The occupational aspirations and gender stereotypes of rural Xhosa-speaking senior primary school children

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SUMMARY

South Africa provides a rich and challenging socio-political context in which to conduct career development research. South African children face a unique range of social, cultural and economic challenges such as poverty and the impact of HIV/AIDS on the family system which influence their career development.

Internationally there has been a call for research that explores children’s career development as the majority of extant career research focuses its attention on the career development of adolescents and adults. The focus in South Africa is no different and despite the introduction of career education into the most recent school curriculum (Curriculum 21), there remains a void in South African child career development research. As such children’s career education and guidance has not been guided by local research findings. The findings of the present research will provide important baseline information relating to the career development of rural Xhosa-speaking senior primary school children.

With this in mind, the present research aimed to explore and describe the occupational aspirations of male and female rural Xhosa-speaking senior primary school children. The present research also aimed to explore and describe the ways in which children assign gender-based stereotypes to different occupations. In order to provide a rich theoretical foundation for the present research, child developmental theories and developmental theories of career development as well as post-modern constructivist theories of career development have been used.

The present research is quantitative in nature and makes use of the Revised Career Awareness Survey, a self-report questionnaire, which was originally designed
to explore children’s knowledge and understanding of the world of work and to gain insight into the way in which they form gender-based occupational stereotypes. Three rural schools in the Eastern Cape Province of South Africa were selected using a non-probability, purposive sampling method. From these schools, a non-probability, convenience sample of 292 grade 6 and 7 learners was asked to complete the measure. The information gathered was then coded into nominal categories and analysed using descriptive statistics.

Results from the present research indicate that rural Xhosa-speaking senior primary school children tend to aspire towards more Social and Investigative type occupations in the high status level category. The findings showed that rural Xhosa-speaking senior primary school children tend to limit the range of occupations which they believe men and women can do. Here it was found that Social type jobs and household chores were most frequently named as jobs that women can do. The children in the present research listed Realistic type occupations most frequently as jobs that men can do, and least often as being jobs that women can do. It was also established that housework activities and other ‘domestic’ jobs are not seen by the participants as jobs that men can do.

The results of the present research should not only inform the field of child career development in South Africa, but can also be meaningfully applied to the development of future career education programs at the primary school level in South Africa.

Keywords: Xhosa-speaking, rural, primary school, career development, occupation, aspiration, gender stereotyping, South African
CHAPTER 1

CONTEXT OF RESEARCH

South Africa, with its unique socio-political history, provides a challenging context in which to conduct psychological research, especially in the field of career development where the employment and education arenas are two of the main areas in which inequality was propagated under the apartheid system. Since the establishment of a democratic government in 1994, the world of work in South Africa has been in a unique state of transition as government legislation, such as the Employment Equity Act No. 55 of 1998, aims to redress the inequalities of the past.

South Africa’s apartheid legacy was most visible in the vast difference in vocational and educational opportunities made available for different racial groups within the country’s labour market. New legislation has opened the door of employment opportunity for all South Africans regardless of race, culture or gender. This legislated aim is being achieved through the establishment of organisational equity and affirmative action policies aimed at increasing the number of previously disadvantaged South Africans employed within the national labour market. According to the Employment Equity Act (EEA), previously disadvantaged individuals include “black people, women and people with disabilities” (Department of Labour, 1998, p. 3), with “black people” being used as a generic term for Africans, Coloureds and Indians. Despite the implementation of measures such as the EEA and affirmative action, unemployment remains a serious problem in South Africa as job creation cannot happen fast enough to provide jobs for all South Africans. In the most recent Labour Force Survey carried out in 2006 it was established that the unemployment
rate in South Africa stands at 25.6% according to the official definition which narrowly defines *unemployed* as “persons ages 15 – 65 who did not have a job or business in the seven days prior to the survey interview but had looked for work or taken steps to start a business in the four weeks prior to the interview and were able to take up work within two weeks of the interview” (Statistics South Africa, 2006, p.ii).

Closer inspection of the employment statistics show that out of 29 852 000 individuals in the South African population who are of working age, only 12 451 000 (41.7%) were employed at the time of the survey. This suggests that, despite the unemployment rate being 25.6% according to the official definition, a further 13 126 000 individuals of working age were not economically active (that is, they are students, scholars, full-time homemakers, those who are retired, and those who are unavailable or unwilling to work). Thus, in the broadest possible sense, the unemployment rate in South Africa is closer to 60%. It is within this complex context that the career development of South Africa’s youth takes place. When taking a closer look at the latest employment statistics, it can be seen that only 26.07% of potentially economically active black South Africans in the Eastern Cape Province are employed. This is much lower than the 48.51% employment rate amongst other population groups in the Eastern Cape Province (that is, Coloured, White and Indian or Asian). The employment rate amongst black women is also lower than that of black men. Statistics also indicate that over 90% of black individuals in the Eastern Cape Province earn below R1600 per month which underlines the level of poverty which is prevalent in the region (Statistics South Africa, 2006).
Along with inequality in employment practices, another issue requiring attention in the new South Africa is that of gaining a deeper understanding of the career development processes of previously marginalized populations through research projects which focus on these groups. Despite the complexity of the South African work context, there are currently no indigenous theories of career development and South African career researchers remain dependent on the application and adaptation of Western theories of career development to the unique context described already (Naicker, 1994; Watson & Stead, 2002). None of these theories address the specific socio-political and cultural context in which career development takes place in this country.

Despite calls for the development of theories based on local cultural traditions and systems of meaning, the lack of South African theories of career development remains a challenge for researchers, educators, and policy makers (Stead & Watson, 2006). Research that evaluates the capacity of extant career theories to explain the career development of South Africa’s diverse population groups may influence the way in which we think about and study the development of South African children’s occupational aspirations.

Children’s career development is not only influenced by their socio-political history but also by the present state of the education system and the projected needs of the South African labour market. According to Stead and Schultheiss (2003), childhood career development remains an under-researched area in career psychology in South Africa. This opinion is echoed by Akhurst and Mkhize (2006) who observe that “career education practice in South Africa still reflects the marked inequalities which characterized the apartheid education structures” (p. 139).
latter authors point out that in the past, tertiary education and career options available to young black South Africans were limited due to job reservation and other psychosocial factors related to the impaired education system of the apartheid era. Extant South African career research highlights the need for further research to be conducted in order to gain a broader understanding of the specific career development needs of children from a wide range of social and cultural backgrounds (Crause, 2006; Hargreaves, 2007; Olivier, 2004).

Since the birth of democracy in South Africa, the opportunity for previously disadvantaged learners to enter the tertiary education system has increased. This has opened up a broad range of career options not previously available to these individuals. This growing scope of career choice has direct implications for career researchers as it highlights the need to understand the career development of South Africa's youth in order to provide more meaningful career education at various levels throughout the primary and secondary education system. The need for improved quality of and access to career education, particularly at the primary school level, has been supported by numerous studies both before and after the democratisation of South Africa in 1994 (Chuenyane, 1983; Cox, 2004; Crause, 2006; Hargreaves, 2007; Mtolo, 1996; Ntshangase, 1995). The knowledge gained from ongoing research into children's career development could provide useful baseline information to support the development of improved career education programs.

Recent research shows that South African children have tended to aspire to Social type occupations and that these occupational aspirations remain stable over time (Crause, 2006; Dean, 2001; Grobler, 2000; Hargreaves, 2007). When compared to the South African labour market which is currently experiencing a specific lack of
engineers (Investigative), and artisans (Realistic) it seems to be that children are aspiring to occupations which are not in line with the current needs of the country’s labour market (JIPSA, 2007). Further, research conducted by Chuenyane (1990) demonstrated that large numbers of black secondary school learners have experienced difficulty with career planning tasks due to a lack of self knowledge.

A study by Els (2004) demonstrated that urban Xhosa-speaking children tended to aspire more to Investigative type occupations such as ‘doctor’ and ‘lawyer’. A small number of children in Els’ study indicated that ‘engineer’ was their favourite occupational aspiration. The fact that South African research shows a trend for Xhosa-speaking South African primary school children to aspire towards high status level occupations is of concern in so far as it reflects a degree of idealism in their occupational aspirations when viewed against the realities of the educational and employment context of South Africa.

It has previously been suggested that more informed career education programs would provide the guidance necessary to give South African children a more realistic understanding of the economic situation in South Africa, eventually leading to the development of occupational aspirations which more accurately mirror the employment needs of the South African economy (Els, 2004; Hargreaves, 2007). As part of the transformation of the primary and secondary education system, the outcomes based Curriculum 2005 (now called Curriculum 21) for grades one to nine was developed and launched in 1997. Through this curriculum, career education has been included as part of the Life Orientation learning area with the aim of enhancing the career development of children at primary and secondary levels. Despite the introduction of this career development focus in the curriculum, Akhurst and Mkhize
(2006) feel that delays in the implementation of this new material in an already struggling education system will lead to a further generation of South African children having had insufficient exposure to career education before making important career decisions. Another concern is that the process of establishing career education programs does not appear to have been guided by research and as such may fail to address the specific needs of South African learners (Cox, 2004; Crause, 2006; Els, 2004). There is therefore a need for more research to be carried out in the field of children’s career development in order to inform these programs.

The increase in possible career options facing individuals is not only a South African phenomenon. Gottfredson (2005) believes that internationally the increase in career possibilities is fuelling a growing trend of young people who, struggling to make career choices, are delaying such choices. Gottfredson states that, because of the strong link between career choice and personal social identity, “the opportunity to choose is also the responsibility to choose and to choose wisely” (p. 71). Other authors (for example, Super, Savickas, & Super, 1996; Turner & Lapan, 2005) have highlighted the need for school-aged children to develop the skills which can guide their career development process across their lifespan.

Despite its focus on career development, the present research takes place within the broader context of child development. South African children develop in a society filled with unique challenges. Issues such as poverty, HIV/AIDS, domestic violence and substance abuse are some of the challenges faced by many South African children as they grow up (Bhana, 2005). According to the South African Department of Education (2001), malnutrition is widespread amongst poor rural children in South Africa. These socioeconomic factors undoubtedly impact on the overall development
of young children. In addition, the impact of HIV/AIDS on South African families means that many children grow up without parents, forced to take on parental responsibilities usually not accounted for in the child development literature.

The present research takes place in rural regions of the Eastern Cape Province of South Africa which has been and remains the poorest province in the country. It focuses specifically on Xhosa-speaking school children from schools in these regions. Xhosa is the most commonly spoken language in the province and is spoken by 83.7% of the people in the Eastern Cape Province (Statistics South Africa, 2001). More specifically, the sample for the present research is drawn from schools in the rural areas of Coega, Motherwell and Addo which surround the major towns of Port Elizabeth, Uitenhage and Despatch which together comprise the Nelson Mandela Metropolitan Municipality (NMMM). The NMMM has a total population of 1 005 780 people of which 57.25% are Xhosa speaking (Statistics South Africa, 2001). Many of these Xhosa-speaking individuals live in the rural areas surrounding the urban centres of the metropolis, in formal and informal settlements. No specific employment data was available for the specific rural areas from which the sample was drawn, but informal discussions held with school principals determined that these areas are characterised by extreme levels of poverty and unemployment as well as limited access to infrastructure. The workforce in these rural areas is largely made up of migrant workers who leave their own rural community to find skilled, semi-skilled and unskilled work (such as factory workers, construction workers and manual labourers) in urban areas or as farm workers on farms in the rural areas surrounding their own community. This kind of employment means parents are often away from their children and this, along with the impact of HIV/AIDS, has serious
implications for family structure in rural South Africa where households are often headed by older women or by the oldest sibling.

The Xhosa people from which the present sample is drawn has traditionally been a society based on strong kinship ties within a strong collectivist culture which emphasises the importance of family and extended family in the day to day structure of its society. The traditionality of South African black cultures and especially the kinship concept have been systematically eroded during the apartheid era as individuals were forced to leave their rural communities, sometimes temporarily but often permanently, in search of work opportunities in urban centres (Afolayan, 2004). Legislation during this time meant that men often had to leave their families behind in rural areas and could not bring them to the urban areas where they worked. As such the family structure has changed dramatically over the years. According to Pauw (1994) kinship now only plays a strong role during major events such as the death of a loved one and other ceremonial occasions such as christenings, initiation and weddings.

Traditionally, Xhosa men have held total authority over Xhosa women and children in what was essentially a patriarchal society, but because of migrant labour and other factors which have drawn men away from their homes, households have increasingly become led by older women who bear the responsibility for child rearing and who may often have up to four generations of children and children’s children under their control. This has implications for factors such as discipline and role models for children as well as economic implications as these women bear the financial responsibility for their extended family group. Despite the patriarchal traditions of the Xhosa culture, women are seen to hold a certain degree of social
prestige and influence based on their ability to reproduce and also to provide extra income (Afolayan, 2004; Pauw, 1994). Traditionally Xhosa women, despite being responsible for taking care of domestic activities including childcare, are also able to contribute to expanding the wealth of the family through informal craft work and other commercial activities. Xhosa women therefore hold a dual role within the family, taking care of domestic responsibilities, while also having a responsibility to provide an income. Despite its strong traditional roots, it has long been suggested that the culture of black South Africans has become increasingly oriented towards Western culture, although there remains an underlying connection to traditional Xhosa culture (Pauw, 1994). The present research is concerned with gaining a deeper understanding of the ways in which Xhosa-speaking South African children, living within a unique rural context, think about careers. As a broader aim, the researcher hopes to engage in a process which will produce not only useful academic insight but, more importantly, stimulate change oriented discussion within the field of South African career education.

This chapter has provided an introductory context within which the present research takes place. The following chapter provides the theoretical underpinnings on which the present research is established. Chapter Three builds on the theory reviewed in Chapter Two by exploring the extant research within the field of child career development both internationally and nationally. Chapter Four provides a detailed description of the research methodology employed by the researcher throughout the process of planning, implementing and reporting the present research. The results of the study are presented in Chapter Five which is followed by an integrated discussion of these results in Chapter Six. The final chapter provides a
brief look at the limitations faced by the researcher in conducting the present research as well as the recommendations which the present researcher is able to make to future researchers based on the experience gained while planning, implementing and reporting on the present research.
CHAPTER TWO
THEORY REVIEW

This chapter introduces the theoretical framework on which the present research is based. It provides an introduction to a number of influential theories from within the fields of developmental psychology and career psychology. It is within the context of these two broad psychological arenas that the present research finds its foundation. As the present research focuses on exploring and describing the career development of children, this review pays more attention to career development theories. It would be amiss, however, to explore one specific aspect of children’s development outside the context of general childhood development theory. It is for this reason that two prominent childhood developmental theories are described in order to provide a comprehensive theoretical framework within which career theory can be introduced and described later in the chapter.

The developmental theories of Erikson (1950; 1993) and Piaget (1950; 1973) have been selected as they provide a foundational understanding of the processes which occur as children grow and develop. Following the description of these two theories of childhood development, the career development theories of Super (1980; 1990), Savickas (2002; 2005) and Gottfredson (1981; 2005) will be discussed with specific emphasis on the aspects of these theories which relate to the career development of children. The work of Schultheiss (2003; 2005) will also be introduced as it provides insight into the relational nature of career development, thus highlighting the role other people play in the career development of children. In the final section of this chapter, the Systems Theory Framework of Patton and
McMahon (1999; 2006a) will be introduced as an overarching framework which provides a point of convergence for the theoretical foundations of the present research.

**Developmental Theory**

Sigelman and Rider (2006) define *development* as the “systematic changes and continuities in the individual that occur between conception and death” (p. 2). These changes are said to take place in an orderly fashion and as such provide researchers and theorists with a meaningful framework within which to explore more specific aspects of human development at various points in the life-span.

One of the fundamental principles of the life-span development perspective is the idea that “development is shaped by its historical-cultural context” (Sigelman & Rider, 2006, p. 9). This idea is especially relevant in the South African context which is characterised by the legacy of its apartheid past. It is within the unique socio-cultural context described in the previous chapter that young South Africans grow and develop. These context-specific challenges cannot be ignored when exploring aspects of South African children’s career development.

In providing a theoretical foundation of child development in which specific aspects of career development can later be explored, the work of Piaget (1950; 1973) and Erikson (1950; 1993) will be discussed. These theories provide valuable insight into the cognitive (Piaget) and psychosocial (Erikson) development of children. *Cognitive development* refers to changes in children’s mental processing abilities, such as perception, language and problem solving. *Psychosocial development* is concerned with the completion of personal and interpersonal
developmental tasks, including motives, emotions, family roles and interpersonal skills. In the context of the present research, this developmental information is useful for understanding the way in which children’s thinking about careers changes and develops as they move through the developmental stages of childhood. It also provides a lens through which to view the psychological and social development of children as they develop within their own unique socio-cultural contexts.

**Piaget’s Theory**

The level at which individuals are able to think about and conceptualise their world develops throughout childhood, becoming increasingly sophisticated with age. Piaget’s (1950; 1973) theory of cognitive development focuses on the growth in complexity of cognitive operations and the changing way in which children are able to engage with and adapt to their environment.

Piaget believes that *knowledge* is the process of acting on physical and mental objects in an attempt to adapt to the environment, rather than simply the body of information which children acquire as they grow up. Essentially, knowing comes from doing. Initially the action of knowing is directed at physical objects which younger children can see and manipulate. Later, older children are able to replace physical objects with mental representations or symbols upon which the operations of knowing can be carried out. The process of cognitive development is therefore seen as a combination of the biological maturation of the brain together with the contribution of the individual’s unique lived experiences. This means that children use what they already know about the world in order to make decisions about how to solve new problems as they experience them. As they develop more complex
cognitive mechanisms, so children are able to use what they have learned in increasingly complex ways (Sigelman & Rider, 2006; Thomas, 2005).

Piaget’s understanding of cognitive development is concerned with the way in which children actively create knowledge of the world through their actions (or operations), whether these are physical or mental (Sigelman & Rider, 2006; Thomas, 2005). This implies that cognitive development does not simply happen to children, but rather that it happens as a continuous process whereby children encounter new experiences which require them to adapt and reorganise their existing understanding of the world. Piaget (1972) referred to this process by stating that all knowledge is “continuously in a course of development and of passing from a state of lesser knowledge to one which is more complete and effective” (p. 5).

Piaget (1950; 1973) determined that cognitive development takes place through a series of qualitatively different stages or periods, each building on the cognitive development which occurred during the preceding period. The order of these periods is set because, in order to take a subsequent step, earlier steps need to have been successfully taken. It should be noted that, although each stage is associated with a specific age group, these age groups may vary across social and cultural contexts. Piaget (1973) himself acknowledges that “they are not stages which can be given a constant chronological date. On the contrary, the ages can vary from one society to another” (pp. 10 – 11).

Piaget identified four periods of cognitive development. The first period is known as the sensorimotor period (birth to 2 years of age) and is followed by the preoperational period (2 to 7 years of age), the concrete operational period (7 to 11 years of age) and finally, the formal operational period (11 to 15 years of age).
Thomas (2005) summarises the progress through Piaget’s periods as the child changing from being a completely dependent and egocentric infant with no meaningful experience of his or her environment to being a highly logical adolescent with the ability to independently engage with and manipulate his or her world.

The majority of the sample for the present research falls into the formal and concrete operational periods which, for the purpose of the present research, will be discussed in great detail. During the *concrete operational period*, which often coincides with the beginning of primary school, children perform operations only in relation to specific objects that are either physically present or imagined. During this period, children’s thinking becomes less egocentric and fanciful as their basic skills are consolidated and reorganised in order to perform higher level cognitive functions. The move away from egocentricity is facilitated by ongoing language development which allows greater interaction with others and therefore provides impetus for socialisation (Cockcroft, 2002; Thomas, 2005). In the concrete operational period, logic is based on children’s ability to physically or mentally manipulate familiar objects (for example, blocks, beads, pictures).

Despite the development of logical thinking during this period, children’s ability to think abstractly has not yet developed. This ability develops during the *formal operations period* during which adolescents become able to carry out operations which are not directly related to specific objects. This includes the ability to thoughtfully consider abstract concepts, theories and propositions. Through the development of formal thought processes, older children reach a stage where they have the ability to actively think about problems or decisions. Formal operations involve the formulation, testing and evaluation of hypotheses, and are not limited to
present problems but can be expanded to the mental consideration of the problems of the past and the future. With this comes an ability called *metacognition* which refers to an individual’s ability to monitor and assess what and how he or she is thinking (Newman & Newman, 2003). When this occurs, children have reached a state of cognitive maturity on which their adult thought processes are based (Cockcroft, 2002; Thomas, 2005). Piaget (1950) referred to this as the stage of “pure thought which is independent of action” (p. 149).

**Summary**

Piaget’s (1950; 1973) stages of cognitive development provide a framework in which the career thought processes of the children in the present research can be understood. Just as the way in which children’s thinking processes become more sophisticated with age, so the way in which they identify and eliminate possible career options becomes more complex. An understanding of Piaget’s stages of cognitive development lends itself to the exploration of children’s career thought processes. This process of cognitive development suggests that children have an increasing ability to conceptualize themselves in terms of the various aspects of their career development as they become older. As the manner in which they relate to their environment develops, so does the way in which they perceive themselves in relation to their ever-expanding world. The manner in which they are able to consider possible career options changes as they move towards cognitive maturity, a fact which is acknowledged by Gottfredson (2005), who highlights the importance of *cognitive growth* in her career theory of circumscription and compromise.
The cognitive development of children cannot be understood apart from their psychosocial development and vice versa. In the following section, a psychosocial theory of development will be introduced. This theory, together with that of Piaget, provides a more comprehensive understanding of the dynamic interplay of cognitive and social factors on the career development of children.

**Erikson’s Theory**

Erikson’s (1950; 1993) model of psychosocial development, which has its starting point in Freudian psychoanalytic theory, provides a theory of identity formation in which the individual’s development is conceptualized as occurring across a series of stages, each characterized by a unique identity crisis which must be negotiated before moving to the next developmental stage. Together with the social development process described by Erikson, career development takes place in a recursive relationship in which career development has an impact on overall personality development (Helwig, 2004) and vice versa. The importance of general life-span developmental theory has been highlighted by vocational theorists who suggest that it be used as a “metatheory” (Savickas, 2001, p. 287) or “guiding conceptual framework” (Vondracek, 2001b, p. 253) for the study of career development and as such the developmental theory of Erikson has been selected for the present research.

A fundamental construct in Erikson’s (1950; 1993) theory is that of *identity formation*, which refers to the process by which an individual acquires the ego strength necessary to achieve mastery over the environment as well as the ability to perceive both the self and the world correctly (Thomas, 2005). Identity is a
multifaceted construct which includes not only an individual's own sense of personal uniqueness, but also social aspects relating to an individual's perceived social roles and position in society. Identity formation also refers to an individual's sense of integration within familial and societal groups (Thom & Coetzee, 2004; Thomas, 2005). Identity formation is a lifelong process which starts at birth and progresses through a number of stages across the life-span. Based on this life-span approach to human development, Erikson’s theory builds on Freud’s psychosexual stages by adding a number of stages that account for the developmental processes of childhood and adulthood.

