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Learned helplessness, depression and academic achievement : a comparative study.

Fainstein, Daelle

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CHAPTER ONE
INTRODUCTION

1.1 Introduction

Inclusive education in South Africa focuses on “acknowledging and respecting that all people have different learning needs which are equally valued” (Landsberg, 2005, p.18). With the adoption of a more equitable educational policy of inclusion in South Africa, emphasis is placed on a holistic understanding of factors that may serve as barriers to optimal learning and development, and may thus need to be accommodated and included in a single education system (Donald, Lazarus, & Lolwana, 2002).

As such, the current challenge within South African schools is to address a wide range of learning needs that may be present. However, transformation is slow, and adjustments within schooling systems indicate gradual change at present. Consequently, many schools in South Africa face a transitional phase, which straddles both existing and incoming educational structures. Resultantly, while schools attempt to address a range of possible barriers to learners, segregation of learners with special educational needs within schools is still commonplace. This suggests that the recognising and addressing of barriers to learning differs across those students with special educational needs, be they internal or external, and those learners placed in “mainstream” classes.

The successful implementation of inclusive education in South Africa thereby calls for recognition and accommodation of a variety of personal and environmental stressors that put learners at risk for behavioural, emotional, and learning difficulties (Landsberg, 2005). In light of the current educational context in South Africa, the study is embedded in a body of literature that highlights the cognitive, behavioural and emotional manifestations and effects of learned helplessness, and related constructs, which may act as barriers to optimal learning. The study explored differences in academic achievement, learned helplessness and depression among samples of learners with varying educational needs. Moreover, the study explored the correlation between learned helplessness, depression and academic achievement, in line with existing literature in the field.

1.2 Research Aims

The primary aim of this study was a comparative analysis of the prevalence of learned helplessness, depression and academic achievement across two differing samples- a sample of learners in a mainstream class, and a sample of learners presenting with barriers to learning placed in a small class inclusion programme (SCIP). In light of this, several secondary aims were purported. The study aimed to identify and describe, using separate test scales, the prevalence of learned helplessness and depression, within the chosen samples. In turn, data yielded from the tests were used to explore the differences in the prevalence of learned helplessness and depression between the sample groups. Furthermore, the study aimed to examine the correlations between learned helplessness, depression, and academic achievement, both within and between the sample groups.

In accordance with existing research in the field (Abramson, Seligman, & Teasdale, 1978; Peterson, Maier, & Seligman, 1993; Seligman, 1995), the study aimed to provide analysis of current trends and hypotheses within the field, based on comparative data yielded from differing sample groups. In turn, results from the study were used to direct researchers towards priorities for further research in light of learned helplessness, depression, and academic achievement, within the current South African context.

1.3 Rationale

The issue of special educational needs in light of the current educational context in South Africa suggests the relevance of this study to the South African context at present. Following the transformation to an inclusive educational system, the term "special educational needs" emphasises the view that learning and behavioural difficulties may arise as a reciprocal product of both intrinsic and/or extrinsic factors. The reformulation of definitions of learning and behavioural difficulties not only broadens existing understanding of such difficulties, but also serves to clarify the high incidence of special educational needs and learning difficulties in the South African school-going population at present, and further accounts for the extent and range of special needs in the South African context (Landsberg, 2005). The reviewing of

educational policies and practices, as outlined in *Education White Paper 6* (Department of Education, 2001), resulted in the realisation that a range of needs exists among learners in South Africa. These needs were conceptualised as "barriers to learning and development" which are defined as "any factor, either internal or external to the learner, which causes a hindrance or barrier to that person's ability to benefit from schooling" (Donald et al., 2002, p. 4).

As suggested in Landsberg (2005), a large number of barriers to learning arise from an interaction of factors within external and internal systems, especially within South Africa at present. Many of these barriers can be attributed to the transformations within the educational system at present, which, despite many positive changes, do not preclude existing inadequacies and deficiencies of the system to meet increasing learner demands. This suggests that a number of factors impact on learning and development, and not only those factors associated with impairment and disability. It is thus evident that there are a number of factors that may affect optimal learning, academic achievement, and emotional development.

The learned helplessness model provides a useful account of the possible psychological consequences that children may experience following difficulties in gaining control over their learning. The resultant cognitive, behavioural and emotional manifestations and effects of learned helplessness may serve as a possible hindrance to optimal learning and development. Several longitudinal studies have examined the link between explanatory style, depression, and poor school achievement, as suggested by the learned helplessness model (Nolen-Hoeksema, Girgus, &Seligman, 1986; Sweeney, Anderson & Bailey, 1986). For the most part, such studies have supported the learned helplessness model as a useful account for depression, as all essential features of the model are all clearly present in depression cases (Seligman, 1995). Furthermore, several studies have indicated the application of learned helplessness to school achievement (Dweck, 1975; Fincham, Hokoda, & Sanders, 1989). As highlighted in the literature, "helpless" behaviour negatively affects motivation and performance, which in turn, influences academic achievement over time (Cole, Martin, Peeke, Seroczynski, & Fier, 1999).

It has been suggested that despite subsequent remedial effort, learning disabled children, or those who experience existing barriers to learning, may present as low in persistence and efforts, with increased frustration and anxiety, even at appropriate ability levels (Thomas, 1979). Studies suggest that specific learning disabilities may be addressed by the learned helplessness phenomenon (Thomas, 1979). Similarly, as highlighted in Fincham et al. (1985), in the absence of appropriate intervention, learned helplessness may be a response pattern that retards learning, especially when learning involves material that presents as challenging and difficult. Thus, learned helplessness influences and reinforces academic achievement patterns over time. It is for this reason that it has been suggested that learned helplessness is more prevalent in populations of children with learning disabilities or barriers to learning, subsequent to experiences of repeated failures and difficulties, and decreased motivation (Thomas, 1979). Further to existing literature in the field, the study hypothesised that learners placed in the SCIP class would be more at risk for learned helplessness, thereby suggesting that the prevalence of learned helplessness, and related cognitive, emotional and behavioural deficits, would be greater in the sample of learners with barriers to learning.

The rationale for this study thus lies in the possible recognition of learned helplessness as a barrier to learning. In light of the current educational context within South Africa, it is necessary to examine the possible differences in explanatory style, and resultant cognitive-behavioural manifestations and effects, as a possible hindrance to optimal learning and development. The recognition of differing emotional reactions and subsequent styles of coping has important implications for examining differences in causal attribution, emotional coping, and academic performance across learners with varying learning needs (Wiggins, 2003).

Against a backdrop of transformation within the educational context at present, the study endeavoured to explore a relevant, but under-researched field in South Africa at present.

CHAPTER TWO
LITERATURE REVIEW

2.1 Overview

This chapter presents a review of the theories on which the research is based. Previous research conducted in the field relevant to the study has been included, in order to provide a contextual understanding for the present study. The link between explanatory style, depression, and poor school achievement, as suggested by the learned helplessness model, has been explored in several longitudinal studies (Nolen-Hoeksema et al., 1986; Sweeney et al., 1986). The concept of learned helplessness originally referred to a learned non-contingency between behaviour and important outcomes, resulting in reduced persistence and depressive-type affect (Seligman, Maier, & Solomon, 1971). Later research revealed that older children exhibit learned helplessness with respect to achievement outcomes (Dweck, 1975). This achievement-based helplessness was associated with a tendency to attribute failure to ability rather than effort. The belief that successful performance is no longer contingent on actions, but rather ability, led to decreased persistence and performance (Burhans & Dweck, 1995). Achievement-based helplessness thereby includes several cognitive, affective and behavioural components. Such theory suggests that concepts such as poor self-esteem, poor motivation, and depression can be viewed as having a direct effect on experiences of success or failure in a variety of learning situations (Beck, 1971; Phares, 1973, as cited in Thomas, 1979).

2.2 The Learned Helplessness Model

The concept of learned helplessness was developed by Overmier and Seligman (1967), following a series of animal studies. Observation of dogs repeatedly exposed to uncontrollable negative events (inescapable shocks), showed that the dogs eventually discontinued their efforts to escape, even after the situation changed so that escape was possible. The dogs learned an independence between their behaviour and the aversive stimulation they received and were therefore helpless to effect change in their later circumstances (Martinko & Gardner, 1982). Maier and Seligman (1976) proposed “learned helplessness” as a cognitive model to explain the behavioural,

cognitive and emotional deficits evident due to the experience of uncontrollable events.

Experiments designed to explore the learned helplessness hypothesis in humans followed the original experiments seen in animal studies. As in the animal studies, humans were found to display cognitive, behavioural, and emotional deficits following uncontrollability. These included subsequent failure to learn that responses can affect outcome, decreased response initiation, and depressed affect. It was further noted that the expected independence between response and outcome could be generalised to different situations (Abramson et al., 1978).

