

ABSTRACT

The present research study examines the possible relationship between students' career decision-making self-efficacy (CDMSE) and their perceptions of their family members' job satisfaction and job insecurity.

The present research uses a quantitative, non-experimental, cross-sectional research design, on a sample of 148 subjects drawn from a sample of first year Psychology students from the University of the Witwatersrand, South Africa. The Career Decision Self-Efficacy scale was used to measure career decision-making self-efficacy (Betz & Taylor, 2001), Warr, Cook and Wall's (1979) Overall Job Satisfaction scale to measure job satisfaction (Short, 1996) and the Job Insecurity scale developed by Ashford, Lee and Bobko (1989) to measure job insecurity.

The statistical procedures used to analyse the data, included correlations to test the first hypothesis, which proposed a relationship between students' CDSME and their perceptions of their family members' job satisfaction and the second hypothesis, assumed a relationship between students' CDMSE and their family members' job insecurity. A Stepwise Multiple Regression was performed to examine the above hypotheses. The results reported a significant relationship between students' CDMSE and their perceptions of their family members' job satisfaction. However, there was insufficient evidence to support the relationship between students' CDMSE and their perceptions of their family members' job insecurity.

CHAPTER 1

LITERATURE REVIEW

Introduction

According to Turner and Lapan (2002), parental influence and support have been found to have a significant impact on children's career development process. The nature of parents' work and working conditions may influence children positively or negatively in terms of their future careers (Gardner, 2004). This statement suggests that specific parental work experiences might also influence adolescents' career decisions and choices, which the present study examines. This study focuses on two aspects of work experiences - job satisfaction and job insecurity. These two specific experiences have been chosen for their potential likelihood in affecting adolescents' career decision-making self-efficacy, which will be discussed further in the literature review.

Gardner (2004) highlights that there have been few investigations conducted regarding the role of parental work experiences on their adolescents' career development. This firstly emphasises the importance of examining this variable in the present study and secondly the significance of examining job satisfaction and job insecurity that have not yet been explored. It should be noted that, although this study is primarily interested in students' perceptions of their *parents'* work experiences, other family members have been considered. This is because other family members currently earning and working may also impact on adolescents' career decisions, especially in extended family households or in situations where youngsters do not have breadwinning parents.

The present study explores the relationship between students' perceptions of their career decision-making self-efficacy and their perceptions of their family members' work experiences. The following literature review discusses career decision-making self-efficacy, broadly covers parental work experiences and further examines job satisfaction and job insecurity. Although parents only spend a number of hours physically in the workplace, their work experiences there may impact on them and their children on returning home (Gardner, 2004). Therefore, the role of 'spillover', which may affect students' 'perceptions of their breadwinners' work experiences, is considered as a possible influence in the present study. It must be reiterated that even though the study seeks to examine parental job satisfaction and job insecurity, it is the students' perceptions of those work experiences that will be explored and not those of their parents/family members.

Career decision-making self-efficacy (CDMSE)

Bandura (1997) conceptualised the notion of "self-efficacy" and described it as an individual's beliefs in his/her capabilities to carry out new and ambiguous tasks successfully (in Gallavan, 2003). He further highlighted that as children grow older, they become more aware of their strengths and weaknesses and that their self-efficacy impacts on the activities in which they engage (Helwig, 2004). As a result, adolescents are likely to follow activities or careers in which they feel more self-confident (Alliman-Brisette, Turner & Skovholt, 2004).

Bandura (1997) also developed a theory to highlight how parents can successfully support their adolescents' vocational and educational development (Alliman-Brisette, et al., 2004). One of the most important studied variables that has stemmed from this

notion of self-efficacy is related to the area of career decisions (Chung, 2002), namely career decision-making self-efficacy (CDMSE) (Taylor & Betz, 1983 in Chung, 2002). CDMSE refers to an individual's confidence in performing career decision-making tasks successfully (DeLorenzo, 2000). This construct has been measured on five dimensions: they comprise accurate self-appraisal; gathering occupational information; goal selection; making plans for the future, and problem solving (Paulsen & Betz, 2004; Betz & Taylor, 2001; Chung, 2002). In addition, the Career Decision Self-Efficacy Scale was developed to measure career decisions based on one's levels of self-efficacy (Betz & Taylor, 2001).

It should be noted that due to trade marking of the term "career decision making" developed by Thomas Harrington and Arthur O'Shea and their firm Career-Planning Associates, Inc., the scale developed by Betz and Taylor (2001) could not be termed the Career Decision-Making Self-Efficacy Scale but rather the Career Decision Self-Efficacy Scale (Betz & Taylor, 2001). Given that the present study uses the Career Decision Self Efficacy scale, to measure career decision-making self-efficacy, the term CDMSE, will still be referred to throughout the present study. Therefore, although the present research uses the CDSE scale, it still measures the construct CDMSE – an individual's confidence in performing career decision-making tasks successfully (DeLorenzo, 2000).

The present study focuses on adolescents' confidence in making successful career decisions, based on their perceptions of one of their breadwinning family member's job satisfaction and job insecurity. In this study, 'breadwinning family member' refers to a parent or family relative who is currently working and earning – either in

an employed or self-employed capacity. Examining the parental role, but more specifically the breadwinning parent's role, is particularly important in this study because parents are seen to be a major influence on their children's self-perceptions of vocational and academic competence (Eccles, 1994). In addition, the literature emphasises the importance of the role that parents play regarding their children's career development process (Peterson, 2001; Turner & Lapan, 2002; Gardner, 2004; Dustmann, 2004; Sallinen, Kinnunen & Ronka, 2004; Schoon, Parsons & Sacker, 2004). It might therefore be assumed that students' confidence in making successful career decisions (i.e. CDMSE) could be influenced by a parent or family member who is currently working and earning.

According to Julien (1999), among the most critical decisions individuals undergo during their lives are career-related ones. Such decisions are known to have possible lifelong consequences for the individual's vocational future, psychological well-being, health and social acceptance (Mann, Harmoni & Power, 1989). Because career decision-making typically begins taking on significance during late adolescence (Julien, 1999), the present study has chosen to examine a sample of first year university students or adolescents. Thus it is important to define what is meant by the term adolescence and why the present study proposes this age group of people to be an appropriate sample.

Adolescence refers to the "transitional period between childhood and adulthood" (Weiten, 2001, p. 456). It is a period that is rather difficult to clarify in terms of age boundaries; however, it is often the time frame between thirteen to twenty-two years of age (Weiten, 2001). Levinson et al. (1978) further postulate that late adolescence

encompasses the ages seventeen to thirty-three, which is indicative of the age category that the present study's students are in (in Schreuder & Theron, 2001). It is a time, which is often characterized as the novice stage, where individuals are novices in virtually all aspects of their lives as they are in the process of exploring the adult world (Levinson, 1978 in Schreuder & Theron, 2001).

Thus, it is primarily for this reason that a sample of first year students has been used in the present study, where they are currently in the process of exploring aspects of the working world (Schreuder & Theron, 2001), which reflects the fact that their confidence in making successful career decisions may in fact be influenced by a process of exploring or observing and learning from their family members' own working experiences. As a period of career exploration, it is also a time when adolescents typically examine their abilities and values (Dupont & Gingras, 1991). Therefore, a great deal of stress is often associated with making these career decisions and often leads to difficulty in making optimal ones (Gati & Saka, 2001).

Research therefore places particular importance on the notion of self-efficacy and its relation to educational and career development with regards to career-related behaviours (Paulsen & Betz, 2004). The concept of CDMSE is frequently referred to in the arena of career-related behaviour (Paulsen & Betz, 2004), suggesting that it is an important factor in career-related behaviour of adolescents. Paulsen and Betz (2004) postulate that one possible reason for the emphasis placed on CDMSE in career development is the fact that it is seen to be core to successful educational and career outcomes.

Alliman-Brissett, Turner and Skovholt (2004) examined the relationships between parents' support for African American adolescents' vocational and educational development on the one hand and the relationship between their vocational and educational development self-efficacy, and outcome expectations on the other. Career self-efficacy was examined in four areas outlined by Bandura - career planning and exploration, career decision making, knowledge of self and others and school-to-career transitions (Alliman-Brisett et al., 2004).

Results found gender differences amongst African American children in their responses to their parents' support. It was reported that African American girls were more responsive to their parents' emotional support whilst boys were found to be more responsive to their parents' career-related modelling. Even though the present study does not examine the role of gender in relation to CDMSE, Alliman-Brisett et al.'s (2004) findings may highlight the significance of examining individual differences of CDMSE between adolescents differing in demographic background. The present study's sample includes students differing in race, age and gender, which may affect the study's findings, particularly within a South African context.

Alliman-Brissett et al. (2004) further acknowledge that African American adolescents are not as prepared as other ethnic groups to enter the workforce. Coupled with this, African Americans who were previously disadvantaged in terms of education and career opportunities are still not taking advantage of the opportunities that are currently available to them in America (Walsh, Bingham, Brown & Ward, 2001). Some theories have attributed this to current social and economic conditions; minority group identification; and discrimination (Alliman-Brisett et al., 2004). Given this, in

a South African scenario, it may be possible that some students from previously disadvantaged backgrounds also find it difficult to take advantage of available opportunities, which were not as readily available for their parents/breadwinners. This might affect their level of confidence in performing decision-making tasks successfully. It might be possible that this could be influenced positively or negatively by their perceptions of their breadwinner's work experiences, depending on how they have reacted to opportunities presented in a democratic society.

The literature has examined the effect of CDMSE on "persistence" of 418 under-prepared college students in USA (Peterson & del Mas, 2001). Under-prepared students refer to economically disadvantaged high school students (O'Brien, Bikos, Epstein, Flores, Dukstein & Kamatuka, 2000). It was reported that CDMSE contributed to the academic and social integration of these students. Academic integration refers to "the degree of institutional fit or congruence between the needs, interests and preferences of the individual and those of the institution developed through academic experiences and interactions with faculty" (O'Brien, et al., 2000, p. 286). Social integration refers to "the degree of institutional fit or congruence between the needs, interests and preferences of the individual and those of the institution developed through relationships with peers and perceptions of non-classroom personal relationships with faculty" (O'Brien, et al., 2000, p. 286).

Although CDMSE was not found to directly influence persistence, it was however found to affect academic integration significantly. Furthermore, the authors reported that making career decisions - a dimension of CDMSE - directly affects academic integration, whereas gathering occupational information (another dimension of

CDMSE) has an indirect relationship with academic integration through social integration (Peterson & del Mas, 2001). It was also reported that career decision-making self-efficacy of under-prepared students improved, after taking part in career exploration programmes aimed to assist them, particularly students who were at risk for vocational and academic underachievement (O' Brien, et al., 2000).

The fact that some students underestimate their ability to achieve might be linked to a low career decision-making self-efficacy as they could lack the “confidence in their ability to perform necessary career-related tasks to obtain a career” (Hackett & Betz, 1981). A low CDMSE could result in students avoiding exploratory activities, giving up easily and failing to reach their occupational potential (O' Brien et al., 2000).

Research has also examined the influence of ethnic and non-ethnic variables on CDMSE of college students in the USA (Gloria & Hird, 1999). They found significant differences between different racial groups, where white students had a higher CDMSE and lower ethnic identity.

However, it has been reported that more conclusive evidence needs to be established in evaluating how ethnic and career-related efficacy affects the career decision-making and career development of racial and ethnic minorities (Hackett & Byers, 1996). A link has however been found between race and ethnicity and CDMSE in America. Race was defined in terms of differences that emerge as a result of differing societal resources, which have been allocated, based on society's socio-political hierarchies (Gloria & Hird, 1999). According to Gloria and Hird (1999), due to the changing ethnic and racial demographics of America, counsellors should look at

assessing the role of the socio-political environment so as to properly evaluate career-related issues for individuals of different cultural, racial and ethnic minority backgrounds.

Findings have also suggested that actual and perceived career alternatives available to racial and ethnic minorities are indeed restricted due to social and economic barriers such as economic hardships and racial discrimination (Leung, 1995). Together with this, longstanding institutional, social and structural barriers have been found to impede the degree of control over career satisfaction and attainment for racial and ethnic minorities (Hotchkiss & Borrow, 1990). Theory suggests that dominant cultures, which affect and control the world of work in specific contexts should be an area of focus, as this may impact on racial and ethnic minorities (Helms & Piper, 1994).

Research proposes that in the USA, various racial and ethnic minorities are not employed in certain professional occupations despite rapidly changing workforce demographics (Simpson, 1996). In addition, because professional occupations are occupied by certain racial groups, this may impact on students' beliefs and expectations of whether their career decisions will result in placement in their chosen occupation (Gloria & Hird, 1999). In light of the American research and South Africa's current political situation, where legislation has introduced policies for employing racial and ethnic minorities into professional occupations, it may be relevant to examine if South African students' CDMSE in a rapidly changing demographic workforce are affected by their perceptions of their breadwinners work experiences.

The literature has also examined the role of efficacy and outcome expectations on career exploration and decidedness (Betz & Voyten, 1997). Findings show that self-efficacy beliefs are the best predictor of career indecision whereas outcome expectations are best at predicting exploration intentions (Betz & Voyten, 1997). Outcome expectations refer to an individual's belief that certain behaviours lead to certain outcomes (Betz & Voyten, 1997). This may suggest that, students' perceptions of their breadwinners' work experiences, such as job satisfaction may affect their own outcome expectations of work, which may affect the way in which students explore career options and make career decisions.

Career counselling interventions have been found to aid clients in increasing their CDMSE and career decision-making attributional styles (Maples & Luzzo, 2005). Interventions are seen as important as they are designed to increase self-efficacy expectations and thus increase a client's likelihood of adopting a more approaching disposition rather than an avoidant one toward a given behaviour, such as choosing a career. One such source of information for learning self-efficacy expectations, according to Bandura (1977), is vicarious learning - the process of watching another person successfully perform that behaviour (in Maples & Luzzo, 2005). In addition to this, parents have been known to act as "value socializers" (Astin, 1984) by shaping their children's perceptions of the suitability of career-related decisions (Turner & Lapan, 2002). Furthermore, research has found that social support primarily contributes to the prediction of self-efficacy (Quimby & O' Brien, 2004). This may suggest that not only parental support but also other family members' support could predict self-efficacy and more specifically CDMSE.

Research has found that one's social support, such as guidance, reliable alliances, attachment, social integration among others primarily contributes to the prediction of self-efficacy (Quimby & O' Brien, 2004, p.325). This may suggest that not only parental support but also other family members' support could predict self-efficacy and more specifically CDMSE. As discussed earlier, parental work experiences can influence children and their career development (Gardner, 2004). Therefore adolescents' perceptions of their parents' work experiences may influence their perceptions of parental support, which may influence their CDMSE.

In summary, the importance of examining CDMSE in this study, primarily stems from Bandura's (1997) social learning theory, which emphasises that children learn much of their self-efficacy expectations through vicarious learning (in Maples & Luzzo, 2005). This highlights the importance of examining adolescents' perceptions of their family members' work experiences and whether this specifically related to their career decision-making self-efficacy. Furthermore, because the study looks at perceptions of job satisfaction, it seems relevant to explore students' perceptions of how successful breadwinners have been in achieving job satisfaction in their careers, and whether this learnt behaviour has influenced adolescents in making successful career decisions.

Furthermore, examining the parental role, but more specifically the breadwinning parent's role, is particularly important in this study because parents are seen to be a major influence on their children's self-perceptions of vocational and academic competence (Eccles, 1994). In addition, the literature emphasises the importance of the role that parents play regarding their children's career development process

(Peterson, 2001; Turner & Lapan, 2002; Gardner, 2004; Dustmann, 2004; Sallinen, Kinnunen & Ronka, 2004; Schoon, Parsons & Sacker, 2004). It might therefore be assumed that students' confidence in making successful career decisions (CDMSE) could be influenced by a parent or family member who is working and earning.

Another theory, which reiterates the importance of this study's exploration, is the notion that parents act as "value socializers" (Astin, 1984) - shaping their children's perceptions of the suitability of career-related decisions (Turner & Lapan, 2002). "Value socializers" may refer to familial influences other than parents who may also contribute to shaping adolescents' perceptions of their family members' work experiences. Thus, the present study finds it essential to examine CDMSE in relation to adolescent's perceptions of their parents'/familial *work experiences* (job satisfaction and job insecurity), as these might shape adolescents' career-related behaviour.

It has become evident, from the above review, that race and ethnicity are factors that have been paid attention in the occupational literature. Research has also highlighted that the more ethnicity and race are perceived as salient for an individual, the more likely this may affect his/her vocational identity development (Fouad & Arbona, 1994). However, much of this research has been conducted within an American context. The present study thus finds it relevant to examine adolescents' CDMSE in South Africa where racial, ethnic and cultural differences are many and diverse.

Research has discovered that African Americans, who were previously disadvantaged in terms of education and career opportunities, are still not taking advantage of the

opportunities that are currently available to them in America (Walsh, Bingham, Brown & Ward, 2001). With on-going political and legislative changes in a post-apartheid South Africa, the introduction of black economic empowerment and affirmative action is designed to provide job opportunities to previous racial and ethnic minorities. This may have negative impacts on other racial groups (such as Whites, Coloureds and Indians), who might now perceive their jobs as less secure.

Students in these racial groupings may now perceive their breadwinners' current jobs as less secure and future job opportunities as limited.

South African adolescents may therefore perceive their racial status as a positive or negative influence on their career development. This may be more pronounced in South Africa, where certain individuals' may be inclined to perceive their racial status as a factor in influencing their job opportunities, choices and decisions. South Africa's political history makes it impossible to ignore the effects that it has had on the lives of previously disadvantaged individuals, especially in terms of their working lives. The country has changed from white supremacy to black rule, which has consequently changed the world of work. This may have implications for certain individuals whose jobs were previously protected because they belonged to the dominant white power of the time. This might affect the way in which white adolescents perceive their breadwinners' work experiences and consequently their own confidence in making career decisions.

However, by the same token this change has brought about more opportunity for previously disadvantaged racial groups. It may be possible that while now belonging to the dominant culture, many adolescents born into previously disadvantaged

families, may, however, still be unsure of their own future career prospects through their perceptions of their breadwinners' work experiences, despite political and legislative changes. Therefore, there may be a possible link between students' CDMSE and their perceptions of their breadwinners' working experiences.

The relevance of examining this is supported by previous research which emphasizes the role of career counsellors and researchers, who are encouraged to understand the role and impact of environmental (such as socio-political) contexts in which career-related decisions (Fouad & Arbona, 1994; Helms & Piper, 1994) are made. Environmental factors, specific to the South African context, could potentially impact on students from different backgrounds. For example, political changes and high unemployment rates could have an unsettling effect on individuals and could possibly influence young students' CDMSE.

As discussed earlier, parental work experiences can influence children and their career development (Gardner, 2004). Therefore, it may be that adolescents' perceptions of their parents' work experiences is influenced to some extent by adolescents' views of their parental support, which in turn, may affect their CDMSE.

Effective career decision is important as career decisions affect one's lifestyle, an important element of which may be job satisfaction (Krass & Hughey, 1999). Examining how students perceive their parents' job satisfaction might be an important indicator of effective career decision-making as it may impact on their overall lifestyle. Students' perceptions of their breadwinners' work experience or job satisfaction might impact on their CDMSE. Job insecurity may also impact on a

person's future lifestyle, either positively or negatively. Job insecurity may be perceived by some as offering job flexibility but has also been found by others to be a great source of individual and family stress (Canaff & Wright, 2004). Whether individuals perceive job insecurity as positive or negative, it has the potential to impact on a person's lifestyle and therefore may affect students' confidence in making career decisions.

'Spillover' becomes an important consideration here, whereby an experience in one area of an individual's life moderates the relationship with experiences in another area (Kirchmeyer, 1992 in Barnett, 1994). Research has suggested that work impacts not only on the individual but also on other family members (Menaghan & Parcel, 1990). If students perceive their parents as having, for example, high job insecurity, this perception might to some extent have been shaped by spillover.

According to Kanter (1977, p.47), "Occupations [also] contain an emotional climate that can be transferred to family life. A person's work and relative placement in an organisation can arouse a set of feelings that are brought home and affect the tenor and dynamics of family life". The spillover theory postulates that a worker's experiences in the job carry over into his/her non-work experiences, including marriage and family relations (Rousseau, 1978; Staines, 1980). Job satisfaction and job insecurity may be expected to spill over onto marital and family life. This is why it may be more important to look at the students' perceptions rather than those of the parents, as this may be evident of the spillover effects of breadwinners' work experiences.

A reminder of the possible spill over effects and the fact that family members acting as potential “value socializers” could both be influential in shaping adolescents’ perceptions. It therefore, seems vital to examine CDMSE in relation to adolescent’s perceptions of their parents’/familial *work experiences* (job satisfaction and job insecurity), as these might shape adolescents’ career-related behaviour.

Parental Work Experiences

A number of theorists have reported that career development starts at a very young age, children as young as three years old have reported occupational preferences (O’Keefe & Hyde, 1983 in Helwig, 2004). In addition, a substantial amount of research has been conducted regarding parental work experiences, especially in its relation to influencing children (Sallinen, Kinnunen & Ronka, 2004; Kelloway & Newton, 1996; Gardner, 2004, Perry-Jenkins & Gillman, 2000, Helwig, 2004). Children choose occupations based on the distinctions they make between male and female work roles, and their perceptions of the world of work (Gottfredson, 1996 in Swanson & Fouad, 1999).