As the focus of the present research is on childhood development, only the first four stages of Erikson’s theory will be discussed in this section. According to Erikson (1993), the development of identity in childhood begins with the establishment of a sense of basic trust versus basic mistrust (0 to 1 years of age) and is followed by the developmental stages of autonomy versus shame and doubt (2 to 3 years of age), initiative versus guilt (4 to 5 years of age) and industry versus inferiority (6 to 11 years of age). These specific developmental stages describe the process through which children’s identity is forged. The participants in the present research fall into two of Erikson's stages, namely the stage of industry versus inferiority and the stage of identity versus role confusion. These two stages will be discussed in more detail below.

Less than ten percent of the participants in the present research fall into Erikson’s fourth developmental stage of industry versus inferiority, a stage which is characterized by the development of a growing range of social and occupational competencies. Children in this stage have a need to be productive and earn
recognition for their efforts. The successful completion of a broad range of tasks provides children with a sense of industry. Newman and Newman (2003) define *industry* as “an eagerness to acquire skills and perform meaningful work” (p. 276). It is this eagerness which, when stifled by lack of opportunity or ability to master new skills, is transformed into feelings of worthlessness or inadequacy, which Erikson (1993) calls *inferiority*. Through the successful development and implementation of new skills, often through imaginary play, children are able to develop a sense of achievement or competence. This process of skill development moves children closer to independence as they develop a range of abilities which they will carry over into adulthood.

The majority of participants (over ninety percent) in the present research fall into Erikson’s fifth developmental stage of *identity versus role confusion*. During this stage, which coincides with the onset of puberty and adolescence, individuals take another step towards adulthood and are faced with the task of developing an increased sense of personal identity. Individuals who have already successfully navigated the preceding stages of psychosocial development should have achieved meaningful levels of trust, autonomy, initiative and industry and it is upon these foundations that adolescents are free to explore their identities.

The process of identity formation during adolescence involves children finding out who they are and where they fit into their society. During this stage adolescents move away from acting out social roles (such as student, friend, sibling and boy) as they have been defined for them by their parents, peers and community, and begin to explore and express these roles based on their own developing sense of self. They begin to explore their own choices regarding religion, careers, sexual
orientation and group affiliation apart from the influence of their family system (Hook, 2002; Sigelman & Rider, 2006). This exploration can often lead to adolescents seeming to clash with their social environment as they experiment with a wide range of social behaviours.

This stage of development is essentially a process of integration during which adolescents must bring together childhood experiences in order to form a meaningful sense of personal identity based on the integration of their own intrapersonal abilities and characteristics with their socio-historically acquired skills and competencies (Erikson, 1968; Hook, 2002). Failing to establish a coherent sense of identity, adolescents face the crisis of role confusion which is characterised by a lack of differentiation from their social environment, and may result in difficulty making decisions later in life.

Summary

Erikson’s (1950; 1993) theory of human development finds its strength in the fact that, starting with childhood, the theoretical stages move upward through the lifespan, providing a sense of continuity in ego development from birth to death (Hoare, 2005). With specific relevance to the present research, Erikson’s theory highlights elements of the developing child’s need to be industrious. This notion suggests that the childhood world of play is the forerunner to the adult world of work and therefore provides a salient link between human development theories and career development theories. Thus it can be said that Erikson’s theory provides a description of childhood vocational behaviour as it occurs within the psychosocial development process.
This section has described two theories of human development which provide the general developmental context in which children’s career development takes place. The following section introduces the career development theories which underpin the present research and include the theories of Super (1980; 1990) along with its recent revision by Savickas (2005). Gottfredson’s (1981; 2005) theory of circumscription and compromise, which provides more specific constructs for the exploration of occupational aspirations and occupational gender stereotyping in childhood, will also be introduced.

**Career Development Theory**

The field of career development has a relatively brief history, emerging in the 1900s with Parson’s (1909) trait-factor theory which sought to match the individual with their work environment in order to maximise job satisfaction. Almost a century later, the field has seen the introduction of a wide range of theoretical schools including developmental theories such as Super’s life-span, life-space theory (Super, 1980, 1990; Super, Savickas, & Super, 1996) and Gottfredson’s theory of circumscription and compromise (Gottfredson, 1981, 1996, 2002, 2005) which focus more on identifying the stages through which individuals’ careers develop. Most recently the field has seen the rise of constructivist theories such as the Systems Theory Framework of career development (McMahon & Patton, 1995; Patton & McMahon, 1999, 2006a) and career construction theory (Savickas, 2005) which are based on social constructivist thinking and the move to emphasise the centrality of individuals in the active construction of their life and career.
The present research is concerned with the exploration and description of South African children's career development processes and as such has as its theoretical base a number of prominent theories from the field of career psychology. Due to the focus of this study on career development as a process starting in childhood and continuing throughout the lifespan, two major developmental theories of career have been selected. The first theory is the life-span, life-space theory of Super (1980; 1990) which conceptualises career development across the life-span together with the recent revisions to this theory by Savickas (1997; 2005) which advances Super’s original ideas within the context of social constructionist thinking. The second theory is Gottfredson’s (1981; 2005) theory of circumscription and compromise which looks more specifically at the dynamics of childhood career development. These two theories identify specific stages of career development and are thus useful for the present research.

The work of Schultheiss (2003; 2005) is also considered to have relevance in the context of the present research as it considers the relational elements of career development. Whilst Schultheiss’ work does not constitute a formal theory of career development, it highlights the role which other people play in the career decision making process, suggesting that “relationships with others are a critical resource that can inform the decision making process for even the most self-directed individual” (p. 308). Schultheiss’ work provides insight into the influence which other people, especially parents, have in the career decision making processes of children.

Internationally, the field of vocational psychology has been characterised by the existence of a number of respected theories which, despite ongoing revision and refinement, have been described by many authors as inadequate and incomplete.
Patton and McMahon (2006a) have referred to the current body of career theories as “a number of theories continuing to focus on specific aspects of career development within a whole which is not yet clearly specified” (p. 167).

The clear theoretical segmentation and disparity which has characterised vocational psychology over the last four decades has led to an increasing emphasis on the need for integration or convergence in the field (Borgen, 1991; Osipow, 1990) through the establishment of an overarching framework of career development. While a number of integrative frameworks have been proposed since the turn of the century (for example, Blustein, 2001; Chen, 2003; Guichard, 2005; Schultheiss, 2003), the Systems Theory Framework (STF) (McMahon & Patton, 1995; Patton & McMahon, 1999, 2006a) has become widely established as a valuable metatheoretical framework through which vocational psychology can begin to express itself in an integrated manner in the 21st century.

Not only does the STF begin to answer the international call for integration and convergence, but it also addresses the call by South African authors (Stead & Watson, 2006) who have emphasised the need for local researchers to make more meaningful and culturally relevant use of extant theories of career development. In the South African context the STF provides a way of bringing well established career theories together in a way which acknowledges the influence of cultural and social factors which may or may not be explicit in the individual theories themselves. As such, the researcher has elected to use the STF as a theoretical point of convergence for the present chapter because of its acknowledgement of the broadest possible range of influences (i.e., individual, social and environmental).
which may impact on the development of occupational aspirations and occupational
gender stereotypes.

This section begins with a detailed introduction to the theories of Super, Savickas
and Gottfredson and ends with a systemic integration of the chosen career theories
which not only introduces the basic tenets of the STF but also uses them to illustrate
the complex relationships which exist between the career theories. In this way the
STF provides a point of convergence, bringing a greater sense of coherence to the
theoretical positions provided by Super, Savickas, and Gottfredson. Not only does it
serve as a point of convergence, but it also illustrates a system of influences which
highlights the systemic complexity in which career development takes place (Patton
& McMahon, 2006a).

**Super and Savickas**

Super (1980) defines the term career as the “combination and sequence of roles
played by a person during the course of a lifetime” and career development as the
“emergence of a sequence of choices throughout the whole or part of the lifespan”
(p. 282). From these definitions, it can be said that career development refers to the
unfolding of an individual’s career through the choices they make as they progress
through life from childhood to retirement and beyond. Following Super’s death, his
career development theory has been reframed and referred to by Savickas (2005) as
career construction theory. This position emphasises the agency of the individual in
actively constructing their career through the decisions they make. Within career
construction theory (Savickas, 2005), career is seen as “a subjective construction
that imposes personal meaning on past memories, present experiences, and future
aspirations by weaving them into a life theme that patterns the individual’s work life” (p. 43). This post-modern definition captures the narrative essence of career construction theory whereby individuals select and emphasise particular experiences at different points in the life-span and use these stories to actively construct their own career reality. Throughout the discussion of Super’s theory, Savickas’ revisions of Super’s original ideas will be provided in order to highlight the transition towards a more unified theory of career development.

Super’s (1980; 1990) original developmental theory of careers suggests a life-span, life-space approach to career development and is useful for exploring the career development experiences of individuals at particular points in their life-span. This theory is characterised by a move away from conceptualising career choice as a once off event and introduces and establishes the idea that career development is an ongoing process (Savickas, 2002; Watson & Stead, 2006a). This notion builds on the foundation of general human development theories (such as, Erikson, 1950, 1993) and has been acknowledged as being the most valuable contribution of Super’s theory to the field of vocational psychology (Super et al., 1996; Watson & Stead, 2006a).

Super’s (1980) original life-span, life-space theory emerged at a time when career theory was characterised by fragmentation and a lack of a unified theory. It was never Super’s intention to formulate a comprehensive theory of career development but rather to provide an holistic description of the development of career behaviour across the life-span (Langley, 1999; Savickas, 1997, 2005; Super, 1980; Watson & Stead, 2006a). However, Super’s work has come to be acknowledged as amongst the most influential career theories of the last century
(Ferreira, Santos, Fonseca, & Haase, 2007; Watson & Stead, 2006a). The endurance or longevity of this theory may be attributed to its flexibility which has enabled theorists such as Savickas to integrate post-modern concepts into the original framework provided by Super.

Super’s theory has been described as a set of theories which together describe aspects of vocational behaviour through the life-span (Savickas, 2005; Super, 1984, 1990). Savickas (1997) has referred to three major theoretical segments which are the culmination of the ongoing revision of the theory during Super’s lifetime. He refers to these as the career maturity segment, the self-concept segment, and the life-space segment, which together describe the process of career development across the life-span. It is on these segments that Savickas has worked at unifying Super’s theory using the metatheory of social constructionism. After discussing the stages of life-span career development, the researcher has used these three segments as a framework for exploring the intricacies of Super’s (1980, 1990) theory and its post-modern revision by Savickas (2005).

**Stages of life-span career development**

Super’s (1980; 1990) theory suggests that career development takes place throughout the life-span of the individual, referring to the progression through a sequence of five life stages. During these stages individuals are faced with specific developmental tasks which contribute to the establishment of the self-concept. It is these stages which provide researchers with an outline of career development processes of individuals at specific stages in their careers (Savickas, 2005).
The first stage is called the *Growth stage* and corresponds with childhood (0 to 13 years of age). The present research draws its sample from individuals in this stage of career development. To provide further focus, the growth stage and its tasks have been divided into four substages, namely *curiosity* (0 to 4 years), the fantasy substage (4 to 7 years of age), the *interest* substage (7 to 11 years of age) and the *capacities* substage (11 to 14 years of age). The sample in the present research falls within the capacities substage which closely corresponds with Erikson's (1950; 1993) developmental stage of industry versus inferiority which has been discussed earlier in this chapter. During the capacities substage, children strive through their play to develop their competence and ability.

An important feature of the growth stage is *curiosity* which leads to the development of the self-concept as children become increasingly inquisitive about the world around them and begin to explore it through various forms of play and the imitation of role models. Curiosity may be stimulated by social, environmental or physiological factors such as hunger, thirst, boredom and loneliness, which suggests that an individual's context has a direct impact on the development of the self-concept. It is believed that children who lack career curiosity may develop naïve beliefs about the world of work as well as inaccurate self concepts (Savickas, 2005; Sharf, 2006).

Super (1990) believes that an increase in the level of exposure to career information during the growth stage may lay the foundation for future career exploration. This belief is echoed by Savickas (2002) who suggests that if the various tasks of the growth stage are successfully completed, children will enter adolescence (i.e., the exploration stage) with “a concern for the future, a sense of
control over it, adaptive conceptions about how to make career decisions and the confidence to engage in designing their occupational future” (p. 171).

While not directly related to the present research, the later stages of career development will be discussed briefly in order to provide an overall sense of the process of life-span career development. Following the childhood growth stage, adolescents (14 to 24 years old) find themselves in the Exploration stage. This stage continues through adolescence into young adulthood. The tasks of the exploration stage are seen as crystallisation, specification and implementation of a career choice. This stage is characterised by a culmination of the career decision-making process and the initiation of study or job seeking. Individuals who have decided on the next step in their career development must now act on this decision and enrol in a study program, seek employment or engage in further career exploration.

The third stage of Super’s life-span theory is the Establishment stage (25 to 44 years of age). During this stage, adults are faced with the task of stabilising and advancing their career within the position which they have chosen. Super called the following stage the Maintenance stage (45 to 65 years of age), a name which has been changed by Savickas (2005) to the Management stage to better reflect the adaptive qualities which are necessary at this stage in the life-span (Watson & Stead, 2006a). The final developmental stage is the Disengagement stage (65 years and older) during which individuals begin to decrease their worker role and prepare for retirement.

The developmental stages provided by Super’s (1980; 1990) theory lend themselves to the normative assessment of an individual’s level of career readiness
at each stage of the life-span (Watson & Stead, 2006a) and therefore provide researchers with a framework against which to compare their findings.

**Life-space**

The life-space refers to the changing roles played by an individual throughout his or her life-span. These roles include child, student, leisurite, citizen, worker, spouse, homemaker, parent and pensioner. Super (1980) suggested that these roles were played out in one of four theatres namely, the home, the community, the school and the workplace. The introduction of these roles shifts the focus away from the worker role and onto the interaction between roles throughout the lifespan (Savickas, 1997; Watson & Stead, 2006a). This shift allows the worker role to be understood in the overall context of the individual’s life-space and takes the experience of previous roles into account. A concept which is linked to life roles is that of role salience, or the relative importance placed on a particular role by an individual at a particular point in their development. Role salience has been conceptualised in terms of the participation, commitment, and value expectation which an individual places on each of the life roles (Langley, 1992). The emphasis placed on each role is largely determined by society and as such individuals are likely to pursue roles according to sociocultural expectations.

**Career maturity**

Career maturity is another of Super's (1955) original concepts which he used to refer to the readiness of an individual to make the career decisions or transitions necessary at specific points in the life-span. It could be said that this concept refers
to a state of readiness of the self-concept to make a successful career transition. Career maturity develops through the successful completion of age or stage appropriate developmental tasks. Individuals who are unsuccessful at these tasks could be said to have lower career maturity which in turn could lead to difficulty making successful career decisions and transitions (Langley, 1999).

Savickas’ (2002) theory of career construction echoes Super’s original ideas while, at the same time, reframing them in post-modern language which suggests that “careers do not unfold, but are constructed” (p. 154) and as such the term career adaptability (Savickas, 1997, 2005) is preferred to career maturity (Super, 1955), the latter term implying a biological maturation of pre-programmed career development processes. Career adaptability, on the other hand, is defined as the “readiness and resources for coping with current and imminent vocational development tasks, occupational transitions, and personal traumas” (Savickas, 2005, p. 51) and implies the active involvement of the individual in the process of career adaptation.

Super’s original theory included both of these concepts with career maturity being applied to the readiness of adolescents to make educational and career decisions and career adaptability being used to refer to the adaptations required of adults in the world-of-work (Langley, 1999; Savickas, 1997; Super, 1955). Savickas (1997) suggests that career adaptability is a concept which is applicable to all age groups (that is, children, adolescents and adults) and all life roles and therefore its use simplifies the life-space, life-span theory.

In his original article on career adaptability as a critical construct in career development theory, Savickas (1997) suggests that the tasks of adaptation are
“planning, exploring and deciding” (p. 247). Adaptive individuals are therefore those who are concerned about their futures, have increased control over their vocational futures, are curious and actively explore their futures, and are becoming more confident in pursuing their career aspirations (Savickas, 2005; Watson & Stead, 2006a). The concept of career adaptability acknowledges the individual’s ability to successfully adapt or respond to changes in their circumstances. As such, it moves away from Super’s normative definition of career maturity which compared an individual’s level of career development to the expected level of development for individuals in that age group. Career adaptability emphasises the role of social context on the career development of individuals and as such creates space for a more meaningful application of Super’s theory in the South African context which is far removed from the Western context against which career maturity has previously been measured.

**Self-concept**

Super’s (1980; 1990) original theory includes a wide range of theoretical constructs which are used as a foundation for understanding and exploring career development in a variety of contexts. Central to his description of how individuals develop is the formation and implementation of the self-concept (Savickas, 2002; Sharf, 2006; Watson & Stead, 2006a). This construct emerged from Super’s earliest work and is concerned with the accurate matching of the self to the environment.

The self-concept develops through the individual’s interaction with his or her sociocultural environment. Owing to the dynamic nature of human existence, individuals are forced to adapt to changes in their environment in order to survive. It
is through this process of adaptation that the self-concept is expanded and refined. It could be said that the self-concept is the ever changing framework of experience by which an individual finds self-definition and, as such, changes in an individual’s self-concept impact on their career development and vice versa. The way in which individuals view themselves influences the career options which they are likely to consider at times of change.

The idea of an ever evolving self-concept ties in with Gottfredson’s (1981; 2005) understanding of the processes of circumscription and compromise. It follows that the more accurate an individual’s self-concept, the more accurate the career options he or she will have to consider when making a choice. If the processes of circumscription and compromise are based on a healthy self-concept, the choices which result are more likely to lead to high levels of work satisfaction which Watson and Stead (2006a) define as a measure of the degree to which an individual’s chosen occupation allows for the meaningful implementation of his or her self-concept.

**Summary**

Super’s original theory introduced a number of valuable constructs into the field of developmental career psychology. These include the self-concept and values which build on trait-factor theory (that is, person-environment theory), and career development and career maturity which highlight the idea of career development as a lifelong process. The concept of life roles and cultural context were added later and acknowledge the importance of cultural and social factors on the career development of individuals (Watson & Stead, 2006a). This description illustrates the
holistic nature of Super’s theory and the way in which it developed from modern to post-modern thinking about career development (Super et al., 1996).

Following Super’s death in 1994, his theory has been revised and expanded by Savickas (2002; 2005) who has integrated the segments of Super’s theory into career construction theory which is a new theory based on social constructionist and constructivist thinking. Savickas’ aim was to provide a richer career theory which could be confidently applied in multicultural contexts. The value of this post-modern adaptation of Super’s theory by Savickas (2002) lies in its underlying belief that “people are embedded in environments that affect them” (p. 157). It is within these environments that careers are actively constructed as individuals adapt to the challenges presented by their unique societal and cultural milieu (Watson & Stead, 2006a). This most recent adaptation brings Super’s theory to life in the 21st century, with its increasing emphasis on the individual’s personal search for meaning.

The value of this new conceptualisation of career development is clear in a society which cannot provide the stability which characterised the labour market in the West at the time of Super’s original theorising. The South African labour market which for so long provided job reservation for white men, and hence one employer careers, has changed dramatically since the establishment of a democratic government. Affirmative action policies which seek to redress the inequalities of the past now aim to provide increased opportunities for previously disadvantaged groups (that is, blacks, women and disabled individuals). There are still however extremely high levels of unemployment, especially in the rural areas where the present research finds its focus. This world-of-work does not support the linear progression through normative stages as described by Super’s original developmental stages but
rather a cyclical progression from one piece-job (such as, domestic work, garden work, farm work) to the next. Savickas (2005) suggests that, despite this fact, the original developmental stages retain their value as a conceptualisation of the ‘mini-cycles’ which take place around each occupational transition (for example, school-to-work, occupation-to-occupation) (Super, 1980; 1990).

Despite its widespread use as a basis for research and counselling both internationally and nationally, Super’s theory has received criticism for having been widely accepted on face value with little empirical support for his original propositions or for changes made to constructs later in its development (Salomone, 1996; Watson & Stead, 2006a). The lack of research underpinning Super’s theory has been attributed by some authors (Brown, 1996; Herr, 1997) to the fact that its segmental nature makes the empirical assessment of its propositions difficult. Further criticism has been levelled at the perceived failure of the career maturity construct to accommodate cultural influences (Hardin, Leong, & Osipow, 2001; Herr, 1997; Leong & Serafica, 2001; Vondracek & Reitzle, 1998) as well as to the lack of specificity in Super’s definition of the self-concept (Betz, 1994).

These criticisms are outweighed by strong support and acceptance of Super’s theory which Marques (2001) believes is still relevant in the present century. It has also been described as a well-ordered and systematic theory lending itself to research and practice (Osipow & Fitzgerald, 1996). The ongoing use of Super’s theory by researchers since its creation is seen by some (Swanson & Fouad, 1999) as validation for its description of the development of the self concept within the context of career development. The value of Super’s theory for use in culturally diverse populations has been supported by Savickas (2001) whose ongoing
adaptation attempts to shift the emphasis of Super's theory to the active
collection of careers by individuals from different cultural and ethnic backgrounds.

Whilst Super’s (1980; 1990) theory describes career development during
childhood, it does not provide a detailed account of the career development
of circumscription and compromise provides a more specific theory for
understanding children's occupational aspirations and occupational gender
stereotypes, which are core constructs explored by the proposed research.

**Gottfredson’s Theory**

Gottfredson (1981; 2005) provides a life stage theory of childhood career
development which includes an explanation of the processes through which children
explore, identify, and eliminate possible occupational options based on factors such
as gender and social status. It stems from a concern with the way individuals
unnecessarily limit their career options by eliminating possible occupations early in
their life-span. The theory focuses on the processes by which children and
adolescents attempt to make sense of the vast number of possible career options
which are available to them (Gottfredson, 2005).

There are two main processes which comprise Gottfredson's theory. These are
circumscription and compromise, and it is in the context of these two processes that
Gottfredson (1981; 2005) explores the cognitive growth of children with specific
regard to their career development. **Circumscription** is one of the processes by which
a child’s career self-concept is created and refers to the way in which children
narrow down their possible career choices by eliminating occupations which are seen
as incompatible with the self-concept. This subconscious process occurs as children compare their self-concepts with the multitude of possible occupations with which they have come into contact. The aim of this process is to establish a suitable match between self-concept and career choice based on the idea that a career provides a means to extend the self-concept into the world. It is through their chosen occupations that individuals assert their self-concepts within their communities.

The way in which children manage this process is dependent on their level of cognitive development. In young children this process is limited by the fact that they have relatively unsophisticated views of both themselves and their environments. Gottfredson (2002) believes that, despite the relative simplicity of children’s thinking, “their conclusions can have lasting consequences” (p. 93) as rejected options are unlikely to be reconsidered spontaneously and are thus eliminated as possibilities for the future. It is therefore vital to have an understanding of the limiting impact of preadolescent cognitive processes on the career decision-making of more cognitively mature adolescents (Gottfredson, 2005).

*Cognitive growth* is a central construct of Gottfredson’s theory and refers to the increasingly complex cognitive tasks (such as, remembering, understanding, applying, analysing and evaluating) which are required of children as they develop. As children develop, their thinking changes from being more intuitive to more concrete and, towards adolescence, the ability for abstract thought is achieved. This development means that children progress from making only simple distinctions between occupations to more complex distinctions as they grow older and become more aware of the differences and similarities between career options (Gottfredson, 2002, 2005). The distinctions move from initial gender based stereotypes founded
on overt social cues to more subtle distinctions based on perceived social status and perceived compatibility of occupations with the individual’s emerging sense of self.