The phenomenon of learned helplessness was used as a possible explanation for observed behaviours in human research. Later, due to observed similarities in symptoms of learned helplessness, and symptoms of depression, learned helplessness was proposed as a model of depression in humans (Peterson et al., 1993). The model proposed that learned helplessness and depression had similar behavioural and physiological manifestations, as all essential features of the model are all clearly present in depression cases (Seligman, 1995). According to the model, depression results from a non-contingency between expected outcomes and personal responses (Peterson et al., 1993). As explained in Thompson (2002), this suggests that when a person is exposed to an experience in which outcomes are non-contingent upon responses, the perception of non-contingency results in apathy, depressed affect and a cognitive deficiency in the learning of new responses. In turn, subsequent learning, motivation, and affect are affected by generalised perceptions of non-contingency, should this occur. Resultantly, "helpless" response patterns were purported as similar to those seen in depression cases. As such, the learned helplessness model was proposed as a model of depression (Maier & Seligman, 1976).

2.3 Reformulation of The Learned Helplessness Model

Abramson et al. (1978) reformulated the model of learned helplessness and reviewed the implications of the model as an account for depression. In light of the shortcomings of the model, the original helplessness model was revised to include attribution theory, which focuses on the causal beliefs, or the reasons that a person

attributes to behaviour. Attribution theory is a cognitive theory, which explores both internal and external attributions or causes (Abramson et al., 1978). The inclusion of attribution theory thereby focused on the habitual explanatory styles that people ascribe to events they experience (Peterson et al., 1993).

Attribution theory postulated that human behaviour is not controlled by "the schedule of reinforcement in the environment", but rather by an internal mental state- the explanations made by people for why the environment has scheduled such reinforcements. Learned helplessness is thus inextricably linked to explanatory style. Learned helplessness functions from the premise that "whatever you do doesn't matter". It can thus be deduced that a largely pessimistic explanatory style belies the development of learned helplessness (Seligman, 1990, p. 41).

Abramson et al. (1978) proposed that people prone to learned helplessness make causal explanations for the uncontrollable events they encounter. These causal explanations affect self-esteem, and the generality of deficits. This suggests that a person need not actually experience repeated events in order for them to occur- but rather, the person needs to expect that events will be uncontrollable. Expected non-contingency between responses and outcomes results in causal explanations for the expected non-contingency. This explanation influences expectation of future non-contingency, which in turn determines the nature of helpless deficits (Peterson et al., 1993).

In the reformulation, Abramson et al. (1978) propose three dimensions of causal explanations – internal-external causes; stable-unstable causes; and global-specific causes. Internal attributions are associated with personal helplessness, as uncontrollability is attributed to individual factors within the person. External explanations are associated with universal helplessness, as uncontrollability is attributed to situational or circumstantial factors that would likely have an effect on anyone who experienced such factors. Thus loss of self-esteem with internal factors is more likely than with external attributions.

Within the second dimension, stable causes are those that are persistent and enduring, while unstable factors are those that are temporary and sporadic. Stable causes are

more likely to result in passivity and helpless deficits, as the causes are seen as constant. Thirdly, global causes are those that can be generalised to several situations or outcomes, while specific causes are those that remain particular to a given situation or outcome.

As explained in Abramson et al. (1978), these three dimensions interact to determine a person's particular attributional style, which accounts for how people "habitually explain events…and allows for individual variation in response to uncontrollability (Peterson et al. 1993, p. 151)". Attributional style is seen as relatively stable, which in turn suggests that the probability and duration of helplessness can be predicted in light of personal attributional style. Individuals at risk for cognitive, behavioural, and emotional effects of helplessness were hypothesised to be those who tend to make stable, global and internal attributions for failure (Thompson, 2002).

Learned helplessness thus occurs when an individual learns that outcomes are uncontrollable by responses, and in turn, is seriously debilitated by this knowledge (Maier & Seligman, 1976). When an action seemingly has no change or effect on a desired outcome, events are seen as beyond control, despite efforts. This occurs to the extent that efforts are ceased, task persistence drops, and emotional accompaniments, such as passivity and anxiety may occur (Thornton & Jacobs, 1971; Maier & Seligman, 1976).

Research studies (Hiroto & Seligman, 1975; Gatchel & Proctor, 1976; Miller & Seligman, 1975, as cited in Martinko & Gardner, 1982) have supported the notion that learned helplessness is a fundamental type of learning, as both the original and the reformulated theory of learned helplessness focus on cognitive processes (Overmier & Seligman, 1967). The attributions made by a person for non-contingency between acts and outcomes determine subsequent expectation of future non-contingency, which in turn determines the type of helplessness symptoms (Valas, 2001a, 2001b). Indeed, learned helplessness has been demonstrated to be a reasonable explanation for depressive behaviour, and motivational deficits in the classroom (Seligman, 1975; Dweck, 1975).

2.4 Learned Helplessness as a Model for Depression

The research is embedded in a body of literature that explores the possible psychological consequences that children may experience following difficulties in gaining control over their learning environment. As suggested in the literature, the resultant cognitive, behavioural, and emotional manifestations of learned helplessness might serve as reasonable explanations for depressive symptoms, and learning deficits.

Some of the research emanating from the learned helplessness model has "confirmed the existence of a depressive attributional style that attributes uncontrollable bad events to internal, stable and global factors" (Mitchell, 2001, p. 448). The results of such research have confirmed the applicability of a characteristic attributional style for depression, and have further suggested a more general applicability. Studies (Sweeney et al., 1986) have confirmed the generalization suggested by attribution theory, which holds that Internality, Stability, and Global Attributions are characteristically higher for positive events than negative events in individuals who do not present with depressive symptoms. It was hypothesized that there would be an association of negative attributional style and depressive symptoms only in the presence, but not in the absence, of negative life events (Abramson et al., 1989). Thus a pre-existing cognitive style, in which internal, stable, global attributions are made following experience of negative events, purports a predisposition to depression.

2.5 Cognitive Models of Depression

As highlighted by Hirsch and Conner (2006), cognitive theories of depression have highlighted the critical importance of cognitive styles and patterns. Much of this research has focused on cognitive styles that promote the development of adverse behavioural and affective responses. Cognitive models of depression suggest the tendency to commit negative cognitive errors about personally relevant events, which contribute to the onset and maintenance of affective problems, as seen in both child and adolescent populations (Kaslow, Rehm, Pollack & Siegel, 1984; Weis, Weiss, Wasserman & Rintoul, 1987). In the context of continuing interest in the determinants of depression, there has been a focused interest in an explanation of depression based

on the reformulated learned helplessness model (Abramson et al., 1978). Learned helplessness, as a cognitive-behavioural approach, emphasizes the role of beliefs and behavioural contingencies in causing depression. Beck (1976) proposed that children with depression hold maladaptive thoughts and beliefs that distort the way in which they process information. Incoming information is thus interpreted according to these negative perceptions, such that everyday events are viewed as hopeless, sad and aversive (Kronenberger & Meyer, 2001). Similarly, Seligman's model of learned helplessness supports the notion that depressive attributional style has been found to be related to depressive symptomatology in children. Maladaptive attributions focus on internal, stable, and global attributions for negative life events (Kronenberger & Meyer, 2001).

According to the reformulated learned helplessness model, depression results from uncontrollable aversive events. The nature and consequences of depression are determined by causal attributions or explanations given for such events. Internal attributions resultantly lead to depression in which a loss of self-esteem is experienced, while stable attributions predict long-lasting symptoms of depression. Furthermore, if the uncontrollable events are attributed to causes that are felt to be present in a variety of situations (global attributions) as opposed to specific attributions, the resulting depression is predicted to be pervasive (Abramson et al., 1978).

2.6 Learned Helplessness and Depression

In a sample of children, Nolen-Hoeksema et al. (1986) assessed the contribution of attributional style and negative life events to depression. In two of four instances, the interaction between pessimistic attributional style and negative life events significantly predicted future levels of depression. Studies have shown that individuals with a pessimistic explanatory style show increased depressive symptoms following exposure to negative events (Priester & Clum, 1992; Gillham et al., 2001, as cited in Hirsch & Conner, 2006).

According to Abramson et al. (1978), the generality of the depressive deficits will depend on the globality of the attributions of helplessness. The chronicity of the

depression deficits will depend on the stability of the negative attributions. Changes in self-esteem will depend on the internality of these negative attributions.

Review of the literature suggests that more cross-sectional than longitudinal studies have been conducted to examine the relationship between explanatory style and depression. Results of these studies (Peterson & Seligman, 1984; Sweeney et al., 1986) have shown that the cognitive tendency to attribute negative events to internal, stable, and global causes is associated with severity of concurrent and future depression. Furthermore, in a meta-analytic review of more than 100 explanatory style studies, Sweeney et al. (1986) reported evidence for the predicted relationship between explanatory style and depressive symptoms. These studies further found that the severity of depressive symptoms (as measured by the Beck's Depression Inventory) is often correlated with attribution of internal, stable, and global causes to bad events.