Gottfredson (1996) further postulated that as children grow they choose occupations more consistent with themselves, in other words, perceptions of their talents, interests and vocational needs (in Helwig, 2004). Vocational aspirations are largely dependent on one’s accessibility to careers (choices that are most realistic) and compatibility with the environment (person-environment fit) (Swanson & Fouad, 1999).

Larson and Wilson (1998) highlight that family members have a huge influence on young adults’ career decision-making. This is because a great deal of emotional

anxiety residing within families and individuals and in parent-child relationships has been found to mediate career decision-making problems. It has also been found that only a few youngsters have strong beliefs and convictions as they constantly seek acceptance and approval (Larson & Wilson, 1998). In addition, career decisions are more emotionally laden than rational for adolescents and are reactive to the perceived wishes of parents (Kinnier, Brigman & Noble, 1990). Because low levels of anxiety and high levels of self-awareness and rational thought are required for effective decision-making, in families with high levels of anxiety, adolescents' career decision making will be less effective (Hartman, Fuqua and Blum, 1985).

It may be relevant to consider in this study the possible impact that extended family members might have on anxiety in students making successful career decisions, including parental influence. However, in this particular aspect was not explored in the current study but may be an area for future endeavours to examine as a possible influencing variable. Anxiety is affected by the amount of emotional closeness or distance within the family (Larson & Wilson, 1998), which might be increased or reduced in extended families. This anxiety could also impact on students' confidence in making career decisions. Research has concluded that parents and any other additional significant others explicitly or implicitly affect the adolescent's decision (Gati & Saka, 2001).

The literature on career development highlights that, based on Bandura's (1977) theory on social learning; parents are largely responsible for shaping their children's perceptions (Kelloway & Newton, 1996). Gottfredson (1981) also proposes that

parents' work experiences are associated with children's occupational aspirations and behaviour (in Kelloway & Newton, 1996).

Research conducted on parental work experiences (such as role overload, income and work hours) has also found that it is not the direct effect of employment, but rather the ways in which employment indirectly impacts on parental well-being or parent-child relationships, which have consequences on children's well-being (Perry-Jenkins & Gillman, 2000).

Gottfredson's (1981) theory and Bandura's (1996) social learning theory have been referred to throughout the occupational literature whereby a longitudinal study focused on these theories in the career development of a sample of 208-second graders. Some of the variables that were measured include occupational aspirations and expectations, parental involvement in career awareness and work experiences (Helwig, 2004). Thus the present study is exploring whether CDMSE - referring to the degree to which students can make career decisions confidently - is affected by social learning, or more specifically here, perceptions of their breadwinners' work experiences.

Research has examined whether a relationship exists between parental work experiences and adolescents' well-being and whether the relationship is mediated through parenting behaviours (Sallinen, Kinnunen & Ronka, 2004). It was found that adolescents' experiences of low autonomy granted by parents and higher conflict with parents, mediated the relationships between parents' negative work experiences and adolescents' depression (Sallinen et al., 2004). Therefore, depending on how

adolescents perceive their parents' work experiences, this could affect their sense of autonomy, which may influence their confidence in making successful career decisions.

Kelloway & Newton (1996), conducted research on predictors of students' union attitudes in relation to parental work attitudes and work experiences. They also found that their research was linked to the socialisation process, whereby student's perceptions of their parents' attitudes and experiences are mediated by students' own attitudes and beliefs towards work. Coupled with that, the work socialisation process acknowledges that certain aspects of employment may influence adults' values and attitudes about self and parenting styles (Greenberger, O'Neil & Nagel, 1994 in Perry-Jenkins & Gillman, 2000; Menaghan & Parcel, 1990).

The literature has explored undergraduate students' identity formation and perceptions of parental acceptance and encouragement of independence as possible predictors of career indecision (Guerra & Braungart-Rieker, 1999). There has been an emphasis on the role that familial factors have on career development (Grotevant & Cooper, 1988; Lopez & Andrews, 1987) and identity formation has been found to influence career choice and decision (Holland, Gottfredson & Power, 1980). Family has been found to be an important factor in identity development (Schultheiss & Blustein, 1994) and this might suggest that family also has a major influence on career decisions.

Guerra and Braungart-Rieker (1999) found that students' views of their parental relationships are related to career decision-making. Students whose mothers

encourage independence have less career indecision as opposed to ones with overprotective mothers. Commitment to career choice is therefore more likely to be present in those who are seeking independence from parents but who are securely attached to them (Blustein, Walbridge, Friedlander & Palladino, 1991).

College students, who live away from the family, tend to create their own lives, and explore vocational options (Kenny & Rice, 1995). According to Guerra and Braungart-Rieker (1999), it seems likely that students living alone might have higher levels of CDMSE in that adolescents, who are awarded more independence, are found to have less career indecision. At the same time, however, students living alone may also feel unsafe in exploring their choices and seeking out new experiences that help to shape identity and encourage progress in career development (Blustein, Prezioso & Schultheiss, 1995). Furthermore, students living alone may lose out on vital occupational information (a major component of CDMSE) due to a lack of vicarious learning from parental/familial influences (Peterson & Del Mas, 2001; Maples & Luzzo, 2005). Therefore it may be possible that students who do not live at home report different levels of CDMSE.

According to France (1990) in Julien (1999), students need to be provided with the opportunity to explore several issues: their values, strengths and goals; their educational and career opportunities; their perceptions of the role models and influences of significant others in their lives; and the work world. This is vital to information-seeking- one of the major components of career decision-making self-efficacy. Furthermore, information used by adolescents in making decisions about their future working lives includes attitudes and beliefs instilled during socialisation

and in school, and specific information provided by any number of sources: parents, siblings, other family members, family friends, peers, guidance counsellors, teachers, school and public library resources, the mass media and government career centres (Julien, 1999).

Information can be provided purposefully by particular sources, usually by parents; or can be identified by the information seeker who attends, at both conscious and unconscious levels, to the stimuli and behaviour models in his/her environment (Julien, 1999). Furthermore, according to Derwin, (1992, 1993 in Julien, 1999) people use their own and others' observations to construct personal pictures of reality which guide their behaviour. According to Arnold (1985, 1990), even if individuals attempt to anticipate their futures, there are often unexpected circumstances and perceptions, which require the individual to make sense of their new environment and understand them in a certain way (in Buckham, 1998). This again highlights the value of examining students' perceptions as they reflect their understanding of the world around them and help determine whether those perceptions affect their own behaviours (CDMSE).

Most important, perhaps, is that the value of such information lies not in its volume (Jepsen, 1989), but in its usefulness to career decision makers. One major barrier to effective information seeking is that adolescents do not always understand that, in order to make rational decisions, certain kinds of information are needed such as "sources of personal support, identification of possible barriers to career development, self-knowledge..." (Harris, Moritzen, Robitschek, Imhoff & Lynch, 2001, p.314-414). The other major barrier to effective information seeking includes a lack of self-

confidence. The present study, therefore, wishes to explore how students perceive their own confidence in making career decisions and whether this may be a possible result of the information sought through their perceptions of their breadwinners' work experiences.

In summary, because parental work experiences have been widely studied in relation to influencing children, within the occupational psychology literature (Sallinen, Kinnunen & Ronka, 2004; Kelloway & Newton, 1996; Gardner, 2004, Perry-Jenkins & Gillman, 2000, Helwig, 2004), emphasizes the present study's need to focus on the possible impact of adolescents' *perceptions* of their breadwinners' work experiences, on adolescents' CDMSE.

To recap, parents are seen as responsible for shaping their children's perceptions, based on Bandura's (1977) social learning theory (in Kelloway & Newton, 1996) and parents' work experiences have been found to be associated with children's occupational aspirations and behaviour (Gottfredson 1981, in Kelloway & Newton, 1996). These two theorists highlight the importance of examining the influence of parental work experiences on adolescents' CDMSE. Furthermore, Guerra and Braungart-Rieker (1999) emphasise that students' views of the parental relationship are related to career decision-making, and career indecision is related to parental variables. This suggests that parents have a considerable influence on their adolescents' career decisions, which reinforces the importance of the relationship explored in the present study.

In addition, the fact that children's perceptions are shaped by social learning (Kelloway & Newton, 1996), suggests that parents as well as other family members may influence these perceptions. To corroborate the importance of considering other family members in the present study, research highlights that adolescents' career decision-making problems are influenced by anxiety residing in families (Larson & Wilson, 1998). It may be possible that if anxiety within the family is found to mediate career decision problems (Larson & Wilson, 1998) then perhaps students who perceive their breadwinners' work experiences negatively (low job dissatisfaction and high job insecurity) in the present study may, as a result, have lower CDMSE.

Adolescents living with other family members, who are currently earning and working, might also be viewed as being responsible for influencing adolescents' CDMSE. It is for this reason that the present study requires students to choose one particular family *member* and not necessarily a parent as such. Therefore, this research includes the important role of extended families as being an influence in shaping adolescents' perceptions of family members' work experiences. This is because parents may not be the only breadwinners in the household and therefore may not be the only key influences impacting on adolescents' CDMSE. Coupled with the fact that only a few youngsters have been reported to have strong beliefs and convictions as they constantly seek acceptance and approval (Larson & Wilson, 1998), suggests the further likelihood that family might have in influencing adolescents' career decision-making *self-efficacy* in the present study.

Given that the literature highlights low levels of anxiety, self-awareness and rational thought that are required for effective decision-making, in families with high levels of

anxiety, adolescents' career decision making will be less effective (Hartman, Fuqua and Blum, 1985). It may be thus be speculated that in the present study, where breadwinners perceived to have high job insecurity and low job satisfaction, may exacerbate adolescents' anxiety and probably negatively influence adolescents' career decision-making self-efficacy.

Furthermore, the literature highlights that students need to be provided with the opportunity to explore several issues such as their educational and career opportunities; their perceptions of their role models and influences of significant others in their lives; and the work world (France, 1990 in Julien, 1999). This is seen to be an essential source of information for adolescents, which is a major component of CDMSE known as gathering occupational information. Given this, it seems relevant to examine how students perceive their breadwinners' experiences of the world of work in that this is one avenue for finding occupational information. Because this information can be provided purposefully by particular sources or identified by the information seeker supports the examination of adolescents' (in this case, information seekers) perceptions, at conscious and unconscious levels, regarding their parent's work experiences in relation to how they perceive their own behaviours (CDMSE).

Furthermore, information used by adolescents in making decisions about their future working lives includes attitudes and beliefs instilled during socialisation and in school, and specific information provided by any number of sources: parents, siblings, other family members, family friends, peers, guidance counsellors, teachers, school and public library resources, the mass media and government career centres (Julien,

1999). In an effort to broaden the scope of family member influence on students' CDMSE, the present study refers to "breadwinners" who could be peers, siblings, or other family members from which adolescents are drawing much of this occupational information.

The fact that Kelloway & Newton (1996), found that students accurately record their parents' job experiences, indicates the importance of examining students' perceptions of their parents' job experiences further. In addition, adolescents' perceptions of their parents' work experiences may be as reliable as those of their parents themselves. Furthermore, their findings, which highlight that the work socialisation process acknowledges that certain aspects of employment may influence adults' values and attitudes about self and parenting styles (Greenberger, O'Neil & Nagel, 1994 in Perry-Jenkins & Gillman, 2000; Menaghan & Parcel, 1990), strengthens the present study's need for establishing a possible link between students' perceptions of their parents' work experiences as well as perceptions of their CDMSE.

It also seems important to address the literature, which emphasises the importance of vocational aspirations being largely dependent on one's accessibility to careers (choices that are most realistic) and compatibility with the environment (person-environment fit) (Swanson & Fouad, 1999). This appears to have particular relevance in a South African context, where perhaps not everyone has access to the same career choices, possibly as a result of their different racial and socio-economic backgrounds. Therefore adolescents might be compelled to form career choices based on their environmental structures and accessibility to those career choices. A large proportion of black adolescents' parents and their family members were previously

disadvantaged individuals. Therefore adolescents who stem from disadvantaged backgrounds might have different perceptions of their breadwinner's work experiences as opposed to advantaged adolescents.

Although CDMSE and parental work experiences have been explored in depth, the fact that these variables have been studied in isolation and that a possible relationship between them has not yet been examined, is basis for the present study's rationale. This research endeavours to contribute to the literature, by investigating a possible relationship between these variables, particularly within a South African context. Job satisfaction and job insecurity will now be discussed.

Job Satisfaction

Job satisfaction has been found to be a reasonably complex job-related attitudinal variable whose definition has multiple varieties (Friday & Friday, 2003). Job satisfaction has been referred to as representing a person's evaluation of his/her job and the context in which he/she works (Weiss & Cropanzano, 1996 in Dose & Scott, 2002).

However, due to the fact that this study measures overall job satisfaction, it is imperative that it be defined as such. Overall or general job satisfaction refers to an individual's "overall affective reaction to the set of work and work-related factors" (Cranny et al., 1992 in Friday & Friday, 2003, p. 428). Cranny et al. (1992) specify that the aspects of job satisfaction include workers' feelings towards different dimensions of the work and work environment (in Friday & Friday, 2003). General

job satisfaction - the overall attitude in liking or disliking one's job - is seen as a vital facet of adult career development (Jepsen & Sheu, 2003).

The literature highlights that everyone seeks satisfaction with his or her work (Jepsen & Sheu, 2003). In addition, Gottfredson (1981) highlights that parental work experiences are associated with children's occupational behaviour (in Barling, 1980). Therefore adolescents' perceptions of their breadwinners' job satisfaction might impact on future career choices and their confidence in making career decisions.

Job satisfaction at any point in an individual's career depends on the successful implementation of occupational self-concepts - "translating one's idea of oneself into occupational terms" (Super & Super, 1996, p.139). Furthermore, general job satisfaction is largely dependent on the match between expressed occupational choices and the kind of work that a person enters into (Jepsen & Sheu, 2003).

The basis for choosing a career might not always be the result of what people desire. Other factors that might impact on a career decision include salary, work hours or leave allocation (Zembylas & Papanastasiou, 2004). Adolescents might feel that they need to choose careers based on what they perceive as parental job satisfaction, for example, a good salary.

Dahir (2001) conceptualised a number of national standards that guide school counselling programs regarding career development (in O'Shea & Harrington, 2003). Two of them are that students will acquire the skills to investigate the world of work in relation to knowledge of the self and to make informed career decisions; and that

students will use strategies to achieve future career goals with success and satisfaction (Dahir, 2001, p.324 in O' Shea & Harrington, 2003). The first standard seems more applicable to the present study's examination; in skills that students acquire to investigate the world of work (a dimension of CDMSE) may be influenced by adolescents' perceptions of their breadwinners' work experiences. Furthermore, in an attempt to discover whether these skills relate to knowledge of the self, may be evident in adolescents' CDMSE.

Research has looked at whether people who work for themselves are more satisfied with their jobs compared to organisation-working employees in America (Bradley & Roberts, 2004). The research supported two assumptions; firstly, that self-employed persons should enjoy higher job satisfaction than others; and secondly, that part of the association between job satisfaction and self-employment is explained by higher levels of efficacy and by lower levels of depression among the self-employed compared to others (Bradley & Roberts, 2004).

Self-employment is seen to be on the rise (Bradley & Roberts, 2004), which may have implications for young students' CDMSE, career choices and perceptions of their own future job satisfaction and job insecurity. It is argued that the relationship between job satisfaction and self-employment may partly reflect distinct personality characteristics that predispose self-employed individuals to evaluate their jobs in a positive manner (Bradley & Roberts, 2004).

Although some may perceive benefits of working in a self-employed capacity, which may increase job satisfaction, there are certainly negative factors associated with self-

employment. They include hard work, long working hours, heightened job stress and risk (Kaufmann, 1999; Buttner 1992). Therefore, this kind of work may lend itself to job insecurity. Furthermore self-employment requires a certain level of self-efficacy. People, who intend to start a business, require self-efficacy in order to perceive it as a feasible venture (Krueger, Reilly & Carsrud, 2000; Kolvereid 1996). It may be assumed that self-efficacy could be related to job satisfaction as people with high self-efficacy are more likely to show interest in tasks they perform, show greater persistence and expend more effort in their jobs (Judge & Bono, 2001).

Job satisfaction has been linked to important organisational outcomes such as employee absenteeism, tardiness, intentions to leave, actual turnover, job performance, organisational citizenship behaviour, burnout, physical and psychological well being and life satisfaction (Judge & Bono, 2001; Kirkham & Shapiro, 2001).

Voydanoff (1990) highlighted that the relationship between job satisfaction and marital and family life satisfaction is reciprocal, in that work and family life influence each other in a circular or feedback fashion. Consequently, if one is dissatisfied with one's job, this will cause stress on marital and family relations, which will, in turn, induce further stress at work (in Larson, Wilson & Beley, 1994). Because making career decisions is a stressful task for adolescents (Gati & Saka, 2001), induced stress caused by breadwinners' job dissatisfaction might impact negatively on students' confidence in making successful career decisions.

An evaluation of students' perceptions of their breadwinners' job satisfaction would appear to be important, in that it is seen to influence other life roles, namely those of work and family (Grandey, Cordeiro & Crouter, 2005). The extent to which one's job is perceived as satisfying or dissatisfying may depend on the extent to which the job is seen as threatening to other self-relevant roles (Grandey et al., 2005). It has been found that work interfering with family is related to job satisfaction and, if this is the case for the breadwinner, then it is a factor that may influence the career decision-making process of the student (Grandey et al., 2005).

Given the above literature, it seems vital to explore the relationship between adolescents' CDMSE and their perceptions of their family members' *overall* job satisfaction for a number of reasons. Firstly, because job satisfaction refers to an overall affective reaction to work, suggests that an emotional reaction to work may be more apparent or better communicated to adolescents, particularly through spillover. Emotional outbursts are more likely to be more noticeable and youngsters may perceive this overt behaviour more easily than their breadwinners' own overall attitude to work, which is covert. This is one of the reasons why this study has chosen to explore job satisfaction as one of the work experiences as it may be more noticeable and may be perceived more easily by adolescents. Other motives for why this particular variable is under scrutiny will be discussed further.

The literature highlights that everyone seeks satisfaction with his or her work (Jepsen & Sheu, 2003). This emphasizes that adolescents, as well as parents, strive for satisfaction in their current or future jobs. It might be possible that when adolescents make career decisions, perceptions of their own future job satisfaction could impact

on their confidence in making a successful career decision. The fact that satisfaction depends on the successful implementation of occupational self-concepts (Super & Super, 1996) highlights the fact that this may relate to one's CDMSE, where adolescents have to think of themselves in occupational terms and engage in activities that help them make successful decisions and choices.

In addition, Jepson and Sheu (2003) who have reported that general job satisfaction depends on a match between expressed occupational choices and the kind of work that a person enters into might suggest that breadwinners' job dissatisfaction is a result of such a mismatch. If students perceive their breadwinners as having low job satisfaction due to the possible result of a mismatch, this might negatively affect their confidence in making successful career choices.

However, where literature highlights other factors coming into play such as salary and work hours (Zembylas & Papanastasiou, 2004), it seems likely that adolescents might base their career decisions primarily on their perceptions of their family members' job satisfaction, which may be influenced by salary and other factors. Thus, these perceptions may influence adolescents' career decision-making processes. It seems more apparent that due to the country's political history and current legislation, many South African breadwinners may have chosen jobs based on their availability rather than their satisfaction outcome. Adolescents, who are aware or unaware of this, may perhaps, base their own career decisions on availability rather than satisfaction. It therefore seems relevant to explore whether perceptions of high or low breadwinner job satisfaction are ultimately responsible for influencing students' confidence in performing career decision tasks successfully.

In light of the previous literature, because some breadwinners are working for themselves in the present sample, it might be important to acknowledge that there may be a significant difference between breadwinners who are self-employed and those working for an organisation, in terms of job satisfaction. Although the present study is not looking at perceptual differences between adolescents whose breadwinners are self-employed versus those whose breadwinners work for an organisation; this may be an area for future research to examine.

The fact that it has been argued that the relationship between job satisfaction and self-employment may partly reflect distinct personality characteristics that predispose self-employed individuals to evaluate their jobs in a positive manner (Bradley & Roberts, 2004). This optimism may also be conveyed at home, where students may perceive the importance of career decision-making mediated through these positive perceptions of their breadwinners' job satisfaction. A positive perception of breadwinners' job satisfaction is likely to increase students' confidence in making successful career decisions, if they perceive work experiences as positive.

It may also be assumed that self-efficacy could be related to job satisfaction as people with higher self-efficacy are more likely to show interest in tasks they perform, show greater persistence and expend more effort in their jobs (Judge & Bono, 2001). This is an important point as it might suggest that the CDMSE of students related to self-employed breadwinners, may be positively influenced by their breadwinners' high self-efficacy and job satisfaction.

