropriate guilt
- Difficulty in thinking
- Recurrent thoughts of death or suicide

Psychotic features, such as delusions, hallucinations or depressive stupor may or may not accompany the other symptoms. Any psychotic symptoms usually involve content that is consistent with the predominant mood. Symptoms must represent a change from previous functioning and be relatively persistent during the 2-week period (Bootzin, Acocella & Alloy, 1994).

Depression can also be categorised into several different degrees or subtypes (Rees, Lipsedge & Ball; 1997) as follows:
Mild Depressive Disorder
The severity of changes in mood and depressive cognitions are mild and they are often accompanied by elements of other disorders such as anxiety or phobias. There is often an issue such as work or a dysfunctional relationship that the client needs help in coming to terms with.

Moderate Depression
People in this category have a greater number of symptoms than the people in the above category and their social and occupational functioning may be influenced. Biological symptoms are usually present but not severe.

Severe Depression
The client will have severe occupational and social dysfunction as a result of this state. Cognitive and biological symptoms are present and some form of physical treatment is necessary. Suicidal thoughts are common in this subtype.

Psychotic (very severe) Depression
These people will have biological symptoms, but these may be obscured as the client refuses to sleep or even eat as a result of the delusions that are held. The delusions are mood congruent and reflect the pessimistic view of the world and themselves that the person experiences. Hallucinations often take the form of a voice speaking to the person berating them and
encouraging them to commit suicide. They may stop eating and drinking, particularly if they believe their food to be poisoned. Depressive stupor may also occur during which the person becomes totally unresponsive and urgent treatment is then required.

Although the research on the etiology of depression is diverse, several factors have been implicated in the onset of a major depressive episode. Biological and genetic factors have been shown to be involved in both the onset and maintenance of depression (Kaplan and Sadock, 1994), however, of particular interest to the present study is the role of psychosocial factors. There is substantial evidence that indicates a relationship between the loss of a parent before age 11 and the development of later depression (Kaplan and Sadock, 1988). Further evidence points to the loss of a spouse as a possible precipitating event as well as the aggregation of stressors or a single major stressor or traumatic event. Of relevance to the current study is the possible role that may be played by these psychosocial factors in the development and maintenance of depression. Financial stress, single parenthood, lack of adequate health care and poor level of education are but some of the factors impacting on the women who have had an abortion in South Africa. The unwanted pregnancy itself represents a stressful life event which may add to the burden of stressors being carried by the women.
2.3 Abortion and Depression

As mentioned previously, not all women seem to experience negative psychological effects after having undergone an abortion. Bracken et al. (1974) state that the predominant emotion after an abortion is happiness and relief. Most women who have undergone an abortion have had an unwanted pregnancy. The exception being those who have had to have the abortion for reasons of danger to the mother or foetus, or both. This can be said to be an idiosyncratic event, one which the woman would want to bring to a conclusion as soon as possible in most cases. Hence, women who immediately decide to have an abortion and do not agonise over the decision appear to experience mostly relief after the procedure (Adler et al., 1990). However, a minority of the women do experience some form of distress, be it feelings of guilt, anxiety or depression (Bracken et al.; Zolese and Blacker, 1992). Various findings in the past have suggested that the certain social and personality aspects play a part in either moderating or enhancing the post-abortion reaction.

2.4 Abortion and Social Variables

This is one area where research has proliferated in the past years. There have been several studies of varying quality that have attempted to assess
the effects of variables such as social support, age and socio-economic status. Attempts have also been made to link the personality traits with social aspects (Cozzarelli, 1993). However, this is an avenue that bears much more discussion and research. The relationship between the various social factors, personality and the effect that they have on abortion is more complex than it might initially seem. Adding to the apparent confusion is the relative lack of longitudinal data to support the directionality of any causative factors. Although it is understood, for example, that locus of control, social support and age are variables involved in the development of depression after abortion, it is unclear in what way these factors act either to moderate or enhance the effect of the other (Cozarelli).

2.5 Social Support

Social support has been identified by various researchers as an important factor in the development of depression after a stressful life event (Cozzarelli and Major, 1994; Hobfoll and Walfisch, 1984 Miller, 1992). People who are unable to access their social support networks or who have little social support tend to experience greater difficulty during times of crisis than people who are able to utilise their social support networks effectively (Moseley, Follingstad, Harley & Heckel 1981). Social support does not seem
to be related to the actual size of the network as much as it is related to the perceived amount of social support (Moseley et al.). This implies that it is not the actual amount of support that a person receives which has a moderating effect on their psychological well-being, but rather whether they experience this support or not. Certain people may have a high need for support and may be disposed towards seeing most forms of support as inadequate. Clearly this implies that certain people, although relatively well supported in actual terms, may perceive themselves as being unsupported and may consequently be at greater risk for depression. The converse also holds true, that people who have relatively small social support networks may perceive their support to be adequate and so may be buffered against the effects of the stressful situation. The reasoning followed here is that social support networks act as a buffering agent against stressful situations but, have no effect on well-being during low-stress periods. This means that when the person is faced with a situation in which their coping resources are tested, the presence of perceived social support may actually serve to mediate the effects of the stressor so that they do not impact as severely upon the person. Hobfoll and Lieberman (1987), in a study on women who were subjected to high stress found that women who are unsupported (have a low perceived social support network, in this case specifically, have no intimate relationships) and who are low on self-esteem, are at increased risk for depression. In this instance, intimacy was defined as perceived closeness with another who expressed affection, acceptance and a sense of shared
feelings and thoughts. Women who were low in self-esteem but received social support fared almost as well as women who were high in self-esteem. The indications are that the effect of having an intimate relationship and of feeling loved and cared for, has mediated the effect of the stressful situation upon the women's mood state. Interestingly, spouse support or intimacy was found to be a coping resource for the women at event occurrence but did not seem to have a significant effect at 3 month follow up Hobfoll and Lieberman. This led these researchers to speculate that perhaps the perceived and actual social support is highest during the event but that as the time of the event recedes, the actual levels of support drop and so do the levels of perceived support. The subject is then left to deal with the trauma on her own. Although perceived support seems to be an important factor during times of extreme stress, Fiore, Becker & Coppel (1983), found that unmet expectations of social support showed a higher correlation to depression than did the frequency of contact with network members. They found that people who were the most depressed were also those asking for more help. These were also the people whose expectations of support were unmet. Fiore et al. also go on to distinguish between different kinds of social support. They mention cognitive guidance which is conceptualised as the need for information, guidance and advice from the social network. Emotional support is described as the feeling of being loved and cared for. The need for socialising is the need for social integration and a feeling of belonging to a social network. Tangible assistance is cited as a further type
of social support and is the provision of concrete assistance (e.g. money) and the sense that the social support network will respond with physical help where needed. The final aspect that they mention is the *availability of someone to self-disclose to or confide in*. A sense of social integration has been found to be inversely related to depression and people who have an intimate relationship with someone else have been found to be 10 times less likely to be depressed than those who have no intimate relationships.

Some interesting findings reported in Fiore et al. (1983) include the observation that social support networks can be a source of both support and stress. As intimated above, unmet expectations of social support may be perceived as an added source of stress with which to cope during times of crisis. Somewhat ironically, the more supportive the social support network was perceived to be in the past, the more negative impact it will have if the expectations are unmet in the future. The failure of a supportive network to provide the kind of support which is expected of it may, therefore, become a source of stress in and of itself.

Social support may also be more than just the close interpersonal relationships that individuals experience. Cozzarelli and Major (1994) studied the emotional effects of anti-abortion demonstrators on women who are having abortions. Their study included such aspects as whether or not there were any anti-abortionists picketing outside the abortion clinic, how
many anti-abortionists were present, whether or not any interpersonal contact was made and the vigour with which the protestors were protesting. Furthermore, they assessed the emotional state of women who were accompanied by a helper or escort as opposed to those who went alone. They found that the presence of an escort acted as a buffer against the activities of the anti-abortion demonstrators. Also, the greater the number of demonstrators, the greater the levels of distress and depression experienced by the women after the abortions. They also found that more intense activity was related to higher levels of depression. From this study it would seem that social disapproval may play a part in forming women's response to abortion. The demonstrators were not a part of the woman's intimate social support network, yet they had an effect on the way she felt. This would seem to suggest that societal norms and our degree of adherence or conflict with these norms has an effect on our emotional well-being. The buffering effect of the escorts seems to be due to fact that they could provide alternatives to the way in which the anti-abortionists perceived the abortion. They were able to counter the rhetoric and provide an alternative frame of reference for the women. The degree in which the escorts were able to prevent interpersonal contact between the women and the demonstrators also had a significant effect on the levels of depression experienced by the women. Furthermore, increased anti-abortion activity only led to increased levels of depression if the women were unaccompanied by an escort. This appears to indicate that perhaps close interpersonal conflict or support may have more of an impact
than general societal norms and values. Cozzarelli and Major, (1994) propose that if other people within the women's cultural environment have different norms and values regarding abortion, then the women begin to doubt themselves and their feelings of self-worth are threatened. Miller (1992) also reports that women undergoing abortion who had internalised social norms, which disapprove of abortion, showed increased levels of distress. Women who were more unconventional, i.e. women who were less conforming to society's standards were also found to be more likely to choose to have an abortion as opposed to carrying the foetus to full term (Costa, Jessor & Donovan, 1987).