According to Abramson et al. (1989), in conducting research on the correlation between explanatory style and depression, it would be useful to select subjects on the basis on the presence or absence of an attributional style predisposed to depression, and to compare those groups. Accordingly, in a study conducted by Alloy, Lipman and Abramson (1992), it was found that currently non-depressed students with a depressive attributional style had higher rates of specific depressive symptoms in the past two years than currently non-depressed students with a non-depressed attributional style. Further research suggests that children with depression hold more negative beliefs about interpersonal relationships, and present with weaker social problem-solving skills (Kronenberger & Meyer, 2001). Moreover, research on the cognitive correlates of depression reveals that depressed children selectively recall events that are negative, evaluate such events more harshly, and over- generalize about such events (Cole et al., 1999).

The above-mentioned studies have clearly demonstrated a link between attributional style, as suggested by the learned helplessness model, and depressive symptoms/ depression. However, it is evident that while some of these studies (Nolen-Hoeksema et al., 1986) have been conducted with child and adolescent populations, there is a need for further research in South Africa with child and adolescent populations, which

are applicable to the South African educational context at present. Furthermore, in light of the move towards inclusive education in South Africa, there is an increased need for research that focuses on cognitive styles that may foster and promote improved behavioural and affective functioning.

2.7 Learned Helplessness and Academic Achievement

As explained by Seligman (1990), traditional views of achievement attribute success to a combination of talent and desire. Similarly, it can be deduced that failure results from absence of talent and desire. However, Seligman (1990) posits that the presence of a third factor- optimism or pessimism- acts as a significant contributor to measures of achievement.

As postulated by Dweck (1975), the theory of attributional determinants can be used to explain academic performance and achievement. The cognitive (attributions), behavioural (motivation) and emotional (self-esteem and depression) effects on a child, who has a cognitive processing style predisposed to learned helplessness, have been correlated with poor academic achievement. Dweck asserts that children can be categorised as "helpless" or "mastery-oriented" in their attributions to academic success or failure. "Helpless" children are those who attribute failure to lack of ability despite possible prior success. In this regard, the attribution of failure to internal and stable causes, leads to decreased persistence and increased negative feelings.

Children's idea of ability becomes more differentiated with age. It is only at early adolescence that some form of formal operational thought is developed, which suggests that ability is fully differentiated from effort, and is conceptualised as an entity unaffected by effort. Furthermore, as children enter secondary school they experience systematic changes in activities, organisation and evaluation practice, which also contribute to shifts in their ability judgements (Stipek & MacIver, 1989 as cited in Cole et al., 1999). School becomes more formal, more evaluative and more competitive, while the focus shifts from the learning process to evaluation of the learning outcomes. Such changes are coupled with increased academic demands and pressure, and changes in motivation, expectations, and effort. Students' self-

confidence in mastering tasks declines with age and experience (Cole et al., 1999). Thus it is expected that older students will be more likely to attribute failure to internal, stable and uncontrollable factors more often than younger students, which in turn may affect helpless expectations, helplessness, self-esteem, and depression (Valas, 2001a, 2001b).

Previous studies, as suggested in Valas (2001a, 2001b), show a link between constructs of learned helplessness and academic outcomes. Research findings (Cole et al., 1999; Valas, 2001a, 2001b) suggest that past academic achievement influences the patterns of attributions. Thus, children who have a history of poor performance are more likely to attribute failure to low ability. As past academic performance may also affect attributional patterns indirectly through academic self-concept, children who experience continuous academic under-achievement, make attributions of academic incompetence, in which failure is attributed to lack of ability (Valas, 2001a, 2001b).

In a study conducted by Valas (2001a, 2001b), mathematical and verbal performance were found to be significantly related to attributional style, expected outcomes, and symptoms of helplessness. It was found that high achieving students attributed success more often to effort and more seldom to ability than low achieving students. It was also found that high achieving students had more positive expectations and showed less helplessness than low achieving classmates. Significant relations were found between achievement and attributional style, highlighting that achievement is negatively related to attributional style, which attributes outcomes to abilities rather than effort. In another study conducted by Peterson and Barrett (1987), as cited in Martinez and Sewell (2000), university freshmen with a pessimistic explanatory style tended to achieve lower grade point averages in their first year of college.

It is evident that academic adjustment, generally demonstrated through achievement, motivation and perceived competence, is widely perceived as important for continued success (Shahar et al, 2006). Overall, students' academic adjustment seems to decline in secondary school. As suggested above, these declines are often thought to be associated with transitions within the schooling environment, exacerbated by developmental changes (Shahar et al., 2006). However, not all children experience

these declines, and researchers have begun to focus on the factors associated with individual differences in this area.

2.8 Learned Helplessness, Academic Achievement and Learning Difficulties

Learned helplessness has been vastly studied in light of children with learning difficulties (Fincham et al., 1989; Martinko & Gardner, 1982; Thomas, 1979) Many children who experience learning difficulties may experience school as a negative experience, over which they feel little or no control, despite effort. Often, the self-images of these children are particularly at risk, following repeated academic difficulty and/or failure. Furthermore, learned helplessness affects motivation to learn (Valas, 2001a, 2001b).

Results from studies (Fincham et al., 1989; Shahar et al., 2006; Valas, 2001a, 2001b) suggest that children with a learning difficulty experience failure in core subject, possibly despite considerable work. In turn, these students will attribute failure to uncontrollable causes- lack of ability. Furthermore, research findings, as highlighted in Valas (2001a, 2001b), suggest that past academic performance influences the pattern of attributions. Often, difficulties and failures are attributed to internal, stable, and global factors, such as low ability. This leads to an expected non-contingency between work and results, which gives rise to symptoms of personal helplessness. In turn, these may lead to lowered self-esteem and increased depressive symptoms (Valas, 2001a, 2001b).

In comparative studies between children with and without learning difficulties, it has been found that learned helplessness might be more prevalent in children with learning disabilities (Shahar et al., 2006; Valas, 2001a, 2001b). However, in a longitudinal study conducted by Fincham et al. (1989), learned helplessness was found to a reliable predictor of achievement in a sample of children without learning disabilities.

2.9 Academic Achievement and Depression

As highlighted in Marcotte, Levesque and Fortin (2006), several recent studies have reported high rates of depressive symptoms in school populations. Resultantly, impaired school performance has been noted as one of the short-term consequences of a depressive episode. Despite this observed consequence of depression, impaired academic functioning has rarely been the focus of studies. As such, the association between depression and academic performance rarely has been addressed in the literature. Traditionally it is the impact of learning and conduct disorders that have been associated with a lower academic performance. However, Cheung (1995) notes that few studies have reported that depressive symptoms may be associated with academic difficulties and lower performance. Furthermore, a higher level of depressive symptoms was reported in students with learning difficulties. Chen, Rubin, and Bo-Shu (1995) further reported that a decline in academic performance was associated with depressive affect; however, academic difficulties were predictive of later depression only for children from families in which a conflictual marital relationship was presenting. Further studies concluded that depressive symptoms in children predicted lowered academic performance in both genders, while low academic performance predicted depressive symptoms for girls only (Kellam, Rebok, Mayer, Ialongo, & Kalodner, as cited in Marcotte et al., 2006).

It is evident that despite some research in the field of academic performance and depression, further research is needed to explore the association between school difficulties and depression. As a result of this, it remains uncertain whether depressive symptoms manifest as a result of academic difficulties, or if such symptoms preceded the decline in academic performance (Marcotte et al., 2006).

2.10 The impact of inclusive education in promoting optimal functioning and adjustment- The move towards a positive psychology

The individualistic, medical approach has thus far ignored the range of systemic and broader socio-economic factors that are influential in the development and perpetuation of behavioural and emotional problems, and learning difficulties. Inclusive education thereby prescribes a shift from the traditional child-deficit,

medical approach towards an ecological and multi-levels systems approach, suggesting a wider scope of analysis and action. The adoption of inclusive education in South Africa calls for recognition of a variety of personal and environmental stressors that put learners at risk for behavioural, emotional, and learning difficulties (Landsberg, 2005). With an increased focus on contextual factors, an inclusive approach to education focuses on developing learner strengths, to overcome difficulties, thus empowering and enabling learners to participate actively and critically in the learning process (Engelbrecht, 2004).

In line with this, the positive psychology movement has focused on the promotion of psychological strengths and environmental conditions that support the development of strengths. This movement seeks to expand the focus of psychology from repairing deficits to building positive qualities in people (Lopez, Snyder, & Rasmussen, 2003; Seligman & Csikszentmihalyi, 2000). Karver and Bickman (2002, as cited in Lewis, Huebner, Reschly, & Valois, 2009) highlight the importance of examining both maladaptive and positive functioning, in order to enhance understanding of well-being and development. Thus, positive psychology upholds the principles of inclusive education by placing emphasis on both intrinsic and extrinsic factors that foster and sustain improved functioning and development.

Previous research has shown that social relationships with parents, peers, and teachers, as well as school bonds and neighborhood contexts, are related to the social, behavioral, and emotional adjustment of students. Research findings have suggested associations between children's relational–contextual experiences *and* social–emotional adjustment (Murray & Greenberg, 2006; Talbott & Fleming, 2003). Murray and Greenberg (2006) highlight the role of caregiver, teacher, and peer relationships in influencing adjustment and well-being. Positive aspects of contexts are suggested to be crucial in maintaining optimal functioning and development. The findings suggest that an accumulation of positive or negative relationships and experiences may prove more influential in the overall health and well being of children and youth than any single variable on its own. This alludes to the importance of examining the dynamic interplay of various systems that contribute to overall functioning in children.