As already mentioned in the literature, job satisfaction has been linked to a number of important organisational outcomes such as employee absenteeism, intentions to leave, burnout, physical and psychological well being (Sparks, Faragher & Cooper, 2001). Adolescents might be able to perceive their breadwinners' job dissatisfaction based on some of the above variables, as these symptoms appear to be relatively noticeable. Coupled with that, adolescents may perceive their family members' job dissatisfaction through more indirect behaviours, of their breadwinners, such as alcohol and drug abuse (Bradley & Roberts, 2004) or general unhappiness. These behaviours may negatively affect students' confidence in making successful career decisions.

As Voydanoff (1990) highlighted, the relationship between job satisfaction and marital and family life satisfaction is reciprocal. It was reported that if one is dissatisfied with one's job, this will generally lead to stress on marital and family relations, which will, in turn, induce further stress at work. This research reinforces the importance of spillover effects within the family, where work interferes with family life. The present study acknowledges the significant impact of spillover and the importance of examining students' perceptions of that spillover through their perceptions of breadwinners' job satisfaction and job insecurity.

Overall, there appears to be lack of research regarding adolescents' perceptions of their breadwinners' job satisfaction and CDMSE, and the effects that differing levels of parental job satisfaction have on the career development of their children. This literature suggests there is a need to explore such a relationship, particularly in a South African context, and this study attempts to fill some of the gaps.

Job Insecurity

Job insecurity is a complex reaction and is defined as a feeling of powerlessness in maintaining desired continuity in a threatened work situation (Greenhalgh & Rosenblatt, 1984, p.438 in press in Greenhalgh, 1983; Wetsman, Etzion & Danon, 2001). The greater the job insecurity, the greater are employees' adverse reactions. Furthermore, individual perceptions have been found to be the source of job insecurity (Greenhalgh, 1983). Thus, adolescents' perceptions of their family members' job insecurity may be a direct reflection of their breadwinners' perceptions of their own job insecurity. Powerlessness has been found to be an important element of job insecurity, which is often, overlooked (Greenhalgh, 1983). Consequently, the present study includes a powerlessness subscale as well as a job insecurity subscale to measure adolescents' perceptions of their breadwinners' *overall* job insecurity more effectively.

Many organisations undergo structural changes, particularly evident in South Africa where the country has undergone many political, economic and social changes. Intensified competition and increasing demand for flexibility and adjustment have led to changes such as downsizing, outsourcing and mergers (Hellgren & Sverke, 2003). Changes in technology, the shifts towards globalisation, acquisitions, strategic alliances and privatisation have largely influenced the functioning and survival of many organizations (Sparks, Faragher & Cooper, 2001). Changes such as these invariably involve retrenchments and the threat of job losses (Mauno, Leskinen & Kinnunen, 2001; Hellgren & Sverke, 2003).

Research has found that job insecurity is a psychological stressor that may trigger adverse mental and physical health problems (Catalano & Dooley, 1977 in Pelfrene, Vlerick, Moreau, Mak et al., 2003). Job insecurity has also been reported to be associated with high levels of emotional and physical symptomatology (Ashford & Bobko, 1989; Heaney, Israel & House, 1994). Furthermore, it has been established that job insecurity is related to various somatic complaints; one in particular is dissatisfaction and deterioration of overall psychological well-being (De Witte, 1999).

Job insecurity has therefore been found to be associated with considerable spillover effects, where the literature highlights the transference of the psychological absorption that an individual undergoes concerning work, which can affect his/her, marriage, and parenting concerns (Canaff & Wright, 2004). Job insecurity can affect an individual's ability to function in the parent-child role because of increased focus on their work situation, which also affects the extent of physical and psychological energy (Canaff & Wright, 2004). Research further emphasises that employees should not expect job security, job content, and/or career development to be permanent (Hellgren & Sverke, 2003).

“Spillover theory” predicts that emotional anxiety and other negative feelings created by job insecurity in the employee will create similar feelings both within the employee's spouse (Larson et al., 1994) and possibly children. Within a family, a change or stressor in one member affects all other members and the family as a whole (Larson, et al., 1994), which may have greater implications for adolescents living in extended family homes.

Job insecurity stress transfers in a systemic function and it has been emphasised that job insecurity transmits negatively from one individual to another either in the same family or to other people at work, and as such cannot be underestimated (Westman, Etzion & Danon, 2001). The effect of work experiences on the employee may continue when the worker is at home and may, in turn, affect other family members (Barling & MacEwan, 1992). Therefore, workers' reactions to work experiences may follow them home and affect their behaviour and interactions with family members (Barling & MacEwan, 1992).

Literature has specifically explored fathers' job insecurity, which has been found to indirectly influence children's behaviours through their sequential effects on job-related effect, namely job satisfaction and parenting behaviours (Stewart & Barling, 1996). This is because job insecurity reflects the degree to which employees perceive their jobs, or parts of their jobs, to be threatened (Stewart & Barling, 1996).

Furthermore, research has examined how spouses react to job insecurity and the crossover strain from one spouse to another (Westman et al., 2001). Therefore, it is important to acknowledge spillover as a possible impact on the present study's findings. According to Hobfoll (1989) in Westman et al., (2001) stress occurs when individuals are threatened with resource loss, actually lose resources or fail to gain resources following resource investment. This is why there may be such strain on familial relationships, which could be a potential reason for a possible negative correlation between adolescents CDMSE and their perceptions of their family members' job insecurity.

In a similar study, researchers examined how role ambiguity, role conflict, job insecurity, and job satisfaction affect three aspects of marital functioning (Barling & MacEwan, 1992). It was found that job insecurity, ambiguity and conflict affected marital functioning via concentration and depression and the relationship between job satisfaction and marital functioning was mediated by depression (Barling & MacEwan, 1992). It is possible that the effect of work on family or of family experiences on work is indirect and mediated by other variables (Barling & MacEwan, 1992).

Furthermore, job insecurity and less stable working environments have been found to be responsible for certain industrial and social problems such as increases in divorce rates, increases in single parent homes, and increases in sickness (Cooper, 1999). Job insecurity appears to have had huge effects upon family members; it is one of the reasons for the emergence of dual-earner families, which have emerged in climates that are far from “family friendly” (Cooper, 1999, p.569). There has been an increase in work hours, which might have profound affects on families, the development of their children and their relationship to their parents (Cooper, 1999). It still remains to be seen whether perceptions of job insecurity affect the way students make career decisions, given that job insecurity is associated with a number of negative factors.

As changes such as restructuring and downsizing continue, it is expected that job insecurity will also increase (Larson, et al., 1994). The more ambiguous and uncertain the future becomes, the more stressful it becomes (Larson et al., 1994). Job security is seen as an important pre-requisite for establishing and maintaining strong families (Voydanoff, 1990; Wilson, Larson & Stone, 1993). Job insecurity, for wives has been

reported to be negatively related to overall marital and family satisfaction. However, for husbands, job insecurity is not significantly related to overall marital and family satisfaction (Voyandoff & Donnelly, 1988). This might suggest that there is a difference in how husbands and wives deal with job insecurity, which may influence the perceptions of students living with only one of their parents.

The literature has further, examined the effects of downsizing on career anchors in relation to age and culture at work. Schein (1974, 1978) first conceptualised the notion of a career anchor when he examined the reasons for why and how individuals make career decisions (in Marshall & Bonner, 2003). A career anchor is “a descriptive and predictive tool that ‘serves to guide, constrain, stabilize and integrate the person’s career’” (Schein, 1978, p.127 in Marshall & Bonner, 2003, p.282).

Furthermore, it is “‘inside the person, functioning as a set of driving forces on career decisions and choices’” (Schein, 1978, p.125 in Marshall & Bonner, p.282). One of the five career anchors is “security/stability” which refers to “long-term employment for health benefits and retirement options” (Schein, 1974 in Marshall & Bonner, 2003, p.283). With the onslaught of global competition there have been increases in downsizing and job insecurity as well as shifts in organisational loyalties (Marshall & Bonner, 2003).

Consequently, this literature has found that downsizing plays different roles on career anchors in relation to age and established that younger employees perceive it more positively than older workers (Marshall & Bonner, 2003). Younger workers have been found to cite positive career and job satisfaction gains in comparison to older

subjects. It has recently been discovered that younger employees do not actively seek job security but rather self-employment as a career anchor (Feldman & Bolino, 2000). Literature corroborates this finding, which highlights that the experience of uncertainty has been seen to be a good predictor of involvement in career exploration (Jordaan, 1963 in Taveira, Silva, Rodriguez & Maia, 1998).

Research has also examined job insecurity in relation to permanent workers versus contract workers. Job insecurity was explored in association with the organisational commitment behaviours (OCBs) in a sample of schoolteachers (Feather & Rauter, 2004). Results found that contract teachers showed higher levels of job insecurity and higher commitment behaviours compared to permanent teachers. In addition, OCBs have been found to be positively related to perceived job insecurity for permanent teachers (Feather & Rauter, 2004). This may be because permanent teachers are likely to feel more secure in their jobs when employed as permanent workers. The literature also proposes that loss of organisational loyalty is a consequence of job insecurity (Reilly, Brett & Stroh, 1993 in King, 2000). As a result, full time or part-time employed breadwinners in the present study may instill differing perceptions in adolescents, which may impact on the study's findings. The study has, therefore included biographical data relating to breadwinners employment status, which may aid in discussing the study's findings.

Job insecurity has been examined in relation to racial discrimination, where minority groups perceive their layoffs as unfair, in comparison to other race groups (Mollica, 2003). Research has suggested that during layoffs or other significant organizational changes where job insecurity is heightened, different identity groups might perceive

diversity management differently (Mollica, 2003). Therefore, managing diversity has been studied as an important process, which refers to the implementation of practices that maximise the potential advantages of diversity and minimise its potential disadvantages (Cox, 1993 in Mollica, 2003). There are major issues with fair treatment in managing diversity programs (Mollica, 2003). Managing diversity is an on-going challenge in South Africa. If students perceive the working world as unfair, this may impact negatively on the types of career choices they make and consequently their CDMSE.

In summary to this section, if it is true that the greater the job insecurity, the greater are employees' adverse reactions (Greenhalgh, 1983), then it might be plausible to assume that adolescents may perceive this to a greater extent. This is why job insecurity has been chosen as a work experience for this study's focus, because it may be more accessible or observable by adolescents. Coupled with this, job insecurity is seen to reflect the degree to which employees perceive their jobs, or parts of their jobs, to be threatened (Stewart and Barling, 1996). If breadwinners are insecure, and threatened in their jobs, adolescents may be able to perceive their family members' own perceptions of their job insecurity.

Furthermore, given that job insecurity is a psychological stressor which may trigger adverse mental and physical health problems (Catalano & Dooley, 1977 in Pelfrene, Vlerick, Moreau, Mak et al., 2003), students who perceive job insecurity as a potential psychological and physical stressor in their family members' lives, may be a more noticeable experience affecting their perceptions of the world of work, and may enhance adolescents' own fear of job insecurity in their future careers. Therefore, it

becomes likely that adolescents may be less confident in making career decisions successfully. It may, therefore, seem likely that perceptions of job insecurity will impact *negatively* on adolescents' CDMSE, in the present study.

The literature also states that job insecurity has enormous side effects, such as burnout, chronic stress, and emotional exhaustion, all of which can affect other family members drastically, especially if the person experiencing these symptoms is the sole breadwinner of the household (Canaff & Wright, 2004). This might, therefore, have huge implications for adolescents who have to make important career decisions and who perceive the world of work as negative and unsafe for career exploration.

The fact that job insecurity affects an individual's ability to function in the parent-child role (Canaff & Wright, 2004) may be a reason for why there is a possible indirect association between adolescents' CDMSE and their perceptions of their family members' job insecurity. This may be a typical spillover effect where negative feelings created by job insecurity in the employee will create similar feelings both in the employee's spouse (Larson et al., 1994) and children. This spillover effect may create and reinforce negative perceptions in adolescents and therefore is likely to negatively affect their confidence in making successful career decisions.

Coupled with this, the fact that job insecurity stress transfers in a systemic negative function from one individual to another in the same family cannot be underestimated (Westman & Etzion, 1999 in Westman, Etzion & Danon, 2001). Thus, there may be greater implications for adolescents living in extended family households, which may impact further on the present study's findings. It seems likely that if workers'

reactions to work experiences follow them home and affect their behaviour and interactions with family members (Barling & MacEwan, 1992), this may impact considerably on adolescents' perceptions of their breadwinners' work experiences. Overall, it therefore seems important to look at adolescents' perceptions of their breadwinner's job insecurity because it is possible that the existence of negative career outcome expectations may function as an internalised barrier to constructive and persistent involvement in career exploration activities (Jordaan, 1963 in Taveira, Silva, Rodriguez & Maia, 1998).

However, it is imperative to acknowledge the literature's findings on job insecurity in relation to younger workers, who have been found to cite positive career and job satisfaction gains in comparison to older subjects. To recap, younger employees do not seek out job security in future job opportunities but rather self-employment as a career anchor (Feldman & Bolino, 2000). This may have implications for the possible relationship between students' CDMSE and their perceptions of their breadwinners' job insecurity, previously it seemed plausible to assume that students might try to avoid future job insecurity, but Feldman and Bolino's (2000) research highlights that adolescents do not actively seek job security. Therefore, this emphasises the importance of examining the direction in which perceptions of job insecurity might influence students in terms of making successful career decisions. Furthermore, this research suggests that adolescents' perceptions of their breadwinners' career anchors might impact considerably on their own future career anchors and therefore influence their career choices and decisions.

In terms of examining differences between self-employed breadwinners and organisation employees (Reilly, Brett & Stroh, 1993 in King, 2000), as apparent in the literature, it might be possible that adolescents perceive their family members as being less committed to their jobs because of their feelings of job insecurity. This might also have implications for students' CDMSE, as they may not be as committed to their career decisions and possibly to their future organisations. If they perceive their breadwinners as being less loyal and less committed to their work, as a result of job insecurity, these perceptions are likely to impact negatively on adolescents' confidence in making career decisions.

Furthermore, with the mention of external changes such as environmental ones impacting on the survival of many organisations (Sparks, Faragher & Cooper, 2001), in South Africa, the rise in black economic empowerment as a result of legislative changes, may have contributed to job insecurity for certain individuals. It is therefore important to acknowledge that, given this, South African adolescents might be more likely to rethink their career paths and choices, which could manifest in a lowered confidence in career decision-making. It therefore seems probable to assume that perceived levels of family members' job insecurity has an impact on students' CDMSE given the recent changes in the country's industrial setting.

In addition, literature, which has highlighted the challenges of managing diversity in terms of maintaining fair treatment (Mollica, 2003), emphasises that this is an on-going challenge in South Africa. If students perceive the working world as negative or biased, this may impact negatively on the types of career choices that they make and consequently their CDMSE. Fairness is linked with acceptance of change (Cobb,

Wooten & Folger, 1995 in Mollica, 2003), and how students' breadwinners have accepted the legislative, structural and procedural changes in South Africa may be reflected in students' perceptions of their breadwinners' working experiences, particularly job insecurity. These perceptions might also affect the way students accept change and how they perceive job insecurity as a positive or negative impact on their career decision-making self-efficacy.

Research further emphasises that employees should not expect job security, job content, and/or career development to be permanent (Hellgren & Sverke, 2003). If people no longer expect job security, especially in a constantly changing working world, the spillover effect may lead to adolescents having different job security perceptions, which could, in turn, affect their CDMSE.

Overall, there appears to be a gap in the literature regarding job insecurity and CDMSE. It therefore seems relevant to explore a possible relationship between students' CDMSE and perceptions of their familial job insecurity. Therefore this forms the basis of the second hypothesis in the present study, which explores the relationship between students' CDMSE and their perceptions of their breadwinners' job insecurity.

SUMMARY AND AIMS

Research (Krass & Hughey, 1999; O'Brien, Bikos, Epstein, Flores, Dukstein & Kamatuka, 2000; Peterson & del Mas, 2001; Turner & Lapan, 2002; Gardner, 2004) has indicated that there is currently a gap in the literature regarding the link between

CDMSE and parental job satisfaction and job insecurity, particularly in the South African context, which has undergone significant changes since the advent of democracy in 1994.

Furthermore, to date, there has been little exploration of the impact of race and ethnicity on the career interests and career development of adolescents (Turner & Lapan, 2002). This is particularly relevant in a South African context, which comprises a multi-racial and multicultural population.

Although a number of studies use school children as samples in measuring CDMSE (O' Brien et al., 2000; Krass & Hughey, 1999; Alliman-Brisett, Turner & Skovholt, 2004), many focus on University student samples as well (Betz & Voyten, 1997; Giles & Rea, 1999; Gloria & Hird, 1999; Peterson & del Mas, 2001). This study has chosen to use university students, who might be better able to reflect their CDMSE, in that they have already demonstrated a willingness to pursue tertiary education. This is indicative on one of the major dimensions of CDMSE, that being goal selection. Furthermore, university students may have the age and maturity to reflect more accurately their perceptions of their breadwinners' job satisfaction and job insecurity.

By focusing on university students, it is hoped that the study will contribute some useful information on the link between students' CDMSE, and perceptions of their breadwinners' job satisfaction and job insecurity in a South African context. In so doing it aims to assist in closing the research gap that exists in current literature.

The overall aim of this study is to assess whether there is a relationship between student's career decision-making self-efficacy and perceptions of their breadwinners' job satisfaction and job insecurity.

From the previous literature review, the following hypotheses may be deduced:

- a. There is a relationship between students' CDMSE and their perceptions of their breadwinners' job satisfaction.
- b. There is a relationship between students' CDMSE and their perceptions of their breadwinners' job insecurity.

CHAPTER 2

METHODOLOGY

The following chapter will discuss the methodological procedure that was undertaken in order to assist the researcher in answering the major research question and hypotheses. Aspects such as the nature of the research design, sample and procedure, instruments used as well as statistical analyses conducted will be discussed.

2.1. Research Design

The present study obtained data of a quantitative nature, so as to determine a relationship between students' career decision-making self-efficacy and their perceptions of their breadwinners' job satisfaction and job insecurity. The study is therefore characterised as having a quantitative non-experimental correlational research design. Data collected was of naturally occurring variables; therefore there was no random assignment of subjects, nor any planned intervention (Welman & Kruger, 2001). As a result, no causal inferences could be made, as there was no independent variable manipulation, no control group or random assignment in the study.

Due to the fact that this was a non-experimental, correlational design, subjects were measured on three variables namely, career decision self-efficacy (dependent variable) and perceptions of their family members' job satisfaction (independent variable) and job insecurity (independent variable), at approximately the same moment in time. The design is therefore a cross-sectional one as data was collected at

approximately one point in time (Welman & Kruger, 2001). The relationship (correlations) between the three variables was then analysed.

2.2. Sample

The sample was obtained from the University of the Witwatersrand, where first year Psychology students (of whom the majority were registered for medical degrees) were asked to participate. Participation in this study was voluntary and the sample is therefore classified as a non-probability convenience sample. Non-probability means that probability is zero, in that not everyone in the population has the chance of being included in the sample. However, non-probability is a frequently used method and was employed for the purposes of this study as matter of convenience and economy (Welman and Kruger, 2001).

Given the nature of the research, students were required to have at least one breadwinner in their family who is currently earning and working as a prerequisite to taking part in the study. Students were then asked to choose only one breadwinner (preferably a parent) to whom they would refer when completing the questionnaire. Students were also required to be fluent in English as the questionnaire was English-based. Out of a total of 200 questionnaires sent out, only 148 (74%) came back completed. This was regarded as a substantial sample size for reliable findings.

Table 1 on the below outlines the demographic information of the sample, used in this particular study. This information is important so that one is able to understand the sample extracted.