Moseley et al. (1981), studied the effects of having a partner support or oppose the abortion. Their findings indicated that perceived social support from the partner resulted in lower levels of pre-abortion anxiety and that negative feelings towards the partner resulted in higher pre-abortion anxiety, hostility and depression. Peer group and parental support were also found to have a significant effect on the emotional well-being of the women. Their research also indicated that support from one group offset the support from another so that perceived support from parents for example was able to counter a lack of support from the spouse. However, consistent with the findings of Cozzarelli and Major (1994), opposition encountered in the decision to abort resulted in statistically higher levels of anxiety, depression and hostility (Moseley et al).
Social support is thus a complex issue in the life of an individual. Contrary to what may be expected, it has been shown that social support can, under certain circumstances as discussed above, have a negative impact on stress management and depression. Generally speaking, however, a high level of perceived social support has a positive effect on the coping of the individual.

2.6 Other Social Factors

Although social support is one of the variables that has enjoyed the most attention in the past, it is not the only factor influencing depression after abortion. The available research is not as diverse or prolific as the information on social support networks, however certain of these factors have been identified.

The age of the subjects has been cited in numerous research (Bracken et al., 1974; Major et al., 1985; Trad, 1993) to have an effect on the emotional outcome of the abortion or of stressful events. Bracken et al. mention that women under the age of 18 years old tended to experience more ambivalence and guilt when faced with the decision of whether to abort the foetus or not. They also found that older married women had more positive effects than younger women. Franz and Reardon (1992) found that women
who are under 20 years of age engage in more suicidal behaviour after an abortion than women who are older. Trad found that adolescents are more at risk of making poor decisions about the pregnancy and possible termination than adults. It is thought that this can be ascribed to the developmental stage in which adolescents find themselves. They are more egocentric and idealistic and believe in a personal fable of invulnerability. Their decisions also tend to be less informed and more immature. Adolescents are less likely to take into cognisance the consequences of their actions and so are more likely to engage in unprotected sex with the expectation that they will not fall pregnant ( Trad). Similarly the short- and long-term consequences of having an abortion may also be poorly considered which may have an effect on the post-abortion adjustment of the adolescent. Although other researchers by and large concur with the above findings (Major et al., 1985). Zolese and Blacker (1992) reported that older women with other children tend to fair less well than younger women. Although this may seem contradictory to the preceding research it would appear that young women who are over 20 years of age, who do not have other children and who have high levels of social support are at less risk than other women. In the study by Zolese and Blacker, no comparison was made with adolescents and hence the negative effects as measured by the other researchers were not observed.
Another factor that has been found to place women at increased risk for depression after abortion has been the presence of a previous psychiatric history (Zolese and Blacker, 1992). It would seem that many women who report negative effects from their abortion have previously suffered from a psychiatric disorder and are therefore predisposed to developing further symptoms or a possible relapse. They also mention their finding that a significant proportion of the women presenting for an abortion are also suffering from major social and relationship difficulties. This somewhat complicates the study of any kind of causal relationship between abortion and any psychological consequences. Clearly there are many factors implicated and a simple cause and effect model would be too simplistic to fully explain the phenomenon.

Another risk factor is socio-economic status. Hobfoll, Ritter, Lavin, Hulsizer & Cameron (1995) studied the role of socio-economic status in the development of depression. They found that women of low socio-economic status were twice as likely to develop depression during pregnancy and post-partum as their more advantaged counterparts. Naturally these women are often under added pressures such as inferior health care, poorer education and inferior housing conditions which exacerbates the effects of additional stressors.
Further factors that have been identified in the literature as having an effect on women’s adjustment after abortion have been the degree of ambivalence that the woman experienced about having the abortion (Adler et al., 1990; Bracken et al., 1974; Mueller and Major, 1998). Women who have difficulty in deciding whether or not to undergo the procedure appear to be experience increased levels of depression after the abortion. Closely linked to this is the concept of the “wantedness” or desirability of the pregnancy. Women who have been forced to have an abortion through certain circumstances such as danger to the mother, rape and foetal deformity appear to experience greater distress than women who abort of their own free choice. The premise here is that planned pregnancies that go awry create greater distress than unplanned pregnancies and voluntary abortion. Also related to this is the degree to which the women view their pregnancy as meaningful or the value that they ascribe to it. Women who value their pregnancy highly experience more distress after the abortion than women who find their pregnancy to be intrusive and unwanted. It would seem likely that the levels of wantedness and the degree of ambivalence towards the pregnancy may be related to factors such as the support from significant others. Severe opposition from family may influence the women’s perception about the desirability of the pregnancy and so may cause doubt where none existed before. Once again, simple causal links seem difficult to establish here.
Moseley et al. (1981) reported that women found the decision to abort easier when the partner was a casual acquaintance than when he was a husband or fiancé. Furthermore, women who made the decision to abort on their own tended to be more depressed than women who had support in making their decisions. One possible explanation for these findings would relate to the degree of significance that is attached to the pregnancy. Possibly, women who are pregnant by someone they love and trust, place a higher significance on the pregnancy and are therefore more distressed when making the decision to abort, which in turn places them at a higher risk post-abortion. The interweaving of social support, “wantedness” and significance appears to be a complex issue which is difficult to separate in the research.

The above factors suggest that there are certain variables that place women at an increased risk for developing depression after an abortion. However, these variables are not the only factors that contribute towards depression during or after a stressful life event. Amongst others, certain personality variables may also play a part. This study will focus on the role of locus of control in either mediating or exacerbating depressive symptoms after an abortion.
2.7 Locus of control

Locus of control is a concept first introduced by Rotter (1966) and refers to the way in which an individual makes attributions as either internal or external. People with an internal locus of control tend to attribute events to themselves and see themselves as being able to influence or change events. People with an external locus of control tend to attribute events and their outcomes to factors outside of themselves and see themselves as powerless to affect or change the outcomes. According to Liebert and Spiegler (1994) locus of control is particularly relevant in novel or ambiguous situations in which the individual has no prior experience on which to base the expectations about potential outcomes, such as abortion. The premise is that if prior experience is available individuals will be able to gauge their levels of efficacy or expected success in a specific area. However, attributions about the source of either failure or success are important. Not only can these attributions be either internal or external, but external locus of control can be further subdivided into control by powerful others and chance (Levenson, 1973). Internal locus of control in turn, can be subdivided into self-character blame and self-behaviour blame (Major et al., 1985). As will be seen in the remainder of this section, each of these different attributional styles hold certain implications for the affective reaction of the individual. Not only are certain styles deemed to be more adaptive than others, but certain
styles may be more adaptive under certain conditions and less adaptive under different conditions.

2.7.1 Locus of Control and Depression

Several studies have focussed on the relationship between locus of control and depression (Gomez, 1998; Mueller et al., 1989; Njus and Brockway, 1999; Robinson 1996). A fair amount of consensus exists among these researchers about the fact that an internal locus of control is associated with lower levels of depression and anxiety. In general, people with an internal locus of control (internals) have been reported to have more positive mood than those with an external locus of control (externals). Internals have also been reported to be lower on psychiatric illnesses than externals (Henson and Chang, 1998). People with an internal locus of control perceive themselves as being able to influence the outcome of events and as such are less likely to become despondent and are more likely to try to affect the outcomes of events. The possibility exists that they would be more likely to engage in preventative measures in the first place as they feel that they can affect the outcome of their lifestyle. Furthermore, because they feel themselves to be in control, they are more likely to attempt some form of direct coping behaviour as opposed to those with an external locus of control who are more likely to attempt some form of avoidant coping behaviour.
(Parks, 1984). This raises the question of whether abortion can be seen as a direct coping measure or as an avoidant one. In one sense, the individual is taking direct steps to rectify a mistake. On the other hand, they are avoiding the consequences of their actions. The relationship between depression and locus of control is not however, a simple one. The relationship is complicated by the interaction of both personality and social factors.