A move towards a positive psychology incorporates analysis of positive experiences and individual personality traits that promote well-being and emotional functioning (Duckworth, Steen, & Seligman, 2005). It is suggested that such analysis serves to enhance factors that foster adjustment and learning, and may thereby counteract barriers to learning. Thus the move towards a positive psychology in central to the implementation of inclusive education in South Africa, as it serves to highlight and encourage learner strengths, and to build on those to promote development and learning.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Research Design

A research design serves as a plan for minimising the risk of extraneous variables that may hinder, and thus impact the validity of the results (Mouton & Marais, 1996). Quantitative methods, measuring the frequency and differences in processes, were employed in this study. The use of descriptive, correlational statistics was identified as the most suitable method in eliciting required data for comparative analysis (Breakwell, Hammond, & Fife-Shaw, 1998). The study yielded quantitative data, which was used to examine the differences in learned helplessness, depression, and academic achievement between the sample groups. The data gathered and analysed were thus descriptive, as the study was concerned with describing the existing distribution of variables and comparing the frequencies between the different groups (Grimes & Schultz, 2002). Furthermore, the study was exploratory and correlational in nature as it aimed to explore the relationship between learned helplessness, depression, and academic achievement across samples. The data were analysed and interpreted to establish if a correlation exists between learned helplessness, depression and academic achievement. Correlational studies examine associations between exposures and outcomes in populations (Grimes & Schultz, 2002). This study further examined specific correlations between the outcomes of two population groups – of the mainstream learners, and learners with barriers to learning.

3.2 Research Questions

The following research questions were used to guide the study:

1. Is there a significant difference in the prevalence of learned helplessness between a sample of mainstream learners and a sample of learners with barriers to learning?

2. Is there a significant difference in the prevalence of depression between a sample of mainstream learners and a sample of learners with barriers to learning?

3. Is there a significant difference in the academic achievement of a sample of mainstream learners and a sample of learners with barriers to learning?

4. What is the correlation between learned helplessness, depression, and academic achievement, both within and between sample groups?

3.3 Research Sample

A theoretical sampling method was employed in selecting participants for the study (Neuman, 1997). The subjects of the study constituted a purposive sample, comprising the learners from the intersen phase (grades 5, 6 & 7) of the chosen school. As outlined in Burhans and Dweck (1995), the validity of the learned helplessness model has been documented in middle to late grade school and junior high school children, as certain aspects of the model appear not to be applicable to younger children. The choice of sample was thus based on existing literature which suggests that attributions associated with learned helplessness may not result in learned helpless behaviour until the middle elementary school years and the simultaneous emergence of a more stable self-concept (Fincham et al., 1989). As such, most of the available data on learned helplessness in school-aged children pertain to learners in fourth and fifth grade and upwards (Fincham et al, 1989).

The subjects of the study included learners from a private co-ed primary school in Johannesburg. The school offers both a mainstream class per grade, as well as a bridging class for learners who experience barriers to learning. Both classes follow the same curriculum and prescribe the same learner outcomes, with the intention of possible mainstreaming of learners with barriers to learning. As such, only those learners who may benefit from the small class inclusion programme (SCIP) are placed in classes for learners with barriers to learning. In light of this, these learners are not globally delayed in functioning, and present with low average-to-average IQ scores. The range of barriers to learning accommodated at the school includes mild (non-

clinical) emotional and scholastic difficulties that may affect optimal learning within the classroom. These learners receive both in-class and extra-curricular support.

The learners attending the school range from middle to middle-upper socio-economic class families and multicultural backgrounds. The medium of language taught at the school is English, and the use of chosen instruments is thus appropriate for the sample.

All learners within Grades five, six and seven were invited to participate in the study. The sample used for the study, however, only included those learners who had returned signed parental consent forms, and were thus legally entitled to participate in the study. In total, the sample included 57 learners from the intersen phase.

3.4 Measurements and Instruments

3.4.1 Children's Attributional Style Questionnaire (CASQ)

Learned helplessness is measured using the CASQ questionnaire, which was designed to measure attributional style in children. The CASQ is a forced-choice instrument created by Seligman, Peterson, Kaslow, Tanenbaum, Alloy, &Abramson (1984), following noted difficulty experienced by young children when completing the adult ASQ. As such, the CASQ is a 48 item standardized questionnaire designed for children aged eight to 13. Hypothetical good or bad events involving the child are followed by two possible explanations. For each event, one of the explanatory dimensions is varied, while the other two are held constant. 16 questions pertain to each of the three dimensions; half refer to good events and half refer to bad events (Peterson et al., 1993).

Assigning a 1 to each internal or stable or global response, and a 0 to each external or specific response scores the CASQ. Scales are formed by summing the three scores across the relevant questions pertaining to each of the three dimensions, separating good and bad events. While the CASQ subscales are only moderately reliable, satisfactory reliabilities can be obtained from combining subscales, separately for good and for bad events. In a study conducted in South Africa by Mayer (1999, as

cited in Thompson, 2002), the internal reliability of the CASQ, as measured by Cronbach's alpha, was found to be satisfactory ($\alpha = 0.75$) with a sample of black children. The CASQ scales and composites are consistent in showing explanatory style to be a somewhat coherent individual difference among children (Peterson et al., 1993).

In order to gain an overall composite explanatory style score, the composite score for bad events is subtracted from the composite score for good events. Resultantly, the overall style score (G-B) is used as a measure of learned helplessness. An overall score of less than five is considered indicative of a pessimistic explanatory style, and thus learned helplessness (Nolen-Hoeksema, et al., 1986).

The CASQ was employed in a previous study in South Africa (Thompson, 2002), in which certain items were modified in order to make the CASQ more suitable to the South African context. While the constructs measured by each item were held constant, vocabulary and content were altered on certain items, in order to ensure applicability of the CASQ to the South African context. This modified version was employed for the purposes of this study. An example of an original item (item 37) is given below.

> You go to an amusement park and have a good time.
> ____ A. I usually enjoy myself at amusement parks.
> ____ B. I usually enjoy myself.

As the term "amusement park" is not commonly referred to in the South African context, this item was adapted to refer to a specific amusement park in South Africa. Thus the modified version reads as:

> You go to Gold Reef City and have a good time.
> ____ A. I usually enjoy myself at Gold Reef City.
> ____ B. I usually enjoy myself.

3.4.2 Children's Depression Inventory (CDI)

As outlined by Seligman (1996), there is no conclusive way to assess depression in children short of a clinical diagnostic interview. However the CDI serves as a reliable approximation of depressive symptoms in children aged between six and 17. The CDI (Kovacs, 1992, as cited in Kronenberger & Meyer, 2001), a downward extension of the Beck Depression Inventory, is a questionnaire used to measure the intensity of each of the four clusters of depressive symptoms, and is thus a useful tool in highlighting possible depressive behaviour. It is a 27-item self-report measure of cognitive, affective, behavioural, and social symptoms of depression. Each item consists of three statements, one of which represents nondepressed symptomatology (scored as 0), one of which represents moderately depressed symptomatology (scored as 1), and one of which represents severely depressed symptomatology (scored as 2). The child chooses the statement that best describes experiences over the past two weeks.

Items are then added to give a total score and five subscale scores, each measuring Negative Mood, Interpersonal Problems, Ineffectiveness, Anhedonia, and Negative Self-Esteem. A raw score of 19 is commonly used as the cut-off, indicating clinical levels of depression. Lower cut-off scores prescribe greater sensitivity, but lower specificity (Kronenberger & Meyer, 2001). For the purposes of this study, item 9, which enquires about suicidal ideation and intent, was omitted from the questionnaire, as it was felt that the sensitive nature of this question was not conducive to the purposes of the study, and was not appropriate for the nature of the chosen sample. Scoring thereby assumed a total possible score based on 26 items.

While the CDI has not been standardised in South Africa, the questionnaire has good psychometric properties with high internal consistency, and moderate test-retest reliability (Kronenberger & Meyer, 2001). It must be noted that the CDI was not designed to reflect symptomatology as reflected in DSM-IV-TR, and thus may not be adequate in identifying children with DSM-IV-TR defined depression. Therefore, the CDI should only be considered as a self-report measure of depression-anxiety, with most items being face-valid for depression.

3.4.3 Academic Marks

Academic marks of the participants were obtained from the class teachers in the form of English and Maths marks as indicated on the previously completed end-of-term school report. These marks were used as subjective measures for academic achievement, reflecting standards held by the school, and prescribed outcomes as required by the Gauteng Department of Education. As suggested by Sun (2006), the reliability of the scores was dependent on teachers' standards and expectations while validity was attained relative to each child's unique performance (within-subjects comparison) and to the class overall (between-subjects comparison).