There are obvious parallels between Gottfredson’s theory and the cognitive development theory of Piaget (1973). Both theories are concerned with the way in which children come to make sense of their worlds. Both Gottfredson and Piaget place emphasis on experiential learning and the active construction of meaning, thus giving their theories strong ties with career construction theory which reflects the most recent developments in the field of career development psychology.

The process of circumscription has been explained by Gottfredson (1981; 1996; 2002; 2005) in four stages, each of which focuses on the level at which children of a certain age are able to classify elements of their environments, with specific relation to occupational aspirations. Because of the impact of cognitive development on the rate at which children progress through the stages, it has been noted that the age and grade levels provided with each stage are to be seen as a rough guide only (Gottfredson, 2005).

During the first stage (ages 3 to 5 years), children become oriented to size and power. This stage is characterized by a move away from magical thinking to more intuitive thinking and the achievement of object constancy. Children’s occupational aspirations cease to include fanciful or unrealistic options (for example, animals, fantasy characters or inanimate objects) from the realm of make believe. Children at this stage may look up to adults as big and strong, while they themselves may feel small and weak. This distinction can be seen in the way small children idolise their parents as omnipotent and indestructible. Gottfredson (2005) suggests that children at this stage are just beginning to lay the foundation for the understanding of sex
roles as they start to identify the most tangible differences between males and females.

The second stage (ages 6 to 8 years) suggests an orientation to sex roles. With the development of more concrete cognitive ability, children are able to identify with a wider range of occupations. These occupations reflect those most salient within the child’s realm of experience (for example, teacher, doctor, and nurse). Children at this age have a greater understanding of the existence of sex roles and due to their dichotomous (that is, either good or bad) thinking, are likely to perceive their own sex as superior. They will begin to place an increasing emphasis on sex-appropriate activities which see boys and girls playing games which are socially acceptable for their sex. Their occupational aspirations will also come to reflect a greater level of gender sensitivity and as such they effectively rule out career options which do not fit with their sex type (Gottfredson, 2002, 2005).

The development of abstract thinking occurs during stage three (ages 9 to 13 years) and it is this stage which has been used to define the upper and lower age limits of the present sample. The third stage introduces the child’s growing understanding of social valuation and its impact on their circumscription of occupational aspirations. The level of awareness of different occupations increases as children are able to ascribe occupational status to less obvious forms of work. At this stage children have developed increased sensitivity to some of the indicators of social status such as clothing, speech, behaviour and possessions. Children are therefore able to evaluate occupations in terms of their associated level of social status and are increasingly aware of the importance of income and education with regards to achieving success in their chosen occupation. An adolescent’s evaluation
of the social suitability of an occupation includes the influence of family and community with regards to which careers are acceptable for one of its members. This ties in with the notion that an individual’s choice of occupation is seen as an important expression of the self-concept and as such individuals strive to find the occupation which makes the most profound statement of their worth within their social context (Gottfredson, 2002, 2005).

Finally, stage four (ages 14 years and above) involves the individual’s orientation to the internal, unique self. At this point, individuals are able to think more abstractly, both in terms of their self-concept and their conceptualization of possible career options. Gottfredson (2002) suggests that adolescent career development is less concerned with eliminating unsuitable options and more focused on selecting the most suitable options from those remaining after the first three stages.

The second major concept constituting Gottfredson’s (1981; 2005) theory is that of compromise which is defined as the process through which individuals adjust their occupational aspirations after taking the limitations of their external environment into account. Compromise involves the elimination of options which become unrealistic when examined against the broader social context of the individual. The theory suggests that individuals faced with varying degrees of compromise will protect sex type, prestige and interests to varying degrees, sacrificing career options in order to protect their self-concept. Compromise suggests therefore that individuals will eventually have to accept and pursue less attractive career options than they had originally considered for themselves.
Summary

Gottfredson’s theory has been criticised (Brown, 1996) for being too general and not accounting for the career development of individuals who do not prematurely circumscribe and compromise their career aspirations. Brown’s criticism includes a call for a greater focus on the factors influencing the development of the self-concept, a primary construct in Gottfredson’s theory. Sharf (2006) believes that Gottfredson’s theory has made itself difficult to validate as it makes very complex predications based on varying degrees of compromise.

Gottfredson’s theory provides specific constructs for the exploration of children’s and adolescents’ career development processes. It is essentially a theory which seeks to understand the limiting occupational choices which are made both unconsciously and consciously based on the evaluation of occupational sex type and social status level. As children grow and develop more sophisticated cognitive structures they are able to comprehend these two factors in increasingly meaningful ways. Gottfredson provides four stages of cognitive growth which describe the growing awareness of children and the impact this has on their occupational aspirations and gender stereotyping.

Systems Theory Framework (STF) – A systemic integration

The final section of this chapter introduces the Systems Theory Framework (STF) of career development (McMahon & Patton, 1995; Patton & McMahon, 1999, 2006a) and makes use of it as a point of convergence for the four career theories discussed in this chapter (that is, those of Super, Savickas, and Gottfredson and the work of
Schultheiss) as well as the general childhood developmental theories (that is, those of Erikson and Piaget).

Watson and McMahon (2004a) have suggested that the STF provides a holistic framework through which the career development of children can be examined based on the complimentary contributions of different career development theories. These authors suggest that the STF provides the breadth necessary to bring different career theories together while at the same time relying on each individual theory to provide the theoretical depth needed to explain the complex career development processes which take place during childhood. The present researcher feels that, while the STF can be used to facilitate the integration of career development theories, it also provides a useful framework for the introduction and integration of theories from other related fields (in the case of the present research, general human development theory).

In response to the international call for convergence and integration within the field of vocational psychology (Borgen, 1991; Osipow, 1990), the STF of career development has emerged as a valuable approach to the integration of career theories. Since its first publication the STF has taken a giant leap towards integration, providing an inclusive framework with the capacity to highlight the complex interrelatedness of the multitude of career theories which have informed both research and practice over the last forty years (McMahon & Patton, 1995; Patton & McMahon, 1999, 2006a).

Despite its relatively short history, the usefulness and validity of the STF has been commented on by authors who have focused on its application across a wide range of settings including rural location (Collett, 1997), low socio-economic status
(Taylor, 1997) and culturally diverse populations (Lim, 1997). In South Africa, the value of the STF has been established through studies of adolescent career decision-making with both lower (Dullabh, 2004) and upper (Kuit, 2006; Longe, 2005; Saaiman, 2006) socioeconomic samples.

The STF provides a detailed framework of individual, social and environmental influences which impact on career development. According to Patton and McMahon (2006a), the term influences has been selected as a dynamic term which encompasses the broad range of interpersonal and contextual factors which impact on career development. The term is also seen as neutral, as an influence is not intrinsically positive or negative (Patton, McMahon, & Watson, 2006). This means that influences can be perceived in different ways by different people and that each individual assigns their own personal meaning to the various influences in their career story. In this way, influences can be seen as either facilitators or barriers to career development (Patton & McMahon, 2006a).

Patton and McMahon have presented their framework in terms of the dynamic interrelationship between content influences and process influences and it is this structure which the researcher has adopted in this systemic integration. In referring to content influences, the creators of the STF refer to the specific influences on career development which emerge from within the individual and from the broader context in which the individual develops. These influences make up the three interrelated systems of the STF, namely the individual system, the social system and the environmental-societal system which are shown in Figure 1. The three interrelated systems of the STF are located within the context of past, present and future which introduces the process influence of change over time. Process
influences refer to the dynamic interaction or recursiveness between the influences as well as change over time and the impact of chance (Patton & McMahon, 2006a).

Figure 1. The Systems Theory Framework of career development.

Content Influences

Individual System

The individual is at the centre of the STF as it is individuals who are responsible for actively creating their own career reality through the choices they make. Both career theorists (Gottfredson, 1981, 2005; Savickas, 1997, 2005; Super, 1980, 1990) and general developmental theorists (Piaget, 1950, 1973) emphasise the active agency of the individual in their theories which move away from defining development as simply a process of biological maturation, to a process of actively adapting to the environment. Erikson (1950, 1993) is the only theorist in the present research who has maintained a completely maturational model of childhood development in his theory.

The individual, along with a wide range of intrapersonal career influences (such as gender, values, age, interests, abilities, ethnicity, personality, and beliefs) is represented within the individual system of the STF (Watson & McMahon, 2004a). According to Patton and McMahon (2006a), the individual system “contains a range of intrapersonal influences on career development which are possessed by all individuals, yet are different for each individual” (p. 198).

A number of other intrapersonal influences (for example, health, disability, sexual orientation, and skills) have been included in the STF based on the emphasis which has been placed on them by other authors or due to their relative absence from theories of vocational psychology and the belief that they require some attention in the future (Patton & McMahon, 2006a). In this section the individual system influences which have been highlighted by Super, Savickas and Gottfredson are
explored along with the emphasis placed on identity formation by Erikson and active construction of knowledge by Piaget.

Super's (1980; 1990) theory has as a central construct the development of the vocational self-concept and it is this construct which holds his segmental theory (as described earlier) together as each segment describes the ongoing formation and implementation of the self-concept. Another important influence which is included in Super's theory is values which, according to Langley (1999), are the important things in an individual’s life, things which bring meaning. Age is another influence which is explicit in Super’s theory in terms of life-span development and career maturity. Career maturity also highlights the importance of world-of-work knowledge as another important influence on the career development of individuals.

Gottfredson (2002; 2005) is concerned with the way in which individuals’ self-concepts are shaped by their gender; she also emphasises the influence of age in her developmental stages. In Gottfredson’s theory of circumscription and compromise, the way in which children limit their occupational aspirations based on gender stereotypes is seen as a major developmental stage.

Savickas’ (2002; 2005) construct of vocational personality acknowledges a wide range of intrapersonal influences, such as abilities, values, inherited aptitudes, physical attributes and interests. The life-themes construct places the responsibility on the individual to give these influences meaning and importance within their own career story and as such places no objective value on any of the influences. Career construction theory believes in the active agency of individuals to create their own unique career reality based on the system of influences which they themselves
choose to highlight. The career adaptability construct highlights the influence of world-of-work knowledge on career development.

When one moves beyond specific career development theories to general developmental theories, Erikson's (1950; 1993) theory of psychosocial development includes a number of individual system influences in its description of the psychosocial development of children. By its very nature this developmental theory acknowledges the central influence of age on the identity development of children, with younger children being faced with different identity crises (trust versus mistrust) from older children (industry versus inferiority) and adolescents (identity versus role confusion). Erikson’s theory describes the process of identity development and as such emphasises the influence of the emerging self-concept, along with the individual’s increasing awareness of other intra-personal forces (such as personality, beliefs and values) which become increasingly crystallised as the individual successfully moves from one stage of development to the next. The process of identity formation described by Erikson is essentially a process of integrating a range of intrapersonal characteristics and influences into a meaningful, independent sense of self.

Piaget's (1950; 1973) theory highlights the influence of age on the overall development of individuals with adolescents having developed more complex cognitive abilities (formal operations) than younger children (concrete operations) and as such being able to perceive themselves and their environment in a more adult manner.

Individuals as a system do not develop in isolation but rather exist within a larger system of social and environmental influences. It is within the contextual system
(that is, the social and environmental-societal systems) of the STF that the individual system is located. In this regard, Schultheiss’ (2003) focus is on the relational aspects of career development and the way in which individuals construct a sense of self in relation to other people (or other individual systems) within the social system. The following section describes the way in which career theories have described the various influences within the social system of the STF.

**Social System**

The social system of the STF is made up of what Patton and McMahon (2006a) have termed the “primary social influences” (p. 201) on the career development of individuals. It is from these social system influences that individuals develop their values, beliefs and attitudes as they come into contact with the different seats of socialisation such as, family, school, workplace, and peers.

As mentioned earlier, the work of Schultheiss in the area of relational influences on career development finds full expression in the social system of the STF. Together with the proffering of a relational theory of career development, Schultheiss’ (2003) work has explored a wide range of social or relational influences on career development. These include the role of family (Schultheiss & Blustein, 1994a) and parents (Schultheiss & Blustein, 1994b) on adolescent and student development, the influence of siblings (Schultheiss, Palma, Predragovich, & Glasscock, 2002) as role models for career development, and more recently the interface of work and family life (Schultheiss, 2006).

The life-space segment of Super’s theory introduced the idea of life-roles into vocational psychology, and Patton and McMahon (2006a) have brought this
construct into their framework saying that, “life roles only exist in relation to this larger system” (p. 201), referring to the social system. The metaphor of life roles was extended by Super to include four theatres in which life roles are played out. These are the theatres of home, school, community and the workplace and they have been included in the social system of the STF (Watson & Stead, 2006a). These four theatres along with the role of peers and the media provide the most immediate social influences on career development, as it is within these groups that individuals come into most regular and influential contact.

According to Savickas (2002; 2005), the self-concept is influenced by society and its institutions and Savickas specifically mentions family, peers, the workplace and educational institutions as important social influences on the construction of career stories. Gottfredson does not explicitly mention the influence of the social system in her theory but refers to individuals gaining increasing knowledge of the world of work through their interaction with and observation of the world around them. This contains an implicit reference to the influence of other people as well as the social environment in which individuals find themselves.

The developmental theories of Erikson (1950; 1993) and Piaget (1950; 1973) both emphasise the influence of the social context on children’s development. Erikson’s psychosocial stages include a range of crises which occur as individuals learn to adapt to their own unique social environment through the development of trust, autonomy and identity. The social system also influences individuals’ opportunities to develop a sense of initiative and industry as they begin to express their emerging identity in different social contexts such as the home, the community and the school. During childhood, social influences such as parents, peers and the
community influence the development of children’s social roles as they seek to conform and adapt to their ever widening social environment. Adolescents, on the other hand, begin to question these social influences in an attempt to establish an identity which stands out rather than fits in with their social context.

Piaget’s (1950; 1973) theory asserts that knowledge is the product of children’s attempts to adapt to their ever-changing environment and that through social interactions children learn about themselves and the world around them. The social environment is therefore seen as providing individuals with opportunities to acquire new knowledge as they use what they already know in order to negotiate the challenges they face.

**Environmental-Societal System**

The individual and social systems are both subsystems within a larger environmental and societal system which is comprised of influences such as geographical location, political decisions, socioeconomic status and historical trends. It is believed that the macrosystem of society has an influence on the development of the individual system of career influences such as the values, attitudes and beliefs which are held by individuals from different geographical and socio-political contexts (Arthur & McMahon, 2005).

Gottfredson’s (2005) is the only theory within the present research that pays direct attention to the environmental-societal system in so far as it is concerned with the impact of socioeconomic status on the processes of circumscription and compromise. As part of the circumscription process, children become oriented to social status and begin to identify or eliminate possible career options based on their
growing perceptions of job status. The process of compromise is based on the perception of accessibility to education and employment opportunities by individuals and as such acknowledges the influence of the employment market on the kinds of aspirations which are held by individuals.

While not central to his theory, Super (1990) included a number of influences from within the environmental-societal system in his archway model. He referred specifically to the economy, society and the labour market as situational determinants which impact on the career development of individuals. Both Super (1990) and Savickas (2005) acknowledge the fact that career development takes place within the overall context of the individual and that societal and cultural influences have an impact on the processes of career development and construction across the life-span. Schultheiss’ (2003) relational theory pays little attention to influences beyond the social system as its focus lies with the social relationships which influence individuals.

The content influences of the three interrelated systems of the STF which have been discussed in this section provide a complex, integrated system of career influences which is brought to life by a number of process influences which reflect the dynamic nature of career development (Watson & McMahon, 2004a). It should be noted that both content and process influences of the STF are located within the broader system of time - past, present and future. According to McMahon (2005), time is represented within the STF as circular so as to highlight the non-linear nature of the process of career development and the fact that individuals’ career choices are subject to past, present and future influences which are inextricably linked. Patton and McMahon (2006b) explain that past career experiences influence the
present and in turn the past and present together influence the future. In the following section, the three process influences of the STF namely, recursiveness, change over time and the impact of chance, will be discussed.

**Process Influences**

**Recursiveness**

The term ‘recursiveness’ was specifically selected by the creators of the STF to acknowledge the multidirectionality of influences within the STF as well as the dynamic relationship between the three interrelated systems which make up the framework. Consistent with general systems theory, the term recursiveness, which is indicated in Figure 1 by a broken line, refers to the fluidity of interaction between the different systems of influence and, as such, highlights the fact that all three systems are open systems which are continually being influenced by other systems and vice versa. It is important to note that recursiveness does not imply reciprocal interaction. Changes in one part of the system will result in changes in other parts (Arthur & McMahon, 2005; Patton & McMahon, 2006a). The manner in which general developmental processes and career developmental processes interact as described in earlier sections highlights the recursiveness which takes place within the STF.

**Change over time**

Since Super (1980) changed the focus of career development from a series of once off decisions to a process of ongoing development across the life-span, the notion of change over time has been reflected across the field of vocational
psychology. Both Super (1990) and Gottfredson (2005) have included developmental stages in their theories which assign certain tasks and processes to different chronological stages of development. As such, these theories place a high level of importance on the influence of change over time although it should be noted that within the STF the nature of an influence and the degree of an influence changes over time.

The influence of change over time has been incorporated into the STF in so far as the three interrelated systems are cast in the temporal continuum of past, present and future. This conceptualisation echoes Savickas’ (2005) definition of career which is concerned with the way in which individuals weave together past memories, present experiences and future aspirations as they construct their own, unique career stories. The modern construct of career adaptability (Savickas, 1997, 2005; Super, 1990) which was initially referred to as career maturity by Super highlights the importance of the emergence of career readiness over time.

Both developmental theories (that is those of Erikson and Piaget) utilised in the present research are intrinsically concerned with the influence of change over time, with each theorist providing a series of developmental stages which must be negotiated as children grow older. It is the negotiation of these stages at different ages that constitutes the process of development over the life-span.

Chance

The final process influence of the STF is that of the impact of chance which is shown in Figure 1 as lightening strikes which highlight the unpredictable nature of this influence on career development. Patton and McMahon (2006a) have made use
of Miller’s (1983) definition of *chance* as “an unplanned event which measurably alters one’s behavior” (p. 17) and also refer to the synonyms of luck, fortune, accident and happenstance. Chance can have an impact on any one of the systems of the STF in so far as an unforeseen event can have a ripple effect which touches parts of the environmental-societal system and in turn impacts on the social system and individual system.

The STF has been used in this chapter as an organising framework for the research review section. It should be noted however that, because of the aims of the present research, the STF has not been extensively used in the discussion of the research findings in later chapters. The following chapter provides a review of national and international child career development research as it pertains to the present research and is presented within the framework of the STF.
CHAPTER THREE
RESEARCH REVIEW

In the same way as the participants in the present research live and develop within their own unique contexts, so the present research takes place within the context of the field of vocational psychology and more specifically within the area of children's career development. It is also against the backdrop of this existing research that the results of the present research will be explored and described.

The importance of the career development processes that begin during childhood has been widely acknowledged in career development theory since the middle of the twentieth century (Ginzberg, Ginsburg, Axelrad, & Herma, 1951; Havighurst, 1951, 1964; Roe, 1956) and, subsequently, has been largely understood within the context of life-span career development theories (Gottfredson, 1981, 1996, 2002, 2005; Super, 1957, 1980, 1990; Super et al., 1996; Tiedeman & O'Hara, 1963; Vondracek, Lerner, & Schulengen, 1986). Despite this fact, the vocational development of children has continued to receive little research attention relative to that of adolescents and adults, a fact which has been acknowledged by a number of authors (Auger, Blackhurst, & Wahl, 2005; Hartung, Porfeli, & Vondracek, 2005; McMahon, Carroll, & Gillies, 2001; Tracey, 2001; Trice, Hughes, Odom, Woods, & McClellan, 1995; Wahl & Blackhurst, 2000; Watson & McMahon, 2004a, 2004b, 2005; Whiston & Brecheisen, 2002).

This overwhelming disparity within the body of career research has been attributed to the fact that the adult years provide the most tangible expression to the processes of career development, with adults engaging more directly with the
world-of-work and adolescents more actively involved in making career decisions (Goldstein & Oldham, 1979). This provides researchers with more easily observable career behaviours. Others believe the paucity of research on the career development of children is due to society’s desire to completely separate career development from childhood (Vondracek, 2001a). It has also been noted that, together with the relative lack of research into the career development of children, there is little research which comments on the usefulness of career development theories for understanding children’s career development (Tracey, 2001; Watson & McMahon, 2004a, 2005).

A national study by Macleod (2004) demonstrates that South African psychological research follows the “adult-centric” (p. 622) pattern described above, with only 3.4% of all psychological studies (that is, career and other) published in the South African Journal of Psychology between 1999 and 2003 having focused on children as participants. Furthermore, a recent review of career literature in South Africa has established that only 3.75% of published career research in South Africa over a period of 14 years (1991 – 2004) has focused on primary school children (Venter, 2006). This is significant when compared with the fact that 57.5% of South African career research was conducted on adolescents (13 to 18 years) and 32.5% on adults (19 years and older) (Venter, 2006). Thus it would seem that South African career development research has focused largely on secondary and tertiary student populations (De Bruin & Nel, 1996; Watson & Stead, 2006b) at the expense of primary school populations.

Despite the limited research on preadolescent children’s career development, there have been studies over several decades that indicate that children as young as
five years of age are capable of forming occupational aspirations and occupational
gender stereotypes, and that early attitudes towards careers may persist in later life
(Dorr & Lesser, 1980; McCallion & Trew, 2000; Seligman, Weinstock, & Heflin, 1991;
Stroeher, 1994; Trice et al., 1995; Trice & King, 1991; Trice & McClellan, 1993;
Whiston & Brecheisen, 2002). It is therefore clear that research is required which
provides further insight into the career development of preadolescent children.

Whilst it appears that little research has been conducted on the specific
population of the present research, namely rural Xhosa-speaking South African
children, some research has been conducted on the career development of other
groups of South African children and adolescents (Cloete, 1980; Crause, 2006; Dean,
2001; Grobler, 2000; Horn, 1995; Watson, 1984). In an ongoing longitudinal study,
the career development of a group of predominantly white, urban, South African
children has been tracked over a period of seven years (Cox, 2004; Crause, 2006;
Dean, 1998, 2001; Hargreaves, 2007; Olivier, 2004). This research has established
that occupational aspirations are present from a young age in both boys and girls,
and that children readily aspire to higher status occupations from as young as six
years of age. Occupational gender stereotyping was also found to be present during
childhood, with younger children seeming to possess greater levels of occupational
gender stereotyping than older children within the same study. The findings of these
South African studies will be discussed in relation to international trends throughout
this review.

Despite this existing research, there is agreement amongst South African
researchers that research is required which explores the career development of black
children (Cloete, 1980; Dean, 2001; Els, 2004; Grobler, 2000; Horn, 1995; Watson,
According to De Bruin and Nel (1996), only five percent of South African career research in the preceding decade explored the occupational aspirations of black youth, with only one percent of the research focusing on the career development of preadolescent black children.