TABLE 1: Demographic Data

<u>VARIABLE</u>	<u>FREQUENCY</u>	<u>PERCENTAGE</u>	<u>N</u>
<u>Gender</u>			148
Male	32	21.62	
Female	116	78.38	
<u>Age</u>			
18 & 19 yrs	115	80.99	142
20> yrs	27	19.01	
<u>Race</u>			
White	70	47.30	148
Black	34	22.97	
Coloured	3	2.03	
Indian	37	25.00	
Asian	4	2.70	
<u>Home-Language</u>			
English	100	68.97	145
Afrikaans	9	6.21	
Zulu	11	7.59	
Sotho	4	2.76	
Xhosa	5	3.45	
Other	16	11.03	
<u>Year of Study</u>			
1st Year	143	99.31	144
2nd Year	1	0.69	
<u>Family member currently living with</u>			148
Father	3	2.03	
Mother	19	12.84	
Both parents	54	36.49	
Grandparent(s)	1	0.68	
Aunt &/Uncle	6	4.05	
Sibling (s)	1	0.68	
Parent(s) & Siblings	42	28.38	
Parent(s) Siblings & extended family	12	8.11	
Other	10	6.76	
<u>Chosen/referred breadwinner in completion of questionnaire</u>			148
Father	99	66.89	
Mother	48	32.43	
Other	1	0.68	
<u>Occupational level of breadwinner</u>			137
Unskilled	8	5.84	
Semi-Skilled	11	8.03	
Skilled	118	86.13	
<u>Occupational field of breadwinner</u>			136
Executives & Managers	34	25.00	
Professionals & support (e.g. engineers)	32	23.53	
Professionals & support (e.g. medical)	33	24.26	
Other semi skilled and unskilled jobs	3	27.22	
<u>Breadwinners' occupation vs. students' degree</u>			148

Dissimilar Occupation/career level & area	18	12.16	
Professional & Dissimilar Occupation/career	108	72.97	
Similar Occupation/career	22	14.86	
<u>Breadwinners' work status</u>			145
Full-Time	138	95.17	
Part-Time	7	4.83	
<u>Tenure of breadwinner at current job</u>			143
0-10 yrs	16	11.19	
11 to 20 yrs	65	45.45	
21 to 30 yrs	55	38.46	
31 to 40 yrs	6	4.20	
41 to 50 yrs	1	0.70	
<u>Working Hours of breadwinner</u>			147
Less than 8 hrs per day	19	12.93	
8 hrs per day	47	31.97	
More than 8 per day	81	55.10	
<u>Breadwinners working in an organisation</u>			145
Yes	74	51.03	
No	71	48.97	
<u>Breadwinners working for themselves (i.e. have own company).</u>			148
Yes	51	34.46	
No	97	65.54	
<u>Does breadwinner enjoy his/her job?</u>			146
Yes	115	78.77	
No	31	21.23	
<u>Breadwinner previously retrenched?</u>			148
Yes	28	18.92	
No	120	81.08	
<u>Degree participant aiming to complete</u>			144
BSC	55	38.19	
BHSC	85	59.03	
BA	2	1.39	
Unsure	2	1.39	

Table 1 outlines the frequencies and corresponding percentages for each of the biographical variables examined in the present study. It is evident from Table 1, that not all sample sizes are the same for each question this was a result of students who had not fully completed the questionnaire. Due to the low response rate, the researcher deemed it necessary to use questionnaires where there only slight inaccuracies occurred in the biographical section of the questionnaire. However, where students had not completed the scales, they were regarded as invalid responses and therefore were not included in the sample. The sample consisted of 148 first year

Psychology students, of which the majority were registered for medical degrees. The sample had a gender split of 32 males (21.62%) and 116 females (78.38%). Given that respondents chosen for the study were from first year Psychology tutorials, 99.31% of the sample consisted of first year students and only 1 participant reported being in second year. Of this total sample, 55 (38.19%) are aiming to complete BSC degrees, 85 reported aiming to complete BHSC including medicine, BNursing or BPharm degrees (59.03%). Two of the samples' students are completing BA degrees and two were unsure of the degrees that they were aiming to complete. The majority of the sample (115 or 80.99%) was therefore aged between 18 and 19 years. Twenty-seven (19.01%) of the sample were aged 20 years or older. The respondents were made up of 70 whites (47.30%), 34 blacks (22.97%), 3 coloureds (2.03%), 37 Indians (25%) and 4 Asians (2.7%). Although exact figures are not available, these statistics do appear to be in line with the racial distribution of the classes.

Of the total sample, 100 (68.97%) were English speaking, 9 (6.21%) were Afrikaans, 11 (7.59%) were Zulu speaking, 4 (2.76%) Sotho, 5 (3.45%) were Xhosa speaking and the remaining 16 (11.03%) accounted for other African languages. The majority of students reported living with both parents (54 or 36.49%) and 42 (28.38%) claimed to live with one parent or both parents with sibling/s. More students reported living with their mothers only (19 or 12.84) as opposed to 2.03% of the sample currently living with their fathers only. Students were asked to stipulate only one breadwinner in their family, to whom they would refer in completion of the questionnaire. The majority of the sample (66.89%) chose father as their breadwinner to whom they would refer when completing the questionnaire, whereas 32.43% chose their mothers as their breadwinner to refer when completing the questionnaire, only one person

chose another family relative as their breadwinner. It should be reminded that, when students were asked to refer or bear in mind only one breadwinner in completion of the questionnaire, students were asked to choose a breadwinner whom they felt had influenced them the most in terms of their life and career choices.

One hundred and eighteen or 86.13% of the sample's breadwinners were in skilled level occupations, 11 or 8.03% were classed as semi-skilled and 8 or 5.84% breadwinners were unskilled workers. Twenty-five percent of the students' breadwinners were classed as managers and executives, whilst 24.26% were in professional occupations (including educational roles, doctors and so on). Eighteen or 22.16% of the students' breadwinners were classed as being in occupations unrelated to their adolescents' chosen degrees, whilst 108 (72.97%) of the sample reported having breadwinners in professional occupations but dissimilar fields to their students' degrees. Twenty-two or 14.86% of breadwinners have similar occupations to students' degrees (in other words, healthcare professions). 95.17 % of the sample's breadwinners work full time whilst only 7 breadwinners were reported as being part-time employees.

The majority (65 or 45.45%) of adolescents' breadwinners have been earning and working up to 20 years and 55 or 38.46% have been breadwinners for approximately 30 years. Eighty-one or 55.10% of students' breadwinners work more than 8 hours a day, 47 breadwinners or 31.97% of the sample work 8 hours a day and 19 or 12.93% work less than 8 hours a day. Seventy four (51.03%) of students' breadwinners work for an organisation whereas 51 (34.46%) of students' breadwinners are self-employed, whilst 65.54% are not self-employed. There was not a 100% response rate for this

particular question, hence the frequency statistics do not add up to a sample of 148. One hundred and fifteen or 78.77% of students' reported their breadwinners as enjoying their jobs, whilst 31(21.23%) of students' breadwinners are perceived as not enjoying their jobs. Twenty-eight (18.92%) of the sample responded "yes" to their breadwinners being previously retrenched, whilst 120 (81.08%) responded "No".

2.3. Procedure

The researcher approached the Psychology Department for permission to carry out the present research study. Permission was required from the Head of the Psychology Department (see appendix C) and verbal permission from the relevant first year psychology lecturers. However, research only commenced once the researcher was also granted permission and clearance from the University of the Witwatersrand's Human Research Ethics Committee (see appendix D). This was to ensure that the proposed study adhered to ethical standards entrenched by the University (Protocol number H050808).

A total of two hundred questionnaires were distributed during tutorial times, where the class sizes were smaller and therefore more manageable, of which 148 were returned completed. Given the fact that tutorial classes are smaller in size as opposed to lectures, the researcher (also a tutor) asked three other tutors to distribute questionnaires to two of their tutorial classes. Questionnaires were therefore distributed amongst a total of 8 classes so as to aim to increase response rates and potentially increase the total sample size. Respondents then completed the questionnaires and were asked to place them in sealed envelopes and place them in

sealed boxes, monitored by the tutors and then collected by the researcher. Participants were requested not to discuss questions and answers with their neighbours or fellow students when completing the questionnaires as this was seen to violate the confidentiality of the study's procedure.

2.4. Instruments

In the present study, data was collected with the use of a self-report questionnaire, consisting of four self-report scales. Each of the scales was included in order to effectively answer the research question and hypotheses, by understanding and exploring possible relationships between the variables. Students were required to complete a biographical questionnaire, the Career Decision Self-Efficacy Scale-Short Form (Betz & Taylor, 2001), The Overall Job Satisfaction Scale (Warr, Cook and Wall, 1979) and The Job Insecurity Scale (Ashford, Lee & Bobko, 1989). It should again be noted that when the students completed the questionnaire, they were asked to choose only one breadwinner in their family who was currently earning and working, to bear in mind when answering each of the scales.

2.4.1. Biographical Questionnaire

Respondents were required to complete a biographical questionnaire, which asked questions focussing on the students' gender, age, race, home-language, year of study, familial background and degree aiming to complete (see appendix A). With the use of biographical questionnaires, the researcher is able to describe the nature of the sample in more detail and make assumptions specific to that sample (Welman and

Kruger, 2001). The purpose of these details was explained to participants in a covering letter (see appendix B).

2.4.2. The Career Decision Self-Efficacy Scale (CDSE) – short form

In order to measure students' career decision-making self-efficacy, the Career Decision Self-Efficacy Scale- short form developed by Taylor, Betz and Klein (2001) was used (see appendix A) (in Betz & Taylor, 2001). The CDSE scale was seen to be appropriate to the present study as it is often used to test the level of career decision-making self-efficacy for University students (Taylor, Betz & Klein, 2001 in Schaffer, 2002).

The original Career Decision Self- Efficacy scale consists of 50 items (Taylor, et al., 2001 in Schaffer, 2002). However, due to the fact that this study administered four scales per student, it was important to use a shorter form of the scale to ensure a better response rate. The shorter form of the CDSE scale used in the present study, consisted of five subscales comprising 25 items. The five subscales measure the five career choice competencies of career maturity, developed by Crites (1978) (Taylor, Betz & Klein, 2001 in Schaffer, 2002).

The subscales comprise self-appraisal, gathering occupational information, planning, problem-solving and goal selection. Responses were scored on a 5-point Likert scale, ranging from no confidence at all (1) to complete confidence (5). Scores for the 25 items were then summed to produce a total score, where higher scores were indicative of higher levels of career decision-making self-efficacy (Schaffer, 2002). This scale

has been reported to be a highly reliable measure (Wolfe and Betz, 2004) with internal consistency reliabilities ranging from .73 to .83 between items and .94 for the 25 item total score (Betz, Klein, et al., 1996 in Paulsen and Betz, 2004). This scale has been used in the South African context, whereby research used a sample of South African and Australian high school students to examine the cross cultural differences (Creed, Patton & Watson, 2002).

2.4.3. The Overall Job Satisfaction Scale

The most appropriate scale, chosen to measure perceptions of job satisfaction in the present study, was the Overall Job Satisfaction Scale developed by Warr, Cook and Wall (1979 in Short, 1996) (see appendix A). The scale appears to be widely used (Short, 1996; Stewart and Barling, 1996; Lok and Crawford, 2004) and it measures intrinsic, extrinsic and overall job satisfaction.

The appropriateness for using this particular scale, in the present study owes to the fact that it is a relatively short 16-item scale that relates to certain aspects of work or the work environment (Lok and Crawford, 2004). It should be noted that items were reworded to assess students' perceptions of the breadwinners' job satisfaction but the overall meaning of the items remained constant. Subjects were asked to respond to the items on a 7-point Likert scale, where 1=extremely dissatisfied and 7=extremely satisfied. A total score was then taken from 15 to 105 with a higher score indicating a higher overall job satisfaction. The Overall Job Satisfaction scale has been proven to be valid and reliable with a Cronbach alpha coefficient of .75 (Stewart and Barling, 1996).

2.4.4. The Job Insecurity Scale

The Job Insecurity scale developed by Ashford, Lee & Bobko (1989) was used to measure job insecurity. Ashford, et al. (1989) developed this scale based on Greenhalgh and Rosenblatt's (1984) theoretical findings, which suggest that job insecurity is a multidimensional construct, comprising of five specific components. Ashford et al. (1989) used three of the five components to develop the Job insecurity scale, which include: perceived threat to various job features; perceived threat of the possibility of certain events that impact negatively on an individual's total job; and perceived powerlessness. Therefore, the three subscales, which comprise the Job Insecurity scale developed by Ashford, Lee and Bobko (1989) are referred to as Job Features, Total Job and Powerlessness.

In the present study, only two of the Total Job Insecurity subscales, namely the Total Job subscale and the Powerlessness subscale were used. The Job Features subscale was not seen to be an appropriate measure to the present study, as the items referred to features, which students would appear to have extreme difficulty in commenting on, therefore affecting their perceptions of their breadwinners' job insecurity and influencing the validity and reliability of the study's findings. For instance, the instruction in the job features subscale asks "how important are each of the following features to you personally? Some examples of the items include: geographic location?, maintaining your current pay? and maintaining opportunities to receive periodic pay increases? (Ashford, Lee & Bobko, 1989).

Despite the fact that the items in the Total Job and Powerlessness subscales were reworded to measure *students'* perceptions of their breadwinners' job insecurity, the items still remained meaningful and answerable to students. Despite the fact that some items were reworded to address students' perceptions on the Job Features subscale, the questions still appeared difficult for students to understand and provide accurate answers for. This was because some questions asked very specific questions regarding their breadwinner's 'current pay', which a student would probably not know the answer.

As already mentioned, the job insecurity scale looks at a multidimensional approach to job insecurity (Mauno and Kinnunen, 2002). Therefore in order to holistically assess students' perceptions of their breadwinners' job insecurity, the Total Job and Powerlessness subscales (see appendix A) were used. As already mentioned the Total Job subscale evaluates the threat to a job itself, for example, how likely is it that the number of work hours the company can offer you to work may fluctuate from day to day? (Ashford et al., 1989) The Powerlessness subscale assesses powerlessness to prevent a job loss where items asked, to what extent do "I have enough power in this organisation to control events that might affect my job?" (Ashford et al., 1989). Items were then reworded to measure the students' perceptions of their breadwinners' job insecurity more effectively (see appendix A). Both the Total Job and Powerlessness subscales were measured on a 5-point Likert type scale, where items ranged from very unlikely (1) to very likely (5) (Short, 1996).

For the purposes of this study, an extra component was added 'don't know' (0), to the job satisfaction scale and the two job insecurity subscales. The reason for this was

because the scales were used to measure student's *perceptions*; therefore it seemed likely that the students would provide neutral (neither likely nor unlikely) responses, when they may have in fact, not have actually known the answer to a particular item. Therefore, this added component was seen to increase the likelihood of more accurate, reliable and valid data. The Job Insecurity scale has been used within the South African context (King, 2000; Laka-Mathebula, 2004) and has produced accurate reliabilities with alpha coefficients ranging from .74 to .92 (Ashford et al., 1989 in Short, 1996).

2.5. ANALYSIS

2.5.1. Descriptive Statistics

This study used descriptive statistics in order to describe the data obtained (Howell, 1999). It is important to describe what the data is saying about a particular phenomenon (Howell, 1999) and by describing the data; one is giving more meaning to the study's findings. This allows the researcher to make certain inferences based on the description of that sample. Welman and Kruger (2001, p.208) define descriptive statistics as being "concerned with the description and/or summarisation of the data obtained for a group of individual units of analysis".

In this study, the data was grouped together in the form of tables so as to present the means, frequencies, variances, kurtoses, Kolmogorov Smirnovs and correlations that described the data. Means may refer to averages and they are often used as the most common measure of central tendency. In order to calculate the mean, one needs to sum all the scores and divide that number by the number of total scores (Howell,

1999). Frequency or frequency data can also be referred to as categorical data. This is data that usually represents a number of observations in each category (Howell, 1999). Furthermore, variance, which is the standard deviation squared, can be defined as “a measure of the average of the deviations of each score from the mean” (Howell, 1999, p. 69).

Distribution Analyses were also performed on the interval scales, namely the five CDSE subscales, total CDSE scale, the Job Satisfaction scale, the Total Job subscale and Powerlessness subscale and the Total Job Insecurity scale to describe the data further, by testing for normality. Therefore tests for Kurtosis and Kolmogorov Smirnov’s Tests for Normality were performed to examine the normality of the distributions for each of the interval scales. These measures of skewness would then further help to determine whether parametric or non-parametric statistics would be used to analyse the data.

Kurtosis is a measure of skewness, which measures the “degree to which a distribution is symmetrical” (Howell, 1999, p.44). More specifically, kurtosis “refers to the relative concentration of scores in the center, the upper and lower ends (tails) and the shoulders (between the center and the tails) of a distribution” (Howell, 1997, p.29). It is important that larger sample sizes are used to test for kurtosis or the shape of a distribution (Howell, 1997), in this study, the sample size was deemed substantial with a total number of 148 participants.

The second test for normality, which was used to measure the skewness of the distributions for the interval scales, was the Kolmogorov Smirnov Test for Normality. The Kolmogorov Smirnov is a “goodness of fit” test for comparing two distributions.

These statistics are generally used for continuous distributions. Any value greater than 1 or less than -1 , suggests that the distribution is skewing either to the left or to the right, where there is density in the extreme areas of the distribution (Ritter, 1998, www.ciphersbyritter.com/javascrp/normchik.htm).

2.5.2. Internal Reliability Analysis

Reliability may be regarded as the extent to which obtained scores may be generalized to different situations (Welman & Kruger, 2001). Internal consistency or reliability refers to the degree of generalisability across the items within a measurement (Welman & Kruger, 2001). Internal reliability also looks at the intercorrelations between the items of scales (Murphy & Davidshofer, 2001).

In this study, in order to measure the internal consistencies of the subscales and across the items of each of the four scales, Cronbach alpha coefficients were used. “Cronbach’s (1951) coefficient alpha is a measure of the internal consistency of a measurement/test. This index shows the degree to which all the items in a measurement/test measure the same attribute” (Welman & Kruger, 2001, p. 141). Therefore, for this reason, it seemed appropriate and relevant to use Cronbach alpha to measure the internal consistencies of the items in each of the career decision self-efficacy subscales, as well as the items for the job satisfaction scale, total job and powerlessness subscales.

2.5.3. Correlations

Correlation essentially refers to the association between two variables (Welman & Kruger, 2001). In this study, the researcher correlated students' career decision-making self-efficacy and their perceptions of their breadwinners' job satisfaction and job insecurity and sought to determine whether there was an association or a relationship between the three variables. In order to measure the degree of association between these three variables statistically, a correlation coefficient was used (Welman & Kruger, 2001).

The present study employed the Pearson's Product Correlation Coefficient (r) in cases where data met the required parametric assumptions, which has been ascertained in the previous section. Pearson's Product Correlation Coefficient (r) is regarded as one of the most common ways of measuring correlations (Howell, 1999). Conversely, in cases where the data did not meet certain parametric assumptions, after consideration of their distribution properties and other descriptive statistics, a Spearman's Correlation Coefficient (r) was seen as appropriate to interpret the data.

Spearman's Correlation Coefficient is used for ranked data, where the lowest values are assigned a 1 and the next lowest a 2, and so on (Howell, 1999). This is one of the simplest and most common correlation coefficients to use. Spearman's is used in order to measure a linear relationship between one set of ranks and another set of ranks (Howell, 1999). This is generally used for continuous data, such as scales that are measured from 1 to 100. The importance for using Spearman's correlation coefficients in this particular study was a result of the not normal distribution of the

data on the Job Insecurity subscales, ascertained by examining the descriptive statistics which did not meet all the parametric assumptions for using a Pearson's Correlation Coefficient to interpret the data. Therefore, when parametric assumptions are not met, it is appropriate to use the non-parametric statistic, Spearman's Correlation Coefficient, to interpret the data.

For interpreting both a Pearson's Correlation Coefficient and a Spearman's Correlation Coefficient, a positive correlation reflects a direct relationship between two variables. Variables inversely related suggest a negative relationship, so as one variable increases the other decreases and vice versa (Howell, 1999). Correlation coefficients can only range between 0 and 1 (Murphy & Davidshofer, 2001). A correlation of 0 indicates no relationship. However, the closer the score is to 1, the stronger the relationship, for example 0.8 is a strong positive relationship, whereas, 0.3 is regarded as a weak relationship. A correlation matrix was produced in order to determine possible significant correlations between the three variables.

2.5.4. Multiple Stepwise Linear Regression

Multiple regressions are very useful in that they allow the researcher to predict the correlation between one variable based on a number of predictor variables simultaneously (Howell, 1999), by ascertaining the relative influence of each predictor on a dependent variable. In this study, a multiple regression was performed in order to answer the main research question, which aimed to establish the influence of the two independent variables (job satisfaction and job insecurity) on the dependent variable (career decision-making self-efficacy). In order to perform a multivariate

analysis, certain assumptions have to be met. The scales have to be fairly normally distributed and the variables under examination have to be interval, in this case, all the variables CDMSE, job satisfaction and job insecurity were interval.

Here the CDSE subscales were totaled and therefore regressed as one dependent variable in relation to the independent variables (job satisfaction and job insecurity). A forward-backward stepwise regression was performed where the independent variables were entered, one at a time into the regression in a series of steps to determine their influence on the dependent variable. Independent variables, which were not influencing the dependent variable, were then removed from the regression model. It was important to run a stepwise regression in order to add and subtract a variable at a time from the regression model (Howell, 1999) to establish which variables were important to consider as impacting on the dependent variable. Independent variables that were subtracted or removed from the regression equation were regarded as not contributing to the relationship under examination.

2.5.5. One-Way Analysis of Variance (One-Way ANOVA)

In order to explore the relationships further, ANOVA were conducted between race and the CDSE subscales in attempt to explain the results in more depth. It was suggested that due to the South African context, there might be differences amongst race groups regarding the relationship between students' CDMSE and their perceptions of their breadwinners' job satisfaction and job insecurity. Therefore, in order to explain these results further, it was important to perform a One-Way Analysis of Variance on the variables. Analysis of Variance or ANOVA is a "statistical

technique for testing for differences in the means of several groups” (Howell, 1999, p. 299). It is one of the most commonly used techniques in research. The advantage of using such a technique is that it deals with differences between sample means and it has no limit on the number of means. It also allows the researcher to analyse two or more independent variables at the same time, by looking at both individual and interacting effects between variables (Howell, 1999). Once the ANOVA’s were performed, any significant differences found, required the use of a post-hoc test to see where exactly the differences lay. However, in this particular study, no significant differences were recorded and therefore post hoc tests were not performed on the variables.