2.7.2 Attributional Style

As mentioned in the introduction to this section, a distinction has been made between self-character blame and self-behaviour blame (Major et al., 1985). People who engage in self-character blame tend to attribute events and consequences to an internal and stable character trait that they posses. The implication here is that they then perceive themselves as being characteristically flawed and that they have contributed to an outcome as a consequence of an enduring personality trait. People who engage in self-behaviour blame tend to attribute outcomes to specific behaviours which they can change in future. In the specific case of abortion, a woman who engages in self-character blame would therefore blame her pregnancy on characterological aspects such as poor discipline, lack of self-control and a host of other personality traits. The woman engaging in self-behaviour blame on the other hand would tend to attribute the pregnancy to the fact that she
did not take measures to prevent the pregnancy. In the former example, the woman can only change the cause of the problem by changing her personality while the latter case is confronted by the relatively simple task of taking precautionary measures in the future. Although both these attributional styles demonstrate an internal locus of control, self-behaviour blame has been shown to be unrelated to levels of coping whilst self-character blame has been associated with poor coping after a stressful life event (Major et al., 1985). Attributions made to relatively stable, global and internal traits appear therefore to have more negative effects than positive ones. Importantly, this demonstrates that an internal locus of control is not always an adaptive style and that it depends on the type of internal attributions which are made.

Njus and Brockway (1999) also distinguish between different attributional styles as follows: *Instrumentalists* are those who possess an attributional style which allows them to claim responsibility for success as well as failure. *Fatalists* claim responsibility for neither outcome, *self-defenders* claim responsibility only for success but not for failures and *self-blamers* accept responsibility only for the negative outcomes and deny responsibility for positive outcomes. Njus and Brockway hypothesised that the instrumentalists, who accepted responsibility for all outcomes, would be less depressed than the other groupings. Although this study was not specifically related to abortion and instead focussed on a student population,
nevertheless their study is of interest here. Their findings indicated that control over positive outcomes was more closely associated with academic and social adjustment than control over negative outcomes. This would imply that women who attributed the unwanted pregnancy to an external source and who then attributed their corrective action (the abortion) to their own effort would be better adjusted than those who accepted blame for both the outcomes or only for the pregnancy. Contrary to these findings were the findings of Mirowsky and Ross (1990) who found that instrumentalists were better adjusted than the other groupings. Njus and Brockway explain the variance as partly due to the difference in focus of the samples. Whereas they had focussed on a student population, Mirowsky and Ross focussed on an adult population. The student population was thought to be a relatively unique population who differed from the adult sample by being in a largely positive environment. They had also experienced a fair degree of success as evidenced by their being at university.

According to Henson and Chang, (1998) an internal locus of control may be maladaptive under certain conditions. Not only is a self-character blame style deemed to be less adaptive than self-behaviour blame, but any form of internal locus of control may be maladaptive when the individual has little or no control over the outcome. When outcomes are attributed to self-behaviour when in fact they are inevitable (such as terminal illness) the
above researchers suggest that attributing outcomes to the self may in fact be less adaptive than would otherwise be the case.

2.7.3 Locus of Control and Social Support

An interesting finding with regards to locus of control has been that social support plays a more important role for people with an external locus of control than for people with an internal locus of control (Vanderzee, Buunk, & Sanderman, 1997). People with an internal locus of control already possess an important coping resource and are therefore less likely to see other people as necessary for coping. Furthermore, internal locus of control suggests that these people are likely to see themselves as the primary influence in affecting outcomes and may therefore see other people as having little or no effect on the outcomes in their lives. Internal locus of control is, per definition, a viewpoint that attributes outcomes to own control and effort and it would seem to make intuitive sense that these people would be in less need of social support or would deem it to be less necessary for coping with a crisis. Vanderzee et al. also reported that network size is only positively related to health among individuals with an external locus of control. This suggests that social support is a necessary coping resource for people with an external locus of control and one that needs to be taken cognisance of in the therapeutic context and has implications for therapy following abortion.
2.7.4 The Illusion of Control

It has been shown that under certain conditions people may believe that they have some measure of control over events that are obviously determined by chance (Burger, 1992). This is most evident in games of chance such as gambling where individuals feel that they are able to influence the outcome of something such as the roll of the dice. Players have been shown to place higher bets on dice when told to throw for a certain number even though they have as little control over the outcome as when they are throwing randomly (Burger). Burger also quotes research that individuals who have chosen their own lottery ticket number feel more certain about winning than when they are merely ascribed a number by the vendor, this despite the fact that their chances are not improved at all. In the current research, individuals with a higher illusion of control may be more likely to engage in unprotected sex, believing that they are able to control the outcome of the event. This does not apply when the individuals engage in sex, knowing when the time of ovulation is as this behaviour does not represent an illusion of control but an attempt to avoid the time when conception is most likely to occur. As with gambling behaviour, where individuals believe that when they pull the handle of the slot machine in a certain way or when they perform a certain action during the process they are more likely to win, so individuals who have an
illusion of control may believe that having sex at a certain time of day may prevent them from becoming pregnant.

2.8 Coping and self-efficacy

Self-efficacy refers to the belief or expectation that one can successfully execute the behaviour required to obtain the desired result in a specific situation (Cozzarelli, 1993). Self-efficacy has been related to positive adjustment after a stressful life event and low self-efficacy expectations have been associated with giving up more easily and making more internal attributions for failure. People who have a high expectation that their actions may lead to a successful outcome are therefore more likely to engage in behaviour that will achieve such an outcome while those that believe that they are unlikely to achieve such an outcome will be unlikely to engage in such behaviour. Related to the concept of self-efficacy is the concept of optimism and people who are optimistic about their ability to cope with stressful life events have been found to be more persistent in applying coping strategies and have generally used more adaptive coping strategies (Cozzarelli, 1993). These people have an expectation that things are going to turn out successfully if they just try hard enough whereas people with a more cynical or pessimistic attitude are generally not optimistic about their chances of success and consequently will not put very much effort into achieving such an outcome.
Self-efficacy expectations stem from four major sources:

"1. Performance accomplishments. When we perform competently at a task, our self-efficacy expectations are improved. The threat of failure is reduced and our persistence increases as a result. Performance accomplishments are a very powerful source of efficacy expectations as they provide direct experiences of personal mastery.

2. Vicarious experience. By observing others that succeed at a task, our expectations that we too may succeed at that task may be increased.

2. Verbal Persuasion. Being told by others that we can succeed at a task may increases our efficacy expectations. Verbal persuasion is the most common source of self-efficacy expectations because it is easy to provide and generally available.

3. Emotional arousal. People often rely on their state of physiological arousal (e.g. heart rate and breathing) to judge their level of fear or anxiety. Feeling calm and relaxed (or even moderately aroused, if some arousal is necessary for effective performance) may serve as positive feedback that increases efficacy expectations."

(Liebert and Spiegler, 1994)
One of the most reliable and influential sources of feelings of self-efficacy is past experience (Cozzarelli, 1993). Individuals who have experienced success in a particular area in the past have a reasonable expectation of success for a similar event in the future as their information is based on an authentic mastering experience and not mere conjecture. So it can be expected that women who have coped well with adversity in the past will cope well with it in the future and that women who are anxious or unsure of their coping resources will have a more difficult time in coping with the after effects of an abortion. Gomez (1998), found that the likelihood of engaging in any coping behaviour is also determined by the availability of coping resources and, as has been illustrated, one of the major sources to determine this is past experience. The implications of this is that people who, for whatever reason, have low self-efficacy expectations, are less likely ever to develop positive self-efficacy expectations as they are less likely to engage in problem solving behaviour and are therefore less likely ever to succeed at new tasks. This becomes a vicious circle and the less individuals engage in problem solving behaviour, the less success they experience and the less likely they become to develop feelings of self-efficacy. On the other hand, individuals who engage in problem solving behaviour are more likely to have some measure of success in at least some of the crises that they attempt to address, and are therefore more likely to expand their feelings of self-efficacy to include new and novel areas of experience. Factors such as developmental history have been hypothesised to play a major role in the
development of locus of control as well as feelings of self-efficacy (Liebert and Spiegler 1994). This can be explained in the light of Erikson's model of psychosocial development. Children of over-controlling or negative parents are likely to experience difficulty in resolving the psychosocial crises of Autonomy vs. Shame and Doubt, Initiative vs. Guilt and Industry vs. Inferiority. This leads the children to develop a lack of belief in themselves and their own abilities and to rely more heavily on others as being the primary centre for control (Newman and Newman, 1987). This appears to be a factor in the development of an external locus of control.