In a forerunner to the present research, Els (2004) indicated that no research could be found that focused on the career development of preadolescent black children in South Africa. Els’ study focused on Xhosa-speaking senior primary school children in urban schools and aimed to provide initial baseline data on this age group. This study found that both boys and girls aspire to Social and Investigative type careers and that boys and girls tend to aspire to high status occupations (for example, doctor, lawyer, teacher), but that more boys were found to aspire to more middle status occupations (for example, police officer) than girls (for example, nurse). It was also found that, in general, boys were more likely to accept girls into traditionally masculine occupations than vice versa.

Despite the growing body of South African child career research, there do not appear to be any studies which have focused on the career development of rural children. It is at this point that the present research breaks new ground, adding to the emerging field of childhood career development research in South Africa. The remainder of this chapter presents a review of the extant body of research in the field of children’s career development both internationally and nationally and is largely informed by two recent reviews of childhood career development research (Hartung et al., 2005; Watson & McMahon, 2005) which included articles published up to and including 2004. Both of these reviews concluded that there is a shortage of research in the area of childhood career development, a concern which has been
highlighted by a number of other national and international authors (Lenhardt & Young, 2001; Stead & Nqweni, 2006; Stead & Schultheiss, 2003; Tracey, 2001; Trice et al., 1995; Turner & Lapan, 2005; Wahl & Blackhurst, 2000; Whiston & Brecheisen, 2002).

Both Watson and McMahon (2005) and Hartung et al. (2005) found that the trend in children’s career development research was to explore what children know and understand about the world of work rather than how they come to learn this information. Watson and McMahon pay close attention to this difference in their review which is based on a learning perspective and explores what researchers have discovered about the way children learn about careers.

The present review focuses on the two specific aspects of children’s career development with which the present research is primarily concerned. These aspects are the way various systemic influences impact on the development of occupational aspirations during childhood, along with the way these influences impact on the development of children’s occupational gender stereotypes. The Systems Theory Framework (STF) (Patton & McMahon, 1999, 2006b) has been used by the present researcher as a framework to structure the presentation of the research review in this chapter, ordering findings according to individual, social and environmental-societal systems influences.

Watson and McMahon (2005) suggest that recursiveness between influences remains under-researched, a viewpoint which is echoed by Hartung et al. (2005) who also note that few studies have explored the way in which intrinsic influences, such as interests and values, interact with contextual factors to yield occupational awareness during childhood. This trend may give childhood career research a one-
dimensional feel in so far as the recursive relationship between various influences has been ignored, with researchers opting to focus on one variable or the other rather than correlating the influence of variables on one another. As such, recursiveness and the other process influences of the STF (that is, chance and change over time) have been highlighted by the present researcher as they occur within this review.

The following section describes both national and international research into the career development of children. It has already been noted that this review is structured around the STF and as such this section begins with a description of research into individual systems influences.

**Individual System Influences**

Watson and McMahon (2004a; 2005) have commented on the fact that research on children's career development is skewed towards content influences, especially the influence of age and gender on children's career development. The present research review reflects this trend with the large majority of extant research being found to focus on the importance of intra-individual influences from within the individual system of the STF. This section of the review describes research exploring the influence of a number of intra-individual influences on the career development of children. These influences include age, gender, ability, personality, interests, ethnicity and self-concept.
Age

The influence of age on the career development of children has been widely acknowledged by career theories (Gottfredson, 1981, 2005; Super, 1957, 1990; Tiedeman & O'Hara, 1963; Vondracek et al., 1986) and has provided the focus for a large number of research studies seeking to explore this influence more fully. This section will describe research which has explored the influence of age on the career development of children with specific reference to the development of occupational aspirations and occupational gender stereotypes. In so doing it also describes research findings which relate to the specific influence of age on the development of realistic as opposed to fantasy occupational aspirations as well as the change in children’s level of world-of-work knowledge as they become older.

In beginning a discussion on the influence of age on the career development of children, it should be noted that it has been suggested that age and grade be linked in order to reflect the process of children’s career development over time (Watson & McMahon, 2005). The influence of age is also related to the process influence of change over time which suggests that career development is influenced by past, present and future experiences (Patton & McMahon, 2006a).

Research has found that children’s occupational aspirations are more stable over time (Trice et al., 1995; Wahl & Blackhurst, 2000) than early career theories initially suggested (Ginzberg et al., 1951), and that they remain considerably stable throughout a given school grade (Trice, 1991b; Trice et al., 1995; Trice & King, 1991; Wahl & Blackhurst, 2000). The stability of South African children's occupational aspirations has been explored in an ongoing longitudinal study, the findings of which are consistent with international research and indicate that South

Findings show that early childhood career development provides an important foundation for future career decision-making, with early childhood occupational aspirations having a predictive value for future career decisions (Hargreaves, 2007; Trice, 1991a; Trice & McClellan, 1993). The long-term influence of early childhood occupational aspirations has been confirmed by Furlong and Biggart (1999) who found that change in early occupational aspirations is usually minimal as individuals become older. It has been found however that children’s range of occupational aspirations increases with age (Hewitt, 1975; Nelson, 1978; Sandberg, Ehrhardt, Ince, & Meyer-Bahlburg, 1991), although other research has shown no increase or the reverse trend (Arap-Maritim, 1984; Miller & Stanford, 1987; Trice, 1991b).

Nationally, Hargreaves (2007) found that 13 year old children participating in the seventh year of a longitudinal study showed a greater variety or range of occupational aspirations than at earlier developmental ages, specifically noting a greater variety of occupational types for girls between 9 and 13 years of age. A similar trend was noted for older boys who exhibited a greater variety of types of occupational aspirations. Hargreaves attributed the increase in variety to the decrease in popularity of the Social typology with increasing age. These findings highlight the influence of age on the career development of South African children.

According to Gottfredson’s (1981; 2005) theory, between the ages of three and five years children begin to become oriented to size and power, a stage which is characterised by a shift in children’s occupational aspirations from more magical to more real occupations. Research has provided support for this idea, with findings
demonstrating that children’s occupational aspirations shift from more fanciful to more realistic during the pre-primary school years, and from more egocentric and concrete to more abstract and objective in the elementary school years (Goldstein & Oldham, 1979; Trice, 1991b; Trice & King, 1991; Vondracek & Kirchner, 1974). Goldstein and Oldham’s early findings have been supported by the more recent work of Helwig (1998c; 2001), who found an increase in realistic occupational aspirations in older children, compared with younger children whose aspirations remained more fanciful. These findings are consistent with Gottfredson’s (2005) theory which emphasises the importance of cognitive growth on the manner in which children circumscribe their occupational aspirations. They also reflect on Piaget’s (1973) theory of cognitive development, which explains the way in which children’s thinking becomes more sophisticated with increasing age. There have however been research findings which suggest that there is no change in the level of fantasy occupational aspirations listed by children between first and fifth grade (Auger et al., 2005).

South African research has found that children begin to aspire to realistic occupations from as early as six years of age (Cox, 2004). Support for Piaget’s theory in the South African context is offered by Crause (2006), who found that between the ages of 9 and 12 years of age, South African children’s occupational aspirations evidenced only realistic and no fantasy occupations.

Age has also been shown to influence the way in which children of different ages limit their occupational aspirations based on occupational gender stereotypes. Gottfredson’s (1981; 2005) theory suggests that children begin to limit their occupational aspirations as they grow older through a process of circumscription, which occurs as children become oriented to sex roles between the ages of six and
eight years. This development has been supported by some researchers (Trice, Hughes, Odom, Woods, & McClellan, 1995), although it has been found that circumscription takes place earlier than hypothesised by Gottfredson (Miller & Stanford, 1987).

South African research supports the latter finding with Grobler (2000) finding that five year old children begin to limit their occupational aspirations which is earlier than theory has suggested and, similarly, Dean (2001) found that both the development of occupational aspirations and gender stereotypes occur earlier than theoretically expected for South African children.

Research has explored the link between age and the development of occupational gender stereotypes, finding that children of all ages stereotype occupations based on gender. Internationally, this has been shown for both kindergarten children (Harris & Satter, 1981; Hartung et al., 2005; Riley, 1981; Stroeher, 1994; Vondracek & Kirchner, 1974) and elementary school children (Franken, 1983; Liben, Bigler, & Krogh, 2001; Looft, 1971; Sellers, Satcher, & Comas, 1999; Siegel, 1973; Spare & Dahmen, 1984; Stockard & McGee, 1990). Further, research suggests that occupational gender stereotyping tends to decrease as children become older (Auger et al., 2005; Dorr & Lesser, 1980; Franken, 1983; McMahon & Patton, 1997; Sandberg et al., 1991; Wigfield, Battle, Keller, & Eccles, 2001).

Extant research in South Africa is consistent with international findings on the process of occupational gender stereotyping in children. It has been found that occupational gender stereotyping decreases with age for both South African boys and girls and that children become more accepting of same sex peers with non-
traditional occupational aspirations with increasing age (Crause, 2006; Hargreaves, 2007).

Consistent with Gottfredson’s (1981; 2005) theory, it has been shown that older children’s occupational aspirations become more focused on status level with the number of prestigious occupational aspirations to which children aspire increasing with age (Bobo, Hildreth, & Durodoye, 1998; Cook et al., 1996). In another study, Helwig (1998a) found that as children become older they tend to aspire towards occupations requiring more complex functions and higher educational levels. Interestingly, Liben, et al. (2001) found as children become older they tend to increasingly rate traditionally male occupations as having a higher occupational status level than traditionally female occupations.

South African research demonstrates that children aspire to high status occupations from an early age and that they continue to aspire to more prestigious occupations as they become older. In particular, it has been noted that children increasingly aspire to occupations requiring tertiary education as they become older (Hargreaves, 2007). Cox (2004) found that South African children begin to aspire to higher status occupations as early as six years of age which is earlier than suggested by Gottfredson’s (1981; 2005) theory. Variability in younger children’s occupational aspirations status levels was noted by Cox (2004) and Dean (2001) who both found that children’s occupational aspiration status levels stabilised with increased age. The trend for children to aspire to higher status occupations was also noted amongst black South Africa children by Els (2004).

A number of other areas of career development have been found to be related to the influence of age. Dorr and Lesser (1980) found that children’s levels of world-of-
work knowledge increase with age and grade level. Similarly, it has been found that
the way that children of different ages describe occupations differs, with younger
children focusing on more tangible aspects such as activities and behaviours and
older children more concerned with the intrinsic characteristic of workers, such as
interest, abilities and aptitudes (Borgen & Young, 1982). There has been a general
finding amongst researchers that children's world-of-work knowledge becomes more
comprehensive and detailed with age (Edwards, Nafziger, & Holland, 1974;
McCallion & Trew, 2000; Seligman et al., 1991; Seligman, Weinstock, & Owings,
1988). The influence of age on the career development of children has been further
explored by Walls (2000) who found that children's conceptions of six dimensions of
work improved with increasing school grade, while others have found that
occupational information and ideas of self in occupation are well developed by age
10 or 11 years and that these increase with age (Stockard & McGee, 1990).

South African research has found that children's level of occupational information
increases with age with children showing increased levels of occupational
information with increasing age (Crause, 2006; Hargreaves, 2007). Crause noted
that age twelve was the first year in which no participants in the longitudinal study
showed a lack of occupational information regarding their ability to accurately
describe the nature of a number of occupations (such as, pop singer, author, bank
teller).

This section has introduced international and national research which explores
the influence of age on the career development of children. The following section
describes research which focuses on the influence of gender on the development of
children's occupational aspirations and gender stereotypes.
Gender

The influence of gender has been widely explored within the field of vocational psychology, although research findings remain fragmented and often contradictory (Tremaine, Schau, & Busch, 1982). Hartung et al. (2005) state that more research is needed to clarify the influence of gender on the career development of children.

Research indicates that gender plays a significant role in the occupational aspirations of children of all ages (Franken, 1983; Hammond & Dingley, 1989; Hartung et al., 2005; Sellers et al., 1999). The influence of gender is highlighted by research which suggests that children as young as four years of age report occupational aspirations along gender lines (Trice & Rush, 1995). Numerous studies report on the development of occupational gender stereotypes along traditional gender roles (Barnhart, 1983; Cann & Garnett, 1984; McMahon & Patton, 1997; Schlossberg & Goodman, 1972) and support the notion that gender based differences in occupational aspirations occur during early childhood (Hewitt, 1975; Liben et al., 2001; Stockard & McGee, 1990). This section reviews research which explores the influence of gender on the development of children’s occupational aspirations as well as the difference in the way boys and girls stereotype occupations based on gender. In so doing it also describes studies that have highlighted the influence of gender on the differing levels of career maturity and world of work knowledge of boys and girls.

A number of research studies have explored the occupational aspirations of children and found that boys tend to aspire to more physically active, concrete and practical occupations, while girls aspire to more people-related, artistic and data-based occupations (Helwig, 1998a; Phipps, 1995). Research with Italian children
found that boys exhibited strong aspirations towards scientific and technological occupations, while girls aspired to occupations in education, health and the social services (Bandura, Barbaranelli, Capara, & Pastorelli, 2001). Cook et al. (1996) found that boys tended to aspire to more prestigious occupations than they realistically expected to pursue although realism tended to increase with age as discussed previously. Phipps (1995) noted that boys and girls aspire to occupations requiring different levels of education with boys aspiring more to occupations requiring secondary education and girls aspiring more to occupations requiring tertiary education.

Results from longitudinal research in South Africa initially indicated that Holland’s (1973; 1997) Social type (i.e., people-related) occupations were the most popular amongst boys and girls between the ages of five and eight years of age (Cox, 2004; Dean, 2001; Olivier, 2004), but more recent research with the same sample has found that the popularity of Social occupations has declined with increasing age (Crause, 2006). Older South African children were found to include occupations from a wider range of typologies in their occupational aspirations (Crause, 2006; Hargreaves, 2007), with a particular shift towards Investigative (i.e., problem-solving), Artistic (i.e., creative) and Realistic (i.e., technical) occupations by age 12 years. Throughout this longitudinal study, Enterprising (i.e., business-related) and Conventional (i.e., systematic, data-based) occupations remained least popular. Both Crause and Hargreaves noted gender differences in the occupational typology changes mentioned above, with older girls tending to favour more Investigative and Artistic type occupations compared with older boys who showed increased interest in Realistic occupations (Crause, 2006; Hargreaves, 2007).
The prevalence of Social type occupational aspirations was also noted by Els (2004), whose research focused on the career development of black South African children in urban primary schools. When asked to list the occupations which they would be interested in doing when they grow up 46% of the occupations listed were Social type occupations and 40% were Investigative type occupations. When these children were then asked to name their favourite occupational aspiration, almost half (48%) of this sample indicated occupations from the Investigative typology with 37% indicating that their favourite occupation was from the Social typology. Els further noted that the specific occupations which were listed by the participants in this study fell into the broad category of the helping professions, a finding which is supported by other national research on older developmental ages (Cherian, 1991; Nel & Mkhabela, 1987; Watson, Foxcroft, & Stead, 1987).

Stockard and McGee (1990) found that gender was an influential predictor of fourth grade children’s occupational aspirations. It has also been found that boys generally perceive a wider range of occupational opportunities, compared with girls who perceive them as more limited (Reid & Stephens, 1985). Research in Australia found that preadolescent girls aspire to a more limited range of occupations and engage in less career exploration in the primary school years relative to boys of the same age (McMahon & Patton, 1997).

Research indicates gender differences in the way in which boys and girls stereotype occupations along gender lines. It has been found that occupational gender stereotyping occurs more readily with boys than girls (Dorr & Lesser, 1980; Franken, 1983; Liben et al., 2001; Sandberg et al., 1991; White & Ouellettee, 1980; Wigfield et al., 2001), although some research shows that girls are more likely to
rule out occupational aspirations because they perceive them as inappropriate for their gender (Dorr & Lesser, 1980; Looft, 1971; McMahon & Patton, 1997). Looft (1971) found that girls as young as six and seven years of age begin limiting their occupational aspirations significantly more than boys of the same age.

In their recent review, Hartung et al. (2005) found that girls typically aspire to predominantly female stereotyped occupations, while boys aspire to predominantly male stereotyped occupations. It has been found that girls and boys choose occupations that are divided along gender specific lines (Furlong & Biggart, 1999; Harris & Satter, 1981; Hartung et al., 2005; Hewitt, 1975; Riley, 1981; Sellers et al., 1999; Watson & McMahon, 2005). Boys tend to discount occupations which are not traditionally accepted as suitable for their gender (Tremaine & Schau, 1979) and are more critical of males in typically female occupations (McMahon & Patton, 1997). Trice et al. (1995) found that boys were twice as likely to mention gender based reasons for rejecting a particular occupation than girls, and boys held more stereotyped perceptions of which occupations are best suited to males rather than females (Garrett, Ein, & Tremaine, 1977; Gorrell & Shaw, 1988). However, some research has demonstrated the opposite trend, whereby boys have shown greater willingness to consider occupations which are not considered traditionally suitable for men (Stockard & McGee, 1990).

Similar findings in South Africa suggest that boys and girls together tend to view traditionally female careers (such as nurse and secretary) as more suitable for girls and traditionally male careers (such as fire fighter and police officer) as more suitable for boys (Hargreaves, 2007). Hargreaves also noted that boys and girls were more willing to accept non-traditional occupations for their same sex peers with
increasing age, although it was also found that boys were more accepting of girls in traditionally male occupations than their female counterparts.

It has been found that girls tend to show less rigid occupational gender stereotyping than boys, with girls more likely to aspire to traditionally male occupations compared with boys, who were less likely to aspire to traditionally female occupations (Raffaele-Mendez & Crawford, 2002; Spare & Dahmen, 1984). There have also been studies which have found no significant difference in attitudes between boys and girls about which occupations are more suitable for males or females (Gregg & Dobson, 1980; Stockard & McGee, 1990), while other studies suggest that boys and girls may at times develop an interest in occupations considered less acceptable for their sex (Gorrell & Shaw, 1988; Griffin & Holder, 1987).

Related to this are findings by Sandberg et al. (1991) who found that boys aspire to a greater range of occupations, despite the fact that girls aspire to more traditionally male occupations during childhood. Similarly, Helwig (1998c) found that, whilst boys continue to hold occupational gender stereotypes as they get older, older girls are more likely to choose occupations usually seen as more suitable for males. Boys appear to stereotype a wider range of occupations (Arap-Maritim, 1984; Miller & Stanford, 1987), although other research has found this to be the case for girls (Wigfield et al., 2001).

Another area in which gender has been found to have an influence is in the development of career maturity. It has been found that preadolescent girls lag behind boys in terms of critical aspects of career development (Dorr & Lesser, 1980), with girls showing a tendency for premature occupational foreclosure
(Vondracek & Kirchner, 1974). This trend has also been noted by Hewitt (1975), who found that girls tend to circumscribe their occupational aspirations earlier than boys. With regards to career maturity, research in South Africa suggests that preadolescent girls aspire to a more limited range of occupations than their male peers and also engage in less career exploration (Crause, 2006).

McMahon and Patton (1997) found differences in the world-of-work knowledge of boys and girls, with boys being aware of a far greater number of occupations than girls. It was also shown that boys find school more helpful in preparation for future occupations than girls, who made fewer links between school experiences and occupations. Boys were also shown to make better use of career resources and career counsellors.

Age and gender are the two intrapersonal influences which have received by far the most research attention, although a number of other intra-individual influences have been a focus of researchers. These include ability, personality, interests, ethnicity and self concept, which will be discussed below. Studies have shown that children’s perceived ability or competence to successfully engage in a task or activity has an influence on their likelihood of developing an interest in a specific activity (Tracey, 2001). Further research has explored the link between self-efficacy and career development and found that children’s self-efficacy beliefs and academic abilities shape their perceived efficacy in future careers and, in turn, influence the development of occupational aspirations (Bandura et al., 2001). Linked to this are findings which suggest that interests have a profound influence on the development of occupational aspirations (Trice et al., 1995).
The influence of ethnicity on career development has been explored with studies demonstrating that children from minority groups in America typically aspire to lower status occupations than their counterparts from the white majority (Cook et al., 1996; Griffin & Holder, 1987), and that black children show lower levels of career maturity, especially with regards to their concern for the future (Bobo et al., 1998; Vondracek & Kirchner, 1974). Other authors have found ethnic differences do not have a profound effect on the development of children's occupational aspirations, but they have noted differences in perceptions of opportunities and barriers between children of different races (Fouad & Byars-Winston, 2005).

One South African study which considered the influence of race on the career development of children found that Social type careers remain the most popular, regardless of race although more black children than white children in this study aspired to Social type occupations (Grobler, 2000). It was also found that no black children aspired to Artistic occupations and that Realistic occupations were more popular amongst white children and Investigative occupations more popular amongst black children. There was a greater tendency to aspire to fantasy occupations by black children compared with their white counterparts.

Central to a number of career theories is the ongoing development of the occupational self-concept (Gottfredson, 2005; Savickas, 2005; Super, 1990). The influence of the self-concept has been found to relate positively to the career development of sixth grade children (Holland, 1981). Other studies have found that girls with higher self-esteem are more likely to consider occupations not traditionally suited to females (Hughes, Martinek, & Fitzgerald, 1985). Self-concept, along with other elements of children's emerging personality, has been found to have an
influence on career development. Oakland, Strafford, Horton and Glutting (2001) found a relationship between temperament and occupational aspirations of 8 and 10 year old children. These authors also found that this relationship becomes more differentiated with age and is further influenced by gender and ethnicity. Locus of control has also been found to influence the career development of children, with an external locus of control being linked to lower levels of occupational aspirations and also more fanciful aspirations (Trice & Gilbert, 1990), compared with children with an internal locus of control whose occupational aspirations reflected more realistic options.

Despite the research which has already been discussed in this section, a number of individual system influences such as disability, health, sexual orientation and physical attributes appear to have received little attention within the field of career development. This highlights the fact that increased research output is required in the field of children’s career development. The focus of this chapter now turns to the influences which comprise the social system of the STF.

**Social System Influences**

The previous section described research findings regarding the impact of individual systemic influences on the career development processes of children. This section will now explore the influences which exist outside of the individual and the individual system within the social system of the STF. These influences include the media, peers, family, school, the workplace and other community groups, and together they provide the individual with opportunities for interaction with other individuals (and individual systems). Through these interactions, children are
socialised in ways which are consistent with the prevailing cultural milieu in which they grow and develop. Watson and McMahon (2005) suggest that the influence of society on the career development of children has been implied more than researched, although it has been found that gender-stereotyping of occupational aspirations is largely a product of social influences (Francis, 1998). Other researchers have found that changes within more post-modern society may account for the fact that girls are more open to non-traditional occupations and acknowledge a greater range of occupations (Bobo, Hildreth, & Durodoye, 1998; Helwig, 1998b).

**Media**

A number of studies have explored the influence of the media on children's career development, focusing most often on the influence of television on the development of occupational aspirations and occupational gender stereotypes. In one study, it was found that children as young as second grade are able to distinguish between documentary and fictional television programming (Huston, Wright, Fitch, Wroblewski, & Piemyat, 1997), which may in some ways mediate the influence of television watching on children's career development. These findings are supported by Wright et al. (1995), who found that children assign greater prestige to occupations which are portrayed on television and were more likely to aspire to the occupations they see on television when they perceived them as socially realistic.

The media has been shown to influence children's goals and understanding of career development, although it seems this influence may be mediated by intrapersonal influences (King & Multon, 1996). Other research explored the way in which cartoons influence children's career development, and found that cartoon
watching has a negative influence on children’s perceptions of scientific occupations (Potts & Martinez, 1994).