2.5.6. Non- Parametric One-way ANOVA

When performing any one-way analysis of variance test, it is firstly important to perform a Levene’s test for normality, which determines whether there is equality of variance amongst the groups (Howell, 1999). If there is equality of variance, then a parametric one-way ANOVA is suitable to perform on the variables under question (Howell, 1999). However, when there is inequality of variance amongst the groups, a non-parametric one-way ANOVA is appropriate to interpret the data. In the present study, a Kruskal-Wallis One-way Analysis of Variance was performed as there was found to be inequality of variance amongst the race groups on the Self-Appraisal CDSE subscale. Kruskal Wallis is a suitable statistic to use when there are three or more independent variables. This statistic “hypothesises that all samples were drawn from identical populations and are particularly sensitive to differences in central tendency” (Howell, 1999, p.405).

2.6. Ethical Considerations

Although the study was essentially of minimal risk, given its nature, it was acknowledged by the researcher that students could perceive the present study's content as invasive or emotionally upsetting in some way. In this particular research study, questionnaires and inventories were used to explore aspects of the respondent's personality, beliefs or perceptions relating to themselves and their family. Therefore, these types of questionnaires pose a greater threat of invasion of privacy (Murphy & Davidshofer, 2001). Therefore, in order to protect the respondent's privacy after divulging their personal information, it was vitally important for the researcher to maintain a level of anonymity and confidentiality.

Therefore attached to each questionnaire was a subject information sheet, which outlined the purpose and procedure of the research as well as various ethical requirements (see Appendix B). The letter addressed to potential participants stated that participation in the research was voluntary and that no person would be coerced or obliged to take part in it in any way. Furthermore, participants were made aware of the fact that no one would be advantaged or disadvantaged in any way for choosing to complete or not complete the attached questionnaire. Volunteers were aware that completed and returned questionnaires were regarded by the researcher as informed consent.

Data collected was under the supervision of the entrusted tutor, where data was collected in sealed envelopes and placed in a sealed box, which was then processed by the researcher. Therefore, participants were informed that no one other than the

researcher would have access to results, ensuring confidentiality. Tutors were instructed not to open any of the envelopes or boxes and told to return questionnaires to the researcher. To further maintain that the process and those ethical considerations were adhered to, the researcher was in contact with each of the tutors, which enabled the researcher to constantly communicate, control and to offer assistance to the process as much as possible. A growing concern is the fact that people who have no legitimate use for the results have access to them; therefore, it is imperative to protect the confidentiality of research results (Murphy & Davidshofer, 2001). Confidentiality was maintained by making it possible for completed questionnaires to be placed in sealed envelopes and sealed boxes.

Furthermore, participants were notified in the attached letter that they were not required to state their names or identify themselves in any way, therefore ensuring anonymity. They were also made aware that the researcher would be unable to access a list of student names. Therefore, students would not be randomly selected. Respondents were also made aware that any information published would be in the form of group responses or numbering would be used to represent individual responses (see appendix B).

CHAPTER 3

RESULTS

This chapter examines the statistical findings of analyses conducted on the collected data. It is important that frequencies be conducted in order to describe the nature of the sample. Analyses such as frequencies and means as well as correlations performed on each of the variables, are examined to determine possible relationships. Lastly an examination of the multiple stepwise regression analysis that was conducted as well as the ANOVA's performed is included in this section.

3.1. Descriptive Statistics

Table 2 on the following page contains values for all the means, minimum and maximum values, number of observations, number of missing observations, Kolmogorov Smirnov Test for Normality scores, corresponding p-values, Kurtosis scores and standard deviations. These values have been calculated for each of the five CDSE subscales, total CDSE scale, Overall Job Satisfaction scale, Total Job and Powerlessness subscales and total Job Insecurity scale.

TABLE 2. Descriptive Statistics, with means, standard deviations and number of missing values.

Variable	Max.	Mean	Min.	N	Nmiss	SD	Kurtosis	Kolmogorov Smirnov	p-value
Self-Appraisal	25.00	18.95	9.00	148	0	2.94	.05	.11	.01
Occupational Information	25.00	18.84	9.00	148	0	2.97	-.21	.11	.01
Goal Selection	25.00	18.12	10.00	148	0	3.11	-.14	.08	.01
Planning	24.00	18.41	11.00	148	0	2.93	-.44	.10	.01
Problem Solving	24.00	16.60	7.00	148	0	3.39	-.35	.07	.12
Total CDSE	121.00	12.67	56.00	148	0	12.67	.03	.07	.12
Job Satisfaction	105.00	68.06	8.00	148	0	16.95	.35	.06	.15
Total Job	39.00	16.90	7.00	148	0	5.63	.71	.09	.01
Powerlessness	13.00	5.36	1.00	141	7	2.25	.45	.13	.01
Total Job insecurity	49.00	27.25	8.00	148	0	6.90	.54	.07	.09

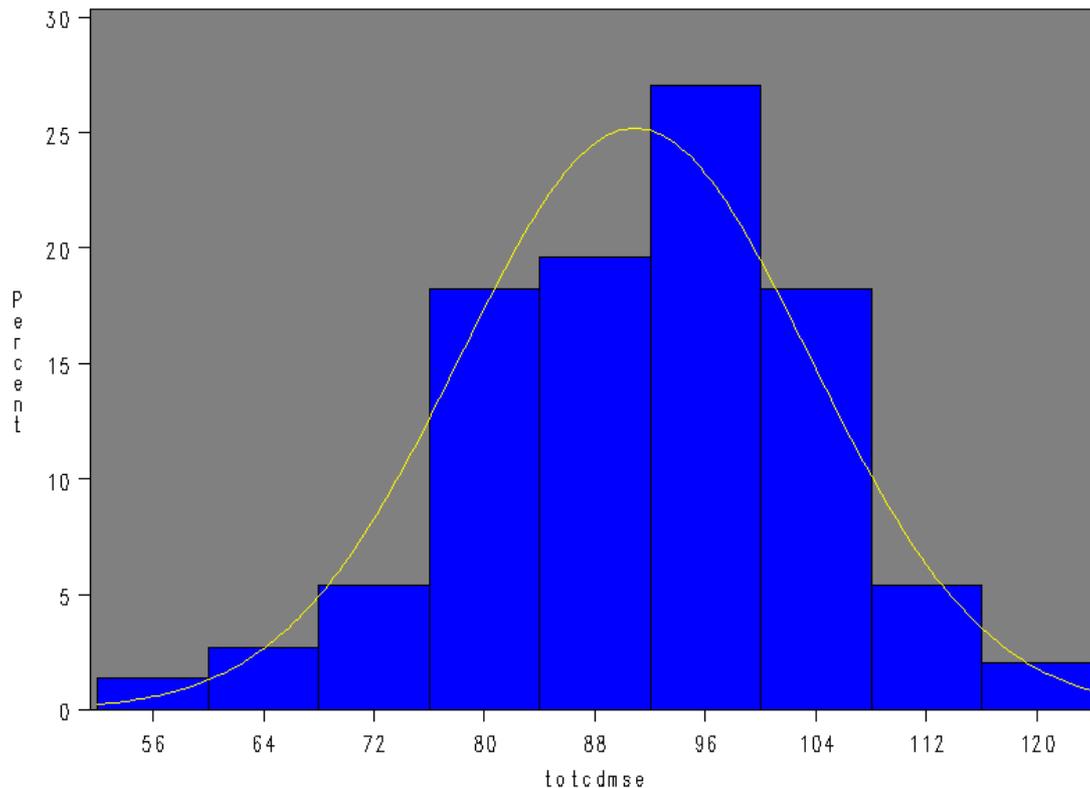
Please note: where $p < .05$ this indicates significance, therefore fails test for normality.

The differences between the means and midpoints for each of the CDSE subscales are relatively small, where the standard deviation values for each of the subscales indicate only slightly skewed distributions to the right. Further distribution analyses were performed to test for normality for the CDSE subscales, using kurtosis and the Kolmogorov Smirnov test for normality.

Kolmogorov Smirnov test for normality indicated significant p-values, for the four CDSE subscales, namely: self-appraisal ($p = .01$), occupational information ($p = .01$), goal selection ($p = .01$) and planning ($p = .01$) CDSE subscales. This highlights that these subscales fail the test for normality. The problem-solving subscale and total CDSE scale indicated p-values that were not significant, where $p = .12$ and $p = .15$ respectively. This means that the problem-solving subscale and CDSE scale do not fail the test for normality, meaning that their distributions are fairly normal. Therefore

parametric assumptions have been met for both the problem-solving subscale and total CDSE scale, as these non-significant p-values, suggest that there are no significant differences, highlighting normal distributions for these two scales. Given that the correlations examine relationships between CDMSE and the independent variables, it is therefore important that the total CDSE scale indicates a normal distribution as opposed to the subscales only. Overall, the Kolmogorov Smirnov for the total CDSE is $F = .07$, $p = .12$ highlighting that the distribution is slightly skewed but on the whole, appears normally distributed. The kurtosis score for the total CDSE scale is also fairly small (.03), indicating that most of the information is in the middle of the curve than in the tails of the distribution. In addition to this, the histogram for total CDSE appears fairly normally distributed evident in Figure 1. Therefore, from the above information, it can be assumed that parametric assumptions have been met, where a Pearson correlation would be suitable to interpret the correlations.

Figure1: Histogram depicting distribution for Total CDSE



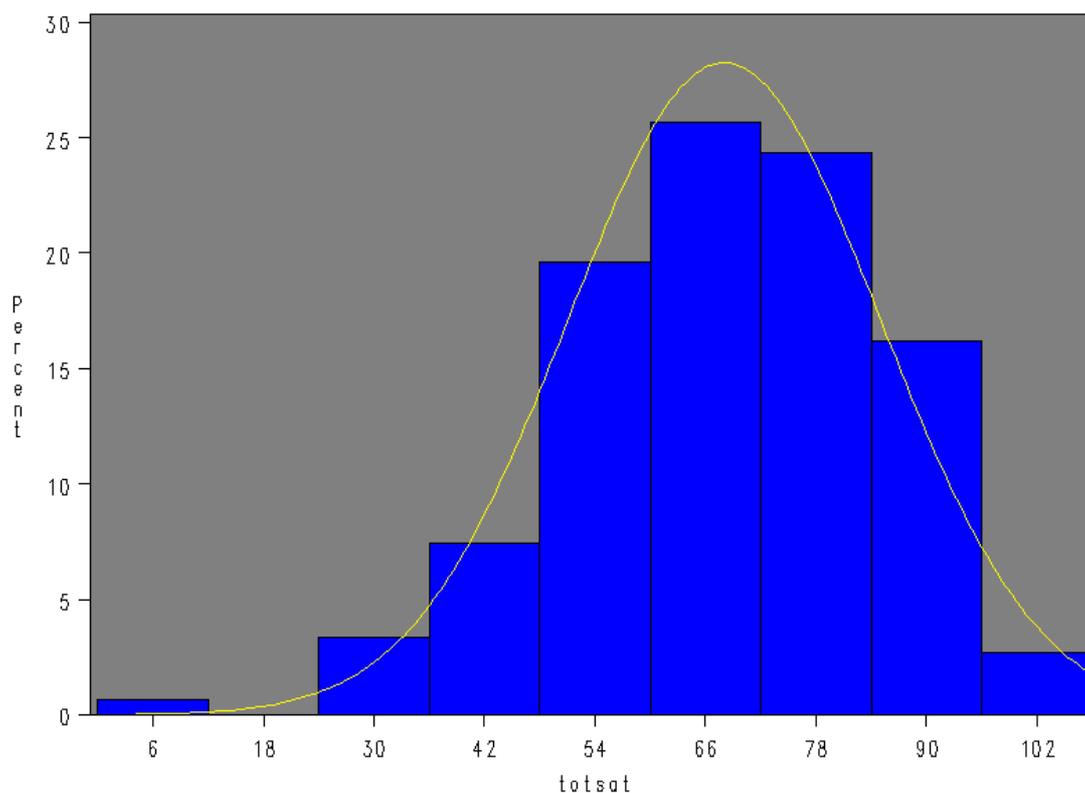
It is thus important to examine the descriptive statistics for the Overall Job Satisfaction scale; Total Job and Powerlessness subscales and total job insecurity scale in order to establish which correlation statistic would be most appropriate in interpreting these results.

Given the results in Table 1, it is clear that the Job Satisfaction scale has a mean score of 68.06 with a minimum value of 8 and a maximum score of 105, indicating that the mid-point is 56.5. This shows that the distribution is skewing to the right. The standard deviation for the Overall Job Satisfaction scale is 16.95. This means that much of the data is deviating to the far right of the mean, which therefore suggests that the majority of the students in this study perceive their breadwinners as having

higher rather than lower job satisfaction. This may have implications for the reliability of the present study because the data is not normally distributed.

Due to the fact that the distribution was slightly skewed to the right on the Overall Job Satisfaction scale, it might be assumed that the kurtosis score was high, indicating that much of the data would appear to be in the tails as opposed to being in the middle of the curve. However, the kurtosis value reported here is fairly low (.35), therefore, suggesting that most of the information is in the middle of the curve. The Kolmogorov Test for normality reported a p-value for the total Job Satisfaction scale as $p = .12$, which was not significant, highlighting that parametric assumptions were met. The histogram below (Figure 2) also suggests a fairly normal distribution of the data. Therefore, it is possible to establish from these results that overall, a Pearson correlation would be the most appropriate statistic to use in determining a possible relationship between students' CDMSE and their perceptions of their family members' job satisfaction.

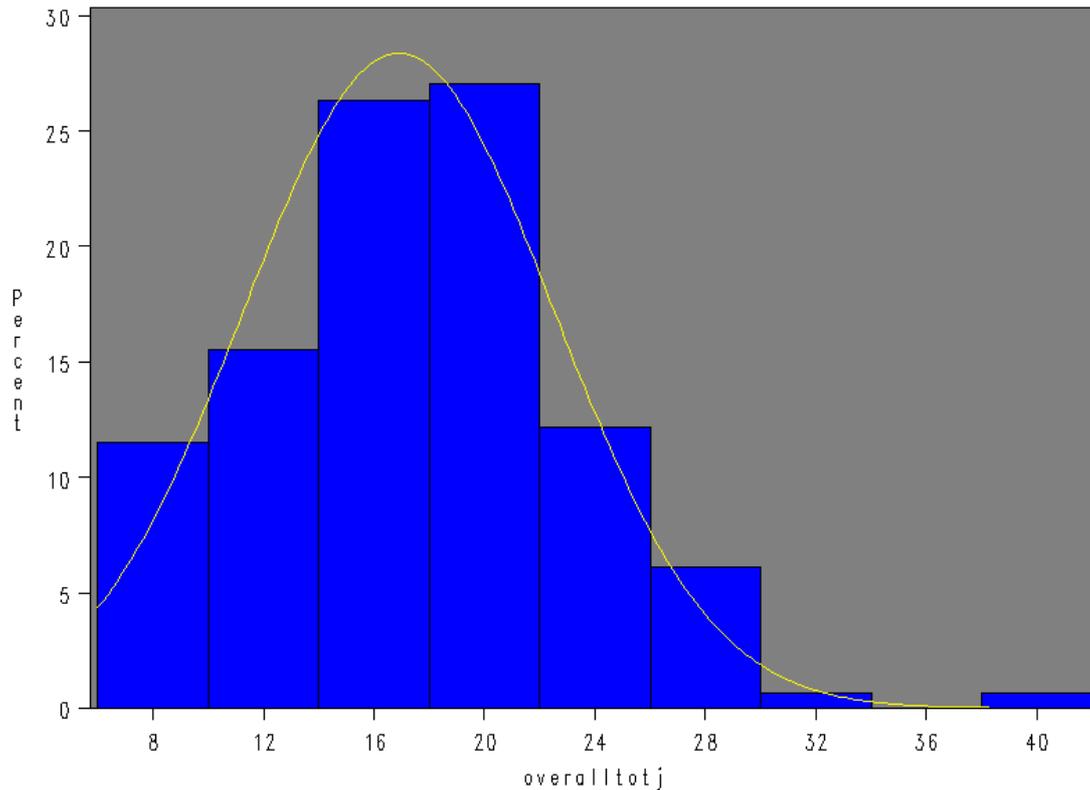
Figure 2: Distribution curve for Job satisfaction



With regard to the Total Job and Powerlessness subscales and total job insecurity scale, the mean score for the Total Job subscale is 16.90, where the mid-point is 23, demonstrating a skewed distribution to the left. Therefore, students in this study perceive their breadwinners as having low job insecurity, where lower scores represent lower job insecurity. The Kolmogorov Smirnov tests for normality also indicate significant p-values where, $F = .09$, $p = .01$. Therefore a significant p-value for the Total Job subscale suggests that it fails the test for normality. The histogram (Figure 3) on the following page, further supports the fact that the data is not normally distributed. Therefore, this subscale does not meet parametric assumptions, which highlights that a Spearman's correlation coefficient would be most appropriate in

establishing a relationship between students' CDMSE and their perceptions of their family members' job insecurity.

Figure 3: Distribution curve for Total Job subscale

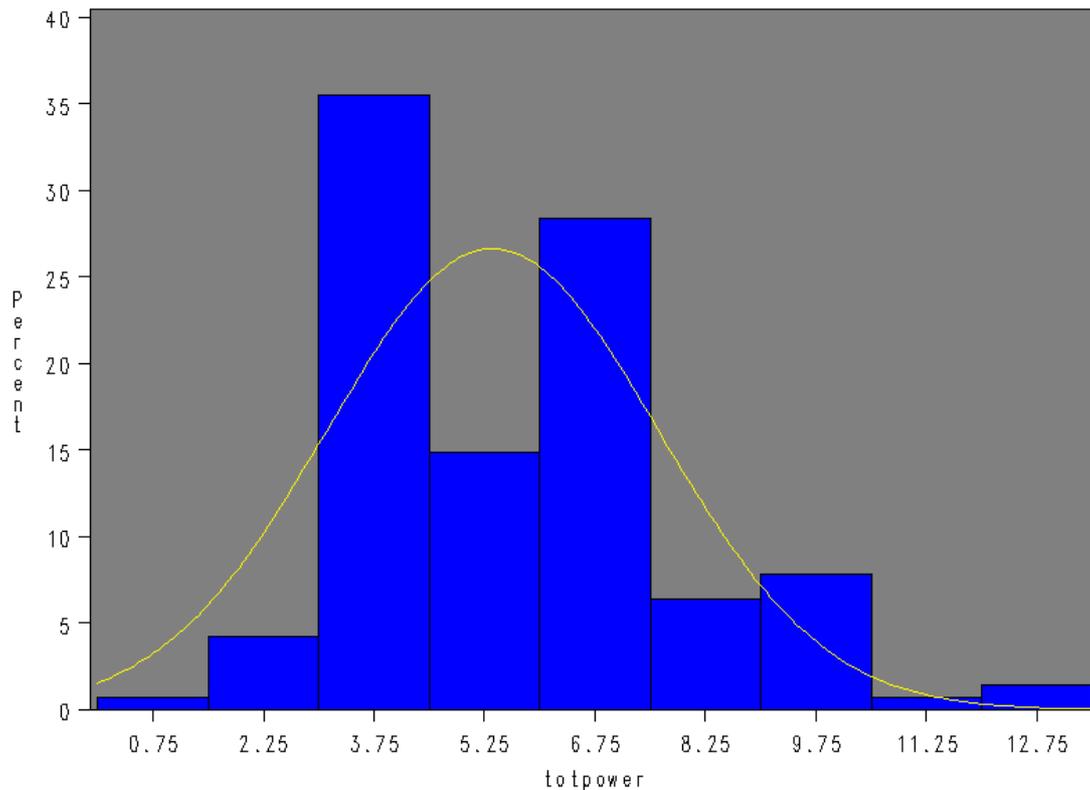


However, it is important to examine the second Job Insecurity subscale used in this study - the powerlessness subscale. The Powerlessness subscale recorded a mean score of 5.36, where the mid-point is 7, indicating a skewed distribution to the left. The recorded standard deviation of 2.25, also corroborates the fact that the distribution is skewed to the left. The way in which the total three-items were worded on the powerlessness subscale and the direction of the Likert scale would suggest that students perceive their breadwinners as having low powerlessness in their jobs. However, all the items on the powerlessness subscale were reverse-scored, suggesting that students' actually perceive their breadwinners' as having high job powerlessness.

The Kolmogorov Smirnov test for normality also indicates significant p-values, which means that the Powerlessness subscale fails the test for normality, where $F = .13$, $p = .01$ and parametric assumptions are therefore not met. The histogram (Figure 4) also corroborates that the distribution is fairly skewed, evident on page 73.

Furthermore, the skewed distribution for the powerlessness subscale may be a result of the fact that only a few respondents in this sample did not complete the Powerlessness subscale. This may be a result of the scale being overlooked as it was situated on the last page. Therefore, on this particular subscale the total number of observations was lower than the total number of observations (141 out of the total sample of 148), which may be causing the distribution to be skewed. This may have implications for the study's findings where missing data can impact on the validity and reliability of the study's findings. Overall, it is evident that the distribution for the total job insecurity scale is skewed to the right, but this does not appear to be a considerably skewed distribution, where the standard deviation is 6.9, and the mean is 27.25.