3.5 Data Analysis

Statistical methods were employed to analyse the data. Descriptive statistics were used to highlight the prevalence of learned helplessness, depression, and academic achievement within the sample groups. Descriptive statistics were further used to ascribe a numerical value to raw scores gleaned from the sample data (Breakwell et al., 1998). As the study was concerned with describing the existing distribution of variables and comparing the frequencies between the different groups, the data gathered and analysed were descriptive (Grimes & Schultz, 2002). Descriptive statistics allowed for the graphic (tabulated) representation of scores, calculation of means and other measures, and analysis of distribution of scores (Howell, 1997).

As the study was comparative in nature, statistical measures were used to assess the differences between groups. Moreover, as the study investigated three dependent variables (learned helplessness, depression, and academic achievement), which may be related to the other variables assessed in the study, a multivariate analysis of variance (MANOVA) was required in order to analyse the data. Thus, rather than using separate analyses of variance to understand each variable, it was considered prudent to assess all of the related dependent variables in one analysis (Devlin, 2006). An assumption required for the correct use of a MANOVA is the assumption that the scores in each population are normally distributed around the population mean, or that the sampling distributions between means are normal (Howell, 2008). Normal

distribution of each of the variables was thus tested, through the use of a Shapiro-Wilk's test of normality.

A MANOVA involves one analysis, thus avoiding the need to use separate t-tests, thereby reducing the possibility of Type 1 error, or the possibility that significant results are due to performing multiple statistical tests, rather than to a true difference. A MANOVA was used to assess whether there is a significant linear combination of the dependent variables in terms of the independent variables (the two sample groups). The univariate effects, or between-subject effects, were then examined separately for each of the dependent variables (Devlin, 2006). These were used to assess the difference of each of the dependent variables between the sample groups.

As the study also aimed to explore the correlation between each of the dependent variables, a Pearson-*r* correlation was used to examine if there is a systemic relationship between the variables (Devlin, 2006). The aim of a correlational design is to show that levels of one variable are associated with another, and as such, no causal relationship can be inferred from correlational analyses (Breakwell et al., 1998).

3.6 Procedure

This research study abided by ethical codes of conduct according to the ethical research guidelines established by the committee for Research on Human Participants (Humanities) of the University of Witwatersrand (Wits). Ethical clearance was granted (protocol number MEDP/09/006 IH). Furthermore ethical guidelines, as outlined by Babbie and Mouton, (2001), were employed for this study. Permission to conduct the study was obtained form the school principal. Full information regarding the research study was provided (See Appendix A).

The parents/legal guardians of the invited participants were required to provide written informed consent to allow their children to participate in the study, stipulating their understanding and acceptance of the research aims and process (refer to Appendix B). The learners, who accepted the invitation to become participants in this research project, further completed assent forms, stipulating in writing their voluntary involvement in this project (refer to Appendix C).

Questionnaires were administered on a group basis by the researcher in order to ensure consistency of process and content. Questionnaires were read aloud by the researcher, in order to account for any reading difficulties that may have been encountered by the participants. Group exercises followed administration of the questionnaires to serve as debriefing. Following administration and completion of the questionnaires by the learners, the class teachers were given the telephone number of the Emthonjeni Centre, should further referrals for counselling or assessment have been deemed necessary. The class teachers were further encouraged to contact the Emthonjeni Centre or school-based psychologist should it have been noted that any of the learners require further intervention.

In order to ensure that confidentiality was maintained throughout the research process, all respondent data was coded and kept in a locked cupboard by the researcher, ensuring privacy in the best way possible.

CHAPTER FOUR
RESULTS

4.1 Overview of Chapter

This chapter presents an overview of the statistical analyses conducted in the study, and the result thereof. Results are reported in terms of the aims and research questions guiding the study, as specified. Descriptive statistics comprise an introduction to this chapter, as they serve to highlight the existing distribution of variables between the sample groups. Similarly, descriptive statistics allow for the calculation of means and analysis of distribution of scores. Descriptive statistics are presented in tables 1, 2, and 3 below.

Further to this, this chapter presents the statistical results pertaining to analysis of the differences in each of the measured constructs (learned helplessness, depression, and academic achievement) between sample groups. Results of a multivariate analysis of variance (MANOVA) are reported in order to determine significant statistical differences between the mainstream group, and learners placed in small-class inclusion programmes (SCIP). As the correct use of a MANOVA requires assumptions of normality, results of the Shapiro-Wilk's test of normality are presented as an introduction to the presentation of the MANOVA results.

The final part of this chapter presents an analysis of the correlation between the measured constructs- learned helplessness, depression, and academic achievement- both within and between the sample groups. Results of a Pearson-*r* correlation are reported to determine the relationship between the measured constructs. These are initially reported as separate analyses of the correlations within each of the sample groups. However, in light of the research questions guiding the study, results pertaining to the whole sample are presented, in order to gain understanding of any significant relationships between the measured constructs.

4.2 Descriptive Statistics of Sample Groups

Tables 1, 2, and 3 below show the means, standard deviations, and minimum and maximum scores of each of the measured constructs. These are tabulated separately for each of the sample groups (Tables 1 and 2) as well for the full sample group (Table 3).

Academic Achievement is recorded as an overall percentage gleaned from English and Maths marks. According to the standards maintained by the school and the Department of Education, an overall average equal to or greater than 50% is considered acceptable.

CDI scores are represented to indicate the overall levels of depression amongst the sample groups. A score equal to or greater than 19 is considered indicative of clinical levels of depression. Cut-off scores equal to or greater than 12 may indicate greater sensitivity to depression, with lower specificity (Kronenberger & Meyer, 2001).

The overall score used as a measure of learned helplessness (gleaned from the G minus B scale), as represented by the CASQ score, indicates the attributional style of the child. Overall, scores lower than 4 indicate that the child attributes bad events to internal, stable and global causes, and thus has a largely pessimistic attributional style. Similarly, scores equal to or greater than 5 indicate that good events are attributed to external, unstable, and specific causes, highlighting an overall optimistic attributional style (Nolen-Hoeksema, et al., 1986).

Mainstream Sample					
Variable	**N**	**Mean**	**Std Dev**	**Min**	**Max**
Academic Achievement	28	78.04	9.79	55.00	92.00
CDI score	28	6.53	8.64	0.00	22.00
CASQ score	28	5.79	8.73	0.00	16.00

Table 1: Descriptive Statistics of Mainstream Sample (N=28)

The mean Academic Achievement score of the mainstream sample is 78.04. This highlights that the overall academic achievement of this group is well above the acceptable average. The mean CDI score of the mainstream sample is 6.53. This mean indicates that this group does not display moderate or significant levels of depression. Moreover, a mean score of 5.79 on the CASQ indicates that this group has a more optimistic than pessimistic attributional style.

SCIP Sample					
Variable	**N**	**Mean**	**Std Dev**	**Min**	**Max**
Academic Achievement	27	60.43	9.83	41.50	77.50
CDI score	27	8.46	8.72	1.00	20.00
CASQ score	27	6.24	8.72	0.00	16.00

Table 2: Descriptive Statistics of SCIP Sample (N=27)

The mean Academic Achievement score of the SCIP sample is 60.43. As expected, this mean is lower than that of the mainstream group. However, a mean of 60.43 indicates that the overall academic achievement of this group is still well above the acceptable average. The mean CDI score of the mainstream sample is 8.46. This mean indicates that this group does not display moderate or significant levels of depression, despite the mean score's being higher than that of the mainstream group. The mean CASQ score of the SCIP group is 6.24. This indicates that this group has a largely optimistic attributional style.

Full Sample					
Variable	**N**	**Mean**	**Std Dev**	**Min**	**Max**
Academic Achievement	55	69.39	13.17	41.5	92.00
CDI score	55	7.45	8.68	0.00	22.00
CASQ score	55	6.01	8.73	0.00	16.00

Table 3: Descriptive Statistics of Full Sample (N=55)

The mean Academic Achievement score of the full sample is 69.39. This highlights that the overall academic achievement of this sample is well above the acceptable average. Overall, the mean CDI score of the full sample is 7.53, indicating that this group does not display moderate or significant levels of depression. Moreover, a mean score of 6.01 on the CASQ indicates that overall, this group has a more optimistic than pessimistic attributional style.

4.3 Results of the Shapiro-Wilk's test of normality

Tests of normality, such as the Shapiro-Wilk's, are used to assess whether the scores in each sample group are normally distributed around the sampling mean, or that the sampling distribution between means is normal (Howell, 2008). Normality thus needs to be checked for each of the independent variables. Tests of normality were conducted for each of the sample groups. A p-value equal to or greater than 0.05 is considered to be an acceptable measure of normality.

Results of the initial tests of normality are shown in Table 4 below.

Group	**Variables**	**Shapiro-Wilk**
Mainstream	Academic Achievement	w=0.86 p=0.001
	CDI score	w=0.87 p=0.002
	CASQ score	w=0.89 p=0.006
SCIP	Academic Achievement	w=0.96 p=0.379
	CDI score	w=0.98 p=0.793
	CASQ score	w=0.95 p=0.207

Table 4: Shapiro-Wilk's test of normality: p- values for independent variables

The p-values, as shown in Table 4, indicate that the test statistics for the mainstream group are significant at p=0.05 for all the dependent variables. This rejects the null hypothesis that the data from this group represents a normal distribution. However,

the p-values gained from the SCIP group show that this data represents a normal distribution.