Television has also been found to influence the development of occupational gender stereotypes in young children, with girls being shown to modify their occupational aspirations based on the portrayal of working women on television (O’Bryant & Corder-Bolz, 1978). Despite findings which suggest that the television media has an influence on the career development of children, one study found that only a few children felt that the media would influence them towards or away from an occupation (McMahon, Carroll, & Gillies, 2001). As such this study brings into question the degree to which the media influences children’s career development. This leaves this area of influence open for further research. In South Africa there appears to be a complete lack of research into the influence of the media on children’s career development. Research exploring the influence of the family on children’s career development is described next.

**Family**

Research has traditionally found a strong link between children’s occupational aspirations and the occupations of their parents (Birk & Blimline, 1984; Holland, 1962; Werts & Watley, 1972; Young & Friesen, 1992). Research by Trice and Knapp (1992) showed a strong relationship between children’s occupational aspirations and the occupations of their parents, with children’s aspirations tending to be more closely related to their mother’s occupation. Helwig (1998c) found that children tend to develop occupational aspirations which are consistent with their parents’ occupational status levels.
Early research by Chown (1958) found parents to be the single most important factor influencing children’s occupational preferences and choices. It was also found that parents provided more specific direction for boys’ occupational aspirations, leaving girls freer to select their own occupational futures. Chown commented on the resulting paradox in that girls were found to be in greater conflict with their parents with regards to their occupational aspirations than boys.

More recently, Hartung et al. (2005) have commented on the positive correlation between parental influence and increased career maturity, which is consistent with findings that suggest that the home environment has an influence on career development learning (Gregg & Dobson, 1980; Morton, Kryk, Awender, & Diubaldo, 1997; Wahl & Blackhurst, 2000).

Age seems to have an influence on the way in which parental influences relate to children’s occupational aspirations. It has been found that younger children are more likely to aspire to occupations which resemble those of their fathers, while older children aspire to occupations similar to those of their mothers (Seligman, Weinstock, & Heflin, 1991). It is suggested that this may be because of the increasing prestige of women’s careers and the fact that children were three times more likely to have visited their mothers’ places of work than their fathers’ (Trice & Knapp, 1992). The influence of family on children’s occupational aspirations has also been shown to include a tendency for children’s occupations to match the traditionality of their mothers’ occupations (Barak, Feldman, & Noy, 1991), while other research found that girls were influenced by their mothers and boys by their fathers (Malone & Shope, 1978). These findings highlight the recursive nature of
systemic influences in so far as the influence of parents on children’s career
development is in turn influenced by age and gender.

Research by Trice and Tillapaugh (1991) suggests that the degree to which
children aspire to their parents’ occupations is mediated by those children’s
perceptions of their parents’ levels of job satisfaction. Research has also found that
the degree to which children identify with their parents’ occupations is particularly
high in young rural school children (Trice, 1991; Trice, Hughes, Odom, Woods, &
McClellan, 1995).

While there is much research which highlights the influence of parents on
children’s career development, other research has found that less than 10 percent of
children reported parental influence when asked about the people who have
provided them with occupational suggestions (Trice, McClellan, & Hughes, 1992).
One study found that family background has no significant influence on the
development of children’s occupational gender stereotypes (Sandberg, Ehrhardt,
Ince, & Meyer-Bahlburg, 1991), and in another study a relatively small number of
children indicated occupational aspirations which matched those of their parents
(Auger, Blackhurst, & Wahl, 2005).

Despite the discrepancies within research, the family, and in particular, parents
have been found to be much stronger influences on children’s career development
than peers or school (Schulenberg, Vondracek, & Crouter, 1984), which will be
discussed next. The influence of family on the career development of children does
not appear to have been specifically researched within the South African context.
The following section describes research relating to the influence of the school on
children’s career development.
School

Watson and McMahon (2005) have found that the influence of school on children’s career development has been broadly acknowledged but narrowly researched. Although there has been some research to support the belief that school plays a role in the development of occupational aspirations, McMahon et al. (2001) found school to be a minor influence in so far as children were able make a link between school learning and their occupational aspirations. It was also found that where children could make the link, occupational learning was drawn from both academic and extra-curricular school activities. In another study, it was found that senior elementary school children struggled to make connections between school learning and the world of work, and were unable to explain the link between their favourite school subject and the associated occupational aspirations (Johnson, 2000). The influence of the school system on children's career development presents a further gap in the South African research base.

This section has described research which explores the influence of three social system influences on the career development of children namely, the media, the family, and the school. The following section describes research relevant to the influence of environmental-societal influences on the career development of children.

Environmental System Influences

The previous sections have described the influences which exist within the individual as well as within the social system. These systems both exist within the macrosystem of society and the environment which will be discussed in this section.
The influence of society on the career development of children has been described as a “pervasive influence”, which Watson and McMahon (2005, p. 123) suggest would be difficult to change. A study by Helwig (2001) offered support for the influence of society, suggesting that preadolescent children are aware of society’s system of values and that they learn from society what is required of them in order to be accepted. It has been suggested that the shift in society towards the promotion of equality between individuals of different genders, races, and social class has an influence on the changing ways in which children stereotype occupations (Bailey & Nihlen, 1990). These changes in society have been linked to the fact that girls acknowledge a wider range of occupations (Helwig, 1998b) and more non-traditional occupations (Bobo, Hildreth, & Durodoye, 1998; Hughes, Martinek, & Fitzgerald, 1985). Watson and McMahon (2005) view the gender stereotyping of occupations as a reflection of children’s awareness of changing social norms.

The influence of society has been found by some authors to increase over time. Having found that elementary school children stereotype genders whereas preschool children do not, Tremaine et al. (1982) suggest that this may be because older children have had more time to be exposed to societal occupational gender stereotypes and to assimilate them into their own system of gender roles. These findings support the earlier work of Jordan (1976) and also highlight the process of recursiveness within the STF as age, gender and society dynamically interact to influence the career development of children.

Having introduced the influence of society, the following section will review research findings which describe the influence of socioeconomic status on the career
development of children. Other environmental influences appear to have been implicit in extant research rather than explored as explicit variables, and this leaves a gap in the research with regards to the influence of the employment market, globalisation, historical trends, political decisions and geographical location. There has been no research in South Africa which takes the influence of geographical location (rural versus urban) on the career development of children into account. This presents a specific gap in the extant research which the present study aims to address by exploring and describing the career development of children from rural schools.

These macrosystemic factors are all particularly relevant to the South African context, with its unique political history and, as such, the lack of specific research into these influences is especially noticeable within the present research review. It could be argued that these factors have been instrumental in defining the socioeconomic status of the present sample, in so far as the widespread poverty in South Africa is a product of the country's apartheid past; as such, research that explores socioeconomic status as an influence on children's career development may be inclusive of other macrosystemic influences.

**Socioeconomic status**

Watson and McMahon (2005) found in their review of children's career development that in much of the extant career literature the socioeconomic status of the sample is not specified and seldom explicitly researched. In a similar vein, Hartung et al. (2005) found that research has repeatedly confounded race and
socioeconomic status in attempting to explore the impact of these influences on children’s career development.

Research indicates a positive correlation between higher socioeconomic status and increased career maturity levels amongst sixth grade learners (M. Holland, 1981). Early research (Jordan, 1976; Nelson, 1963) demonstrated that children from higher socioeconomic backgrounds were more informed about the variety of occupational choices and had more positive attitudes towards occupations. This finding is supported by more recent research which found that children living in poverty exhibit a restricted range of occupational aspirations and have limited occupational knowledge (Weinger, 1998).

In a study of middle class and poor children, Weinger (2000) found that children from both groups showed an awareness of the influence of socioeconomic status in limiting future career opportunities of poorer children. Children from middle class families were twice as likely to list professional occupations, compared with their poorer counterparts. Weinger also found that poorer children were three times more likely to choose careers in law enforcement and manual labour, and twice as likely to aspire to occupations in professional sport or entertainment.

Research in America has shown that African American boys from poor families aspired to less prestigious occupations, compared with Caucasian boys from more affluent families (Cook et al., 1996). These findings provide an example of recursiveness in so far as race and socioeconomic status come together to influence children’s career development. Recursiveness is further illustrated when age is introduced into the equation, as it was found that the older the boys became, the
more the gap increased between their occupational aspirations and their
expectations for attaining these goals (Cook et al., 1996).

Contrary to the American findings, Bandura et al. (Bandura, Barbaranelli, Capara,
& Pastorelli, 2001) found that socioeconomic status had no direct effect on Italian
children's occupational aspirations, and they suggested that parental beliefs and
aspirations mediated the influence of socioeconomic status, again highlighting the
influence of recursiveness within the STF of career development.

Earlier research found that socioeconomic status influences both parents’
aspirations for their children and the children's own occupational aspirations (Brook,
Whiteman, Peisach, & Deutch, 1974). The recursive relationship between parental
influence and the influence of socioeconomic status is implicit within these findings,
and is therefore noted within the context of the present research. This is further
evidenced in Weinger's (2000) findings that children from both socioeconomic
groups believed that their parent's relative wealth or needs would have an influence
on their perceived future opportunities.

Socioeconomic status has also been found to influence the way in which children
gender stereotype careers, with lower socioeconomic status resulting in more
conservative attitudes about the types of work which are appropriate for men and
women (Hageman & Gladding, 1983). Studies which have focused on the
development of occupational aspirations have found a decline in gender-stereotyping
in more recent times (Bobo, Hildreth, & Durodoye, 1998; Gregg & Dobson, 1980;
Helwig, 1998b; Zuckerman & Sayre, 1982), a change which has been attributed to
children’s increasing awareness of changing social norms (Watson & McMahon,
2005). Despite the extreme levels of economic disparity which exist in South Africa,
only Grobler (2000) has specifically explored the impact of socioeconomic status on the career development of South African children.

Summary

This section has reviewed the extant literature within the field of vocational psychology on children’s career development. It provides a knowledge base against which the findings of the present research can be explored and described. Using the STF as an overarching framework, this review has described national and international research which related to the influence of a wide range of systemic influences from all three systems of the STF namely, the individual system, the social system and the environmental-societal system.

Age and gender were found to be the most widely researched intra-individual influences with research findings indicating that both age and gender have an effect on the development of children’s occupational aspirations and occupational gender stereotypes. Age was found to influence children’s range of occupational aspirations (Hewitt, 1975; J. A. Nelson, 1978; Sandberg, Ehrhardt, Ince, & Meyer-Bahlburg, 1991), level of realistic occupations (Auger, Blackhurst, & Wahl, 2005; Goldstein & Oldham, 1979; Helwig, 1998c, 2001; Trice, 1991; Trice & King, 1991; Vondracek & Kirchner, 1974), and the process of circumscription of occupations (Miller & Stanford, 1987; Trice, Hughes, Odom, Woods, & McClellan, 1995). Research shows that children of all ages circumscribe occupations based on occupational gender stereotypes (Franken, 1983; Harris & Satter, 1981; Hartung et al., 2005; Liben, Bigler, & Krogh, 2001; Looft, 1971; Riley, 1981; Sellers, Satcher, & Comas, 1999; Spare & Dahmen, 1984; Stockard & McGee, 1990; Stroheuer, 1994; Vondracek &
and that occupational gender stereotyping tends to decrease with age (Auger et al., 2005; Dorr & Lesser, 1980; Franken, 1983; McMahon & Patton, 1997; Sandberg et al., 1991; Wigfield, Battle, Keller, & Eccles, 2001).

Findings from a range of research studies indicate that boys and girls are likely to aspire to occupations which are considered appropriate for their gender (Furlong & Biggart, 1999; Harris & Satter, 1981; Hartung et al., 2005; Hewitt, 1975; Riley, 1981; Sellers et al., 1999; Watson & McMahon, 2005) and that gender stereotyping occurs more readily amongst boys than girls, with girls showing less rigid occupational gender stereotypes than boys (Dorr & Lesser, 1980; Franken, 1983; Liben et al., 2001; Raffaele-Mendez & Crawford, 2002; Sandberg et al., 1991; Spare & Dahmen, 1984; White & Ouellette, 1980; Wigfield et al., 2001).

Research relating to the influence of the media, the family and the school on children’s career development was described under the social systems section of the present review. Nationally there is no research which has focused on the influence of social system influences on the career development of South African children. Despite the existence of a wide range of potential environmental-societal system influences within the STF, the present review describes only the limited research relating to the influence of socioeconomic status on the development of occupational aspirations and occupational gender stereotypes in children. There is a clear lack of research both nationally and internationally which focuses on the influence of the broadest systems of influence on the career development of children and as such this is an area which requires future research attention. The following section provides a description of the research methodology employed in the present research.
CHAPTER FOUR
RESEARCH METHODOLOGY

Having reviewed both the theoretical and research foundations of the present research in the previous two chapters, this chapter outlines the methodological aspects of the present research. It begins with a problem formulation, outlining the specific aims of the research, followed by a description of the nature of the research method employed by the researcher. This chapter also contains detailed descriptions of the sample and sampling process, the measure, data coding and analysis, as well as the ethical considerations which have guided the researcher at all times during the research process.

Problem Formulation

From the preceding research review chapter, it is clear that the need for research into aspects of rural children’s career development is great. This gap in research which explores the career development of children has been acknowledged both internationally and nationally as reported in the previous chapter. International reviews of career literature have highlighted the disparity between research that focuses on children compared to that focused on adolescents and adults, with the majority of extant research using adolescents and adults as participants (Hartung et al., 2005; Watson & McMahon, 2005). Recent studies by South African researchers have called for increased focus to be placed on the career development dynamics of children from lower socioeconomic statuses and especially black, coloured and Indian racial groups (Crause, 2006; Hargreaves, 2007).
In a recent review of psychological research in South Africa, Macleod (2004) concluded that people from rural areas and children, present relatively untapped populations within South Africa. This trend was also found in a review by Venter (2006) who found only a handful of studies which explored the career development of South African children. The relative lack of research focus on these populations means any attempt to implement practical career development interventions or education programs cannot be guided by sound psychological research findings. The proposed research aims to address this gap in extant knowledge by focusing specifically on the career development of rural children.

The primary aim of the present research is to explore and describe the occupational aspirations and occupational gender stereotyping of rural Xhosa-speaking South African senior primary school children in grades 6 and 7. More specifically, the aims may be stated as follows:

1. to explore, describe and compare the occupational aspirations, in terms of their typology, of male and female rural Xhosa-speaking South African senior primary school children;
2. to explore, describe and compare the occupational aspirations, in terms of their status level, of male and female rural Xhosa-speaking South African senior primary school children, and
3. to explore, describe and compare the occupational gender stereotyping of male and female rural Xhosa-speaking South African senior primary school children.

The findings from the present research should provide valuable insight into an area of career psychology which to date has received little attention in South Africa.
The following section describes the research methodology adopted for the present research.

**Research Method**

The present research is exploratory and descriptive in nature and will be based on quantitative data. The data will be obtained using a questionnaire and the responses of participants to the questionnaire will be coded into nominal categories for further analysis. According to Neuman (2006), quantitative research involves the transformation of abstract constructs into empirical data which can be analyzed quantitatively.

Exploratory-descriptive research provides an opportunity for the researcher to develop new knowledge which can lead to a greater, more complete understanding of the constructs being explored (Whitely, 2003). This kind of research may lead to the development of further hypotheses which may stimulate future research. The present research is exploratory as it aims to investigate and explore the occupational aspirations and occupational gender stereotypes of rural Xhosa-speaking South African senior primary school children in order to gain insight into these constructs as they naturally exist.

The present research is also descriptive in nature as it aims to accurately describe the occupational aspirations and occupational gender stereotypes of rural Xhosa-speaking South African senior primary school children based on the analysis of the quantitative data. According to Gravetter and Forzano (2006), the goal of descriptive research is to describe a single variable or set of variables without examining the relationship between such variables. Thus, this form of research is not
concerned with cause and effect relationships (Harris, 1998) but rather with providing greater insight into a naturally occurring phenomenon, in this case the occupational aspirations and occupational gender stereotypes of rural Xhosa-speaking South African senior primary school children.

**Sampling and Participants**

The sample for the present research was drawn from three schools in the rural areas of the Nelson Mandela Metropolitan Municipality (NMMM) which is located in the Eastern Cape Province of South Africa. According to the most recent national census carried out in 2001, the Eastern Cape Province of South Africa has a total population of over 6 million people, with the large majority of this population (83.7%) falling into the Xhosa language group. The NMMM comprises the urban areas of Port Elizabeth, Uitenhage and Despatch together with many large rural areas which border each of these urban areas. The NMMM has a total population of 1,005,780 people of which 57.25% are Xhosa-speaking. Many of these Xhosa-speaking individuals live in the rural areas surrounding the urban centres of the metropolis, in formal and informal settlements. Within the Xhosa language group 47.39% are males and 52.61% are females. The sample for the present research is drawn from the Xhosa-speaking language group from the rural parts of this metropolitan area, the majority of whom come from the Black population group although there are a small number of individuals from other population groups (such as white, coloured, Indian/Asian) that have Xhosa as a first language (Statistics South Africa, 2001).
The present research required a two stage sampling process. During the first stage, schools were selected using non-probability, purposive sampling. This sampling method allowed the researcher to select a non-random sample with a specific purpose in mind (Neuman, 2006; Strydom & Venter, 2002), namely to obtain a large sample of specifically rural Xhosa-speaking senior primary school children. According to Gravetter and Forzano (2006), this is a valuable kind of sampling often used in exploratory research. A disadvantage of non-probability sampling is that the researcher cannot know to what extent the chosen sample represents the population (Gravetter & Forzano, 2006; Neuman, 2006; Whitely, 2003).

The researcher obtained a list of rural schools from the Education Management Information Systems (EMIS) division of the Eastern Cape Provincial Department of Education. The Department of Education classifies schools as rural when they are located more than 5km from an urban boundary. There were 97 rural schools in the NMMM with a total of 3595 learners enrolled in grades 6 (n=1849) and 7 (n=1746) at the time the research was carried out.

Three schools were selected based on factors such as total enrolment figures and grade and gender distribution (that is, the balance of girls and boys in grades 6 and 7). Based on this information, the researcher began with a potential sample of 733 which is described in Table 1. It can be seen that of this potential sample, 52.93% are boys and 47.06% are girls.

The selected schools are all state-funded and have annual school fees of approximately R100 per learner. According to the school principals, fewer than half of the learners’ parents are able to pay these fees with the majority of the families living in poverty. Unemployment is high in the rural areas surrounding the selected
schools although some parents have short-term semi-skilled contract or piece work (for example, factory work, construction work, domestic work or farm work).

According to the most recent White Paper on Social Development disseminated by the Department of Social Welfare (1997), rural African households are the most harshly affected by poverty, with an average per capita income of R151 a month in rural areas. According to the White Paper for Social Welfare (Department of Social Welfare, 1997), 54% of South African children live in poverty. Based on this information it is fair to say that the selected schools and their learners can be described as being of low socioeconomic status.

Table 1

<table>
<thead>
<tr>
<th>Grade and gender distribution of selected schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>School 1</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Grade 6</td>
</tr>
<tr>
<td>Grade 7</td>
</tr>
<tr>
<td>Totals</td>
</tr>
</tbody>
</table>

During the second stage of sampling, participants were chosen using non-probability convenience sampling. Convenience sampling includes participants based on their availability at the time the data is collected. Although this kind of sampling is easy and inexpensive the results cannot be generalized beyond the specific sample as the researcher is unable to determine the degree to which the sample represents the population (Gravetter & Forzano, 2006; Neuman, 2006). All learners in grades 6 and 7 who were in attendance at all three selected schools when the field work was
carried out completed the questionnaire. In total, 445 learners completed the questionnaire which indicates that 39.3% of Grade 6 and 7 learners from the three selected schools were absent on the days testing took place. The majority (n=248) of the learners who were absent from school on the day testing took place were from School 3 where learners had already completed their end of year exams and were no longer expected to attend classes. This occurred despite the principal making a special effort to have these learners attend on the day of testing in order to participate in the present research.

Initial analysis of the completed questionnaires found that 13 questionnaires needed to be excluded from the final sample because the respondents’ home language was not Xhosa. The desired age range of the present research was predetermined as falling between 10 and 14 years of age. This age range was important as it ensured that the entire sample fell into Gottfredson's (2005) third stage of development, that participants’ ages are educationally appropriate for their grade level, and also that the data can be compared with results from an Australian study of a similar nature. This meant that 140 age outliers were removed from the final sample; these included a number of participants younger than 10 years old and others older than 14 years old.

Table 2 shows the grade and gender breakdown for the final sample and comprises 292 individuals, 60.62% in grade 6 (n=177) and 39.38% in grade 7 (n=115). Girls comprised 52.74% (n=154) of the final sample and boys 47.26% (n=138) which is representative of the gender distribution in the Xhosa population of the NMMM.
Table 2

*Grade and gender distribution of final sample*

<table>
<thead>
<tr>
<th></th>
<th>School 1</th>
<th></th>
<th>School 2</th>
<th></th>
<th>School 3</th>
<th></th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Total</td>
<td>Female</td>
<td>Male</td>
<td>Total</td>
<td>Female</td>
</tr>
<tr>
<td>Grade 6</td>
<td>47</td>
<td>30</td>
<td>77</td>
<td>32</td>
<td>48</td>
<td>80</td>
<td>13</td>
</tr>
<tr>
<td>Grade 7</td>
<td>26</td>
<td>27</td>
<td>53</td>
<td>20</td>
<td>26</td>
<td>46</td>
<td>16</td>
</tr>
<tr>
<td>Totals</td>
<td>73</td>
<td>57</td>
<td>130</td>
<td>52</td>
<td>74</td>
<td>126</td>
<td>29</td>
</tr>
</tbody>
</table>

The gender distribution of the final sample shows an inverse trend when compared to the gender distribution of the total potential sample (Table 1) where there was a greater percentage of boys than girls. Despite this difference, the final sample is well balanced in terms of gender but less so in terms of grade. This discrepancy can be partially explained by the fact that a large number of participants in grade 7 fall outside the predetermined age range for the present research.

**Measure**

The measure selected for the proposed research is the Revised Career Awareness Survey (RCAS, see Appendix A) developed by McMahon and Watson (2001). The measure is an example of a self-report questionnaire and is an adaptation of the Career Awareness Survey originally developed by Gillies, McMahon and Carroll (1998a). The Career Awareness Survey was developed to explore children’s knowledge and understanding of the world of work and to gain insight into the formation of occupational gender stereotypes. Internationally, the Career Awareness Survey has been reported on by a number of authors (Gillies, McMahon, & Carroll, 1998b; McMahon, Carroll, & Gillies, 2001). The original measure was adapted by McMahon and Watson (2001) in order to ensure that specific
occupations mentioned in the survey were appropriate for use in both Australia and South Africa.

The Revised Career Awareness Survey (McMahon & Watson, 2001) was administered to children from both countries in order to determine its comprehensibility and readability. All children were able to read and understand the content of the measure. In order to ensure content validity, experts in the fields of educational and research psychology were consulted during the adaptation process. Extant literature suggests that the Revised Career Awareness Survey (RCAS) has been successfully used as a research tool in South African and Australian primary schools (McMahon & Watson, 2005; Watson & McMahon, 2004). The measure has subsequently been translated into the Xhosa language using a back translation technique (Brislin, 1970) for use with Xhosa speaking primary school children (Els, 2004). It is the Xhosa version of the measure which will be used in the present research.