Figure 4: Distribution curve for Powerlessness subscale

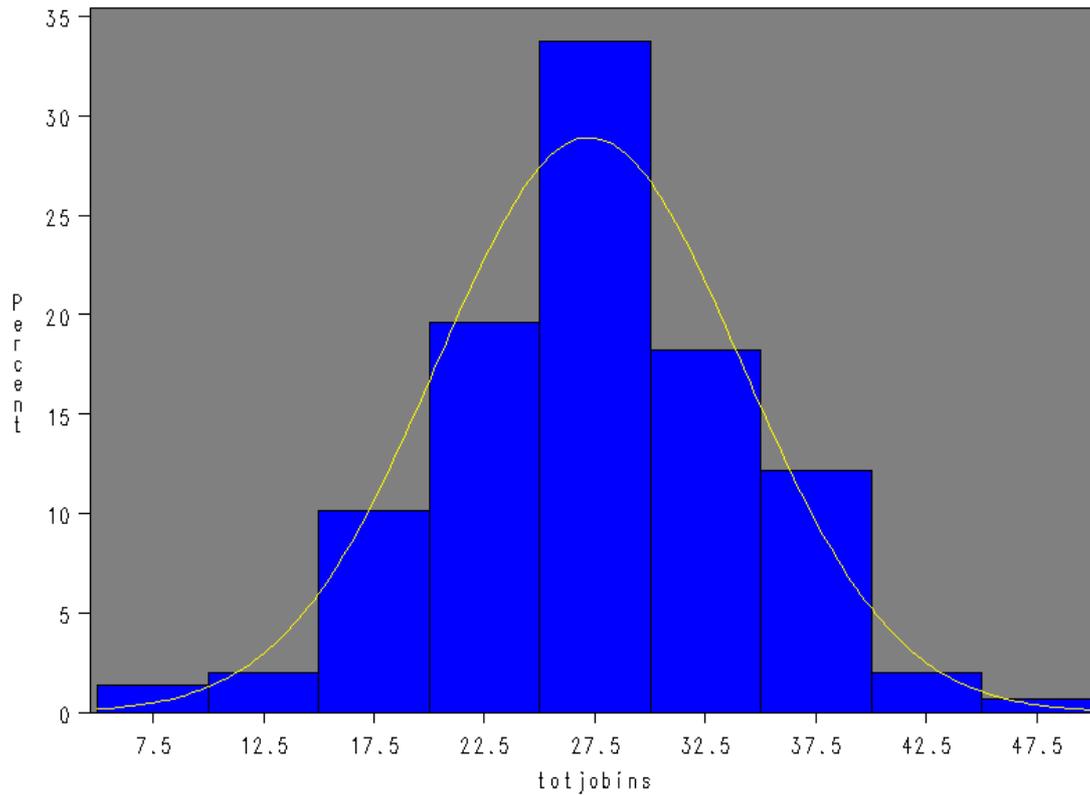


Overall, the above information suggests that the distributions for both the Total Job and Powerlessness subscales are not normally distributed. Furthermore kurtosis scores were both high and closer to one, indicating that more information was reported to being located in the tails of the distribution than in the middle of the curve. Both subscales failed the Kolmogorov Smirnov test for normality with significant p-values. Therefore in order to interpret the correlation between students' CDMSE and their perceptions of their family members' job insecurity, it seems more appropriate to perform a non-parametric, Spearman's correlation for interpreting the correlation.

For the Total Job Insecurity scale, the mean score was 27.25, with a mid-point of 28.5, indicating a slight skewness to the left, where students perceive their breadwinners to have low job insecurity. Although it is important to note that this is a

very small difference and therefore may suggest that the distribution is normal. The kurtosis score was reasonably high (.54), indicating that most of the data is located in the tails of the curve as opposed to the middle. The Total job insecurity scale appears to be normally distributed, evident in the histogram (Figure 5) and given that the Kolmogorov Smirnov test for normality reported non-significant p-values, this scale does not fail the test for normality. However, the Total Job insecurity scale's distribution is a combination of both the Total Job and Powerlessness scales distribution properties, where the overall distribution appears to be less skewed. However, given the above information for the Total Job and Powerlessness subscales it is evident that a non-parametric, Spearman correlation would be most suitable in establishing the relationship between students' CDMSE and their perceptions of their family members' overall job insecurity, as the two subscales are not normally distributed.

Figure 5: Distribution curve for Total Job insecurity



3.2. Internal Consistencies

In order to test the internal reliabilities for each of the CDSE subscales, total CDSE, Overall Job Satisfaction, Total Job and Powerlessness subscales and total job insecurity scale, an internal reliability analysis was conducted using Cronbach's Alpha coefficients to interpret the results. Table 3, below includes all the Cronbach Alpha coefficients for each of the scales used in the questionnaire.

TABLE 3: Internal Reliabilities of scales (N=148)

<u>CDSE-SF SCALE</u>	<u>CRONBACH ALPHA COEFFICIENT</u>
Self-Appraisal	.85
Gathering Occupational Information	.88
Planning	.86
Problem-Solving	.84
Goal Selection	.87
Total CDSE	.91
Total Job Satisfaction	.92

Total Job	.80
Powerlessness	.74
Total Job Insecurity	.77

It is clear from these results in Table 3, that the internal reliabilities for the CDSE subscales and the overall job satisfaction scale are very good, as the Cronbach coefficients are very close to +1. The job satisfaction scale is particularly high with an Alpha coefficient of .92, showing that it has good internal consistency among the items. An acceptable alpha for research purposes is Cronbach Alpha .65 (Howell, 1999). The job insecurity subscales are slightly lower but still indicate satisfactory Cronbach Alpha Coefficients of .80 for the Total Job subscale and .74 for the Powerlessness subscale. Overall, the total job insecurity scale has a satisfactory Cronbach Alpha coefficient of .77.

3.3. Hypothesis 1: There is a relationship between students' CDMSE and their perceptions of their family members' job satisfaction

In order for the researcher to explore the first hypothesis, which assumes a relationship between students' CDMSE and their perceptions of their family members' job satisfaction, Pearson's correlations were conducted.

Table 4 contains the results for the correlation matrix conducted between each of the five CDSE subscales and job satisfaction, together with total CDSE and job satisfaction.

TABLE 4: Correlations between Job Satisfaction and CDSE Subscales and Total CDSE (N=148)

CDSE SUBSCALES	JOB SATISFACTION
Self Appraisal	0.18 0.03 *
Occupational Information	0.23 0.01 *
Goal Selection	0.27 0.00 *
Planning	0.27 0.00 *
Problem-Solving	0.22 0.01 *
Total CDSE	0.29 0.00 *

First value = Pearson's correlation coefficient (r)

Second value= p-value, where significance at the .05 levels indicated by *

In order for a relationship to exist, the r-value needs to be close to +1 or -1 and $p < .05$ (Murphy and Davidshofer, 2001). In the present study, the findings demonstrate that, the correlations between job satisfaction and each of the five CDSE subscales are all significant, however they are positive weak correlations. The Total CDSE scale is correlating stronger with job satisfaction, than the subscales individually, where $r = .29$, $p = .00$. The goal selection subscale and the Planning subscales are correlating higher than the other CDSE subscales, in relation to job satisfaction, where $r = .27$, $p = .00$ for the goal selection subscale and $r = .27$, $p = .00$ for the planning subscale. Overall, given this, it is clear that there is a significant relationship between students' CDMSE and their perceptions of their family members' job satisfaction.

3.4. Hypothesis 2: There is a relationship between students' CDMSE and their perceptions of their family members' job insecurity

In order for the researcher to explore the second hypothesis that there is a relationship between students' CDMSE and their perceptions of their family members' job insecurity, Spearman's correlations were conducted. This was seen to be an

appropriate statistic given that not all parametric assumptions were met, as previously noted in the descriptive statistics summary in the previous chapter.

Table 5 on the following page, contains the results for the correlation matrix conducted between each of the five CDSE subscales and the two job insecurity subscales, namely Total Job and Powerlessness subscales, together with total job insecurity.

TABLE 5: Correlations between CDSE subscales, total CDSE, Total job, Powerlessness and Total Job insecurity

	(N=148)	(N=141)	(N=148)
CDSE SUBSCALES	TOTAL JOB SUBSCALE	POWERLESSNESS SUBSCALE	TOTAL JOB INSECURITY
Self-Appraisal	-0.01 0.89	-0.21 0.01 *	-0.04 0.59
Occupational Information	0.01 0.88	-0.16 0.06	-0.03 0.74
Goal Selection	-0.05 0.55	-0.18 0.03 *	-0.07 0.41
Planning	0.04 0.65	-0.16 0.06	0.01 0.95
Problem Solving	-0.04 0.63	-0.17 0.04 *	-0.07 0.37
Total CDSE	-0.00 0.99	-0.21 0.01 *	-0.04 0.66

First value=Spearman's Correlation Coefficient (r)

Second value= p-value, where significance at the .05 levels indicated by *

The results indicated that there was no significant relationship between total job insecurity and any of the CDSE subscales. There were also no significant relationships between the Total Job subscale and CDSE. However, there was found to be a significant negative weak relationship between total CDSE and the Powerlessness subscale. There were also significant negative weak correlations between self-appraisal and powerlessness ($r = -.21$, where $p = .012$). There are also significant correlations between the goal selection CDSE subscale and powerlessness ($r = -.18$ where $p = .028$) and problem-solving CDSE subscale and powerlessness ($r = -.17$ where $p = .028$). There were, however, no significant relationships between the occupational information and planning CDSE subscales and the powerlessness subscale, where $r = -.16$ $p = .06$ and $r = -.17$, $p = .059$ respectively.

Overall, given the results, there is no significant relationship between total job insecurity and the CDSE subscales and total job insecurity and total CDSE ($r = -.04$, $p = .66$) and therefore it is not possible to assume a relationship between students' CDMSE and their perceptions of their family members' job insecurity. Therefore the second hypothesis has been rejected in the present study. In summary, it is possible to deduce from the overall aim of the study that there is a significant relationship between students' CDMSE and their perceptions of their family members' job satisfaction but there is no significant relationship between students' CDMSE and their perceptions of their family members' job insecurity.

3.5. Multiple Stepwise Regression for Job Satisfaction, Job Insecurity and CDSE subscales

In order to confirm the above correlation, particularly the first hypothesis, which assumes that, there is a relationship between students' CDMSE and their perceptions of their breadwinners' job satisfaction, a multiple regression was conducted. As previously mentioned the multiple stepwise regression is used to predict the influence of multiple independent variables on the dependent variable, by entering and removing the variables step by step, so as to ascertain which variables are accounting for the most variance and which are influencing the dependent variable significantly.

Hypothesis 1: There is a relationship between students' CDMSE and their perceptions of their family members' job satisfaction

TABLE 6: Step 1 Job Satisfaction entered into regression, where R-Square = 0.0991

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	2315.59315	2315.59315	15.29	0.0001
Error	139	21055	151.47421		
Corrected Total	140	23371			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	73.53732	4.54834	39596	261.40	<. 0001
Total satisfaction	0.25254	0.06459	2315.59315	15.29	0.0001

In the first step of the multiple regression, only job satisfaction was entered against CDSE and indicated an R-square value of .0991, where $F(df = 1, 139) = 15.29, p = .0001$. Therefore, although, the multiple regression reinforces the previous findings, which highlights a significant relationship between students' CDSE and their perceptions of their family members' job satisfaction, the R-square value is a relatively low one, where job satisfaction only explained 9% of the variance. This suggests that job satisfaction is not accounting for a large proportion of the variance. Therefore from this, it cannot be assumed that job satisfaction predicts CDSE. Overall, job satisfaction influences CDSE but one cannot predict the direction in which this influence occurs.

Hypothesis 2: There is a relationship between students' CDSE and their perceptions of their family members' job insecurity

TABLE 7: Step 2 Powerlessness entered into the regression, where R-Square = 0.1455

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	3400.30740	1700.15370	11.75	<. 0001
Error	138	19970	144.71160		
Corrected Total	140	23371			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	83.08481	5.65020	31291	216.23	<. 0001
Total satisfaction	0.21272	0.06479	1560.16578	10.78	0.0013
Powerlessness	-1.27149	0.46442	1084.71425	7.50	0.0070

In the second step, powerlessness was entered into the regression, where both job satisfaction and powerlessness were regressed onto the dependent variable (CDMSE). The regression again reported significant differences between job satisfaction and CDMSE where $F(df=2; 138)=10.78, p<. 05$. This step further showed significant differences between powerlessness and CDMSE, where $F(df=2; 138)=11.75, p<. 05$, $R\text{-squared}= .1455$. Therefore, together job satisfaction and powerlessness contributed to 14.55% of the variance explained in the study. This means that powerlessness is not explaining much more of the variance, where job satisfaction is explaining 9 % of 14.55% of the variance explained. Overall, it cannot be assumed from this that powerlessness predicts CDMSE but powerlessness only influences CDMSE to some

extent. From the multiple regression, it is clear that overall, job satisfaction influencing CDMSE more so than powerlessness. The regression therefore substantiates the previous correlation that there are slight differences between powerlessness and CDSE, but that overall job satisfaction is correlating more with CDMSE. However as seen below, Total Job is not significant at all in relation to CDMSE, which further substantiates the previous correlation, which reported no significant differences between the total CDSE scale and Total Job.

TABLE 8: Step 3, Total Job entered into the regression, where R-Square = 0.1510

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	3529.46672	1176.48891	8.12	<. 0001
Error	137	19841	144.82513		
Corrected Total	140	23371			

Variable	Parameter Estimate	Standard Error	Type II SS	F Value	Pr > F
Intercept	80.17611	6.43712	22467	155.13	<. 0001
Total satisfaction	0.21625	0.06492	1606.93181	11.10	0.0011
Total Job	0.18110	0.19177	129.15932	0.89	0.3466
Powerlessness	-1.34217	0.47059	1178.08596	8.13	0.0050

In the third step, the third subscale was entered, Total Job where in this step all independent variables were regressed onto the dependent variable (CDSE). The total variance has increased but only slightly, to 15 %, therefore Total Job did not explain much of the variance either. Job satisfaction and powerlessness showed significant

differences again with CDSE, where $F(df=3; 140)=11.10, p<. 05$ and $F(df=3; 137)=8.13, p<. 05$ respectively. However, total job indicated having no significant influence on CDSE where $F(df=3; 140)=. 89, p=. 35$. This finding clarifies the previous correlations where powerlessness only correlated with the CDSE to some extent. It also confirms a relationship between job satisfaction and CDMSE. The regression also seems to confirm the lack of correlation on the Total Job subscale with CDMSE.

However, it cannot be assumed from any of these findings that any of the independent variables predict the dependent variable. It can only be assumed that because job satisfaction explained most of variance in the regression, as opposed to the other independent variables, job satisfaction, merely influences CDMSE more so, but does not predict CDMSE. As a result of the previous step, the fourth step of the regression thus removes Total job from the regression model as it was found to be insignificant in predicting CDMSE.

TABLE 9: Summary Table for Multiple Stepwise Regression of Job satisfaction, Total job and powerlessness on CDSE

Summary of Stepwise Selection									
Step	Variable Entered	Variable Removed	Label	Number Vars In	Partial R-Square	Model R-Square	C(p)	F Value	Pr > F
1	Total satisfaction		Total satisfaction	1	0.0991	0.0991	8.3817	15.29	0.0001
2	Powerlessness		Powerlessness	2	0.0464	0.1455	2.8918	7.50	0.0070
3	Total Job		Total Job	3	0.0055	0.1510	4.0000	0.89	0.3466
4		Total Job	Total Job	2	0.0055	0.1455	2.8918	0.89	0.3466

Overall, the multiple stepwise regression supports hypothesis 1 (at the .05 significance level) that there is a relationship between students' CDMSE and their perceptions of their family members' job satisfaction. Similarly the multiple regression substantiates the correlations previously performed between CDSE and the job insecurity subscales, which further rejects hypothesis 2 (at the .05 significance level) that there is a relationship between students' CDMSE and their perceptions of their family members' job insecurity. In summary, the multiple regression enhances the robustness of the previous findings.

3.6. Possible racial differences on the dependent variable (ANOVA)

Given that the study has found a relationship between students' CDMSE and their perceptions of their family members' job satisfaction, there is however, no relationship between students' CDMSE and their perceptions of their family members' job insecurity. In light of the previous literature, the present study has also seen the importance of examining possible racial differences in relation to student's career decision-making self-efficacy. This was seen to be particularly relevant to the South African context, where race might contribute to significant differences.

In order to ascertain significant differences amongst different racial groupings, a one-way analysis of variance was performed, on each of the CDSE subscales (dependent variable) and race, the independent variable. It was appropriate to conduct an ANOVA so that the mean differences could be compared across the five race groups. ANOVA's are able to test for the differences in means between several groups and it

allows the researcher to analyse more than one independent variable at one point in time (Howell, 1999).

3.7. ANOVA for Race and Self-Appraisal ($F(df = 4,143) = 3.18, p < .02$)

Table 10 : Kruskal Wallis and Means for Race and Self-Appraisal (CDSE subscale)

Kruskal-Wallis Test	
Chi-Square	10.8068
DF	4
Asymptotic Pr > Chi-Square	0.0288
Exact Pr >= Chi-Square	.

RACE	NO. OF OBSERVATIONS	MEANS
WHITES	70	75.55
BLACKS	34	89.56
COLOUREDS	3	48.30
INDIANS	37	59.07
ASIANS	4	90.38

A One-way Analysis of Variance, was performed on race and the self-appraisal CDSE subscale. The Levene's Test for Normality reported a significant p-value, demonstrating inequality of variance amongst the race groups. This meant, therefore, that parametric assumptions had not been met where it was most appropriate to perform a non-parametric one-way analysis of variance to interpret the data. A Kruskal-Wallis was then performed which indicated that there were significant differences between the different races regarding their CDMSE ($F = 10.81, p = .03$). However, after performing a Kruskal-Wallis, it is not possible to locate where exactly the differences can be found. Therefore we can only ascertain that there are significant racial differences in relation to the self-appraisal CDSE subscale and that certain

students perceive themselves as having higher self-appraisal in relation to their CDMSE.

3.8. ANOVA for Race and Planning (CDSE subscale)

TABLE 11: ANOVA and Levene's test for Race and Planning CDSE subscale

Levene's Test for Homogeneity of planning Variance ANOVA of Squared Deviations from Group Means					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Race	4	781.7	195.4	2.04	0.0921
Error	143	13707.5	95.8565		

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	46.059130	11.514783	1.36	0.2520
Error	143	1213.798978	8.488105		
Corrected Total	147	1259.858108			

A Levenes' Test for Equality revealed that there were no significant differences between the race groups on the planning subscale. As a result of the equality of variance, an ANOVA was performed for the planning CDSE subscale and race, which further indicated that there were no significant differences, where $F(df= 4, 143) = 1.36, p = .25$. As a result of the lack of significance, post hoc tests were not performed and it was assumed that there were no significant differences between race and the planning CDSE subscale.

3.9.ANOVA for Race and Problem Solving (CDSE subscale)

TABLE 12: ANOVA, Levene's test for race and problem-solving CDSE subscale

Levene's Test for Homogeneity of Variance ANOVA of Squared Deviations from Group Means					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Race	4	320.1	80.0325	0.43	0.7853
Error	143	26491.4	185.3		

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	82.465993	20.616498	1.84	0.1245
Error	143	1603.013737	11.209886		
Corrected Total	147	1685.479730			

The Levene's test for race and the problem-solving subscale revealed that there were no significant differences, which meant that, there was equality of variance amongst the race groups ($F = 1.84, p = .12$). As a result, a parametric one-way analysis of variance was performed. However, the ANOVA indicated that there were no significant differences amongst the race groups and the problem solving subscales ($F(df = 4, 143) = 1.84, p = .12$). Therefore, no post hoc tests were conducted and overall there were no significant differences amongst the groups.

3.10. ANOVA for Race and Occupational Information (CDSE subscale)

TABLE 13: ANOVA, Levene's test and means for race and the occupational information CDSE subscale

Levene's Test for Homogeneity of occinfo Variance ANOVA of Squared Deviations from Group Means					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Race	4	143.9	35.9720	0.27	0.8984
Error	143	19220.1	134.4		

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	34.486506	8.621626	0.97	0.4237
Error	143	1265.595842	8.850321		
Corrected Total	147	1300.082348			

The One way Analysis of variance conducted for race and the occupational information CDSE subscale also revealed that there were no significant differences amongst the groups where ($F=(4,143) = .97, p=. 42$). Consequently, post hoc test were not conducted.

3.11. ANOVA for Race and Goal selection (CDSE subscale)

TABLE 14: ANOVA and Levene's test for race and goal selection CDSE subscale

Levene's Test for Homogeneity of goalselec Variance ANOVA of Squared Deviations from Group Means					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Race	4	994.9	248.7	1.71	0.1512
Error	143	20813.6	145.5		

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	41.341021	10.335255	1.07	0.3741
Error	143	1382.469790	9.667621		
Corrected Total	147	1423.810811			

Similarly, the ANOVA performed for race and the goal selection CDSE subscale also reported no significant differences, evident in Table 14. Therefore there were no reported significant differences between race and the problem solving CDSE subscale.