Observation of the raw scores for the mainstream group highlighted an outlying value for the overall academic achievement score (31.5%). Similarly, this outlier presented among the highest CDI score (19) and lowest CASQ score (2). This outlier was therefore removed from the calculations, in order to examine possible effects thereof on the normality of the dependent variables within the mainstream group. Table 5 shows the result of re-calculation of p-values within the mainstream group, following removal of the outlying observation.

Group	**Variables**	**Shapiro-Wilk**	
Mainstream	Academic	w=0.93	p=0.075
	CDI score	w=0.88	p=0.004
	CASQ score	w=0.89	p=0.008

Table 5: re-calculated p-values of dependent variables subsequent to removal of outlying observation within the mainstream group

Table 5 indicates that the removal of the outlying observation substantially increased the p-values of the academic achievement within the mainstream group. Hence, scores of academic achievement are approximately normally distributed, with p=0.075. However, re-calculated p-values for scores on the CDI and CASQ are still significantly low, indicating that the data for these scores are not normally distributed.

Thus, in order to conduct further analyses of these scores, it was necessary to apply transformations in order to normalise the variables as measured by the CDI and CASQ. The log transformation was used for this purpose. Despite the initial normative distributions evidenced in the SCIP sample, log transformations were applied to the same constructs as measured in this sample, in order to maintain homogeneity among the groups in terms of statistical values. The results of the log transformations are presented in Table 6.

Group	Variables	Shapiro-Wilk	
Mainstream	Academic Achievement	w=0.93	p=0.075
	LogCDI score	w=0.95	p=0.3
	LogCASQ score	w=0.93	p=0.073
SCIP	Academic Achievement	w=0.96	p=0.379
	LogCDI score	w=0.99	p=0.975
	LogCASQ score	w=0.93	p=0.065

Table 6: results of log transformations applied to CDI and CASQ variables

The p-values in this table indicate that each of the dependent variables is now assumed to be normally distributed. Further analysis was done based on these variables- Academic Achievement, LogCDI score (depression) and LogCASQ score (learned helplessness).

4.4 Results of MANOVA

A MANOVA (multivariate analysis of variance) was used to determine significant differences between the Mainstream and SCIP groups compared simultaneously on Academic Achievement, CASQ score and CDI score. Multiple measure of association, known as Wilk's Lambda, are used for this purpose. Results of this are shown in Table 7 below.

Wilk's Lambda	p- value
0.5282109	p<.0001

Table 7: Wilk's Lambda Values

The computed value of Wilks' Lambda is found to be 0.53 and $p<0.0001$ indicating a significant difference between the sample groups pertaining to at least one of the dependent variables- Academic Achievement, CDI score or CASQ score. Thus,

univariate tests were conducted to determine which of these differences is significant. Results of the univariate tests are represented in Table 8 below.

Variables	**Source**	**DF**	**f-value**	**p-value**
Academic Achievement	Full Sample	1	44.32	<.0001
CDI score	Full Sample	1	2.19	0.1452
CASQ score	Full Sample	1	0.18	0.6719

Table 8: results of univariate tests

Results indicate that no significant difference exists between sample groups with regards to depression, as measured by the CDI score with f=2.19 and p=0.145. Similarly, results of learned helplessness, as indicated by the CASQ score, are not significant with f=0.18 and p=0.672. However, there was a significant difference in the academic achievement between the two groups, with f=44.32 and p<0.0001. The mean value of Academic Achievement for the mainstream group is 78.04 and that of the SCIP group is 60.43.

4.5 Results of the Pearson-*r* correlation

Correlations indicate the type of relationship that exists between each of the variables. A Pearson correlation coefficient was calculated in order to investigate the relationship between academic achievement, depression (as measured by the CDI score), and learned helplessness (as measured by the CASQ score). This was conducted for the sample group as a whole (N=55), as well as within each of the sample subgroups (mainstream and SCIP groups). Further hypothesis testing was conducted in order to determine whether the correlations are significant.

4.5.1 Results within the mainstream sample

Table 9 indicates results of the Pearson-*r* correlation within the mainstream sample.

	Academic	LogCDI score	LogCASQ score
Academic	1		
LogCDI score	- 0.55**	1	
LogCASQ score	0.23NS	- 0.2NS	1

* indicates significance at the 0.05 level ($p<.05$)

** indicates significance at the 0.01 level ($p<.01$)

NS indicates no significance

Table 9: correlations between the independent variables within the mainstream sample

Table 9 indicates a moderate negative correlation between academic achievement and CDI score (r = -0.55). The results suggest that there is a moderate relationship between academic achievement and depression within this sample group. Other correlations between the independent variables are not significant.

4.5.2. Results within the SCIP sample

Table 10 below indicates results of the Pearson-*r* correlation within the SCIP sample.

	Academic	LogCDI score	LogCASQ score
Academic	1		
LogCDI score	0.1NS	1	
LogCASQ score	0.15NS	- 0.45*	1

* indicates significance at the 0.05 level ($p<.05$)

** indicates significance at the 0.01 level ($p<.01$)

NS indicates no significance

Table 10: correlations between the independent variables within the SCIP sample

Table 10 indicates a moderate negative correlation between CASQ score and CDI score (r = - 0.45). The results suggest that there is a moderate relationship between

learned helplessness and depression within this sample group. Other correlations between the independent variables are not considered significant.

4.5.3. Results within the full sample

Table 11 below indicates results of the Pearson-*r* correlation within the full sample.

	Academic	**LogCDI score**	**LogCASQ score**
Academic	1		
LogCDI score	- 0.33*	1	
LogCASQ score	0.1 NS	- 0.29*	1

* indicates significance at the 0.05 level ($p<.05$)

** indicates significance at the 0.01 level ($p<.01$)

NS indicates no significance

Table 11: correlations between the independent variables within the full sample

Table 11 indicates a low negative correlation between academic achievement and CDI score (r = -0.33). Similarly, a low correlation between CASQ score and CDI score (r = -0.29) is evident. These results suggest a weak relationship between depression, and each of the other variables. Other correlations between independent variables are not significant.

CHAPTER FIVE
DISCUSSION

5.1 Overview of Chapter

This study comprised a comparison between learned helplessness, depression and academic achievement between two sample groups- learners placed in a mainstream class, and learners placed in a small class inclusion programme to accommodate barriers to learning. The aim of this study was thus to explore the difference in prevalence of each of the measured constructs between the sample groups. Moreover, the study aimed to examine the correlation between learned helplessness, depression and academic achievement, both within and between the sample groups.

Results of the study, as outlined in the previous chapter, will be interpreted and discussed in this chapter, in line with the literature reviewed in chapter two.

5.2 Differences in the measured constructs between sample groups

5.2.1 Difference in the prevalence of learned helplessness between the groups

The Children's Attributional Style Questionnaire (CASQ) was used as a measure of learned helplessness. The findings of the study, as indicated in Table 8, show that there is no statistically significant difference in the prevalence of learned helplessness between the sample groups (p=0.672). Results of the statistical analyses, as indicated in Tables 1 and 2, indicate that the prevalence of learned helplessness in each of the groups is relatively low (N=28, mean=5.79; N=27, mean=6.24).

Achievement-based helplessness is associated with a tendency to attribute failure to ability rather than to effort. Thus, attributions of failure to ability foster the belief that successful performance is no longer contingent upon action and effort. In light of this, Benson and Kennelly (1976) assert that for learned helplessness to occur, experience with failure is necessary. While it is evident that the SCIP sample (N=27, mean=60.43), as indicated in Table 2, is performing lower on academic tasks than the mainstream group (N=28, mean=78.04), as indicated in Table 1, the overall academic

achievement of the SCIP group is not indicative of academic failure. This may therefore serve to explain why the prevalence of learned helplessness within the sample groups is low (Tables 1, 2, and 3).

Furthermore, the literature suggests that effort attributions become increasingly important with age, such that effort may be more highly valued than outcome itself in children aged between 10 and 12 (Cole et al., 1999). Moreover, Dweck (1975) asserts that children, who attribute outcome to effort, rather than ability, are more likely to work harder or longer. Dweck further posits that some learning-disabled children, despite academic difficulty, or even failure, retain a positive sense of competence through successful experience in other areas. Results of these studies suggest that negative attributions about ability become less stable following such successes, which further counteracts the effects of school difficulty and failure (Dweck, 1975).