As has been seen, people with an internal locus of control tend to experience outcomes as being under their own control and therefore more likely to have greater feelings of self-efficacy than people with an external locus of control. Cozzarelli (1993) states that individuals who feel more personal control exert more effort, seek more and make better use of social support, have wider range of coping resources and make use of more successful coping strategies. Clearly, in the light of what has been said in the preceding sections, feelings of self-efficacy and locus of control are implicated in the above statement. The degree to which these particular factors affect coping is unclear and it appears to be a difficult task to untangle.
2.9 Locus of control and self-efficacy

Self-efficacy is the expectation that one can successfully execute the behaviour required to obtain desired outcomes in a specific situation. Research has shown that women who are high in self-efficacy for coping are more likely to blame their pregnancy on their own behaviour and less on the other person or chance (Mueller and Major, 1989). As has been seen previously, self-behaviour blame, which is a form of internal locus of control, is more adaptive than either form of external locus of control or of self-character blame. It appears therefore that a connection may exist between self-efficacy and self-behaviour blame as a coping resource. These researchers also proposed that although attributions may have an effect in the etiology of depression, self-efficacy plays a role in the subsequent behaviour and maintenance thereof. It also seems logical that if attributions are internal and if efficacy is high for that particular situation, then effective coping behaviour can be expected. However, if either the attributions are external or the self-efficacy expectations are low, then coping behaviour becomes increasingly unlikely as the individual feels that they cannot affect the outcome in any meaningful way. Parkes (1984) found that individuals with an internal locus of control displayed lower levels of distress in a crisis situation and also exhibited more task centred behaviours. Furthermore, individuals who perceived control in a particular area were more likely to exhibit task orientated coping behaviour and those who perceived little
control in a particular area used more emotional coping strategies. Emotional coping strategies would include such measures as emotional support from significant others while task orientated coping refers to actions taken to resolve the source of the crisis. Although locus of control is seen as a stable pattern of interaction (Rotter, 1966), individuals may also experience differing levels of control in different circumstances. Furthermore, locus of control may change as life circumstances change (Liebert and Spiegler, 1994). An individual who may therefore, have a general internal locus of control may find that when faced with a specific crisis such as abortion they may tend to revert to more external measures of coping. Although the individual may have built up a general attributional pattern, this may become irrelevant in a situation that is so novel that no previous experience has prepared them for it such as abortion. Similarly, an individual with an external locus of control may actually feel empowered in certain situations with which they are familiar and may actually feel in control of the outcomes. This is referred to as general and specific locus of control (Liebert and Spiegler, 1994).

Interestingly, subjects with an internal locus of control have been shown to make better use of their social support network than externals (Cozarelli, 1993). Even though externals are more reliant on social support during times of crisis, it is the people with an internal locus of control who actually make better use of their available support networks. Actual size of the
network is irrelevant to whether or not the perceived social support is adequate (Major et al., 1985). However, internals tend to perceive more support than individuals with an external locus of control. The implications of this are that not only are individuals with an external locus of control more dependent on social support for post traumatic adjustment, but they are also less likely to experience such support even when it is available. On the other hand, people with an internal locus of control, not only are less reliant on social support networks for post-stressor adjustment, but they are also more likely to make efficient use of such support as there is available. This may make it seem that the case is hopeless for individuals with an external locus of control. However, as has been discussed in an earlier section, an external locus of control has been shown to be more useful under certain circumstances such as when events are well beyond the individual's control (Liebert and Spiegler, 1994.)

2.10 Learned Helplessness

The concept of learned helplessness refers to the self-statements that are made which reflect the degree to which an individual feels in control of outcomes (Seligman, 1975). Individuals who are depressed often use statements such as "there is nothing I can do about it" or "I cannot change
the way things are”. Depressed people often suffer from a lack of motivation and a general lack of interest in normal day to day activities. Individuals, through a process of conditioning, may come to think of themselves as being unable to control important life events. Past experience with a similar problem may teach them that they cannot affect the outcome at all. Alternately, trying to affect the outcome of a situation that is not subject to change by the efforts of the individual may lead the individual to conclude that they are ineffectual in altering their circumstances. When individuals then develop a generalised pattern of feeling helpless to affect outcomes, their problem solving abilities become limited and problems tend to overwhelm them more easily. A woman who, for example, finds that she cannot avoid failing a test at school may then believe that she cannot pass any other test and may then conclude that she will never be able to find a job or become happily married and so on. When these feelings of helplessness are pervasive, individuals tend to believe that they cannot help themselves at all and they then tend to make statements such as “I cannot do anything about it”. A perceived lack of control over future events has been shown in research to be linked to the development of depression (Burger, 1992). Feelings of inefficacy are closely linked to this concept. When an individual experiences a negative life event over which they have little or no control, and they then engage in questioning about why they have no control over the outcome, the answers which they come to play a significant role in the development of learned helplessness (Burger). These attributions can be
examined along three dimensions as follows: people with an internal, stable and global attributional style are more prone to depression. In other words, those people who attribute the outcomes to something about themselves that will not go away and which is applicable across a range of situations will tend to be more susceptible to developing learned helplessness.

2.11 Post Partum Depression

O' Hara, Zekoski, Phillips and Wright (1990) cite the prevalence of post-partum depression as ranging between 39 to 85%. According to them the symptoms peak about 3 days after childbirth and are *inter alia* ascribed to the large hormonal changes after childbirth. Wilmoth, de Alterlis and Bussel (1992) found that the negative psychological responses to abortion were either the same as or less than those for women who had carried the baby to full term. Certain variables have been identified as placing women at an increased risk for post-partum depression as follows: depression during the pregnancy or prior history of depression, younger age, limited social support, living alone, a greater number of children, the presence of marital conflict and ambivalence about the pregnancy (Altshuler, Hendrick & Cohen, 1998). When these findings are compared to the risk factors for depression after abortion, it would seem that there is a remarkable similarity and a possible link could serve as an avenue for further investigation. The possibility that depression after abortion may be related to hormonal change also cannot be
ignored although, as in the case of a normal pregnancy, psycho-social variables appear to play a role.
CHAPTER THREE

METHODOLOGY

3.1 Subjects

The women in the sample were selected from individuals reporting for abortions at the Marie Stopes clinics in Soweto and Jeppe street Johannesburg. No exclusion criteria were used other than that they were able to read and understand the questionnaires administered. In this regard, the nursing staff at the clinics assisted in selecting the subjects. Wherever subjects were unable to complete the locus of control questionnaire, they were asked to complete the other two questionnaires only. The locus of control questionnaire was unfortunately of a complex nature and required the subjects to be reasonably proficient in reading and understanding English. The biographical questionnaire and the Beck Depression Inventory (Beck, Ward, Mendelson, Mock and Erbaugh, 1961) are rather more simple and were within the reach of all of the respondents.

The abortions were all performed on the same day that the questionnaires were administered and the procedure used was the suction method. All of
the foetus's aborted were less than twelve weeks old. The procedure followed was that women reported to the clinic for a check up which involved ascertaining the age of the foetus. Later that same day, they then underwent the procedure which can last from about 2 minutes to about 5 or 6 minutes. The women were then allowed a recovery time in the clinic on comfortable chairs. According to the nursing staff the women generally do not need more than about 10 to 15 minutes to recover sufficiently to leave the clinic. Although a follow up appointment is recommended, very few women actually return for this appointment and only do so when they experience problems. Due to the sensitive nature of the research, certain women chose not to take part in the research and this was respected. Although no specific data was collected concerning the racial group that the women belonged to, the respondents were mostly black. The measures were applied while the women were waiting to have an abortion.

3.2 Measures

3.2.1 The Biographical Information Questionnaire

This questionnaire was compiled after a review of the available literature on the possible factors affecting adjustment after abortion. Most of the questions required either a "yes" or "no" response and an attempt was made
to keep the language usage as simple as possible. The types of questions asked attempted to gauge issues such as social support levels, economic independence and educational level as possible factors which influence adjustment during the abortion period (see annexure A).

3.2.2 The Locus of Control Questionnaire

The Locus of Control Questionnaire of Schepers (1995) was used as the measure for internal and external locus of control. A score is obtained for each internal and external locus of control, which can then be converted to a standard score using the norms provided. However, for the purposes of this research, the raw data was used as this test has not been standardised for the general population and the standard scores would be largely irrelevant for the current sample. Using the Cronbach-alfa test of reliability, the reliability score for external locus of control is .841 and for internal locus of control it is .832. Schepers (1995) also found that there is a significant relationship between high levels of internal locus of control, autonomy and factors such as emotional stability (factor +C) and lack of anxiety (factor +Q4) on the 16 PF. Factors such as group dependency (factor -Q2) and undisciplined (factor -Q3) correlate highly with an internal locus of control. Furthermore, a one-way analysis of variance indicates that individuals with an internal locus of control, score higher (on a 5% significance level) on the various variables of the Survey of Study Habits and Attitudes. It can
therefore be expected that these individuals are more highly motivated. The Locus of Control Questionnaire is attached as annexure B.