The RCAS is divided into five forms which are completed by the participant directly on the survey. There is no time limit specified for completing the measure, but it is believed that participants should be able to complete the survey within 45 minutes (Watson & McMahon, 2004).

Form 1 includes a series of open-ended questions about different aspects of children’s personal-social knowledge such as their occupational interests, their favoured occupations, occupational influences and sources of occupational information. Using open-ended questions, Form 2 focuses on occupational gender stereotypes and asks what occupations children believe are more or less suitable for men or women. Form 3 also explores occupational gender stereotypes but this time
provides children with a list of occupations which they must indicate as being suitable for either males, females or both, by placing a tick in the corresponding check box.

Form 4 explores the ability of children to recognize similarities between different types of occupations. Each item provides a list of three occupations and asks the child to name a feature common to all three. Form 5 invites participants to describe the link between listed occupations and what they have learned at school. This form provides a list of occupations and asks children to comment on what it is that they have learned at school that may be helpful in the listed occupations.

For the purposes of the present research only selected questions and forms from the Revised Career Awareness Survey will be used. These questions and forms have been selected based on the aims of the present research. As such, Questions 1 and 2 from Form 1 will be used as they specifically explore the occupational aspirations of the participants. Data collected on Forms 2 and 3 will also be utilised in the present research as they provide insight into the occupational gender stereotypes of the participants.

**Procedure**

After obtaining all necessary permission from the relevant authorities of the provincial Department of Education, the principals of three rural schools were contacted in order to determine their willingness to take part in the present research. These principals were each provided with an invitation (see Appendix B) to participate in the research. Once they had confirmed their interest, the researcher met with each principal in order to provide a clear description of the nature of the
research including information highlighting important ethical considerations such as the voluntary nature of the research and confidentiality.

Upon discussion with the school principals it was decided that they would give informed consent for all participants *in loco parentis* (that is, in the place of the parents). This was decided based on the fact that school takes parental responsibility for all learners in attendance and therefore is not required to obtain individual consent from learners’ parents for such an activity. Other factors which influenced this decision are the low level of literacy amongst learner’s parents and the fact that not all children had identifiable adult guardians, a fact which is largely due to the impact of HIV/AIDS on the families of rural South Africans.

The data collection was conducted in a group context during an agreed upon lesson time and was conducted by a group of Xhosa-speaking postgraduate psychology students under the leadership and guidance of the researcher. Before the data collection sessions, these postgraduate students received training in the administration of the RCAS in order to ensure that the measure was administered in a standardized manner throughout the data collection process.

In addition to the written survey questionnaire, the research assistants administered the survey verbally in Xhosa, going through the questions one by one in order to ensure that the participants completed the survey accurately. The research assistants were also available throughout the data collection process to answer questions regarding the nature of the survey. Participants were encouraged to ask about survey items which were not clear to them but research assistants did not help the participants with formulating their answers to the questions.
Data Coding

According to Neuman (2006), the process of data coding refers to the way in which the researcher groups information together, based on emergent or predetermined themes, for further analysis. In the present research, the occupational aspirations of the participants were coded by the researcher based on Holland’s (1973; 1997) well established system of occupational interest types. Given that the present research is part of a larger international collaboration, the coding process was carried out in consultation with co-researchers in Australia which provided a greater level of consistency across the two national coded databases.

Holland’s (1973; 1997) theory of career choice is based on the notion of matching, placing it within the realm of the person-environment (PE) fit theories in so far as it explores the way in which different people find job satisfaction in different work environments. It is essentially concerned with the goodness of fit between personality type and work environment type. Not unlike the other career theories on which the present research is founded, Holland (1973; 1997) believes that career choice represents an expression of an individual’s personality and that people with similar personalities are drawn to similar occupations. Based on this belief, it follows that the greater the congruence between personality and work environment, the greater the level of career fulfilment because corresponding work environments will provide opportunities, activities, tasks and roles which are congruent with the individual’s competencies, interests and self-beliefs (Holland, 1996).

Holland (1973; 1997) established a framework of personality and work environment types based on six vocational personality types and their corresponding
work environment types which he referred to as Realistic, Investigative, Artistic, Social, Enterprising and Conventional. This model has been referred to as the RIASEC model, an acronym derived from the six types. This system has been used by researchers to establish a system of three-letter codes for a broad range of South African (Taljaard & Van Mollendorf, 1987) and Australian (Shears & Harvey-Beavis, 2001a, 2001b) occupations. Based on this system, participants’ occupational aspirations were assigned a three-letter code which was shortened to a one letter code based on the first letter of the three-letter code. This one-letter code places occupations into one of the six work environment types. Table 3 provides a brief description for each of the six occupational typologies based on the descriptions provided by Taljaard and Van Mollendorf (1987) in the South African Dictionary of Occupations.

Table 3

*Description of Holland’s Six Occupational Typologies*

<table>
<thead>
<tr>
<th>Typology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realistic</td>
<td>Occupations involving concrete and practical activities in which machinery, tools and materials are used.</td>
</tr>
<tr>
<td>Investigative</td>
<td>Occupations involving analytical and mental activities aimed at problem solving, creativity and the application of knowledge.</td>
</tr>
<tr>
<td>Artistic</td>
<td>Occupations presupposing creative ability in among other things the arts, for instance music, writing, entertainment, sculpture or other relatively unstructured and creative mental tasks</td>
</tr>
<tr>
<td>Social</td>
<td>Occupations aimed at helping and supporting others.</td>
</tr>
<tr>
<td>Enterprising</td>
<td>Occupations in which people are persuaded or influenced with the purpose of achieving a common goal.</td>
</tr>
<tr>
<td>Conventional</td>
<td>Occupations that require the use of office machines and language and/or figures, and conducted in an orderly environment in order to achieve the usual and expected goals of the work environment.</td>
</tr>
</tbody>
</table>
Holland’s (1973; 1997) model has also been used to code the status levels of occupations. Thus participants’ aspirations were coded according to the status levels provided in the South African Dictionary of Occupations (Taljaard & Van Mollendorf, 1987). The description of the occupational status levels can be found in Table 4 and range from unskilled status level 5 occupations (for example, domestic worker and cleaner) which requires some primary or no education to high level status level 1 occupations (for example, lawyer and doctor) which require some form of tertiary education.

Table 4

<table>
<thead>
<tr>
<th>Levels</th>
<th>Description of Status Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High-level workers (e.g., tertiary education such as university or technikon)</td>
</tr>
<tr>
<td>2</td>
<td>Middle-level workers (e.g., college diploma)</td>
</tr>
<tr>
<td>3</td>
<td>Skilled workers (e.g. technical college or matric)</td>
</tr>
<tr>
<td>4</td>
<td>Semi-skilled workers (e.g. grade 8, 9 or 10)</td>
</tr>
<tr>
<td>5</td>
<td>Unskilled workers (e.g. primary school or no education)</td>
</tr>
</tbody>
</table>

Due to the nature of the responses provide by the participants in certain sections of the present research, further nominal categories were established by the researcher in order to deal with a number of response types which were not able to be coded according to Holland’s system. These were created by grouping the responses which could not be coded according to Holland’s typologies into five
groups based on the kind of work related activity which the responses seemed to suggest. These ‘other responses’ are shown along with examples in Table 5.

Table 5

*Description of ‘Other Responses’ Categories with Examples*

<table>
<thead>
<tr>
<th>Category</th>
<th>Description and Examples of Responses in Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housework</td>
<td>Responses which are suggestive of informal household activities and which are usually taken care of by family members or domestic workers, such as ‘washing dishes’, ‘washing clothes’, and ‘cooking’.</td>
</tr>
<tr>
<td>Childcare</td>
<td>Responses which are suggestive of child care activities which may be taken care of by parents, siblings or a nanny, such as ‘washing baby’, ‘watching children play’, and ‘guiding children’.</td>
</tr>
<tr>
<td>Business Related</td>
<td>Responses which are suggestive of non-specific business-related activity such as ‘office work’, ‘business’ and ‘running a business’, these may be indicative of Enterprising type activities.</td>
</tr>
<tr>
<td>Place or Field of Work</td>
<td>Responses which indicate a place or field of work, such as ‘tourism’, ‘hotel’ and ‘clinic’.</td>
</tr>
<tr>
<td>Manual Labour</td>
<td>Responses which indicate some form of manual labour activity such as, ‘heavy lifting’, ‘making cars’, and ‘washing cars’, these may be indicative of Realistic type activities.</td>
</tr>
<tr>
<td>Uncodeable</td>
<td>Responses which are too vague to code according to either Holland’s typologies or the above-mentioned ‘other responses’ categories, such as ‘car’, ‘machine’, ‘have knowledge’.</td>
</tr>
</tbody>
</table>

**Data Analysis**

The data collected in the present research has been analyzed using descriptive statistics in order to explore and describe the occupational aspirations and gender stereotypes of rural Xhosa-speaking senior primary children. Descriptive statistics have been chosen as they allow the researcher to present the findings of the quantitative research in a simple and meaningful way (Gravetter & Forzano, 2006).
Thus descriptive statistics have been used to reduce large amounts of data to concise numerical summaries which can be displayed using tables and charts. This means large amounts of raw data can be reported on efficiently and in a way which is more accessible to the end user.

The total number of occupational aspirations listed by participants on Form 1 was calculated in order to illustrate the nature and variety of occupations with which the participants are familiar. Here the researcher examined the total sample as well as the occupational aspirations of boys and girls separately in order to explore the relationships between gender and level of occupational knowledge.

The occupational aspiration data collected was coded using Holland’s (1973; 1996) work environment typologies and status levels as described earlier in this chapter. The mean number of responses per participant as well as the frequency with which responses appeared under each primary one-letter code was also explored. These statistics were calculated for the total sample as well as for boys and girls separately. The frequency counts were converted to percentages for further analysis.

The gender stereotyping data provided by participants on Forms 2 and 3 were then subjected to frequency counts in order to determine the ways in which children ascribe gender based stereotypes to certain occupations. These data were examined in totality and also in terms of the occupational gender stereotyping of boys and girls separately. In the present report, the statistical data has been presented both textually (i.e., tables) and graphically (i.e., pie charts).

In this discussion chapter, the researcher will discuss the results in terms of the occupations that are considered traditionally male and traditionally female. This has
been done based on the criteria which have been meaningfully employed by a number of previous studies conducted by South African researchers (Cox, 2004; Crause, 2006; Els, 2004; Olivier, 2004). Internationally, Riley (1981) defined traditional female occupations as those that characteristically provided lower incomes, lower status and fewer opportunities for promotion than male occupations do.

Based on previous national research trends, the researcher has selected a criterion for traditionality which assigns gender traditionality to an occupation when more than 70% of the workers in an occupation are either male or female. Examples of traditional female occupations include domestic worker, nurse, teacher (primary), social worker and sewers. Examples of traditional male occupations include police officer, doctor, engineer, gardener, and construction worker. These examples have been assigned gender traditionality based on data from the latest Labour Force Survey published by Statistics South Africa (2006). From these examples, it can be seen that traditional female occupations tend to include mostly Social type occupations and traditional male occupations tend to be from the Realistic and Investigative typologies.

**Ethical Considerations**

In order to ensure that psychological research is carried out in a manner which upholds the rights and dignity of its participants, the Professional Board for Psychology of the Health Professions Council of South Africa (Professional Board for Psychology, 2008) has established a code of ethical conduct which includes rules for
conducting ethical research. A number of these rules apply to the present research and will be discussed below.

Before commencing with the present research, approval was sought from the Research Ethics Committee (Human) of the Nelson Mandela Metropolitan University. Approval was granted by this committee to conduct the research in the manner described in the submitted research proposal.

Informed consent was obtained from the school principals *in loco parentis*. Consent was also obtained from all participants before they began completing the questionnaires. At the start of each data collection session, the research team explained the nature of the research to the participants, highlighting the ethical issues outlined below. Participants were also required to complete an informed consent form (see Appendix C).

The measure does not require learners to provide their names and as such the data will remain anonymous, thus ensuring confidentiality of the research data. The ethical integrity of the data will be further maintained through the secure handling and storage of assessment protocols by the researcher and research team throughout the research process. Participants were informed of the voluntary nature of their participation and their right to withdraw their participation in the research.

In order to ensure that the data collection was carried out in a fair and ethical manner, the field workers were selected based on their familiarity with professional and ethical standards of assessment practice, as well as their ability to communicate clearly and accurately in the language of the test takers. Once selected, the research team received thorough training in the research measure in order to ensure that the
fieldwork was carried out in a consistent, standardised manner (Foxcroft & Roodt, 2001).

It is the belief of the present researcher that, due to the lack of career research on the chosen population, the present research is relevant and will provide findings which may be used to benefit the field of career psychology and career education in South Africa. The results of the present research are presented and discussed in the following chapter.
CHAPTER FIVE

RESULTS

The previous chapters have presented relevant theory and research which provide the theoretical background to the present research. This chapter describes the results of the study and aims to explore and describe the occupational aspirations and occupational gender stereotyping of rural Xhosa-speaking South African senior primary school children in grades six and seven. The chapter is structured according to the primary aims of the research and begins with the results pertaining to the occupational aspirations of rural Xhosa-speaking boys and girls. These results are drawn from two items of Form 1 of the Revised Career Awareness Survey (RCAS, McMahon & Watson, 2001) and are reported in tabular form and discussed using descriptive terms to describe the frequency counts and percentages contained in the tables.

The second part of this chapter presents the findings related to the occupational gender stereotypes held by the children in the present sample. These results are based on participants’ responses to questions from Forms 2 and 3 of the RCAS. The data from Form 2 is displayed in tabular form. The data from Form 3 is displayed graphically using pie charts.

Occupational Aspirations

The results in this section are drawn from two items of Form 1 where participants were first asked, “What jobs are you interested in doing when you grow up?” and then asked “Of those jobs you wrote down, which one is your favourite?” The
findings described in this section are based on the first aim of the present research which is to explore, describe and compare the occupational aspirations, in terms of their typology, of male and female rural Xhosa-speaking South African senior primary school children.

**Occupational Typology**

This section of the chapter initially reports the frequency with which occupational aspirations were listed by the participants. The data in this section was gathered by asking participants, “What jobs are you interested in doing when you grow up?”. Participants listed a total of 794 responses to this question with a mean of 2.7 occupations per participant for the total sample. This explains why the total number of responses (n=794) is greater than the total number of participants (N=292). Table 6 provides a summary of the occupational aspirations for the total sample as well as for boys and girls according to Holland’s (1973; 1997) six occupational typologies namely, Realistic, Investigative, Artistic, Social, Enterprising and Conventional typologies. These typologies have been used in the present research to code the majority of participant’s responses as described in Chapter 4. Some responses which participants listed were not able to be coded according to Holland’s typologies and these responses have been coded in the ‘other responses’ categories which were established by the researcher to deal with those responses which did not refer to formal occupations, and were thus not able to be coded according to Holland’s occupational typology and status level classification. These categories include: ‘Housework Activities’, ‘Child Care Activities’, ‘Business Related Activities’, responses indicating a ‘Place or Field of Work’, and ‘Manual Labour Activities’. 
Table 6

*Frequency Counts (and Percentages) of Occupational Aspirations according to Holland’s Typology: Total Sample and Gender*

| Holland Typology | Total Sample (n=794) | Gender | | | | |
|------------------|----------------------|--------|--------|--------|--------|
| | | Males (n=375) | Females (n=419) | | |
| **Typology** | **Sample** | **(n=375)** | **(n=419)** | | |
| Realistic (e.g., “electrical engineer”, “hairdresser”, “pilot”) | 47 | 44 | 3 | | |
| Investigative (e.g., “doctor”, “climatologist”, “lawyer”) | 294 | 147 | 147 | | |
| Artistic (e.g., “artist”, “dancer”, “fashion designer”) | 48 | 18 | 30 | | |
| Social (e.g., “police officer”, “traffic officer”, “social worker”) | 346 | 136 | 210 | | |
| Enterprising (e.g., “manager”, “mayor”, “bank manager”) | 20 | 9 | 11 | | |
| Conventional (e.g., “secretary”, “accountant”) | 3 | 1 | 2 | | |
| **Other Responses** | | | | | |
| Housework Activities (e.g., “house work”) | 1 | 1 | 0 | | |
| Child Care Activities | 0 | 0 | 0 | | |
| Business Related Activities (e.g., “business”, “business owner”, “office work”) | 9 | 5 | 4 | | |
| Place or Field of Work (e.g., “school”, “municipality”, “tourism”) | 18 | 13 | 5 | | |
| Manual Labour Activities | 0 | 0 | 0 | | |
| Uncodeable (e.g., “buying house”, “maths”, “buying furniture”) | 8 | 1 | 7 | | |
The establishment of these ‘other responses’ categories is described in detail in Chapter 4. A small number of responses in various sections of the present research were unable to be coded in either Holland’s typologies or the ‘other responses’ categories and these fall in the ‘uncodeable’ category. Examples of participants’ verbatim responses have been included in all tables in this chapter in order to provide greater insight into the kinds of occupations listed by participants in response to research questions.

The findings displayed in Table 6 demonstrate that Social type occupations are the most frequently listed occupational aspirations for the total sample, with two fifths of all occupations listed by participants being for this typology. The popularity of the Social typology was followed by that of Investigative type occupations which make up over one third of the total responses. Social and Investigative occupations together comprise four fifths of the total number of occupations listed by boys and girls in the present research.

The remaining occupational aspirations were mainly for Realistic, Artistic and Enterprising typologies, while Conventional type occupations account for less than one percent of the occupations aspired to by the total sample. A small number (n = 36) of responses were not able to be coded according to Holland’s occupational typology and status level classification system and have been coded using the ‘other responses’ categories. Due to the small number of responses in these categories, no major trends were noted although it can be noted that boys listed a greater percentage of places or fields of work than girls.

The trend described for the total sample for Social type occupations to be listed most often followed by Investigative type occupations is also observed for girls with
half of the occupations listed by girls falling into the Social typology and over one third of girls’ occupational aspirations being for the Investigative typology. Realistic type occupations account for over ten percent of all occupations listed by boys whereas Realistic type occupations account for less than one percent of girls’ occupational aspirations.

The findings in this section indicate that, while Social and Investigative type occupations are the most popular occupational aspirations for rural Xhosa-speaking senior primary boys and girls in the present research, boys listed more Investigative type occupations than Social type occupations and girls indicated a preference for Social type occupations followed by Investigative type occupations. A notable difference between girls’ and boys’ responses is seen in the Realistic typology where boys listed a relatively large number of Realistic type occupations compared with girls who listed relatively few Realistic type occupations. The following section describes the findings relating to the status level of the occupations listed by participants in the present study.

**Status Level**

The second aim of the present research is to explore, describe and compare the occupational aspirations, in terms of their status level, of male and female rural Xhosa-speaking South African senior primary school children. Table 7 describes the status levels for all occupational aspirations listed by the participants in the present research. The status level data is based on the status levels of the responses which were coded according to Holland’s occupational typologies and status level classification system which was described in detail in Chapter 4, and as such the
totals reflected in this section (n = 758) do not reflect the total number of responses (n = 794) as they exclude the small number (n = 36) of responses which were coded according to the ‘other responses’ categories and which have therefore not been given a status level classification.

The results in Table 7 demonstrate that over three quarters of the occupations aspired to by participants are classified as high status level occupations. Middle status level occupations account for approximately one fifth of the occupations listed, with less than five percent of listed occupations falling in the skilled, semi-skilled and unskilled status level categories. High status level occupations comprise over four fifths of the aspirations listed by girls, while middle status level occupations comprise more than one tenth, which suggests that girls have a preference for occupations requiring tertiary education.

Table 7

*Frequency Counts (and Percentages) of Occupational Aspirations according to Status Level: Total Sample and Gender*

<table>
<thead>
<tr>
<th>Holland’s Status Level</th>
<th>Total Sample (n=758)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males (n=355)</td>
<td>Females (n=403)</td>
</tr>
<tr>
<td>High Level</td>
<td>587 (77.44%)</td>
<td>242 (68.17%)</td>
</tr>
<tr>
<td>(e.g., “doctor”, “electrical engineer”, “nurse”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Level</td>
<td>147 (19.39%)</td>
<td>93 (26.20%)</td>
</tr>
<tr>
<td>(e.g., “police officer”, “traffic officer”, “secretary”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>12 (1.58%)</td>
<td>10 (2.82%)</td>
</tr>
<tr>
<td>(e.g., “hairdresser”, “electrician”, “mechanic”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>10 (1.32%)</td>
<td>10 (2.82%)</td>
</tr>
<tr>
<td>(e.g., “fire fighter”, “construction worker”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td>2 (0.26%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td>(e.g., “domestic worker”)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Only a few of the girls in the present research indicated occupational aspirations from the skilled, semi-skilled and unskilled status level categories. Like girls, boys also showed a tendency to aspire more to high status level occupations, with over two-thirds of boys’ responses falling in this category, and another quarter falling in the middle status level category. Less than ten percent of boys’ occupational aspirations fell in the skilled, semi-skilled and unskilled status level categories.

The results from this section indicate that the rural Xhosa-speaking boys and girls in the present research tend to aspire more to high status level occupations followed by middle status level occupations. These findings also suggest that a greater percentage of girls listed high status level occupations compared with boys. The following section describes the research findings as they relate to the favourite occupational aspirations of the children in the present research.

**Favourite Occupational Aspirations**

Having been asked to freely list as many occupations as they were interested in doing when they grew up, participants were then asked, “Of those jobs you wrote down, which one is your favourite?” It is from these responses that the data in this section of the results chapter have been gathered. As each participant was asked to name one favourite occupational aspiration and all participants responded, there are therefore a total of 292 responses in this section. The findings in this section will be described according to Holland’s typology and status level as well as in terms of the five most popular occupational aspirations listed by participants.
**Occupational Typology**

The data in Table 8 demonstrate that, when asked to name one favourite occupation in the second question on Form 1 of the RCAS, participants’ responses showed similar trends to those reported in Table 6, with Social and Investigative type occupational aspirations each accounting for approximately two fifths of the total responses. The remaining responses include occupations from the Realistic, Artistic and Enterprising typologies, with Conventional type occupations again showing minimal popularity with only one response falling in this typology.