In summary, there have only been found to be significant differences between self-appraisal and race but not on any of the other CDSE subscales. It can therefore, be assumed that overall, race does not contribute to the relationship between students' CDMSE and their perceptions of their family members' job satisfaction and job insecurity.

CHAPTER 4

DISCUSSION

The results from the previous section will now be discussed in more detail. There will be particular focus on how the results relate to the literature and how the analyses have attempted to answer the two main hypotheses, which comprise the overall aim of the study. In order to do this, it is important to acknowledge the correlations conducted on each of the variables as well as other important extraneous variables that may have played a role. To recap, the aim of the present research was to determine whether there was a possible relationship between students' career decision-making self-efficacy and their perceptions of their family members' job satisfaction and job insecurity.

4.1. The relationship between students' CDMSE and their perceptions of their family members' job satisfaction

Given the results from the previous section, there is substantial evidence to support the first hypothesis, which states that there is a relationship between students' career decision-making self-efficacy and their perceptions of their family members' job satisfaction. In light of the literature review, this finding thus supports previous claims that parental influence does in fact have a significant impact on children's career development process (Turner & Lapan, 2002). The results from the present study further corroborate the fact that parents play an important role regarding their children's career development process (Peterson, 2001; Turner & Lapan, 2002; Gardner, 2004; Dustmann, 2004; Sallinen, Kinnunen & Ronka, 2004; Schoon,

Parsons & Sacker, 2004). Even though the present study examined adolescents' perceptions of their *family members*, the fact that 99.32% (refer to Table 1 on page 48) of the sample chose one of their *parents* as a breadwinner, despite many living in extended family homes, further supports the above findings. More specifically, the present study has therefore established a relationship, although a weak one between students' CDMSE and their perceptions of their *parents'* job satisfaction.

The present study's correlation between adolescents' career decision-making self-efficacy and their perceptions of their parents' job satisfaction, also supports research which claims the importance of including the likelihood of attaining job satisfaction in career choices (Hotchkiss and Borrow, 1990). It seems possible that such a relationship exists between students' CDMSE and their perceptions of their parents' job satisfaction because adolescents may realize a greater likelihood of achieving job satisfaction in their future careers. Adolescents may be more confident in making career decisions based on their perceptions of their breadwinners' job satisfaction because the probability of attaining future job satisfaction in adolescents' future careers may be perceived as being more of a reality. Given this, it seems plausible that outcome expectations are best at predicting career exploration intentions (Betz & Voyten, 1997).

It is important to acknowledge that 78.77 % (refer to Table 1, page 49) of the sample reported their breadwinners as currently enjoying their jobs, which might explain the fact that a correlation exists between adolescents' career decision-making self-efficacy and their perceptions of their family members' job satisfaction. Having said this, it is relevant to note that only 14.86% (refer to Table 1 on page 49) of the sample

reported pursuing degrees similar to their breadwinners' occupational fields, whilst, 72.97% (Table 1, page 49) reported their breadwinners as being in professional occupations completely unrelated or dissimilar to their degree.

This is relevant, because whilst there is a correlation between adolescents' confidence in making career decisions and their perceptions of their parents' job satisfaction, together with the fact that the majority of these students have reported their breadwinners enjoying their jobs; the majority of students, however, have chosen a career path completely unrelated to their breadwinners' current occupations. This may indicate that adolescents are even more confident in making career decisions based on their perceptions of their parents' job satisfaction as they are confident enough to make a career decision that has the potential risk of not providing them with the same level of job satisfaction, indicative of choosing an occupation that is not the same as their parents. This could, however, also be a result of the fact that now adolescents have access to more career options than their parents had, given the previous restrictions of Apartheid.

The present study's finding on adolescents' CDMSE being influenced by their perceptions of their breadwinners' job satisfaction, further supports Bandura's (1977) social learning theory. This theory proposes that a major source of information for learning self-efficacy expectations is through vicarious learning - the process of watching another person successfully perform that behaviour (in Maples & Luzzo, 2005). In addition to this, people use their own and others' observations to construct personal pictures of reality, which guide their behaviour (Jordaan, 1963 in Julien, 1999). This is evident here, in that adolescents' CDMSE appears to indeed be

affected by their observations or perceptions of their breadwinners' job satisfaction. In this study, it is demonstrated that adolescents' process of watching their parents' successfully achieve job satisfaction in their careers has had a positive influence on their career decision-making self-efficacy. This may be a consequence of the fact that adolescents' perceptions of their parents' job satisfaction has had a major influence in helping adolescents construct their personal pictures of reality and consequently guiding their career decision behaviour.

The current findings also reinforce the fact that effective career decision-making is important in making effective career decisions (Krass & Hughey, 1999). In this case, it is adolescents' perceptions of their breadwinner's job satisfaction that has significantly and positively influenced youngsters to make more effective career decisions. This is further emphasised by the fact that these perceptions have a positive influence on adolescents' confidence in making successful career decisions. The more confident students are in making successful career decisions - based on positive perceptions of their family members' job satisfaction - the more likely they are to make effective decisions.

This may be a result of the fact that adolescents realize that in order to achieve a more positive lifestyle, involving job satisfaction, they need to make successful career decisions. If adolescents can perceive the benefits of making successful career decisions - based on their perceptions of their parents' job satisfaction, it does indeed seem likely that students' CDMSE would increase. It may be the opposite for adolescents whose breadwinners are dissatisfied in their jobs, as it seems likely that this may hamper their confidence in making successful career decisions.

The literature has already reviewed the likelihood of spillover as a potential influence on the study's findings (e.g. Menaghan & Parcel, 1990; Kanter, 1997; Rousseau, 1978; Staines, 1980). From the literature it seems very probable that spillover has impacted on the relationship between adolescents' CDMSE and their perceptions of their family members' job satisfaction. However, due to the fact that a measure was not incorporated into the study to measure the role of spillover effects, one cannot draw conclusive evidence that spillover was in fact an influence. However, it can only be assumed that spillover may indeed have played a part in the study's correlation between students' CDMSE and their perceptions of their parents' job satisfaction.

There does appear to be substantial evidence in the present study to support previous research that parents' work experiences - specifically job satisfaction - impacts on them and their children on returning home (Gardner, 2004), as a result of the present study's finding that adolescents' *perceptions* of their parents job satisfaction impacts on their CDMSE. There is however, insufficient evidence to presume that the present study's findings corroborate research claims that occupations' emotional climates can be transferred to family life, which arouse a set of feelings that are brought home and affect the tenor and dynamics of family life (Kanter 1977). The present research is, however, not focused on examining the dynamics of family life, but has merely explored adolescents' perceptions of possible spillover effects which may indeed be responsible for "arousing a set of feelings" in adolescents. These could have been responsible for the established relationship between students' CDMSE and their perceptions of their parents' job satisfaction.

Furthermore, by its definition, job satisfaction is an “affective reaction” (Cranny et al., 1992 in Friday & Friday, 2003), which suggests that it has an inherent emotional element. The fact that a correlation exists and because spillover may have played a fundamental role, emphasises that adolescents not only *perceive* their family members’ job satisfaction but are influenced by it.

Adolescents’ perceptions may have been shaped by their breadwinners’ positive reactions to their own feelings of job satisfaction, which could have been transferred onto close family members. This highlights that work does indeed impact not only on the individual but on other family members too (Menaghan & Parcel, 1990). Given this, it seems likely that the emotional quality associated with job satisfaction, may have resulted in the current research’s finding that students CDMSE is influenced by their perceptions of their parents’ job satisfaction. Adolescents may aim to also have feelings of job satisfaction in their future careers, which through observing their parents’ emotional reactions has impacted on their confidence in making successful career decisions. However, by the same token, it must be noted that adolescents may not necessarily chose the same occupations that their breadwinners are currently in.

The literature posited that career decisions are perceived to be more emotionally laden than rationally based and are reactive to the perceived wishes of parents (Kinnier, Brigman & Noble, 1990). This may be a contributing factor to consider for the established correlation between students’ CDMSE and their perceptions of their parents’ job satisfaction. It may be the case that parents have communicated to adolescents the importance of the achieving job satisfaction, which may be the result

of a positive correlation between students' CDMSE and their perceptions of their parents' job satisfaction. If students' parents have positive emotions surrounding career decisions, this may be a valid reason for why there are correlations between students' positive perceptions of their parents' job satisfaction and their increased confidence in making successful career decisions.

Parents are likely to want their children to achieve future job satisfaction and may too influence their children to achieve that, by supporting their career decisions more; therefore increasing adolescents' career decision-making self-efficacy.

It seems reasonable to assume that breadwinners, who are satisfied with aspects of their jobs, may indeed make this clear to individuals close to them, either directly or indirectly. Additionally, because the present study has established a positive relationship between students' CDMSE and their perceptions of their parents' job satisfaction, it again seems likely that adolescents' own confidence in making successful career decisions is indeed positively influenced by positive perceptions of job satisfaction – reflected by parents' positive reactions to job satisfaction. This is highlighted by the fact that the majority of the sample has reported their breadwinners as enjoying their jobs (refer to Table 1 page 51).

The present study supports research findings that social support primarily contributes to the prediction of self-efficacy (Quimby & O' Brien, 2004). Given the findings of the present study, there is inadequate evidence to support speculations that other family members play a significant support in terms of influencing adolescents CDMSE. However, it is evident that parents are a primary source of support for

adolescents in influencing their CDMSE. This is because, the majority of the sample chose parents as their support base or current breadwinner which have been found to be responsible for shaping adolescents confidence in making career decisions successfully, in the present study.

Furthermore, the current results corroborate the fact that parents act as “value socializers” (Astin, 1984) - shaping their children’s perceptions of the suitability of career-related decisions (Turner & Lapan, 2002). This finding illustrates the importance of considering and examining the role of other family members, who are just as influential as parents in shaping adolescents’ confidence in making successful career decisions. Although only one adolescent responded that another family member was their breadwinner, it cannot be ruled out that other family members may in fact be still be accountable for influencing adolescents’ career decisions, but in the present study there is insufficient evidence to support this effectively.

The present study further confirms the fact that family has a huge influence on young adults’ career decision-making (Larson and Wilson, 1998). However, there is insubstantial evidence to support that a possible reason for this, is a result of the fact that there is a great deal of anxiety within families which causes problems in adolescents’ career decisions (Hartman, Fuqua and Blum, 1985). In addition, the present study has established a positive correlation, which might further suggest that these particular adolescents are unaffected by anxiety in the households, or that anxiety within their families is low or non-existent. Adolescents may therefore, be more confident in making career decisions successfully because of low levels of anxiety in households resulting from breadwinners being currently satisfied in their

jobs. This again highlights that spillover is a likely contributing factor in the study's correlation between students' CDMSE and their perceptions of their parents' job satisfaction. It seems probable that low levels of anxiety may be transferred from work and family life as a result of parents achieving satisfaction in their jobs. However, there is inconclusive evidence to support this.

The relationship between adolescents' CDMSE and their perceptions of their parents' job satisfaction supports the fact that parents' work experiences are associated with children's occupational aspirations and behaviour (Gottfredson (1981) in Kelloway & Newton, 1996). However, it is only possible to assume from this study's results that parents' specific work experience of job satisfaction is responsible for positively influencing adolescents occupational aspirations or their CDMSE.

The present study's findings also appear to substantiate claims that it is not the direct effect of employment, but rather the ways in which employment indirectly impacts on parental well being or parent-child relationships, which have consequences on children's well-being (Perry-Jenkins & Gillman, 2000). The fact that adolescents are influenced by their *perceptions* of their family members' job satisfaction may be a reflection of how adolescents' are indirectly affected by their family members' employment. Furthermore, due to the fact that family member's job satisfaction indirectly affects youngsters' well-being, it is possible that well being could refer to adolescents' confidence levels, which if adequate enough in career decisions, could lead to a longer-term sense of well-being.

As noted in the literature review, research has examined the role of parenting behaviours (Sallinen, Kinnunen & Ronka, 2004) where it was established that adolescents' experiences of low autonomy granted by parents and higher conflict with parents, mediated the relationships between parents' negative work experiences and adolescents' depression (Sallinen et al., 2004). The study's correlation highlights that positive work experiences lead to higher levels of confidence in making better career decisions. A positive relationship may exist because parents experiencing positive work experiences such as job satisfaction may have more effective parenting behaviours. Parents or family members within this study, who grant adolescents more autonomy or have less conflict with them as a result of increased job satisfaction, may be plausible contributing factors for why adolescents' perceptions of their family members' job satisfaction positively influences their CDMSE.

Given this, it therefore seems possible that a positive correlation between adolescents CDMSE and their perceptions of their parents' job satisfaction is a result of adolescents' positive views of the parental relationship (Guerra & Braungart-Rieker, 1999). It was found that students' views of the parental relationship are related to career decision-making and students living with parents who grant them independence but who are still securely attached to them have been found to be less affected by career indecision (Guerra & Braungart-Rieker, 1999). The majority of this study's sample still live with their parents/breadwinners, which highlights that that students relationships with their parents could play a fundamental role in influencing their CDMSE. Due to a positive correlation occurring between students' CDMSE and their perceptions of their parents' job satisfaction, highlights that an adolescents in this study may have effective parent-child relationships. It may be possible that

adolescents' parents in this study grant them more independence, which may result in these adolescents achieving more confidence in making successful career decisions.

The literature reiterates that everyone seeks satisfaction with his or her work (Jepsen & Sheu, 2003). The fact that adolescents' CDMSE is positively influenced by their perceptions of their family members' job satisfaction may be a consequence of their own desire to seek future job satisfaction. This may be why the specific work experience – job satisfaction- has a significant yet minor influence on adolescents' career behaviours. Furthermore, the fact that there is a correlation between students' CDMSE and their perceptions of their parents' job satisfaction, may suggest that adolescents are able to think of themselves in occupational terms and engage in activities that help them make successful decisions and choices (Super & Super, 1996). The ability for adolescents to translate themselves into occupational terms seems to be heavily reliant on their *perceptions* of their family members having successfully implemented their own occupational self-concepts. This may be reflected in adolescents' perceptions of their breadwinners' job satisfaction.

It may also be speculated that such a relationship exists because people with high self-efficacy, are more likely to show interest in tasks they perform, show greater persistence and expend more effort in their jobs (Judge & Bono, 2001). If adolescents perceive these kinds of behaviours in their parents, they may too adopt those behaviours and attain higher self-efficacy in making their career decisions.

It is important to acknowledge that adolescents' perceptions of family members' job satisfaction has been found to correlate positively and significantly with all of the five

dimensions of CDMSE. Thus supporting the theory that the nature of parents' work and working conditions influences children (in this case) positively in terms of their future careers (Gardner, 2004). Therefore, adolescents are either more aware of or are more affected by their breadwinners' job satisfaction in terms of making career decisions. This has huge implications for South African breadwinners, whose job satisfaction in this context as been proven to play a vital but positive role in effecting the success of youngsters' career decisions.

4.2. The relationship between students' CDMSE and their perceptions of their family members' job insecurity

The second hypothesis, which proposed a relationship between students' career decision-making self-efficacy and their perceptions of their family members' job insecurity, was rejected. Similarly, there is no relationship between students' CDMSE and their perceptions of their *parents'* job insecurity, where, as previously stated, the majority of the sample referred to a breadwinning parent when commenting on their perceptions of a family members' job insecurity.

However, it is relevant to acknowledge that there were positive weak correlations between the self-appraisal, goal-selection and problem –solving CDSE subscales and powerlessness subscale. This would appear to make sense as students may be more inclined to select their goals more carefully, particularly in terms of selecting achievable goals, which would empower them in their later careers. It seems likely that they may be more inclined to problem solve when making career decisions, so as to not follow the same line as their parents, where they will strive to make better

career decisions, which do not lead to feelings of powerlessness in their own careers. It should be noted that overall total CDSE correlated significantly with powerlessness. This highlights that parents experiencing powerlessness in their jobs seems to be affecting their children considerably, if students are able to perceive its influence on their confidence in performing career decisions successfully. Powerlessness therefore, seems to be a factor that students take into account when making career decisions.

Nonetheless, the results highlight that overall there is no relationship between students' CDMSE and their perceptions of their breadwinners' total job insecurity. This is interesting as it highlights that job insecurity has no impact on students' confidence in performing career decisions successfully. The following discussion will attempt to ascertain some of the causes for this finding, with reference to previous research.

The fact that there is no correlation between students' CDMSE and their perceptions of their parents' job insecurity indicates that there may be a possibility that adolescents are merely unaware of their breadwinners' job insecurity. It could however suggest that parents do not communicate their job insecurity to their youngsters, in an effort to protect their children. Another consideration may be that adolescents are merely unaffected by their breadwinners' job insecurity in terms of making their own career decisions. Nonetheless, this finding does provide the study with some relevant information, as it suggests that adolescents' CDMSE is not affected by perceptions of this particular work experience as opposed to being significantly influenced by perceptions of their parents' job satisfaction.

The present study, does indeed confirm that only certain work experiences influence adolescents but not all of them. The fact that there is no relationship between students' CDMSE and their perceptions of their family members' job insecurity, fails to support Gardner's (2004) assumption that adolescents are influenced by *all* of their parents' work experiences. The non-existent correlation between students' CDMSE and their perceptions of their parents' job insecurity also does not substantiate the likely contributing effects of spillover.

The fact that no correlation exists between adolescents' career decision-making self-efficacy and their perceptions of their parents' job insecurity highlight that there is no apparent logical reason for including spillover as a contributing factor. Thus, the present study's findings cannot support some of the previous literature on spillover. Consequently, the study's findings cannot substantiate spillover theory which predicts that anxiety and other negative feelings created by job insecurity in the employee will create similar feelings both in the employee's spouse (Larson et al., 1994) and children. However, interestingly, spillover seems to impact on the first hypothesis, where spillover appears to be a factor to consider in its likely effect on the relationship between students' CDMSE and their perceptions of their parents' job satisfaction.

Ineffective communication between parents and adolescents regarding parents' job insecurity may influence the lack of correlation between adolescents' CDMSE and their perceptions of their parents' job insecurity. Research highlights that one major barrier to effective information seeking is that adolescents do not always understand

that, in order to make rational decisions, certain kinds of information are needed such as “sources of personal support, identification of possible barriers to career development, self-knowledge...” (Harris, et al., 2001, p.314-414). Adolescents may not be seeking the knowledge about their parents’ job insecurity and as a result this may further influence the lack of association between students’ CDMSE and their perceptions of their parents’ job insecurity.

Given the previous literature on job insecurity, the current finding cannot sufficiently support research that suggests that the greater the job insecurity, the greater are employees’ adverse reactions (Greenhalgh, 1983). If parents were experiencing adverse reactions to job insecurity, it seems likely that they would be noticeable or observed by adolescents. It is also likely that these adverse reactions would have a negative effect on students’ confidence in making successful career decisions. It may however, be the case that parents are not experiencing any job insecurity, but due to the fact that the study explored *students’* perceptions and not parents, there is insufficient evidence to speculate this.

In addition to this, the findings cannot effectively substantiate the assumption that students’ perceptions are largely dependent on their breadwinners’ perceptions of their own job insecurity. However it may be possible that the reason for students’ CDMSE being unrelated to their perceptions of job insecurity is because individual perceptions are the sources of job insecurity (Greenhalgh, 1983). Adolescents may be completely unaffected by their parents’ job insecurity due to their own perceptions of job insecurity. This may be more the case, as research has already found that young people perceive downsizing more positively than older workers (Marshall & Bonner,

2003). However, it should be noted that whilst overall there was no apparent relationship between students' CDMSE and their perceptions of their parents' job insecurity, the distribution curve for the Total Job Insecurity Scale demonstrated a skewed distribution to the left. Therefore, suggesting that students' actually do have perceptions of their breadwinners job insecurity and that they perceive their parents to have low job insecurity. Having said this, there is not insufficient evidence to support this finding based on the results discussed in chapter 3.

It seems possible that adolescents do not perceive job insecurity as a threat to their future careers and career decisions because literature concludes that they do not actively seek job security but rather self-employment as a career anchor (Feldman & Bolino, 2000). The fact that they do not seek job security highlights that their confidence in making successful career decisions is unaffected by their perceptions of their parents' job insecurity. If they do not seek job security, it therefore seems likely that job insecurity is a factor that they do not even consider in their career decision-making process. This may be a plausible reason as to why there is no relationship between adolescents' CDMSE and their perceptions of their family members' job insecurity.

The study's findings are unable to sufficiently support the fact that adolescents' perceptions of their parents' job insecurity results in an internalised barrier to constructive and persistent involvement in career exploration activities as a result of negative career outcome expectations (Jordaan, 1963 in Taveira, Silva, Rodriguez & Maia, 1998). The fact that there were no significant correlations emphasises that one may not assume that perceptions of breadwinners' job insecurity act as an internalised

barrier to constructive career exploration activities in adolescents. This may be more noticeable in the person directly experiencing the job insecurity, but does not appear to be evident in indirect perceptions of job insecurity through adolescents. However, it may have been more useful to have analysed the data by distinguishing between adolescents with high, medium and low perceptions of job insecurity, to find more significant differences amongst the groups.