3.2.3 The Beck Depression Inventory

The Beck Depression Inventory (Beck et al., 1961) is a widely used depression research instrument that measures levels of depression. The levels are as follows: Normal, Mild Depression, Borderline Clinical Depression, Moderate Depression, Severe Depression and Extremely Severe depression. Beck et al. determined the reliability levels of the test with a split half reliability estimate at .93. According to Gallagher, Nies & Thompson (1982) the test retest reliability of the instrument is .90 and their split half reliability figures showed a value of .84. According to Reynolds and Gould (1981) the Beck Depression Inventory (Beck et al.) has been found to be a reliable and valid measure for the assessment of depression. They obtained results as follows: 7 factors with an eigen value of greater than 1 were identified of which 5 emerged as having three items or more with significant loadings (less than or equal to 4) after having rotated through a varimax solution. These factors can be viewed as reflecting: (1) negative affect toward self, (2) negative physiological symptoms, (3) performance difficulties, (4) general unhappiness and (5) loss of personal and social interest. The Beck Depression Inventory is attached as annexure C.
3.3 Procedure

Access to the sample was obtained from the Marie Stopes head office both by telephonic conversation and by letter. The nature of the research was discussed with the nurses at the respective clinics. The women in the sample were requested to participate in the research by the administrative staff and nurses at the clinics. The questionnaires were collected into piles and were given to the women to complete upon their arrival at the clinic. As there were several ethical considerations in a study of this nature, participation was completely voluntary. Participation was also concomitant on the subjects ability to read and understand English, the medium of communication in this study.

3.4 Experimental Design and Statistical Analysis.

The research conducted was cross-sectional in nature as it involved the administration of a battery of measuring instruments after which no more data was collected. The design is non-experimental in nature and the independent variables were not manipulated in any way. For the purposes of investigation, a simple correlation was performed between the raw scores of the Beck depression inventory and the raw scores of the internal and external locus of control measures respectively. The Beck Depression Inventory was divided into two discreet groups for the purpose of
comparison with the psycho-social variables. Group one consisted of non- or mildly depressed subjects while group two consisted of subjects with borderline clinical depression or worse. In addition, the Beck Depression Inventory and the locus of control questionnaire were correlated with demographic data to explore if these had any meritable links.

3.5 Hypotheses

The study hypothesised that the greater the extent of external locus of control, the greater the risk for depression following abortion. Furthermore, the study also identified certain psychosocial variables, which it speculated, will impact on depression. The specific hypotheses are as follows:

1. Subjects with greater measured internal locus of control would be less depressed following abortion.

2. Subjects with a greater measured external locus of control would be more depressed following abortion.

3. Subjects with a higher level of education would be less depressed than those with a lower level of education.

4. Women who had some form of social support would be less likely to develop depression after the abortion.
5. Women who had been coerced (by circumstances or by other people) into having the abortion would be more likely to develop depression after abortion.

6. Women who experienced doubt with regards to the decision to abort would be more likely to develop depression.
CHAPTER FOUR

RESULTS

4.1 Depression

For the purposes of this research, the Beck Depression Inventory was divided into two discreet groups as follows: Depression 1: Normal and Mild Depression. Depression 2: Borderline Clinical Depression, Moderate, Severe and Extreme Depression. The results obtained were as follows where “missing” represents the number of respondents who did not answer the questions satisfactorily.

Figure 1 Categorized level of depression for the entire sample
As can be seen from the above table, most people in the sample were either not depressed or only mildly depressed. However, 33.3% fell in the Borderline range or higher, an alarmingly high figure. The precise relationship between abortion and depression in this case is unclear as other factors, such as economic and social conditions may have had a strong influence. This is particularly relevant in the current sample as most of the sample are part of the so-called "previously disadvantaged" groups in South Africa.

The marital status of the respondents was also requested and the results are as follows:

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married:</td>
<td>4</td>
<td>9.5</td>
</tr>
<tr>
<td>Single:</td>
<td>28</td>
<td>66.7</td>
</tr>
<tr>
<td>Divorced:</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>Widow:</td>
<td>1</td>
<td>2.4</td>
</tr>
<tr>
<td>Missing:</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>34</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 2.

As can be seen from the above table, the majority of the women, 66.7% were single followed by married women at 9.5%.
4.2 Locus of Control and Depression

The results for Internal and External Locus of Control were as follows:

Table 2: Locus of Control scores for the entire sample

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Internal LOC</th>
<th>External LOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Low</td>
<td>10</td>
<td>12</td>
</tr>
</tbody>
</table>

The average scores for the internal locus of control was 143.77 and the average for the external locus of control was 108.91.

On the external locus of control scale, a score of 108 represents a stanine of 8 and a percentile rank of 94.58. It would therefore appear that the respondents represent a group with a high external locus of control when compared to the norm group. Even allowing for the particular nature of both the norm group and the respondents, this score does seem to represent a significant deviance. The socio-political history, cultural background and economic situation of the respondents may have played a large role in influencing these scores.

A Pearson Correlation was performed on both Internal and External Locus of Control to determine whether there was any significant relationship with depression and the results are as follows:
Table 3: Correlation effects of locus of control and depression

<table>
<thead>
<tr>
<th>LOC</th>
<th>Beck</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal LOC</td>
<td>0.395</td>
</tr>
<tr>
<td>External LOC</td>
<td>0.279</td>
</tr>
</tbody>
</table>

It is evident from the above, the correlation between levels of depression and both Internal and External Locus of Control are insignificant at the 5% level.

4.3 Age

Another variable was the age of the respondents, which appeared as follows:

Figure 2: Age of respondents
The average age of the respondents was 25.81 with 5 respondents not reporting their age.

4.4 Psychosocial Factors

The following table represents a summary of the statistics obtained.

Correlations below .05 are significant on the 5% level and are indicated with an asterisk. The questions are presented here in summary form.

Table 4: Demographic variables

<table>
<thead>
<tr>
<th></th>
<th>YES Normal</th>
<th>YES Depressed</th>
<th>NO Normal</th>
<th>NO Depressed</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did financial concerns play a role in the decision?</td>
<td>17 10 10 2</td>
<td>0.187</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was contraception used?</td>
<td>15 2 5 6 0.022*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was there support from the partner?</td>
<td>15 10 9 2 0.187</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your partner know about the TOP?</td>
<td>15 12 12 2 0.053</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economically self supported?</td>
<td>15 6 10 7 0.318</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you morally comfortable with the idea of abortion?</td>
<td>25 11 3 3 0.311</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any doubt before making the decision?</td>
<td>14 4 14 10 0.161</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any doubt now?</td>
<td>3 2 25 12 0.547</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The only result that showed a significance on the 5% level was the question, "Did you use any measures to avoid the pregnancy?" Whether or not the partner was aware of the fact that the woman was having an abortion also produced a result that tends towards significance.
CHAPTER 5

DISCUSSION AND CONCLUSIONS

5.1 Introduction

The study of abortion is a pertinent and relevant topic in South Africa at present with clinics and hospitals doing upward of 20 abortions per day. The actual mechanisms involved in the development of negative symptoms following abortion are poorly understood and are the focus of much research. In recent years the research seems to be pointing towards the fact that not all women who have undergone the procedure develop negative psychological symptoms following the abortion.

5.2 Discussion

5.2.1 Locus of Control and Depression

The relationship between internal locus of control and depression was .39, which is not significant on the 5% level. This is contrary to the hypothesis that people with an internal locus of control would tend to be less depressed. However, the fact that the respondents did not score very high on internal
locus of control when compared to the norm group may affect the results with regards to this particular scale. It would be very difficult to establish any kind of relationship in the absence of any significantly high scores on this scale. Nevertheless, according to the majority of the available literature on the subject, people with an internal locus of control generally tend to be less depressed than people with an external locus of control (Burger, 1984; Cozzarelli, 1993; Gomez, 1998; Robinson, 1996). The research finding of this study could be interpreted as being in line with the research of Henson et al. (1998) which indicates that an internal locus of control is not always adaptive. When the outcomes are beyond an individual's control, indications are that an external locus of control may be more adaptive. This then raises the question of whether the termination of pregnancy can be seen as either within or beyond the individual's control. Certainly the fact that the individuals had participated in intercourse was within their control as none of the termination were due to rape or similar reasons. For 17 out of the 28 who responded to the question of whether contraception had been used or not the answer was affirmative. This implies that for a significant amount of women falling pregnant was not under their control as they had taken measures to prevent it. Although no data is available correlating locus of control with contraceptive taking, this result might suggest an avenue for further research. The possibility exists that women with an external locus of control are less likely to use contraceptive measures as they see the eventual outcome as beyond their control anyway. Alternately, women with
an internal locus of control who took no contraceptive measures and who fell pregnant may be more likely to become depressed as they may perceive themselves as having failed to control a situation that was potentially controllable. The confounding issue at stake is whether or not falling pregnant and the subsequent abortion can be seen as being a controllable event or whether the outcomes are beyond the individual’s control. Certainly, it seems that in at least some cases the pregnancy had occurred despite the efforts of the individual’s concerned. However, in other cases, no effort had been made to avoid the pregnancy and as such the event must be seen at least as potentially avoidable.