Similarly, it is evident that a number of contextual factors at play have contributed to the positive adjustment of learners faced with barriers to learners into the mainstream of the school. It is hypothesised that it is the contribution of these factors that have successfully buffered the development of learned helplessness in the SCIP sample, (as well as in the mainstream sample). In a study conducted by Peterson and Barrett (1987) examining attributional style as a predictor of performance in students with disabilities included in a college setting, it was found that the relation between attributional style and performance existed for the overall sample, regardless of the presence or absence of a disability. Similarly, Martinez and Sewell (1996) assert that with regards to explanatory style, college students with and without disabilities may in fact be more alike than different. This alludes to the presence of extraneous factors that may serve influential in the development of attributional style, be it optimistic or pessimistic. The findings of the study suggest that despite differences in the overall academic achievement of the sample groups, similarities exist in the attributional style of the learners within these groups. While no conclusive findings can be reported, it is hypothesised that it is the structuring of the learning environment within the school that has successfully buffered against the development of an adverse attributional style, thereby minimizing the prevalence of learned helplessness amongst the learners.

In line with the principles underlying inclusive education, the extensive restructuring of the education system in South Africa has called for the development of learner strengths, through which learners are empowered and enabled to participate actively and critically in the learning process (Department of Education, 2001). This has prescribed the need for a positive teaching and learning culture, which has placed emphasis on positive attributes that foster optimal learning and development. The philosophy of inclusion promotes acceptance, which is crucial to social and emotional development (Engelbrecht, 2004). The structure of the school in which the study was conducted fosters a sense of belonging, in which each of the learners is valued as an integral and equal member of the school community. Inclusion in South Africa recognizes that every child can learn and belongs in the mainstream of both school and community life (Department of Education, 2001). The school nurtures this philosophy, by providing learners in the SCIP class with the necessary support to overcome barriers to learning. As the study was conducted in a private school, it is suggested that both the school itself and the parents of learners within the school, are thus able to afford a range of services that enhance learning and development. These services include access to private tutors, speech therapists, occupational therapist, psychologists, and even classroom assistants.

Moreover, in a study conducted by Yssel et al. (2007) it was found that South African parents generally reported that their children encountered positive social experiences in inclusive settings. This was evidenced in the present study, as it was found that learners in the SCIP class maintain close friendships with peers in the mainstream class. Thus it is hypothesized that the range of contextual factors at play has successfully ameliorated the development of learned helplessness within the sample groups. It is further suggested that such factors have counteracted the development of depression within the learners.

5.2.2. Difference in the prevalence of depression between the groups

The Children's Depression Inventory (CDI) was used as a measure of depression. The findings of the study, as indicated in Table 8, suggest that there is no statistically significant difference in the prevalence of depression between the sample groups ($p=0.145$). Results of the statistical analyses, as shown in Tables 1 and 2, indicate that

the prevalence of depression in each of the groups is relatively low (N=28, mean=6.53; N=27, mean=8.46).

Given the low prevalence of learned helplessness within the sample groups, and the average to above-average overall academic achievement of learners within these groups, this is an expectable result. However, much of the literature suggests that children with learning difficulties are a vulnerable population, who are at a heightened risk for experiencing difficulties such as peer rejection, depression, anxiety, behavioral and conduct problems, poor academic adjustment, school dropout, and poorer long term outcomes than are children and youth without disabilities (Montague, Enders, Dietz, Dixon & Cavendish, 2008; Murray & Greenberg, 2006). It is thus necessary to consider why results of the study seemingly contradict previous research findings, in which it is hypothesised that children faced with barriers to learning may present as more depressed than learners placed in a mainstream class.

Developing greater understanding of the social and contextual lives of children with learning difficulties may therefore highlight the importance of social relationships and contexts as possible risk or protective factors in the development of adverse consequences (Greenberg, 2006; Talbott & Fleming, 2003; Werner, 2003). Previous research suggests that such contextual factors are associated with adjustment and development. Findings of such studies (Greenberg, 2006; Talbott & Fleming, 2003; Werner, 2003) indicate that positive social relationships with parents, teachers, and peers are related to social, behavioural and emotional adjustment of learners, especially those with learning difficulties. While this was not formally explored in the present study, it is suggested that the low prevalence of depression among the learners can be attributed to a range of contextual factors evidenced within the school environment that promote optimal emotional adjustment.

Learners placed within the SCIP and mainstream classes feel a sense of belonging and connectedness to the school, fostered by engagement in a range of co-curricular and extramural activities. Moreover, the students appear to perceive the school as a safe and accommodating environment, geared towards providing all students with a positive learning experience. Furthermore, as suggested by Murray and Greenberg (2006), as children and youth spend a considerable portion of their day in schools, the

role of teacher-learner relationships is important. Accordingly, it is suggested that emotionally warm relationships between teachers and students, characterized by open communication, support and involvement may provide learners with a sense of security within the school environment, which in turn, encourages social, emotional and academic competencies (Murray & Greenberg, 2006). Given the low teacher-learner ratios at the school in which the study was conducted, the learners benefit from individualized attention and support from the teachers. Further to this, constant communication between teachers and parents comprises an integral part of learner support within the school. Access to on-site resources, such as speech therapists, occupational therapists, counselors, psychologists, and teacher aids further provide ongoing support for learners at the school. It is hypothesized that perhaps the presence of a wide range of social, emotional and academic support fosters improved school adjustment, leading to a decrease in emotional difficulties, such as depression.

Furthermore, peer relationships play an integral role in influencing the social, emotional, and academic adjustment of children and youth (Murray & Greenberg, 2006; Talbott & Fleming, 2003). Learners placed in SCIP and mainstream classes have several opportunities to integrate and engage with each other, both during break time, and though combined structured learning activities. This has facilitated the development of many close friendships for the learners, both within and between the classes. Many of the learners have remained with their classmates throughout their schooling career, resulting in strong peer relationships. As suggested by Resnick et al. (1997), a strong sense of belonging in social contexts is associated with lower levels of emotional distress, and thus lowers levels of anxiety and depression. This may thereby account for the finding of the present study, in which levels of depression were identified as low across the sample.

5.2.3. Difference in the overall academic achievement of the groups

Measures of academic achievement comprised overall percentages gleaned from Maths and English marks, as reflected on end-of-term reports. The findings of the study, as indicated in Table 7, show a statistically significant difference in the overall academic achievement of the groups ($P<0.0001$). The mean value of Academic Achievement for the mainstream group is 78.04 (Table 1) and that of the SCIP group

is 60.43 (Table 2). This is an expectable finding, consistent with the hypothesis of the study, considering that the groups are distinguished by academic ability and achievement.

The learners in the SCIP class face barriers to learning that may affect optimal functioning in the classroom, thus the overall academic achievement is significantly lower than that of learners placed in the mainstream class. However, it is evident that the overall academic achievement within this group indicates that these learners are achieving learning outcomes, and are thereby effectively accommodated within the school setting. Results of the study support the notion that the small class inclusion programme fosters optimal development and adjustment of learners within the school, thereby upholding the underlying principles of inclusive education.

5.3 Correlation between learned helplessness, depression and academic achievement

The study aimed to examine the correlations between learned helplessness, depression, and academic achievement, both within and between the sample groups. Results of the Pearson-*r* correlation, as shown in Tables 9 and 10, highlight moderate relationships between two of the dependent variables within each of the sample groups, as will be delineated below. Further to this, results of the Pearson-*r* correlation conducted within the full sample indicate similar relationships between the variables as highlighted by within-sample results, although such correlations within the full sample were found to be significantly lower (Table 11).

The results of the study, as shown in Table 10, suggest a moderate negative relationship between learned helplessness and depression within the SCIP group (r= -0.45). Similarly, this correlation was found within the overall sample (r= -0.29), as seen in Table 11, although not as highly correlated as within the SCIP group. This finding thus suggests that higher scores on the CASQ, indicating low levels of learned helplessness, were reasonably associated with lower scores on the CDI, indicating low levels of depression.

The results further suggest a moderate negative relationship between academic achievement and depression within the mainstream group (r = -0.55), as indicated in Table 9. Similarly, this relationship was further evidenced in the results of the full sample, although the correlation was markedly lower (r= -0.33), as shown in Table 11. This finding thus indicates that higher academic achievement scores were moderately associated with lower levels of depression, as indicated by low scores on the CDI.

These results suggest a weak-to-moderate relationship between depression, and each of the other variables, namely learned helplessness, and academic achievement. Other correlations between independent variables are not significant. These findings were somewhat unexpected; as it was hypothesised that learned helplessness would be strongly correlated with academic achievement, as suggested by previous research findings. Thus the discussion explores possible reasons for findings of the study.

5.3.1 Correlation between learned helplessness and academic achievement

Learned helplessness was not found to be highly correlated with academic achievement, both within and between the sample groups, as indicated in Tables 9, 10, and 11. Further to this, as learned helplessness was only moderately correlated with depression within the SCIP sample (Table 10), and weakly correlated with depression within the full sample (Table 11), reliability of the CASQ, as the measure of learned helplessness as employed in the study, is questioned.