There were only a small number of responses ($n = 16$) that could not be coded according to Holland’s typology and these are reflected in the ‘other responses’ categories. Boys’ favourite occupational aspirations included Investigative occupations which accounted for approximately two fifths of their responses and Social type occupations which accounted for one third of their responses. Boys’ responses indicate that Realistic type occupations are also amongst their favourite occupational aspirations and make up close to one tenth of their responses. Girls aspire more to Social type occupations, which account for almost half of all their responses, followed by Investigative type occupations, comprising just over one third of girls’ favourite occupational aspirations. A greater percentage of boys listed Realistic type occupational aspirations compared to only a small number of girls. One tenth of girls’ responses were for the Artistic type occupations, which accounted for only a small percentage of boys’ occupational aspirations.
Table 8

*Frequency Counts (and Percentages) of Favourite Occupational Aspirations according to Holland’s Typology: Total Sample and Gender*

<table>
<thead>
<tr>
<th>Code</th>
<th>Total Sample (n=292)</th>
<th>Gender</th>
<th>Males (n=138)</th>
<th>Females (n=154)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holland Typology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realistic (e.g., “electrical engineer”, “hairdresser”, “pilot”)</td>
<td>12</td>
<td>11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.11%)</td>
<td>(7.97%)</td>
<td>(0.65%)</td>
<td></td>
</tr>
<tr>
<td>Investigative (e.g., “doctor”, “climatologist”, “lawyer”)</td>
<td>116</td>
<td>61</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(39.73%)</td>
<td>(44.20%)</td>
<td>(35.71%)</td>
<td></td>
</tr>
<tr>
<td>Artistic (e.g., “singer”, “disc jockey”, “artist”)</td>
<td>18</td>
<td>4</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(6.16%)</td>
<td>(2.90%)</td>
<td>(9.09%)</td>
<td></td>
</tr>
<tr>
<td>Social (e.g., “police officer”, “teacher”, “traffic officer”)</td>
<td>119</td>
<td>47</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(40.75%)</td>
<td>(34.06%)</td>
<td>(46.75%)</td>
<td></td>
</tr>
<tr>
<td>Enterprising (e.g., “president”, “manager”, “bank manager”)</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.42%)</td>
<td>(2.90%)</td>
<td>(3.90%)</td>
<td></td>
</tr>
<tr>
<td>Conventional (e.g., “accountant”)</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.34%)</td>
<td>(0.00%)</td>
<td>(0.65%)</td>
<td></td>
</tr>
<tr>
<td>Other Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housework Activities</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00%)</td>
<td>(0.00%)</td>
<td>(0.00%)</td>
<td></td>
</tr>
<tr>
<td>Child Care Activities</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00%)</td>
<td>(0.00%)</td>
<td>(0.00%)</td>
<td></td>
</tr>
<tr>
<td>Business Related Activities (e.g., “business owner”, “office work”, “business”)</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.71%)</td>
<td>(1.45%)</td>
<td>(1.30%)</td>
<td></td>
</tr>
<tr>
<td>Place or Field of Work (e.g., “municipality”, “computers”)</td>
<td>8</td>
<td>8</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.74%)</td>
<td>(5.80%)</td>
<td>(0.00%)</td>
<td></td>
</tr>
<tr>
<td>Manual Labour Activities</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.00%)</td>
<td>(0.00%)</td>
<td>(0.00%)</td>
<td></td>
</tr>
<tr>
<td>Uncodeable (e.g., “buying house”, “maths”, “have knowledge”)</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.03%)</td>
<td>(0.72%)</td>
<td>(1.30%)</td>
<td></td>
</tr>
</tbody>
</table>
These findings highlight the popularity of Social and Investigative occupational aspirations for the rural Xhosa-speaking school children in the present sample. The following section describes the findings relating to the status levels of boys’ and girls’ favourite occupational aspirations.

**Status Level**

Table 9 provides a breakdown of the status levels of the occupations which participants indicated were their favourite occupational aspiration. The data in this table is based on the status level classifications which accompany the Holland codes for occupations which are coded according to Holland’s (1973; 1997) occupational typologies. Only a small number of responses (n = 16) could not be coded according to Holland’s typologies and these were coded in the ‘other responses’ categories. These responses are not accounted for in the data in Table 9 which demonstrate similar trends to that in Table 7, with almost all of participants’ favourite occupational aspirations comprising high and middle status level occupations. Once again it can be seen that a higher percentage of girls compared with boys listed high status level occupations. A notable difference between boys’ and girls’ occupational aspirations is seen in the middle status level category where a greater percentage of boys compared with girls listed occupations which fall in the middle status level category. A very small number of the participants’ favourite occupational aspirations (n = 5) fall into the skilled and semi-skilled status levels.
Table 9

*Frequency Counts (and Percentages) of Favourite Occupational Aspiration according to Status Level: Total Sample and Gender*

<table>
<thead>
<tr>
<th>Holland’s Status Level</th>
<th>Total Sample (n=276)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males (n=127)</td>
</tr>
<tr>
<td>High Level</td>
<td>222</td>
<td>88</td>
</tr>
<tr>
<td>(e.g., “doctor”, “electrical engineer”, “teacher”)</td>
<td>(80.43%)</td>
<td>(69.29%)</td>
</tr>
<tr>
<td>Middle Level</td>
<td>49</td>
<td>35</td>
</tr>
<tr>
<td>(e.g., “police officer”, “traffic officer”, “security guard”)</td>
<td>(17.75%)</td>
<td>(27.56%)</td>
</tr>
<tr>
<td>Skilled</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>(e.g., “hairdresser”, “electrician”)</td>
<td>(0.72%)</td>
<td>(0.79%)</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>(e.g., “fire fighter”, “construction worker”, “garden work”)</td>
<td>(1.09%)</td>
<td>(2.36%)</td>
</tr>
<tr>
<td>Unskilled</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(0.00%)</td>
<td></td>
<td>(0.00%)</td>
</tr>
</tbody>
</table>

Only a small number of boys indicated favourite occupations from the semi-skilled status level, while none of the participants’ favourite occupational aspirations fell in the unskilled status level. A greater percentage of boys than girls listed favourite occupational aspirations from the middle status level category.

Tables 10 to 12 present the five most popular occupational aspirations listed by the participants as being their favourite occupational aspiration according to typology and status level. Table 10 reports the breakdown of the most frequently named occupations for the total sample; individual occupations were included in this table if they each accounted for 5% or more of the total responses for this question.

There are five occupations listed in Table 10 which together account for 195 responses and make up two thirds of the total responses to this question.
Table 10

*Most Frequently named Favourite Occupational Aspirations according to Holland’s Typology and Status Level: Total Sample*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (n = 292)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Holland Typologies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor</td>
<td>Investigative</td>
<td>High</td>
<td>75 (25.68%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>44 (15.07%)</td>
</tr>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>30 (10.27%)</td>
</tr>
<tr>
<td>Lawyer</td>
<td>Investigative</td>
<td>High</td>
<td>26 (8.90%)</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Social</td>
<td>High</td>
<td>20 (6.85%)</td>
</tr>
</tbody>
</table>

The findings in Table 10 highlight the tendency for participants to aspire to Social and Investigative type occupations of high and middle status levels. A quarter of the sample listed the Investigative type job of ‘doctor’ as their favourite occupational aspiration followed by the Social type jobs of ‘police officer’ and ‘teacher’ which account for a further quarter of the responses. The fourth most popular occupational aspiration was ‘lawyer’ which is an Investigative type job. ‘Social worker’, a Social type job, was the fifth most popular occupational aspiration.

Table 11 reports the breakdown of the most popular occupations indicated by boys and provides a similar picture to that of the total sample. It should be noted that the total number of responses in the table does not reflect the total number of responses given by boys to the question. The data in the table includes four
occupations which were listed by at least 5% of boys; together they make up 67.4% of boys’ responses.

Table 11

*Most Frequently named Favourite Occupational Aspirations according to Holland’s Typology and Status Level: Boys*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=138)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>Investigative</td>
<td>High</td>
<td>42 (30.43%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>30 (21.74%)</td>
</tr>
<tr>
<td>Lawyer</td>
<td>Investigative</td>
<td>High</td>
<td>9  (6.52%)</td>
</tr>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>7   (5.07%)</td>
</tr>
</tbody>
</table>

Almost one third of boys selected ‘doctor’ as their favourite occupational aspiration, followed by ‘police officer’, which was selected by one fifth of boys in the present sample. The third and fourth most popular favourite occupational aspirations were ‘lawyer’ and ‘teacher’ respectively, and these occupations accounted for much smaller percentages of participants’ responses compared with the two most popular responses.

Table 12 reports the occupations listed most frequently by girls, with the Investigative type job of ‘doctor’ again being the most popular, listed by one fifth of all girls in the present study.
Table 12

Most Frequently named Favourite Occupational Aspirations according to Holland’s Typology and Status Level: Girls

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=154)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>Investigative</td>
<td>High</td>
<td>33 (21.43%)</td>
</tr>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>23 (14.94%)</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Social</td>
<td>High</td>
<td>19 (12.34%)</td>
</tr>
<tr>
<td>Lawyer</td>
<td>Investigative</td>
<td>High</td>
<td>17 (11.04%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>14 (9.09%)</td>
</tr>
<tr>
<td>Nurse</td>
<td>Social</td>
<td>High</td>
<td>14 (9.09%)</td>
</tr>
</tbody>
</table>

The total number of responses in this table does not reflect the total number of responses to this question but rather the six occupations which were named by at least 5% of girls which together account for over three quarters of girls’ responses to this question. The second and third most popular occupational aspirations are both Social type jobs, namely ‘teacher’ and ‘social worker’ respectively. The Investigative type job of ‘lawyer’ was fourth most popular. Two jobs were fifth most popular, and these were ‘police officer’ and ‘nurse’, which together make up one fifth of girls’ most popular occupational aspirations.

The findings in Tables 11 and 12 again highlight the dominance of high status level Social type and Investigative type occupational aspirations for rural Xhosa-speaking boys and girls. It is noticeable that a wider range of occupations were
listed frequently by girls as their favourite occupational aspiration compared with boys who listed a more limited range of occupations most frequently. Another overall trend in this section was the tendency of children to list mostly codeable formal occupations (as opposed to informal activities in the ‘other responses’ categories) when asked about their own occupational aspirations. The following section reports the results of the present research as they relate to the occupational gender stereotypes of rural Xhosa-speaking children.

**Occupational gender stereotypes**

The previous section of this chapter addressed the first two aims of the present research, describing the results relating to the occupational aspirations of rural Xhosa-speaking children. The third aim of the present research is to explore, describe and compare the occupational gender stereotyping of male and female rural Xhosa-speaking South African senior primary school children. The data in this section are drawn from Forms 2 and 3 of the Revised Career Awareness Survey (RCAS, McMahon & Watson, 2001). Form 2 required participants to answer the following five questions: “Write down some jobs you think women can do”, “Write down some jobs you think women cannot do”, “Write down some jobs you think men can do”, “Write down some jobs you think men cannot do”, and “Write down some jobs you think both men and women can do”. Further occupational gender stereotyping information was gathered from Form 3 which asked participants to indicate whether specific jobs listed on the form could best be done by males, females or equally well by both males and females.
**Jobs that women can do**

Participants were asked to “write down some jobs you think women can do”. A total of 853 responses were provided for this question with participants listing between one and nine occupations each, with a mean number of 2.92 responses per participant. Approximately two thirds of the total responses in this section were codeable according to Holland’s occupational typology and a further third of the responses fell within the ‘other responses’ categories. The breakdown of responses according to gender is reported in Table 13.

Participant’s responses indicate that housework activities which account for between one fifth and one third of the total responses are the second most frequently named category of jobs that women can do. The housework activities category includes participant responses which indicate some form of informal household activity (such as ‘washing dishes’, ‘washing clothes’, and ‘cooking’) which are usually taken care of by members of the family or a domestic worker. The responses in this category do not constitute formal occupations and as such have not been coded according to Holland’s typology. Realistic and Investigative jobs together account for less than one fifth of the responses, and even lower frequencies were noted for the remaining typologies (i.e., Enterprising, Artistic and Conventional).

The same trend which is observed for the total sample can be seen for both boys and girls, whose responses indicate Social type jobs and housework activities most frequently as jobs which women can do. Relatively small numbers of boys and girls listed jobs from the remaining typologies.
Table 13

Jobs Women Can Do according to Holland’s Typology: Total Sample and Gender

<table>
<thead>
<tr>
<th>Code</th>
<th>Total Sample (n=853)</th>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males</td>
<td>Females</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=382)</td>
<td>(n=471)</td>
<td></td>
</tr>
<tr>
<td>Holland Typology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realistic</td>
<td>81</td>
<td>43</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>(e.g., “construction worker”, “cook”, “sewer”)</td>
<td>(9.50%)</td>
<td>(11.26%)</td>
<td>(8.07%)</td>
<td></td>
</tr>
<tr>
<td>Investigative</td>
<td>60</td>
<td>26</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>(e.g., “doctor”, “lawyer”, “psychologist”)</td>
<td>(7.03%)</td>
<td>(6.81%)</td>
<td>(7.22%)</td>
<td></td>
</tr>
<tr>
<td>Artistic</td>
<td>18</td>
<td>6</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>(e.g., “actor”, “singer”, “fashion designer”)</td>
<td>(2.11%)</td>
<td>(1.57%)</td>
<td>(2.55%)</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>358</td>
<td>152</td>
<td>206</td>
<td></td>
</tr>
<tr>
<td>(e.g., “teacher”, “domestic worker”, “nurse”)</td>
<td>(41.97%)</td>
<td>(39.79%)</td>
<td>(43.74%)</td>
<td></td>
</tr>
<tr>
<td>Enterprising</td>
<td>16</td>
<td>6</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>(e.g., “model”, “bank manager”, “manager”)</td>
<td>(1.88%)</td>
<td>(1.57%)</td>
<td>(2.12%)</td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>(e.g., “accountant”, “cashier”)</td>
<td>(0.23%)</td>
<td>(0.00%)</td>
<td>(0.42%)</td>
<td></td>
</tr>
<tr>
<td>Other Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housework Activities</td>
<td>242</td>
<td>118</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td>(e.g., “cleaning house”, “cleaning floors”, “kitchen work”)</td>
<td>(28.37%)</td>
<td>(30.89%)</td>
<td>(26.33%)</td>
<td></td>
</tr>
<tr>
<td>Child Care Activities</td>
<td>20</td>
<td>4</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>(e.g., “wash baby”, “feed kids”)</td>
<td>(2.34%)</td>
<td>(1.05%)</td>
<td>(3.40%)</td>
<td></td>
</tr>
<tr>
<td>Business Related Activities</td>
<td>16</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>(e.g., “office work”, “run a business”, “bank worker”)</td>
<td>(1.88%)</td>
<td>(1.83%)</td>
<td>(1.91%)</td>
<td></td>
</tr>
<tr>
<td>Place or Field of Work Activities</td>
<td>22</td>
<td>14</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>(e.g., “municipality”, “clinic”, “bakery”)</td>
<td>(2.58%)</td>
<td>(3.66%)</td>
<td>(1.70%)</td>
<td></td>
</tr>
<tr>
<td>Manual Labour Activities</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>(e.g., “carwash”, “make cars”, “)</td>
<td>(0.70%)</td>
<td>(1.05%)</td>
<td>(0.42%)</td>
<td></td>
</tr>
<tr>
<td>Uncodeable</td>
<td>12</td>
<td>2</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>(e.g., “reading”, “prostitute”, “machine”)</td>
<td>(1.41%)</td>
<td>(0.52%)</td>
<td>(2.12%)</td>
<td></td>
</tr>
</tbody>
</table>
It can be seen that over two fifths of the total responses indicate that Social type occupations (such as ‘domestic worker’, ‘teacher’, and ‘nurse’) are jobs that women can do. Table 14 reports the frequency counts and percentages of occupational gender stereotypes of the children in the sample regarding the status level of jobs that women can do. The status level data reflected in this table are based on the status level codes which correspond to participant responses which were coded according to Holland’s occupational typology and status level classification, and include two thirds of the total responses in this section. These results exclude those responses coded in the ‘other responses’ categories. The results demonstrate that over half of the responses fall in the high status level category. The next most popular status level, with one quarter of the responses, is the unskilled category.

Table 14

Frequency Counts (and Percentages) of Jobs Woman Can Do by Status Level: Total Sample and Gender

<table>
<thead>
<tr>
<th>Holland’s Status Level</th>
<th>Total Sample (n=535)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males (n=233)</td>
</tr>
<tr>
<td>High Level (e.g., “teacher”, “doctor”, “nurse”)</td>
<td>279 (52.15%)</td>
<td>105 (45.06%)</td>
</tr>
<tr>
<td>Middle Level (e.g., “police officer”, “security guard”, “sports coach”)</td>
<td>41 (7.66%)</td>
<td>18 (7.73%)</td>
</tr>
<tr>
<td>Skilled (e.g., “cook”, “caterer”, “street vendor”)</td>
<td>33 (6.17%)</td>
<td>14 (6.01%)</td>
</tr>
<tr>
<td>Semi-Skilled (e.g., “sewing”, “construction worker”, “gardener”)</td>
<td>36 (6.73%)</td>
<td>24 (10.30%)</td>
</tr>
<tr>
<td>Unskilled (e.g., “domestic worker”, “cleaner”, “house cleaner”)</td>
<td>146 (27.29%)</td>
<td>72 (30.90%)</td>
</tr>
</tbody>
</table>
The remaining responses are shared between the middle, skilled and semi-skilled status level categories, which together account for one fifth of the responses. Not reflected in Table 14 are a further one third of the total responses to this question which indicate housework activities as being jobs that women can do. The housework activities category (see Table 13) was created due to the large number of informal housework activities such as “cleaning house”, “cleaning floors”, and “kitchen work” which were listed by participants. This category does not carry a formal status level classification and as such is not reflected in Table 14, although these kinds of housework activities could be seen as unskilled activities, adding to the weight of unskilled status level occupations that participants listed as jobs that women can do.

Tables 15 to 17 report on the most frequently named occupations that women can do according to Holland’s typology and status level for the total sample and for gender and also reflect responses from the ‘other responses’ categories where applicable. The data in these tables do not reflect the total responses to the question but rather all of the jobs named in this section which account for at least 5% of the total jobs named, including those coded according to Holland’s typologies and ‘other responses’ categories. Table 15 reports the breakdown of the most frequently named jobs that women can do according to typology and status level for the total sample. These responses total 353, and comprise two fifths of the total responses to this question. Other jobs which participants listed infrequently and which are therefore not reflected in this table include occupations from all six of Holland’s occupational typologies as well as responses from the ‘other responses’ categories. Housework activities were named especially frequently as shown in Table 13.
Table 15

*Most Frequently Named Jobs that Women Can Do according to Holland’s Typology and Status Level: Total Sample*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=853)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>86 (10.08%)</td>
</tr>
<tr>
<td>Domestic Worker</td>
<td>Social</td>
<td>Unskilled</td>
<td>72 (8.44%)</td>
</tr>
<tr>
<td>Nurse</td>
<td>Social</td>
<td>High</td>
<td>71 (8.32%)</td>
</tr>
</tbody>
</table>

The results indicate that ‘teacher’ was listed most frequently by one tenth of the total population as being a job that women can do. The second most frequently listed job that women can do was ‘domestic worker’ which is also a Social type job, but in contrast to ‘teacher’, falls in the unskilled status level. The third most frequently named job was ‘nurse’, another Social type job from the high status level category. Note that no individual responses from the ‘other responses’ categories comprised more than 5% of participants’ responses and therefore do not appear in Table 15.

These results demonstrate that two of the three most frequently named jobs that women can do fall in the Social typology, which is consistent with occupational aspiration trends established earlier in the present chapter (see Tables 6 and 8). Table 16 shows the breakdown of occupations listed most frequently by boys as being jobs that women can do.
Table 16

*Most Frequently Named Jobs that Women Can Do according to Holland’s Typology and Status Level: Boys*

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=382)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Worker</td>
<td>Social</td>
<td>Unskilled</td>
<td>34 (8.90%)</td>
</tr>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>34 (8.90%)</td>
</tr>
<tr>
<td>Nurse</td>
<td>Social</td>
<td>High</td>
<td>27 (7.07%)</td>
</tr>
<tr>
<td>Cleaner</td>
<td>Social</td>
<td>Unskilled</td>
<td>20 (5.24%)</td>
</tr>
<tr>
<td>Cleaning House</td>
<td>Housework Activities</td>
<td>22 (5.76%)</td>
<td></td>
</tr>
</tbody>
</table>

The responses in this table total 137 and account for over one third of boys’ responses to this question. It can be seen that boys listed both formal occupations, coded according to Holland’s typology, along with informal activities amongst their most frequent responses. The Social type jobs of ‘domestic worker’ and ‘teacher’ were also listed frequently by boys who also listed ‘nurse’, and ‘cleaner’. The informal housework activity ‘cleaning house’ was also listed amongst boys’ most frequent responses and accounts for just over 5% of their responses and as such is included in Table 16.

Three of the occupations boys listed most frequently as being jobs that women can do are unskilled (‘cleaning house’ is an informal housework activity which is
indicative of unskilled work). They also listed ‘teacher’ and ‘nurse’ which are both high status level occupations and, as such, are more consistent with the occupational aspiration trends established in the first part of the present chapter (see, for instance, Tables 6 and 8). Despite boys listing these two high status level occupations amongst their most frequently listed jobs that women can do, the results suggest that boys view more unskilled status level jobs and informal housework activities as being work women can do.

Table 17 provides a breakdown of the occupations which were listed most frequently by the girls in the present study as being jobs women can do. These responses total 183 and comprise over two fifths of girls’ responses to this question. The Social occupations of ‘teacher’ and ‘nurse’ were listed most frequently by girls as jobs that women can do and together account for one fifth of their responses to this question. It is worth noting that ‘teacher’ and ‘nurse’ are the only two high status level occupations listed by boys (see Table 16), who named more unskilled and housework activities when listing jobs which they felt women could do. Girls listed one other high status level job, namely ‘doctor’ which was the fourth most frequently named job by girls as being a job that women can do. Earlier, ‘doctor’ was the most frequently named occupational aspiration by girls in the present research (See Table 12). Girls’ most frequently named occupations included only one unskilled job, ‘domestic worker’, as well as one informal housework activity, ‘cooking’. Girls listed a greater range of occupational typologies amongst their five most popular responses. Whereas boys only listed Social type occupations and Housework, girls listed Social and Investigative type occupations as well as Housework activities.
Table 17

**Most Frequently Named Jobs that Women Can Do according to Holland's Typology and Status Level: Girls**

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=471)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Holland Typologies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>52 (11.04%)</td>
</tr>
<tr>
<td>Nurse</td>
<td>Social</td>
<td>High</td>
<td>44 (9.34%)</td>
</tr>
<tr>
<td>Domestic Worker</td>
<td>Social</td>
<td>Unskilled</td>
<td>38 (8.07%)</td>
</tr>
<tr>
<td>Doctor</td>
<td>Investigative</td>
<td>High</td>
<td>24 (5.10%)</td>
</tr>
<tr>
<td><strong>Other Responses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooking</td>
<td>Housework Activities</td>
<td></td>
<td>25 (5.31%)</td>
</tr>
</tbody>
</table>

The results in Tables 16 and 17 suggest that Social type occupations such as ‘teacher’ and ‘nurse’ are frequently regarded by boys and girls as being jobs women can do more often than occupations from Holland’s other five occupational typologies. Boys and girls also regard housework activities such as ‘cooking’ and ‘washing dishes’ as jobs that women can do. The Investigative type job of ‘doctor’ was the only response amongst those listed most frequently by the participants which falls outside the Social typology. It has already been noted that some disparity seems to exist between children’s occupational aspirations and the gender stereotypes they hold about the jobs that women can do. Despite girls showing a preference for high status level occupational aspirations, their gender stereotypes
suggest that they also view unskilled jobs and informal housework activities as being amongst the jobs that women can do. Similarly, while boys mentioned two high status level occupations amongst their most frequent responses, their overall responses suggest that boys view unskilled jobs, whether paid (such as ‘domestic worker’ and ‘cleaner’) or unpaid housework activities (such as ‘washing dishes’ and ‘washing clothes’) most frequently as occupations that women can do.