The same rationale may be used for the poor correlation between external locus of control and depression. Suffice to say at this point that the research does not point out any significant relationship between internal locus of control, external locus of control and depression. However, this does not mean that no relationship exists for the reasons already mentioned. It is, however, worth mentioning that the correlation between external locus of control and depression was slightly higher than between internal locus of control and depression. This seems to suggest a trend and perhaps supports the hypothesis that external locus of control may be a risk factor for depression.
5.2.2 Biographical Information

Table 4 is relevant to this discussion. Whether or not financial concerns were involved in the decision to abort delivers some interesting results. Although there is no significant correlation, the groupings show a possible pattern emerging. Of the 39 responses to the question, 27 maintained that financial concerns had played a role and 12 replied that it played no role. Of those who replied in the affirmative, 17 fell within the normal to mild depression group. Of the 12 who replied in the negative, 10 fell within the same range. It would seem therefore, that financial concerns may be a risk factor in developing depression where the woman terminates the pregnancy. This is consistent with the literature which reports that high income helps individuals to resist stress (Hobfoll et al., 1987). This question was closely related to the question of whether or not the women were economically self-supported. There was no statistically significant result on this question either. Although these questions seem to measure the same aspect, it is conceivable that women who support themselves may be unable to support an additional child and therefore, although economically self-supported, may, for financial reasons, decide to continue with the termination. The statistics do not support the claim of any connection between the fact that women are economically self-supported and depression. However, the role that self-support may play in being an additional stressor in their lives is not sufficiently answered by this study due to its limited nature.
There was an interesting outcome to the question of whether the women had used contraception or not. The women who had used some form of contraception appeared to be less depressed than those who had taken no form of precaution. Various reasons can be forwarded to explain this phenomenon. If it is assumed that the women who had taken some form of contraceptive measure by and large possessed an internal locus of control, then they may still feel as if they can affect the outcome of the situation. The assumption is based on the fact that they took some measure to avoid the pregnancy and did not merely leave it to chance and therefore attempted to exercise some control over the outcome. If this were true then it would make sense for the women concerned to still feel as if they can control the outcome of the situation. Indeed, by having the termination done, they were doing just that. The converse is also true that the women who were more depressed by and large had an external locus of control and as such felt that they were a victim of circumstance and therefore were more susceptible to depression. Alternately, the women who took contraceptive measures may have had more access to medical assistance and were more economically well off than those who did not and as a result were less depressed due to the mediating effects of higher socio-economic status and financial resources.
The level of support from the partner did not produce any statistically significant results. The actual figures seem to indicate that women whose partners supported them were more depressed than those whose partners supported them not at all. The possibility exists that the support of partners may also be translated as coercion from those partners, which may have a negative effect on the women. Another possible explanation for this is that the women in this sample are largely unmarried and single. This implies some degree of financial and emotional strain. Pregnancy and termination of pregnancy are potentially stressful events that, under certain circumstances may cause severe distress (Adler et al., 1990; Cozzarelli, 1993; Cozzarelli and Major 1994). Furthermore, these individuals are then left without any close form of support from the biological father or significant other, which, as has been seen, can be a mediating factor during times of stress and anxiety.

A somewhat surprising result is the relatively high levels of depression recorded in the group of women whose partners know about the termination of pregnancy. The correlation of .053 approaches the 5% significance level and the women whose partners know about the termination of pregnancy appear to be worse off here. This question could possibly be related to the previous one and the level of support from the partners that do know, may deliver at least part of the reason for the surprising results here. The premise being that negative support from the partner may actually be less beneficial to the woman than no support as when the woman is single. Negative
interaction, as when the partner actively militates against the termination of pregnancy, may, therefore, be conducive to higher levels of depression as is illustrated in the study by Moseley et al. (1981). Conversely, when the partner is unaware of the termination of pregnancy, he is also unable to condemn or otherwise negatively influence the decision to terminate.

There is no statistically significant result with regards to the relationship between whether the women were morally comfortable with the idea of termination of pregnancy and depression. However, as most women had no moral objections to the termination, these results are very limited in scope. It would be extremely difficult to read anything into these results and the plethora of confounding variables would make this an even more difficult task.

Women who experienced doubt before coming to the decision to abort experienced lower levels of depression than the women who experienced no doubt at all although there is no significant statistical difference. Of the 14 who had experienced moderate to severe depression, only 4 experienced doubt before coming to a decision. This would seem to indicate that the women who experienced some form of doubt came to a more satisfactory decision than did the other group of women. Possible reasons for this could be that they took a more deliberated decision as opposed to a capricious or impulsive one. Most of the women experienced little doubt as to their
decision on the day of the abortion and the results are not statistically significant. Possibly, some level of doubt on the day of the abortion would lead to higher levels of depression in a sample of a larger size.

The respondent's level of education produced results in accordance with the prevailing opinion in the literature. Although, once again, there is no statistical significance, of the 8 respondents who had a post matric qualification, only one fell within the moderate to severe range. Of the 29 respondents with matric or less, 11 feel within the same range perhaps indicating that the respondents with a higher level of education were less likely to become depressed.

The above discussion is difficult due to the nature of the phenomenon being studied. It is extremely difficult to identify which variables have the greatest influence on the respondents as they all come from such divergent backgrounds. Furthermore, the social circumstances under which they live are unenviable to say the least, which makes for a chaotic lifestyle. The respondents mainly represent the lower income groups and for many of them the termination of pregnancy procedure is an exorbitant cost which they can ill afford, let alone the birth and maintenance of a child. Even for the respondents who have moral objections to the termination are forced into making a choice, which represents the lesser of two evils.
5.3 Caveats and Limitations

As a statistical analysis, the current study has limited power. The total number of respondents for the biographical questionnaire and the Beck Depression Inventory were only 42 whilst there were 22 respondents for the Locus of Control Questionnaire. Any conclusions or indications in the following section can, therefore, at best be seen as areas for possible further study and not as conclusions as such. Often correlations were performed with groups as small as 22 in the case of the Locus of Control. An effort will, however, be made to indicate whether any grounds exist for hypothesising a relationship or whether the statistics do not justify such a link.

Furthermore, the respondents were mostly, due to the situation of the clinics, from economically and socially disadvantaged backgrounds and as such they may have been subjected to a host of stressors other than the pregnancy. Although the present study is an effort to identify certain of these stressors, there may be many more which have not been identified and which may have had an impact on the current study. For many of the respondents, English was generally a second language and in some cases a third language which may have affected accuracy and understanding during the completion of the questionnaires. However, any questionnaire in which it was apparent that the respondent’s understanding and command of the language was not adequate was excluded from the analysis of the results.
Due to the sensitive nature of the research, the respondents were approached by the nursing staff of the respective clinics and no form of coercion was used or implied. However, this may have meant that only those respondents that felt comfortable with the westernised standards and language being used answered the questionnaires. It also means that there is a possibility that the respondents who were severely depressed did not feel that they could muster the energy or motivation to answer the questionnaires. This could mean that a significant portion of the sample was excluded due to the severity of the depression, which is a major focus of the study. No statistics are available on the number of respondents who refused to answer the questionnaires.

The terminations were all voluntary and no medical reasons were cited by the respondents. Abortion on the grounds of medical reasons may have produced significantly different results from those obtained in the current study as much of the decision making is removed from the patient.
5.4 Directions for further study

During the course of this research certain further avenues have presented themselves as suitable directions for further exploration. The absolute levels of depression in the sample were higher than in even the highest estimations of depression in the general population. Whether this high level of depression can be ascribed to the abortion or to other variables can be used as an avenue for further study. The respective weightings of the individual stressors is also of possible use to the clinician. Which variables contribute towards the depression and to what extent? This could shed some light on the types of stressors or risk factors that are generally more highly stressful than others.

The specific role of age has not been discussed in this research and it is a question that presents itself as a natural progression of this study. Whether or not the subjects are still staying with their parents may also be considered under this question although the dynamics in the lower socio-economic classes is somewhat different than in other groupings. Often children are forced to remain at home long after they leave school, as they are unable to support themselves financially. The degree of social and financial independence is thus less obvious when dealing with this population.
5.5 Conclusion

Although abortion is still a relatively contentious issue and researchers disagree as to whether or not it represents a psychological risk to the woman, it would seem that the majority of researchers concur that abortion does not inevitably lead to negative side effects. Indeed it appears to make more sense to speak of individuals at risk for depression after abortion rather than depression being an inevitable consequence of abortion. This research supports the contention that certain life circumstances appear to increase the risk for depression after abortion. Issues such as the level of education of the individual, social support networks, and financial considerations seem to increase the risk of depression. Whether or not depression represents a distinct risk from other stressors is a moot point and few if any researchers declare abortion to be anything less than a life stressor. This obviates the point that, along with other stressors, abortion may increase the risk of any psychological distress. Much in depth research is still needed in the field of identifying the various aspects which impact on depression after abortion, particularly in the South African context.
References


All information on this sheet will be treated confidentially. No names will be made public.