Overall, the present study's findings do not further support the role of job insecurity affecting youngsters in a South African context where the legislation and economy has influenced employees both positively and negatively. There is inconclusive evidence to suggest that extraneous variables such as these contribute to the lack of correlation between students' CDMSE and their perceptions of their parents' job insecurity.

4.3. Racial differences in terms of career decision-making self-efficacy

It is important to acknowledge that much of the previous literature discussed the possible role of racial differences in relation to students' CDMSE (e.g. Alliman-Brissett, Turner & Skovholt, 2004; Gloria & Hird, 1999; Hackett & Byers, 1996; Leung, 1995; Hotchkiss & Borrow, 1990; Helms & Piper, 1994). The present study has already ascertained that there is a relationship between students' CDMSE and their perceptions of their parents' job satisfaction and that there is no relationship between students' CDMSE and their perceptions of their breadwinners' job insecurity. Therefore, it was seen to be important to discover, where the differences lie in terms of the differing race groups in the study. ANOVA's were performed in

order to ascertain differences on the dependent variable (CDMSE) and it was interesting to note that overall, there were no significant differences amongst the groups in relation to CDMSE.

Race was seen to be an important factor to consider in the present study as it was speculated that it may have an influence, largely due to South Africa's history and current legislation. It was proposed that due to the fact that South Africa has a population that is diverse in race and ethnicity, it was possible that there might be racial differences regarding the relationship between adolescents' CDMSE and their perceptions of their family members' work experiences. This was also corroborated by some of the research findings in America, which is also diverse in race and ethnicity.

As already mentioned, the primary reason for examining racial differences, in the present study, was largely dependent on South Africa's political and legislative changes that have brought about fundamental transformations to South Africa's industrial world. These changes were predicted to have a considerable impact on the way in which they affect adolescents' perceptions of their parents' job insecurity, thereby influencing their career decisions. These may be possible factors to consider for the racial differences reported in the present study on the self-appraisal subscale where students reported showing differences, however there is inconclusive evidence to support this.

With on-going political and legislative changes in a post-apartheid South Africa, the introduction of black economic empowerment and affirmative action are designed to

provide job opportunities to previous racial and ethnic minorities. This was seen to have negative impacts on other racial groups (such as Whites, Coloureds and Indians), who might now perceive their jobs as less secure and consequently influence their confidence in making successful career decisions. This is however difficult to assume as no significant differences amongst specific race groups were ascertained in the study.

Four of the five CDSE subscales reported no significant differences and the Kruskal-Wallis only showed significant differences between race and the self-appraisal subscale. As a result, this suggests that these findings corroborate assumptions that new legislative and political changes have brought about more opportunity for previously disadvantaged racial groups. However, the fact that there were no significant differences found between race and any of the other four CDSE subscales highlights that one cannot make any more assumptions in light of the literature. The present study also cannot support previous American studies which have found that previously disadvantaged African Americans are still not taking advantage of the opportunities that are currently available to them in America (Walsh, Bingham, Brown & Ward, 2001). Overall, in an attempt to explore the present study's findings that there is a relationship between students' CDMSE and their perceptions of their parents' job satisfaction, there is inconclusive evidence to assume that this relationship differs according to race, particularly within a South African context.

4.4. Limitations

Within the present study there are various limitations that have to be acknowledged, as being potential impacts on the reliability and validity of the current findings. The following will discuss some of the major limitations of the research in more detail.

4.4.1. The Sample

In this study, the sample size might have been perceived to be more of a limitation than strength. Even though the sample size was a fairly large one, with a total sample size of 148 respondents, which was a major strength for the study as a whole, the limitations cannot be ignored as posing a major threat to the validity and reliability of some of the findings. The sample could have been more inclusive of students studying in other faculties; this might have enhanced the generalisability of some of the findings. It should also be noted that there was a lower response rate than originally intended, as students who did not complete their biographical details and those who failed to answer all the scales were deducted from the sample. Furthermore, respondents who were younger than 18 were not included in the study, for ethical reasons, which also decreased the sample size, impacting on the overall reliability and validity of the study's findings.

It might also be a concern that the sample used only included first year medical school students studying first year Psychology. It may have been more valid, reliable and fair to use a sample of students studying a range of degrees. However, the present study used a convenience sample as it was seen as more accessible and economical.

Caution must be taken when generalising findings from the sample population to the target population. Due to the fact that the sample was comprised of volunteers brings about its advantages and disadvantages. The strengths of using a volunteer sample is that people do not feel coerced in any way and one can avoid possible halo effects if an incentive had been used to gain a better sample. The sample size may be better when people are given an incentive, however, the results might be skewed or invalid, as respondents may not depict an accurate picture of themselves and their responses (Welman & Kruger, 2001).

The disadvantages however, lie in that volunteers may affect the population validity of the study. Population validity refers to “the degree to which the findings obtained for a sample may be generalised to the total population to which the research hypothesis applies” (Welman & Kruger, 2001, p.118). Volunteers might differ from the relevant population and therefore biased results might exist. This study was examining the relationship of the variables in relation to all university contexts. However, it is very difficult to generalise a sample from one university to all types of adolescents in that age category. Not all adolescents are studying in tertiary institutions and not all adolescents have breadwinners. Therefore, a limitation of the study is the inability to generalise these findings to all adolescents, which is likely to decrease the external validity or population validity of the present research.

It is also difficult to generalise findings across contexts, for example South Africa has a society that has a diversity of races and cultures, which may impact on some of the findings. Even though race did not appear to be an influencing factor in this study, it may still have had implications if a broader base of adolescents were used. Therefore,

it is difficult to generalise these results to other societies, which therefore weakens the ecological validity of the study. Ecological validity refers to the degree to which results may be “generalised to all circumstances that are implied by the research hypothesis” (Welman & Kruger, 2001, p. 120).

It must also be noted that only 32 males participated in the study, whilst 116 females comprised a larger proportion of the sample size. Therefore, only 21.62% of the sample comprised male respondents and 78.38% female respondents. Therefore, due to the fact that there were substantially more females in the study, gender bias could have occurred in the results, and so acting as a limitation to the study (Please refer to Table 1 on pages 48 & 49).

4.4.2. Instruments

With regards to the scales, it is important to acknowledge the various limitations. One major limitation regarding the instruments was the Overall Job Insecurity Scale, where both the job insecurity and powerlessness subscales' questions had to be modified, to address students' perceptions. This may have had implications on the lack of correlation between students' CDMSE and their perceptions of their parents' job insecurity. Indirect questions, where students responded through their parents may have affected the correlations, especially with regards to job insecurity, where parents might not be open in sharing some of the difficulties associated with job insecurity.

Another limitation is that the original powerlessness subscale is measured on a five-point Likert scale; where responses range from strongly agree to disagree. However, in terms of how the questions were worded, this was an incorrect measure for responses, in terms of how the items were rephrased. This was, however only realised at the analysis stage. This might have also been a contributing factor in the present study's findings. However, it is important to note that none of the students queried any of the tutors regarding their understanding of this scale; therefore it is unsure whether this impacted on some of the findings. Furthermore, the powerlessness scale was a short three-item scale, where all items had to be reverse-scored; this too may have impacted on the reliability of the study.

It is also important to acknowledge that job insecurity on the whole, is a sensitive topic, therefore, some respondents might have felt uncomfortable in answering some of the items, which could have influenced the lack of correlation in the results. However, in terms of the other questionnaires, they proved to be appropriate and reliable scales. There were very high internal consistencies on the CDSE and Job satisfaction scales, which showed that they were reliable measures to use for the present study.

A further potential limitation to the study may have been the result of the fact that this study was measuring *career* decision self-efficacy but made use of scales that examined “jobs” and not careers. This may pose as a potential limitation to the study where the findings may not be as generalisable in terms of the link between CDMSE and Job satisfaction and job insecurity. It may also have been important to introduce spillover indicators into the questionnaire so as to provide more valid findings and

reasons to justify study's findings. The study may also have benefited from a qualitative measure to ascertain some clarity to further understand the findings in the present study.

4.4.3. Extraneous Variables

Language may also have been a potential limitation in the study where some respondents might not have understood certain questions or items, due to the questionnaire being English-based. A substantial proportion of the sample's first language was African, which emphasises that language barriers could have been a possible extraneous variable limiting the study's credibility. Language may have also affected the reverse scoring on some of the items of the job insecurity scale and all of the items on the powerlessness subscale.

In terms of the role of spillover, which was one of the variables that was seen to be a contributing factor in the study, was unfortunately not measured in the study, which could have been useful in terms of interpreting some of the study's main findings. However, it should be acknowledged that spillover was not a primary focus of the present research, even though it may have been a useful analysis variable. This could however, be an interesting implication for further research.

The age of the students in the sample may have been another extraneous variable that could have influenced the present study's results. This is because at their age, which is primarily regarded as a novice/exploratory phase, they are probably less likely to understand the effects of their parents work experiences. Therefore, it may have been

better to measure an older sample, however this may have had implications for their confidence in making successful career decisions. Older adolescents may be regarded as more confident in their choices as opposed to younger ones.

4.5. Suggestions for future research

With reference to the results and discussion chapters, it was noted that there was a correlation between students' CDMSE and their perceptions of the parents' job satisfaction, but not their parents' job insecurity. This highlights that it might be relevant to examine adolescents' perceptions of other work experiences, which may impact on their career aspirations or CDMSE.

Due to the fact that this was a quantitative study and because the data will only gain a certain amount of information from respondents, a future research suggestion might be to answer the present study's research by following a more qualitative approach. This way, more detailed and insightful information could be gained. In terms of measuring job insecurity, which is a relatively sensitive topic, it may be more effective to use an interview approach to draw more accurate and reliable conclusions.

From the discussion, it was apparent that it was difficult to generate likely reasons for some of the findings generated in the study. If adolescents were interviewed, one could possibly draw out reasons and more open-ended responses to some of the questions. Therefore, qualitative techniques such as structured interviews or focus groups could possibly be more appropriate in getting a deeper insight into the adolescents' familial backgrounds. It may also be a consideration here, to focus on

measuring the role of spillover effects in studies such as these that look at the parental influences on adolescents' growth and development. This could help to clarify why certain correlations exist between students' CDMSE and their perceptions of their parents' work experiences and why others do not exist.

It might also be relevant to conduct studies, elsewhere, in other institutions, where the likelihood of students living on their own may impact on the study's findings. This may produce very different findings where students living away from their breadwinners, may indicate very different findings in terms of their career decision-making self-efficacy. This is why other research should possibly explore the roles of other influences, such as peers, friends, lecturers or others who may not necessarily be regarded as breadwinners but may still play a vital role in influencing adolescents CDMSE.

Even though the job insecurity scale used in this study was seen as a less effective scale to employ in the South African context and possibly for the purposes of measuring students' perceptions. A suggestion for future research, might be to attempt to devise a measure specifically aimed at measuring perceptions of job insecurity, more specific to adolescents and the South African context, where the current legislation, politics, socio-economic status, race, politics, and diversity play a major role. A careful consideration of such factors could help to devise a measure that is more relevant, appropriate and fair to our country and might offer better insight into youngsters' perceptions. The ultimate aim of this would be to enhance the generalisability of findings to the South African population, bettering future research ventures.

CHAPTER 5

CONCLUSION

Career decision-making self-efficacy is a relevant research area to explore in terms of understanding adolescents' behaviours and their perceptions of their family work experiences. This is highlighted by the fact that in this study, students' perceptions of their parents' job satisfaction has been found to influence their career decision-making self-efficacy. CDMSE might require more focus and attention within the occupational literature, as it should not only be regarded as an important research area, but as a vital component to the career development of youngsters.

Research should focus on how CDMSE manifests, factors which impacts on a youngster's confidence in making successful career decisions and find ways of improving CDMSE to better the growth and development of adolescents. This is why it should be a topic that should be continually explored to find new possible findings to an issue that can potentially affect the growth and development of an entire nation. CDMSE can impact on adolescents' lives in many ways and may have huge developmental and psychological effects for young people. It is important for parents and families to realise the potential negative effects of not developing a child's confidence in making successful career decisions, there should be a greater need for research ventures to explore many other possible influences that could play a fundamental role on adolescents' CDMSE.

Due to the fact that it was a South African university that took part in the study, this might suggest that certain contextual factors- such as culture, socio-economic status,

politics and legislation- specific to the South African context could have also impacted on the findings.

With regards to this study, although a relationship was not found between students' CDMSE and their perceptions of their parents' job insecurity, does however emphasise the fact that there needs to be more research done in the field of CDMSE to determine other possible relationships. Even though race was not found to contribute to this relationship, this again highlights that further exploration needs to be conducted in order to find some clarity into the role that race might play on this topic. It is important to note that the contributions of the study essentially pertain to one university; perhaps this research should be conducted in other institutions that might have different findings, thereby offering even more valuable contributions to the CDMSE literature.

Overall, this study has hopefully brought about the realisation that more research needs to be explored on the topic of CDMSE in particular. Coupled with that, more research studies should be explored by focussing on a unique South African context, where new findings could enrich the lives of not only South Africans but also individuals across the globe.

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Approximately how many hours a day does your breadwinner work?

LESS THAN 8 HOURS	<input type="checkbox"/>
8 HOURS	<input type="checkbox"/>
MORE THAN 8 HOURS	<input type="checkbox"/>

Does your breadwinner work for an organization?

YES NO

Is your chosen breadwinner self-employed?

YES NO

Do you think that your breadwinner enjoys his/her job?

YES NO

Has your breadwinner ever been retrenched or unemployed for other reasons?

YES NO

How long has or was he/she retrenched or unemployed for? (mark your answer with an X).

YEARS MONTHS DAYS

What degree are you aiming to complete?

P. T. O

INSTRUCTIONS: For each statement below, please read carefully and indicate how much confidence you have that you could accomplish each of these tasks.

Mark answers with an X in the spaces provided in the table.

Example: How much confidence do you have that you could:

- a. Use the skills you have developed at university in your chosen career?

If your response is "Moderate Confidence," place an X in the corresponding column for that particular question.

	No Confidence at All	Very Little Confidence	Moderate Confidence	Much Confidence	Complete Confidence
1. Find information in the library about occupations you are interested in.					
2. Select one major from a list of potential majors you are considering.					
3. Make a plan of your goals for the next five years.					
4. Determine the steps to take if you are having academic trouble with an aspect of your chosen major					
5. Accurately assess your abilities.					

	No Confidence at All	Very Little Confidence	Moderate Confidence	Much Confidence	Complete Confidence
6. Select one occupation from a list of potential occupations you are considering.					
7. Determine the steps you need to take to successfully complete your chosen major.					
8. Persistently work at your major or career goal even when you get frustrated.					
9. Determine what your ideal job would be.					
10. Find out the employment trends for an occupation over the next ten years.					
11. Choose a career that would fit your preferred lifestyle.					
12. Prepare a good resume.					
13. Change majors if you did not like the first choice.					
14. Decide what you value most in an occupation.					

	No Confidence at All	Very Little Confidence	Moderate Confidence	Much Confidence	Complete Confidence
15. Find out about the average yearly earnings for people in an occupation.					
16. Make a career decision and then not worry if it was right or wrong.					
17. Change occupations if you are not satisfied with the one you enter.					
18. Figure out what you are and are not ready to sacrifice to achieve your career goals.					
19. Talk with a person already employed in a field you are interested in.					
20. Choose a major or career that will fit your interests.					
21. Identify employers, firms and institutions relevant to career possibilities.					
22. Define the type of lifestyle you would like to live.					
23. Find information about graduate or professional schools.					

	No Confidence at All	Very Little Confidence	Moderate Confidence	Much Confidence	Complete Confidence
24. Successfully manage the job interview process.					
25. Identify some reasonable major or career alternatives if you are unable to get your first choice.					

Please complete the following as honestly as possible. You may only choose ONE breadwinner (a family member who is earning and working) in answering this table. **Mark your answers with an X in the spaces provided.**

	Extremely Dissatisfied	Very Dissatisfied	Moderately Dissatisfied	Not Sure	Moderately Satisfied	Very Satisfied	Extremely Satisfied	I Don't Know
01. How satisfied do you think your breadwinner feels about his/her physical working conditions?								
02. How satisfied do you think your breadwinner feels about his/her freedom to choose his/her own method of working?								
03. How do you perceive your breadwinner's feelings towards fellow workers?								
04. How satisfied do you think your breadwinner is in terms of recognition for good work?								

05. How satisfied do you think your breadwinner is with his/her immediate boss?								
06. How satisfied do you think your breadwinner is in the amount of responsibility he/she is given at work?								
07. How satisfied do you think your breadwinner is, with his/her rate of pay?								
08. How satisfied do you think your breadwinner is in terms of opportunity to use his/her abilities?								
09. How do you perceive your breadwinner as being satisfied with relations between management and workers in his/her firm?								
10. How satisfied do you think your breadwinner is regarding chances of promotion?								
11. How satisfied do you think your breadwinner is regarding the way his/her firm is managed?								
12. How satisfied do you think your breadwinner is regarding attention paid to suggestions he/she makes?								
13. How satisfied do you think your breadwinner is with the hours he/she works?								
14. How satisfied do you think your breadwinner is regarding the amount of variety in his/her job?								
15. How satisfied do you think your breadwinner is with his/her job security								

Please answer the following as honestly as possible regarding the same breadwinner you thought of when you answered the previous questions.

Please mark your answers with an X in the spaces provided.

	Very Likely	Unlikely	Neither Likely or Unlikely	Likely	Very Likely	I Don't Know
01. What do you think the likelihood is of your breadwinner losing his/her job and being moved to a lower level job within the organisation?						
02. What do you think the likelihood is of your breadwinner losing his/her job and being moved to another job at the same level within the organisation?						
03. What do you think the likelihood is of your breadwinner finding that the number of hours the company can offer him/her to work may fluctuate from day to day?						
04. What do you think the likelihood is of your breadwinner being moved to a higher position within his/her company?						
05. What do you think the likelihood is of your breadwinner being moved to a higher position in another geographical location?						
06. What do you think the likelihood is of your breadwinner losing his/her job and being retrenched for a short while?						
07. What do you think the likelihood is of your breadwinner losing his/her job and being retrenched permanently?						
08. What do you think the likelihood is of your breadwinner finding his/her department's or division's future uncertain?						
09. What do you think the likelihood is of your breadwinner losing his/her job by getting fired?						

10. What do you think the likelihood is of your breadwinner losing his/her job by getting pressured to accept early retirement?						
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Please answer the following as accurately and honestly as possible.

Please mark your answer with an X in the spaces provided.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	I Don't Know
01. To what extent do you think that your breadwinner has enough power in his/her organisation to control events that might affect his/her job?						
02. To what extent do you think your breadwinner's in his/her organisation can prevent negative things from affecting his/her work situation?						
03. To what extent do you think your breadwinner understands his/her organisation well enough to be able to control things that affect him/her?						

APPENDIX B
Subject Information Sheet (Questionnaire Based Research)

Dear Student

My name is Sarah Hutchison and I am conducting research for the purposes of obtaining a Masters degree in Psychology at the University of the Witwatersrand. My area of focus is that of adolescents and their confidence in making career decisions and how they are affected by their family members' work experiences. Part of the research aims to explore if there is an existing relationship between students' career decision-making self-efficacy and how they see their breadwinner's job satisfaction and job insecurity. I would like to invite you to participate in this study.

Participation in this research will entail completing the attached questionnaire. The questionnaire will take approximately 20 minutes to complete. Participation is voluntary and no student will be advantaged or disadvantaged in any way for choosing to complete or not complete the questionnaire. Participants are required to complete a biographical questionnaire, so that the researcher is able to describe the sample being studied and make assumptions based on that sample. While questions are asked about family and career development, no identifying information, such as names or I.D. numbers are asked for, and as such participants will remain anonymous. Completed questionnaire will not be seen by any person in the class or the Psychology department and will only be processed by myself. Responses will be looked at in relation to all other responses. This means that feedback will be provided in a report and will be in the form of group responses and not individual perceptions.

If you choose to participate in the study, please complete the attached questionnaire as carefully and honestly as possible. Please note that you may not discuss questions with your neighbours, as this will violate the confidentiality procedure. Therefore, no person will be permitted to converse with others or compare answers when completing the questionnaire. Once you have answered the questions, place the questionnaire in the envelope provided, seal it and deposit it in the sealed box provided. This will ensure that no one will have access to the completed questionnaires and will ensure your confidentiality. If you do return your questionnaire, this will be considered as consent to participate in the study.

Your participation in the study would be greatly appreciated. This research will contribute to a larger body of knowledge on adolescents' career aspirations.

Kind regards

Miss Sarah Hutchison (B. A. Masters Student)

Fiona Donald (Supervisor)

APPENDIX C

The following is a consent form from the Head of Psychology granting permission to conduct this research.

9 June, 2005

Ethics Committee for Human Subjects (non-medical)
University of the Witwatersrand

Dear Professor

PERMISSION TO INVITE STUDENT PARTICIPATION IN RESEARCH

I hereby grant Ms Sarah Hutchison permission to invite psychology students to participate in the research for her Masters degree. Ms Hutchison will liaise with the relevant lecturers regarding suitable times when she may approach their classes so as to avoid disruption to the learning process.

Yours sincerely

Prof. N. Duncan
Head of Psychology

APPENDIX D

Letter from Human Research Ethics Committee, available on request