Previous studies in South Africa in which the CASQ was used as a measure of learned helpless (Mayer, 1999; Thompson, 2002), necessitate the modification of several items to the South African context. While a modified CASQ was employed in the study, thereby increasing applicability to the South African context, past studies of the questionnaire have indicated that several items on the questionnaire involve local item dependence (Higgins, Zumbo & Hay, 1999). For the CASQ, locally context-dependent item sets (Haladyna, 1992, as cited in Higgins et al., 1999), elicit person covariance and situation covariance. Hence, studies conducted by Higgins et al. (1999) suggest that individual variables such as attributional style cannot be separated from the contexts in which they occur. Thus, due to the “projective” nature of

attributional style measures, the reality of the situation may be irrelevant to individual differences in explanatory style. It is thus difficult to reduce the impact of situational variables on causal attributions.

As the study focuses on learners in a school setting, it is important to consider that the CASQ does not measure school-based attributions, but rather focuses on general attributions. Thus it would be difficult to assess the correlation between school based academic achievement and learned helplessness, using only the CASQ. It is suggested that the employment of the Student Academic Attribution Scale (SAAS), as proposed by Bell and McCallum (1994) may have been more applicable in its examination of causal attributions for success or failure situations in school settings. The CAVE (Content Analysis of Verbatim Explanations) technique is employed as a qualitative measure of attributional style (Peterson, Luborsky & Seligman, 1983). This technique examines naturally occurring attributions, which are recorded (either in verbal or written form) and subsequently analysed to provide an understanding of attributional style. It is suggested that this technique, or a combination of both quantitative and qualitative procedures may have yielded more reliable results of learned helplessness, lending to improved analysis and discussion.

5.3.2 Correlation between learned helplessness and depression

Moreover, much of the literature focuses on learned helplessness as a predisposing factor to the onset of depressive symptomatology. Findings of the study suggest a weak relationship between learned helplessness and depression within the full sample ($r = -0.29$), as indicated in Table 11, and a moderate negative correlation between learned helplessness and depression within the SCIP sample ($r = -0.45$), as shown in Table 10, as higher scores on the CASQ were associated with lower scores on the CDI. The results thus allude to the notion that the presence of a more optimistic style, as indicated by higher scores on the CASQ, is indicative of a decreased vulnerability to depression, as indicated by lower scores on the CDI. These results indicate the influence of personal beliefs pertaining to academic and social efficacy on observed levels of depression within the sample groups (Locker & Cropley, 2004). Peterson et al. (1993) assert that depression is consistently predicted by prior depression, pessimistic explanatory style, and by adverse life events. Therefore, as the overall

explanatory style of the sample was found to be more optimistic than pessimistic, it can be hypothesized that the group is at lower risk for depression. This was confirmed through low scores on the CDI, as evidenced in the research results.

The literature (Nolen-Hoeksema et al., 1986; Peterson et al., 1993) supports the notion of a strong relationship between attributional style and depression, as negative affect is more common in those who attribute failure to internal, stable causes, such as lack of ability, to those who attribute failure to external stable causes, such as task difficulty (Bell et al., 2004). This was found in the present study, in which more optimistic explanatory style of the group was evidenced. However, it must be noted that the CASQ fails to measure key dimensions of attributional style such as ability and effort. Further to this, Bell et al. (2004) assert that due to the transient nature of many of the items of the CASQ (such as having bad luck), hypothetical events as questioned by the CASQ may be perceived as less pervasive and permanent than attributions to ability and effort.

In a study conducted on the relationship of school-based attributions to depression (Bell, McCallum, Doucette, 2004), it was found that school-related attributions are more highly related to depression in nonclinical intermediate-grade students than general attributions. However, as mentioned above, the CASQ, as the most widely-used measure of attributional style, does not measure school-based attributions, and thus it is difficult to ascertain the relationship between school-based attributional style and depression, using only the CASQ as a measure of learned helplessness. Thus, it is suggested that the use of a school-based measure of attributional style may have yielded stronger correlations between learned helplessness and depression.

5.3.3. Correlation between academic achievement and depression

Depression was found to be negatively correlated with academic achievement, both within the mainstream sample ($r = -0.55$), as indicated in Table 9, and within the full sample ($r= -0.33$), as shown in Table 11. As highlighted in Marcotte et al. (2006), the association between depression and academic performance rarely has been addressed in the literature. Cheung (1995) asserts that few studies have reported that depressive symptoms may be associated with academic difficulties and lower performance.

Conversely, it may be concluded that absence of depressive symptoms is associated with average academic performance, as found in the present study. Chen, Rubin, and Bo-Shu (1995) reported that a decline in academic performance was associated with depressive affect. As both groups do not indicate a decline in academic performance, it can hence be suggested that the average academic competence among the sample is correlated with low levels of depression. While higher level of depressive symptoms have been reported in students with learning difficulties (Cheung, 1995), it is suggested that the successful accommodation of learners in the SCIP class has counteracted a range of adverse consequences that may otherwise manifest. Moreover, further studies concluded that depressive symptoms in children predicted lowered academic performance (Kellam et al., as cited in Marcotte et al., 2006). Resultantly, impaired school performance has been noted as one of the short-term consequences of a depressive episode. As neither the mainstream nor the SCIP group present with marked depressive deficits, it is further postulated that the possible learning difficulties comprising barriers to learning within the SCIP class are not indicative of depressive symptomatology. Moreover, these barriers seem to be successfully managed within the school, resulting in decreased incidences of depression and learned helplessness among the learners.

5.4 Summary

Analysis of the results alludes to a range of possible extraneous factors that may have contributed to the findings of the study. As such, it is suggested that the results of the study are somewhat inconclusive. Due to the small sample size, it is difficult to ascertain whether the findings are consistent with current research and trends in the field. Further to this, given the specificity of the research sample, generalizability of the findings is limited. As such, discussion of the results is limited to the sample on which the study was conducted.

The following chapter serves as a conclusion, highlighting strengths and limitations of the study. Directions for further research are delineated.

CHAPTER SIX
CONCLUSION

6.1 Summary

The study aimed to explore differences in learned helplessness, depression, and academic achievement between two sample groups, thereby exploring the differences in each of the constructs between learners placed in a mainstream class, and those placed in a bridging class for barriers to learning. Moreover, the study aimed to explore the correlations between learned helplessness, depression and academic achievement, both within and between the sample groups. Results of the study indicate that while a significant difference was noted in the overall academic achievement of the groups, the prevalence of learned helplessness and depression across both groups was relatively low. Moderate correlations between learned helplessness and depression, and depression and academic achievement were evidenced.

Results of the study were somewhat unexpected as, as suggested in the literature, learning difficulties may manifest as a consequence of, or may result in, increased learned helplessness and depression. However, the results suggest that in contrast to previous findings, learned helplessness and depression was no more prevalent in a group of students with learning difficulties. Such findings provide valuable insight into the strengths and limitation of the study, and further serve to provide guidelines for future research.

6.2 Strengths of the Study

The findings of the study provide insight into the range of possible factors that may have contributed to the low prevalence of learned helplessness and depression within the sample groups. Contextual factors, such as social support, teacher support, and accommodation of a range of learner needs, may prove critical in overcoming barriers to learning and promoting optimal development and functioning. Such insight further fosters enhanced understanding of the effectiveness of inclusive education in South Africa in accommodating a variety of learning needs within the mainstream of

education. In this regard, the study sheds light on the applicability of the learned helplessness model and related fields, to the examination of learning needs within South Africa at present. Given the previous research conducted in the field in South Africa, the study highlighted the importance of conducting further studies within the South African context. Furthermore, the findings allude to the examination of positive factors that may serve to counteract adverse consequences of learning difficulties. This highlights the role of positive psychology, when exploring learning and development. In light of this, the study highlights possible gaps in the literature, in discussing factors that promote the management of barriers to learning. The research findings are beneficial in motivating for further research in the field, especially against the backdrop of inclusive education in South Africa.

6.3 Limitations of the Study

Due to the small sample size, the generalizability and representivity of the study is limited. The sample comprises learners from a private, well-resourced school in Johannesburg. As such, it is difficult to ascertain whether the results of the study can be generalised to the wider population, given the range of socio-economic variables evidenced in South Africa. Further to this, while the sample comprises learners faced with barriers to learning, findings of the study cannot be generalised to groups of students faced with severe learning problems and disabilities. It is thus difficult to ascertain whether the findings are consistent across samples with varying learner needs. Moreover, as the study relied solely on quantitative data, the findings are inconclusive, as the study did not explore a range of contributing factors that may have affected the results.

6.4 Recommendations for Future Research

In light of the strengths and limitations outlined above, it is suggested that future research in the field is critical in providing further insight into the implications of inclusive education in South Africa. Thus, it is necessary that future samples comprise representative groups, including a range of demographic and socio-economic variables. Research within the field of severe learning difficulties and disabilities is also needed in order to provide further insight and understanding. This in turn, will

foster improved comparison between groups. The importance of large sample sizes is necessitated.

Given the range of factors that seem to have successfully counteracted the development of learned helplessness and depression within the groups, further research should serve to investigate and measure components of positive psychology that buffer against adverse reactions and consequences. The applicability of such studies to the South African context at present is evident.

It is further suggested that both quantitative and qualitative methods be employed on future research, lending to increased reliability and validity of the findings, and richer discussion and analysis thereof.

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