**BIOGRAPHICAL DATA**

Name: ...........................................(Optional)

Age: ....................................................

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>What is the reason for the termination of pregnancy?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Have you ever received counselling with regards to termination of pregnancy?</strong></td>
</tr>
<tr>
<td></td>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>From whom did you receive counselling?</th>
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</thead>
<tbody>
<tr>
<td><strong>Was the counselling received before or after the termination of pregnancy?</strong></td>
</tr>
<tr>
<td>Before</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What measures, if any, did you take to avoid the pregnancy?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Are you currently on medication?</strong></td>
</tr>
<tr>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>For what reason?</th>
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<table>
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<tr>
<th>Name the medication.</th>
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</thead>
<tbody>
<tr>
<td><strong>Does your spouse/partner know about the termination of pregnancy?</strong></td>
</tr>
<tr>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To what extent does your partner support the termination of pregnancy? (e.g. fully, partly, not at all)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Are you currently in a supportive relationship with someone?</strong></td>
</tr>
<tr>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>If so then with whom?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Did you feel pressured into having the pregnancy terminated?</strong></td>
</tr>
<tr>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>From whom or what did you feel the most pressure?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Have financial concerns played a role in your decision to terminate?</strong></td>
</tr>
<tr>
<td>YES</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Are you economically self supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td>**YES</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Do you live with your parents?</td>
</tr>
<tr>
<td>Are you morally comfortable with the idea of termination of pregnancy?</td>
</tr>
<tr>
<td>Did you experience any doubt when trying to decide about the termination of pregnancy?</td>
</tr>
<tr>
<td>Do you feel any doubt now about whether you made the right decision?</td>
</tr>
<tr>
<td>If so, then what level of doubt are you experiencing? (e.g., none, little, a lot, etc.)</td>
</tr>
<tr>
<td>Was this pregnancy planned?</td>
</tr>
<tr>
<td>Where did you have the termination done?</td>
</tr>
<tr>
<td>Are you currently studying?</td>
</tr>
<tr>
<td>If so, where?</td>
</tr>
<tr>
<td>What is your highest level of education? (excluding current study)</td>
</tr>
<tr>
<td>How many children do you have?</td>
</tr>
<tr>
<td>Was this a factor in your decision to terminate?</td>
</tr>
<tr>
<td>Please mention any other factors that influenced your decision to terminate the pregnancy.</td>
</tr>
<tr>
<td>Do you have anything else to add?</td>
</tr>
</tbody>
</table>
LOCUS OF CONTROL

1. To what extent do you doubt your own capabilities when your work is being criticised?

Not at all 1 2 3 4 5 6 7 To a great extent

2. How strongly are you geared towards ensuring that your case triumphs during a conflict situation?

Not at all 1 2 3 4 5 6 7 Very strongly

3. How readily would you take risks?

Not at all 1 2 3 4 5 6 7 Very readily

4. How strongly are you convinced that a person without money will get nowhere, no matter how hard he/she works?

Not at all 1 2 3 4 5 6 7 Very strongly

5. How readily can you convince someone else of your viewpoint?

Not at all 1 2 3 4 5 6 7 Very readily

6. How strongly are you convinced that personal insight is a prerequisite for good interpersonal relationships?

Not at all 1 2 3 4 5 6 7 Very strongly

7. To what extent should the structure and routine of a person's work be determined by himself/herself?

Not at all 1 2 3 4 5 6 7 To a great extent

8. How readily do you accept responsibility for mistakes that appear in your work?

Not at all 1 2 3 4 5 6 7 Very readily

9. How often does it happen that people obtain good positions simply because they know the right people?

Hardly ever 1 2 3 4 5 6 7 Very often

10. To what extent are you convinced that success is mainly related to a person's ability and dedication?

Not at all 1 2 3 4 5 6 7 Very strongly

11. How strongly are you convinced that once you have failed at something, it is virtually impossible to achieve it again?

Not at all 1 2 3 4 5 6 7 Very strongly

12. How strongly are you convinced that you are subject to the whims of fate?

Not at all 1 2 3 4 5 6 7 Very strongly

13. How strongly are you convinced that you will succeed when undertaking important tasks?

Not at all 1 2 3 4 5 6 7 Very strongly

14. How often do you make things happen through your own input, rather than wait for things to happen?

Hardly ever 1 2 3 4 5 6 7 Very often

15. How often do you wait for other people to take charge, rather than take charge yourself?

Hardly ever 1 2 3 4 5 6 7 Very often

16. How often do you tackle matters yourself, rather than wait for others to take decisions on your behalf?

Hardly ever 1 2 3 4 5 6 7 Very often
17. To what extent do failures spur you on to improve your performance?
   Not at all 1 2 3 4 5 6 7 To a great extent

18. To what extent does recognition encourage you to perform even better?
   Not at all 1 2 3 4 5 6 7 To a great extent

19. To what extent does success encourage you to work harder and achieve greater heights?
   Not at all 1 2 3 4 5 6 7 To a great extent

20. How often does it happen that you fail on account of other people interfering in your business?
    Hardly ever 1 2 3 4 5 6 7 Very often

21. To what extent are you dependent on the advice or cues of others, in order to produce quality work?
   Not at all 1 2 3 4 5 6 7 To a great extent

22. To what extent do you like taking decisions yourself?
   Not at all 1 2 3 4 5 6 7 To a great extent

23. In a group situation, how readily would you support a group decision if you do not agree with it?
   Not at all 1 2 3 4 5 6 7 Very readily

24. How often would you air your views when they differ from someone else's?
   With great impatience 1 2 3 4 5 6 7 Very readily

25. To what extent would you prefer to follow your own mind, rather than have to follow someone else’s instructions?
   Not at all 1 2 3 4 5 6 7 To a great extent

26. To what extent do you insist on recognition of your own individual achievements?
   Not at all 1 2 3 4 5 6 7 Very strongly

27. To what extent do you take responsibility for your own intellectual development?
   To a minor degree 1 2 3 4 5 6 7 Fully

28. To what extent do you like occupying a leadership position?
   Not at all 1 2 3 4 5 6 7 Very much

29. How strongly would you stick to your viewpoint when someone for whom you have great respect disagrees with you?
   Not at all strongly 1 2 3 4 5 6 7 Very strongly

30. To what extent do you like solving complex problems?
   Not at all 1 2 3 4 5 6 7 Very much

31. How important is it for you to receive feedback on tasks which you have performed?
   Not at all important 1 2 3 4 5 6 7 Very Important

32. To what extent is reward for achievement earned?
   Not at all 1 2 3 4 5 6 7 To a great extent
<table>
<thead>
<tr>
<th>Question</th>
<th>Rating Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>33. How readily would you accept responsibility for mistakes in the work situation even though you are not at fault?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very readily</td>
</tr>
<tr>
<td>34. To what extent does Lady Luck play a role in your life?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = To a great extent</td>
</tr>
<tr>
<td>35. How strongly do you believe in fatalism?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very strongly</td>
</tr>
<tr>
<td>36. To what extent is your life influenced by coincidences?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = To a great extent</td>
</tr>
<tr>
<td>37. To what extent does the achievement of your personal objectives depend on yourself?</td>
<td>To a minor degree (1, 2, 3, 4, 5, 6, 7) = Fully</td>
</tr>
<tr>
<td>38. To what extent are other people responsible for your well-being?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = To a great extent</td>
</tr>
<tr>
<td>39. How often do you feel that you have no control over your own circumstances?</td>
<td>Never (1, 2, 3, 4, 5, 6, 7) = Very often</td>
</tr>
<tr>
<td>40. How readily do you accept responsibility for your own poor performance?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very readily</td>
</tr>
<tr>
<td>41. To what extent are you convinced that failures in life could be attributed to fate?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very strongly</td>
</tr>
<tr>
<td>42. How strongly are you convinced that the respect you receive is directly related to your behaviour?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very strongly</td>
</tr>
<tr>
<td>43. To what extent are your present achievements adversely affected as a result of negative experiences in your past?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very strongly</td>
</tr>
<tr>
<td>44. How often do you achieve set objectives, irrespective of the conditions?</td>
<td>Nearly always (1, 2, 3, 4, 5, 6, 7)</td>
</tr>
<tr>
<td>45. How strongly are you convinced that other people are in charge of your life and that they determine the outcome of issues?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very strongly</td>
</tr>
<tr>
<td>46. How strongly are you convinced that you can solve most of your problems, irrespective of the conditions?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very strongly</td>
</tr>
<tr>
<td>47. To what extent do you agree that a person cannot achieve without the right opportunities?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Very strongly</td>
</tr>
<tr>
<td>48. To what extent do you agree that failure in life can be attributed to a lack of dedication?</td>
<td>Not at all (1, 2, 3, 4, 5, 6, 7) = Fully</td>
</tr>
</tbody>
</table>
49 How strongly are you convinced that success depends mainly on hard work?
Not at all 1 2 3 4 5 6 7 Very strongly

50 How strongly are you convinced that success depends mainly upon equal opportunities in life?
Not at all 1 2 3 4 5 6 7 Very strongly

51 To what extent do you believe that advancement in life is determined by your superiors?
Not at all 1 2 3 4 5 6 7 Very strongly

52 To what extent did your parents/guardians negatively influence your achievement at school, because of interference in your affairs?
Not at all 1 2 3 4 5 6 7 To a great extent

53 To what extent is your present achievement negatively influenced by people who are not favourably disposed towards you?
Not at all 1 2 3 4 5 6 7 To a great extent

54 To what extent do you take personal responsibility for the things that go wrong in your life?
To a minor degree 1 2 3 4 5 6 7 To a great extent

55 To what extent is the outcome of matters determined by your own inputs?
Not at all 1 2 3 4 5 6 7 To a great extent

56 How often has your progress in the past been thwarted by people that were hostile towards you?
Never 1 2 3 4 5 6 7 Very often

57 How strongly are you convinced that only people who are at the right place at the right time, get promoted?
Not at all 1 2 3 4 5 6 7 Very strongly

58 How strongly are you convinced that only people who belong to the right political party have a chance in life?
Not at all 1 2 3 4 5 6 7 Very strongly

59 To what extent are you convinced that your own input bears no relation to the outcome of matters?
Not at all 1 2 3 4 5 6 7 Very strongly

60 To what extent are you convinced that achievement depends upon your utilising your own God-given talents to the full?
Not at all 1 2 3 4 5 6 7 Fully

61 How strongly are you convinced that the achievements you have obtained were deserved, and not merely due to luck?
Not at all 1 2 3 4 5 6 7 Very strongly

62 How well can you predict whether you have passed an examination, which you have just written, or not?
Not at all 1 2 3 4 5 6 7 Very well

63 How strongly are you convinced that promotions are earned through hard work and perseverance?
Not at all 1 2 3 4 5 6 7 Very strongly

64 How easy or difficult do you find it to satisfy choosy people?
Very diff. 1 2 3 4 5 6 7 Very easy
On this questionnaire are 93 statements that have been grouped into 21 categories for research purposes. Please read each group of statements carefully and pick out the one statement in each group which best describes the way you have been feeling in the past week, including today. Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

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

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

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

4. 0 I get as much satisfaction out of things as I used to
    1 I don't enjoy things the way I used to
    2 I don't get real satisfaction out of anything anymore
    3 I am dissatisfied or bored with everything

5. 0 I don't feel particularly guilty
    1 I feel guilty a good part of the time
    2 I feel quite guilty most of the time
    3 I feel guilty all of the time

6. 0 I don't feel I am being punished
    1 I feel I may be punished
    2 I expect to be punished
    3 I feel I am being punished

7. 0 I don't feel disappointed in myself
    1 I am disappointed in myself
    2 I am disgusted with myself
    3 I hate myself
65 How strongly are you convinced that clique formation is the most important determinant of social acceptance?
Not at all 1 2 3 4 5 6 7 Very strongly

66 How strongly are you convinced that you possess the ability to produce work of the highest quality?
Not at all 1 2 3 4 5 6 7 Very strongly

67 How strongly would you defend your actions if the appropriateness thereof were to be questioned by others?
Not at all 1 2 3 4 5 6 7 Very strongly

68 How strongly are you convinced that you are sufficiently qualified for the work that you are doing?
Not at all 1 2 3 4 5 6 7 Very strongly

69 To what extent do you prefer to plan and co-ordinate your own work programme?
Not at all 1 2 3 4 5 6 7 To a great extent

70 To what extent do you prefer challenging work to routine work?
Not at all 1 2 3 4 5 6 7 To a great extent

71 How often does it happen that you subsequently doubt the correctness of the decisions that you have taken?
Hardly ever 1 2 3 4 5 6 7 Very often

72 To what extent are you dependent on the support and goodwill of others in the execution of tasks?
Not at all 1 2 3 4 5 6 7 To a great extent

73 How readily would you quit if you are battling with a complex problem?
Not at all 1 2 3 4 5 6 7 Very readily

74 How often do you take the initiative in finding solutions for troublesome problems?
Hardly ever 1 2 3 4 5 6 7 Very often

75 How strongly are you convinced that the achievements you have obtained are the results of hard work and dedication?
Not at all 1 2 3 4 5 6 7 Very strongly

76 How strongly are you convinced that failures in life are due to a lack of perseverance?
Not at all 1 2 3 4 5 6 7 Very strongly

77 How strongly are you convinced that promotion in the new South Africa will depend largely on skin colour?
Not at all 1 2 3 4 5 6 7 Very strongly

78 How strongly are you convinced that it is impossible to rise above your own environment?
Not at all 1 2 3 4 5 6 7 Very strongly

79 How strongly are you convinced that your fate is determined by coincidental events over which you have no control?
Not at all 1 2 3 4 5 6 7 Very strongly

80 How strongly are you convinced that your advancement in life will be determined by certain influential people?
Not at all 1 2 3 4 5 6 7 Very strongly
On this questionnaire are 93 statements that have been grouped into 21 categories for research purposes. Please read each group of statements carefully and pick out the one statement in each group which best describes the way you have been feeling in the past week, including today. Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

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   3 I feel guilty all of the time

6. 0 I don't feel I am being punished
   1 I feel I may be punished
   2 I expect to be punished
   3 I feel I am being punished

7. 0 I don't feel disappointed in myself
   1 I am disappointed in myself
   2 I am disgusted with myself
   3 I hate myself

Annexure C
<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>I don't feel I am any worse than anybody else</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am critical of myself for my weakness or mistakes</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I blame myself all the time for my faults</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I blame myself for everything bad that happens</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>I don't have any thoughts of killing myself</td>
</tr>
<tr>
<td>1</td>
<td>I have thoughts of killing myself, but I would not carry them out</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I would like to kill myself</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I would kill myself if I had the chance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>I don't cry anymore than usual</td>
</tr>
<tr>
<td>1</td>
<td>I cry more now than I used to</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I cry all the time now</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I 'used to be able to cry, but now I can't even though I want to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>I am no more irritated now than I ever am</td>
</tr>
<tr>
<td>1</td>
<td>I get annoyed or irritated more easily than I used to</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I feel irritated all the time now</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I don't get irritated at all by the things that used to irritate me</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>I have not lost interest in other people</td>
</tr>
<tr>
<td>1</td>
<td>I am less interested in other people than I used to</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I have lost most of my interest in other people</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I have lost all of my interest in other people</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>I make decisions about as well as I ever could</td>
</tr>
<tr>
<td>1</td>
<td>I put off making decisions more than I used to</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I have greater difficulty in making decisions than before</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I can't make decisions at all anymore</td>
<td></td>
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<tr>
<td></td>
<td>0</td>
<td>I don't feel I look any worse than I used to</td>
</tr>
<tr>
<td>1</td>
<td>I am worried that I am looking old or unattractive</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I feel that there are permanent changes in my appearance that make me look unattractive</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I believe that I look ugly</td>
<td></td>
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<tr>
<td></td>
<td>0</td>
<td>I can work about as well as before</td>
</tr>
<tr>
<td>1</td>
<td>It takes an extra effort to get started at doing something</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I have to push myself very hard to do anything</td>
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</tr>
<tr>
<td>3</td>
<td>I can't do any work at all</td>
<td></td>
</tr>
</tbody>
</table>
16. 0  I can sleep as well as usual
1  I don't sleep as well as I used to
2  I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
3  I wake up several hours earlier than I used to and cannot get back to sleep

17. 0  I don't get more tired than usual
1  I get tired more easily than I used to
2  I get tired from doing almost nothing
3  I am too tired to do anything

18. 0  My appetite is no worse than usual
1  My appetite is not as good as it used to be
2  My appetite is much worse now
3  I have no appetite at all anymore

19. 0  I haven't lost much weight, if any lately
1  I have lost more than 2,5 kilogrammes
2  I have lost more than 5 kilogrammes
3  I have lost more than 7,5 kilogrammes

20. 0  I am no more worried about my health than usual
1  I am worried about physical problems such as aches and pains; or upset stomach; or constipation
2  I am very worried about physical problems and it's hard to think of much else
3  I am so worried about my physical problems, that I cannot think about anything else

21. 0  I have not noticed any recent change in my interest in sex
1  I am less interested in sex than I used to be
2  I am much less interested in sex now
3  I have lost interest in sex completely
<table>
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