This section has described the results relating to the occupational gender stereotypes which the participants hold regarding jobs that women can do. The following section describes the gender stereotypes relating to the jobs which participants believe women cannot do.

**Jobs that women cannot do**

Having first been asked to list jobs that women can do, participants were then invited to list jobs which they thought women cannot do. Participants provided a total of 651 responses, listing between one and six jobs each, although the majority of participants listed between two and three responses, with a mean of 2.23 responses per participant. Once again, the majority of responses to this question were codeable according to Holland’s occupation typology, with just over one tenth falling into the ‘other responses’ categories. Of these other responses, only 14 responses were unable to be coded.

Table 18 illustrates a breakdown of the jobs which women cannot do according to Holland typology for the entire sample and for gender.
### Table 18

**Jobs Women Cannot Do according to Holland’s Typology: Total Sample and Gender**

<table>
<thead>
<tr>
<th>Code</th>
<th>Total Sample (n=651)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males (n=309)</td>
</tr>
<tr>
<td><strong>Holland Typology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realistic</td>
<td>429 (65.90%)</td>
<td>187 (60.52%)</td>
</tr>
<tr>
<td>(e.g., “construction worker”, “mechanic”, “road construction worker”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigative</td>
<td>38 (5.84%)</td>
<td>14 (4.53%)</td>
</tr>
<tr>
<td>(e.g., “doctor”, “engineer”, “environmentalist”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artistic</td>
<td>5 (0.77%)</td>
<td>2 (0.65%)</td>
</tr>
<tr>
<td>(e.g., “musician”, “artist”, “jeweller”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>83 (12.75%)</td>
<td>50 (16.18%)</td>
</tr>
<tr>
<td>(e.g., “sports person”, “life guard”, “teacher”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enterprising</td>
<td>7 (1.08%)</td>
<td>4 (1.29%)</td>
</tr>
<tr>
<td>(e.g., “president”, “ship captain”, “politician”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td><strong>Other Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housework Activities</td>
<td>16 (2.46%)</td>
<td>8 (2.59%)</td>
</tr>
<tr>
<td>(e.g., “washing clothes”, “cleaning”, “cooking”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Care Activities</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td>Business Related Activities</td>
<td>5 (0.77%)</td>
<td>3 (0.97%)</td>
</tr>
<tr>
<td>(e.g., “newspaper seller”, “seller”, “taxi worker”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Place or Field of Work</td>
<td>22 (3.38%)</td>
<td>14 (4.53%)</td>
</tr>
<tr>
<td>(e.g., “municipality”, “hotel”, “tavern”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual Labour Activities</td>
<td>32 (4.92%)</td>
<td>21 (6.80%)</td>
</tr>
<tr>
<td>(e.g., “heavy lifting”, “woodwork”, “use a pick”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncodeable</td>
<td>14 (2.15%)</td>
<td>6 (1.94%)</td>
</tr>
<tr>
<td>(e.g., “contract worker”, “making stamps”, “counsel”)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From this data, it can be seen that Realistic type jobs account for over two thirds of the responses which were seen by participants as jobs women cannot do. Social type jobs which were previously listed most frequently as jobs that women can do (see Table 13), are now listed second most frequently as jobs that women cannot do. In this case, Social type jobs account for just over one tenth of the total responses, and the data indicate that a greater percentage of boys than girls listed Social type jobs as amongst those that women cannot do. Only a small number of responses fall in the remaining typologies. Between one tenth and one fifth of responses fell in the ‘other responses’ categories with participants’ listing a number of ‘manual labour activities (such as ‘heavy lifting’, ‘woodwork’ and ‘use a pick’) and places or fields of work (such as ‘municipality’, ‘hotel’, ‘tavern’) as work that women cannot do.

The status levels of the jobs that women cannot do are reported in Table 19. The results in this table are based only on responses which were coded according to Holland’s typology and status level. Only one tenth of the total responses were not codeable according to Holland’s typology and status level classification and, as such, the data in Table 19 is based on a large majority of the total responses. Here, it can be seen that two fifths of the responses listed are for semi-skilled status level occupations, and a further fifth are skilled status level occupations. High status level occupations comprise only one tenth of the responses in this section. Unskilled status level jobs were listed least frequently as jobs that women cannot do. The results in Table 19 correspond with those in Table 14 which showed that unskilled status level jobs were most frequently listed as jobs that women can do.
Table 19

*Frequency Counts (and Percentages) of Jobs Woman Cannot Do by Status Level:*

*Total Sample and Gender*

<table>
<thead>
<tr>
<th>Holland’s Status Level</th>
<th>Total Sample (n=562)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males (n=257)</td>
</tr>
<tr>
<td>High Level</td>
<td>79 (14.06%)</td>
<td>38 (14.79%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=257)</td>
</tr>
<tr>
<td>(e.g., “sportsperson”, “teacher”, “doctor”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Level</td>
<td>58 (10.32%)</td>
<td>30 (11.67%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=257)</td>
</tr>
<tr>
<td>(e.g., “soldier”, “police officer”, “security guard”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>125 (22.24%)</td>
<td>61 (23.74%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=257)</td>
</tr>
<tr>
<td>(e.g., “mechanic”, “electrician”, “painter”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>255 (45.37%)</td>
<td>109 (42.41%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=257)</td>
</tr>
<tr>
<td>(e.g., “construction worker”, “gardener”, “gardener”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td>45 (8.01%)</td>
<td>19 (7.39%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=257)</td>
</tr>
<tr>
<td>(e.g., “road construction worker”, “farm worker”, “domestic worker”)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 20 lists the most frequently named jobs that participants indicated women cannot do. These specifically named jobs account for over two fifths of the total responses to this question and all fall in the Realistic typology and semi-skilled status level category. The total number of responses shown in this table does not reflect the total number of responses to this question, but rather all the responses which account for at least 5% of the total responses. These responses total 249 and account for approximately two fifths of the total responses to this question. The two most frequently listed jobs were ‘construction worker’ and ‘gardener’ which were each listed by over one tenth of the sample and together account for close to one third of responses.
Table 20

*Most Frequently Named Jobs that Women Cannot Do according to Holland’s Typology and Status Level: Total Sample*

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=651)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>Realistic</td>
<td>Semi</td>
<td>112 (17.20%)</td>
</tr>
<tr>
<td>worker</td>
<td></td>
<td>Skilled</td>
<td></td>
</tr>
<tr>
<td>Gardener</td>
<td>Realistic</td>
<td>Semi</td>
<td>97 (14.90%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skilled</td>
<td></td>
</tr>
<tr>
<td>Mechanic</td>
<td>Realistic</td>
<td>Skilled</td>
<td>40 (6.14%)</td>
</tr>
</tbody>
</table>

The jobs which boys named most frequently as being jobs that women cannot do are reported in Table 21. There are four jobs listed in this table which each comprise at least 5% of boys’ responses in this section. Together these responses total 121 and account for approximately two fifths of boys’ responses to this question. These responses are dominated by Realistic type jobs which account for all four of the jobs which boys named most frequently as being jobs that women cannot do. The Realistic type job of ‘Construction worker’ was named most often by boys as being a job that women cannot do and accounts for between one tenth and one fifth of the responses. The semi-skilled status level Realistic type job of ‘Gardener’ accounts for a further one tenth of the responses along with ‘mechanic’ and ‘miner’ which together also account for one tenth of boys’ responses.

Table 22 shows the jobs that were listed most frequently by girls as jobs that women cannot do. These responses total 162 and account for almost half of the jobs listed by girls as jobs that women cannot do.
Table 21

Most Frequently Named Jobs that Women Cannot Do according to Holland’s Typology and Status Level: Boys

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(N=309)</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Realistic</td>
<td>Semi</td>
<td>44</td>
</tr>
<tr>
<td>worker</td>
<td></td>
<td>Skilled</td>
<td>(14.24%)</td>
</tr>
<tr>
<td>Gardener</td>
<td>Realistic</td>
<td>Semi</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skilled</td>
<td>(12.94%)</td>
</tr>
<tr>
<td>Mechanic</td>
<td>Realistic</td>
<td>Skilled</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(6.80%)</td>
</tr>
<tr>
<td>Miner</td>
<td>Realistic</td>
<td>Skilled</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(5.18%)</td>
</tr>
</tbody>
</table>

Table 22

Most Frequently Named Jobs that Women Cannot Do according to Holland’s Typology and Status Level: Girls

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(N=342)</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Realistic</td>
<td>Semi</td>
<td>68</td>
</tr>
<tr>
<td>worker</td>
<td></td>
<td>Skilled</td>
<td>(19.88%)</td>
</tr>
<tr>
<td>Gardener</td>
<td>Realistic</td>
<td>Semi</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skilled</td>
<td>(16.67%)</td>
</tr>
<tr>
<td>Mechanic</td>
<td>Realistic</td>
<td>Skilled</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(5.56%)</td>
</tr>
<tr>
<td>Electrician</td>
<td>Realistic</td>
<td>Skilled</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(5.26%)</td>
</tr>
</tbody>
</table>

The three most frequently named jobs, ‘construction worker’, ‘gardener’, and ‘mechanic’, are the same as those listed by boys. Girls also listed ‘electrician’
amongst their most frequent responses. All of these responses are for the Realistic typology and are all in either the skilled or semi-skilled status level categories.

The results in this section suggest that the rural Xhosa-speaking South African children in the present sample generally view Realistic type jobs, many of which are semi-skilled, as work that women cannot do. The following section explores the data relating to the jobs that the children in the sample believed that men can do.

**Jobs that men can do**

The results in the previous sections described data relating to the jobs that participants in the present research indicated as jobs that women can or cannot do. This section describes the data relating to the jobs which participants regard as jobs that men can do. In response to this question, participants listed a total of 779 jobs with a mean of 2.67 responses per participant. The majority of these responses were codeable according to Holland’s typology. One tenth of the total responses was unable to be coded according to Holland’s typologies and was coded in the ‘other responses’ categories. Only 17 responses were unable to be coded into any of the categories.

Table 23 shows the breakdown of occupations that participants listed as being jobs that men can do. From these results it can be seen that the majority of the responses listed were for Realistic type jobs, which account for over half of all jobs listed. The results in this section stand in contrast to those in the last section in so far as Realistic type jobs are viewed by both boys and girls as jobs that men can do and as jobs that women cannot do.
Table 23  
Jobs Men Can Do according to Holland’s Typology: Total Sample and Gender

<table>
<thead>
<tr>
<th>Code</th>
<th>Total Sample (n=782)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males (n=379)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Females (n=403)</td>
</tr>
<tr>
<td>Holland Typology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realistic</td>
<td>444 (56.78%)</td>
<td>195 (51.45%)</td>
</tr>
<tr>
<td>(e.g., “construction worker”, “furniture maker”, “painter”)</td>
<td>(61.79%)</td>
<td></td>
</tr>
<tr>
<td>Investigative</td>
<td>70 (8.95%)</td>
<td>41 (10.82%)</td>
</tr>
<tr>
<td>(e.g., “doctor”, “engineer”, “lawyer”)</td>
<td>(7.20%)</td>
<td></td>
</tr>
<tr>
<td>Artistic</td>
<td>3 (0.38%)</td>
<td>1 (0.26%)</td>
</tr>
<tr>
<td>(e.g., “journalist”, “news reader”)</td>
<td>(0.50%)</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>146 (18.67%)</td>
<td>80 (21.11%)</td>
</tr>
<tr>
<td>(e.g., “teacher”, “security guard”, “police officer”)</td>
<td>(16.38%)</td>
<td></td>
</tr>
<tr>
<td>Enterprising</td>
<td>17 (2.17%)</td>
<td>10 (2.64%)</td>
</tr>
<tr>
<td>(e.g., “manager”, “president”, “mayor”)</td>
<td>(1.74%)</td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
</tr>
<tr>
<td>Other Responses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housework Activities</td>
<td>16 (2.05%)</td>
<td>4 (1.06%)</td>
</tr>
<tr>
<td>(e.g., “cooking”, “washing”, “cleaning house”)</td>
<td>(2.98%)</td>
<td></td>
</tr>
<tr>
<td>Child Care Activities</td>
<td>2 (0.26%)</td>
<td>1 (0.26%)</td>
</tr>
<tr>
<td>(e.g., “looking after kids”, “clean baby”)</td>
<td>(0.25%)</td>
<td></td>
</tr>
<tr>
<td>Business Related Activities</td>
<td>8 (1.02%)</td>
<td>5 (1.32%)</td>
</tr>
<tr>
<td>(e.g., “busines person”, “office work”, “taxi owner”)</td>
<td>(0.74%)</td>
<td></td>
</tr>
<tr>
<td>Place or Field of Work</td>
<td>27 (3.45%)</td>
<td>18 (4.75%)</td>
</tr>
<tr>
<td>(e.g., “automotive industry”, “municipality”, “firm”)</td>
<td>(2.23%)</td>
<td></td>
</tr>
<tr>
<td>Manual Labour Activities</td>
<td>31 (3.96%)</td>
<td>20 (5.28%)</td>
</tr>
<tr>
<td>(e.g., “work with tools”, “make cars”, “bush work”)</td>
<td>(2.73%)</td>
<td></td>
</tr>
<tr>
<td>Uncodeable</td>
<td>18 (2.30%)</td>
<td>4 (1.06%)</td>
</tr>
<tr>
<td>(e.g., “provides money”, “study education”, “food”)</td>
<td>(3.47%)</td>
<td></td>
</tr>
</tbody>
</table>

Realistic type jobs account for approximately three times as many jobs compared with the second most frequently listed Social typology, which accounts for a further
fifth of the jobs listed that men can do. The remaining fifth of responses are made up of mostly Investigative type jobs. Artistic type jobs account for less than one percent of the total responses, and no Conventional type jobs were listed. A greater percentage of girls than boys regarded Realistic type jobs as being jobs that men can do, while a greater percentage of boys than girls listed Social type jobs. More girls than boys listed housework activities as being work that men can do. Apart from the small differences in these two categories, boys’ and girls’ responses followed the same trend as that of the total sample. A number of small differences are noted when looking at the ‘other responses’ categories where boys listed more responses in the ‘place or field of work’ and ‘manual labour activities’ categories compared with girls who named more jobs in the ‘housework activities’ category than boys.

Table 24 shows the breakdown of jobs that men can do according to status level. The data in this table reflects the status levels of the responses which were coded according to Holland’s occupational typologies and exclude the responses which were coded according to the ‘other responses’ categories and which did not receive status level codes. Only one tenth of the total responses in this section did not receive status level codes and as such the data in Table 24 is based on the majority of the total responses provided by participants. Semi-skilled status level jobs are shown to account for the largest percentage of responses, comprising two fifths of the total responses to this question.
Table 24

*Frequency Counts (and Percentages) of Jobs Men Can Do according to Status Level: Total Sample and Gender*

<table>
<thead>
<tr>
<th>Holland’s Status Level</th>
<th>Total Sample (n=678)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males (n=327)</td>
<td>Females (n=351)</td>
</tr>
<tr>
<td>High Level (e.g., “teacher”, “doctor”, “manager”)</td>
<td>147 (21.68%)</td>
<td>85 (25.99%)</td>
</tr>
<tr>
<td>Middle Level (e.g., “security guard”, “police officer”, “detective”)</td>
<td>96 (14.16%)</td>
<td>52 (15.90%)</td>
</tr>
<tr>
<td>Skilled (e.g., “mechanic”, “electrician”, “taxi driver”)</td>
<td>113 (16.67%)</td>
<td>55 (16.82%)</td>
</tr>
<tr>
<td>Semi-Skilled (e.g., “construction worker”, “fisherman”, “driver”)</td>
<td>276 (40.71%)</td>
<td>119 (36.39%)</td>
</tr>
<tr>
<td>Unskilled (e.g., “road construction worker”, “farm worker”, “forestry worker”)</td>
<td>46 (6.78%)</td>
<td>16 (4.89%)</td>
</tr>
</tbody>
</table>

High status level jobs were the second most frequently named and account for a further one fifth of responses. Skilled and middle level jobs were the third and fourth most frequently listed jobs, and together they account for almost one third of responses given by boys and girls. There is some difference in frequency between the percentage of boys and girls who listed high status jobs, with a greater frequency of boys than girls listing jobs of the high status level category and more girls than boys listing semi-skilled and unskilled status level jobs.

Table 25 shows the breakdown of the most frequently named jobs that men can do. The responses total 270 and account for one third of the total responses to this question. The total number of responses shown in this table does not reflect the total number of responses to this question, but rather lists all the responses which
account for at least 5% of the responses to the question. The results for the most frequently named jobs that men can do comprise jobs from both the Realistic and Social occupational typologies.

Table 25

*Most Frequently Named Jobs that Men Can Do according to Holland’s Typology and Status Level: Total Sample*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Worker</td>
<td>Realistic</td>
<td>Semi-Skilled</td>
<td>124 (15.86%)</td>
</tr>
<tr>
<td>Gardener</td>
<td>Realistic</td>
<td>Semi-Skilled</td>
<td>97 (12.40%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>49 (6.27%)</td>
</tr>
</tbody>
</table>

The Realistic type job of ‘Construction worker’ was listed most frequently amongst the jobs that men can do, and accounts for between one tenth and one fifth of the responses in this section. The semi-skilled status level job of ‘Gardener’, which is also a Realistic type job, was the second most frequent response and comprises a further tenth of the responses. Both of these jobs fall in the Realistic typology and semi-skilled status level category. The other most frequently named job was ‘police officer’, a Social type job from the middle status level category.

Table 26 reports the jobs listed most frequently by boys as being jobs that men can do. These responses account for over two fifths of boys’ responses to this question and include all responses which account for at least 5% of the total responses listed by boys.
Table 26

*Most Frequently Named Jobs that Men Can Do according to Holland’s Typology and Status Level: Boys*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=379)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Worker</td>
<td>Realistic</td>
<td>Semi-Skilled</td>
<td>60 (15.83%)</td>
</tr>
<tr>
<td>Gardener</td>
<td>Realistic</td>
<td>Semi-Skilled</td>
<td>31 (8.18%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>26 (6.86%)</td>
</tr>
<tr>
<td>Doctor</td>
<td>Investigative</td>
<td>High</td>
<td>23 (6.07%)</td>
</tr>
</tbody>
</table>

‘Construction worker’ was the job listed most frequently by boys, followed by ‘gardener’, ‘police officer’ and ‘doctor’. From these results it can be seen that Realistic, Social and Investigative type jobs comprise the jobs most frequently named by boys as jobs that men can do, which is in part consistent with the occupational aspiration data discussed earlier (see Tables 6 and 8). Boys’ favourite occupational aspirations were found to be in the Investigative and Social typologies, although Realistic type jobs accounted for close to one tenth of boys’ favourite occupational aspirations. The data in Table 26 shows that of the jobs named most frequently by the boys in the present study, only one could be classified in the Investigative typology despite the popularity of this typology in terms of occupational aspirations. This is noteworthy when one considers that Investigative type occupations were boys’ most frequently named favourite occupational aspiration type (See Table 11).
In terms of status levels, it can be seen from the data that three of the five occupational status level categories are represented amongst the occupations most frequently named by boys as jobs that men can do. It can be seen that none of the jobs which boys listed most frequently as jobs that men can do fall in the unskilled status level category. These findings are consistent with earlier findings relating to the status level of boys’ occupational aspirations where it was found that boys tended to aspire more to occupations in the high and middle status level categories as well as to a number of occupations in the skilled and semi-skilled status level. No boys aspired to occupations in the unskilled status level category (See Tables 7 and 9).

Table 27 shows the jobs most frequently listed by girls as being jobs that men can do. These responses account for over two fifths of the responses given by girls to this question. Girl’s most frequent responses are similar to those of boys, but differ in order of frequency. Girls listed ‘gardener’ most often followed by ‘construction worker’ and ‘police officer’. The total number of responses shown in this table does not reflect the total number of responses to this question, but rather the responses which comprise the jobs listed most frequently by participants. Responses were included if they accounted for at least 5% of participants’ responses to the question. These responses total 153 and account for between one third and one fifth of girls’ responses to this question. The results in this table suggest that girls view Realistic and Social type jobs most frequently as being jobs that men can do. Once again, this is consistent with earlier occupational aspiration findings, although no Investigative type jobs are listed amongst the jobs which girls listed
most frequently as being jobs that men can do, despite boys holding strong occupational aspirations towards Investigative type jobs (see Tables 6 and 11).

Table 27

*Most Frequently Named Jobs that Men Can Do according to Holland’s Typology and Status Level: Girls*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=403)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardener</td>
<td>Realistic</td>
<td>Semi-Skilled</td>
<td>66 (16.38%)</td>
</tr>
<tr>
<td>Construction Worker</td>
<td>Realistic</td>
<td>Semi-Skilled</td>
<td>64 (15.88%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>23 (5.71%)</td>
</tr>
</tbody>
</table>

This section has described the results relating to jobs which the rural Xhosa-speaking senior primary school children in the present sample regarded as jobs that men can do. The findings suggest that these children consider Realistic type jobs most frequently as being jobs that men can do. The frequency with which Realistic type jobs were listed as a suitable job for men to do appears to be three times that of Social type jobs, which also appear amongst the most frequently named jobs that participants thought men could do. Despite Investigative type jobs featuring in the same children’s occupational aspirations (see Tables 6 and 11), there is little indication that these children view Investigative type jobs as being jobs that men can do, as ‘doctor’ was the only Investigative type job which featured amongst the most frequently named jobs by boys and girls. The following section describes the results relating to the jobs which participants thought men cannot do.
Jobs that men cannot do

The focus in this section is on the jobs which were listed by the participants of the present research as being jobs that men cannot do. Table 28 shows the breakdown of the jobs that participants indicated as jobs that men cannot do. Participants listed a total of 641 responses, each listing between one and seven occupations, which equates to a mean of 2.19 responses per participant. Only two fifths of the total responses in this section were able to be placed into one of Holland’s six occupational typologies with the remaining responses being coded according to the ‘other responses’ categories. The majority of these ‘other responses’ referred to housework activities which account for over half the total responses to this question, as can be seen in Table 28.

Of those occupations codeable according to Holland’s occupational typology, Social type jobs were listed second most frequently and account for one quarter of the total responses and a further one fifth were for the Realistic typology. The Investigative, Artistic and Conventional typologies each account for less than one percent of the responses and no Conventional type jobs were listed as being jobs that men cannot do. Boys’ and girls’ responses showed little deviation from the trends observed for the total sample. Some small differences were noted in the ‘other responses’ categories where girls listed greater percentages of housework and childcare activities as jobs that men cannot do compared with boys. These results suggest that the rural Xhosa-speaking children in the present sample do not believe that men can do housework activities (such as ‘cooking’, ‘cleaning the house’, and ‘washing dishes’), and they also suggest that many Social type jobs (such as ‘domestic worker’, ‘nurse’, and ‘cleaner’) cannot be done by men.
Table 28

*Jobs Men Cannot Do according to Holland’s Typology: Total Sample and Gender*

<table>
<thead>
<tr>
<th>Code</th>
<th>Total Sample (n=641)</th>
<th>Gender</th>
<th>Males (n=284)</th>
<th>Females (n=357)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Males (n=284)</td>
<td>Females (n=357)</td>
</tr>
<tr>
<td>Holland Typology</td>
<td></td>
<td></td>
<td>Males (n=284)</td>
<td>Females (n=357)</td>
</tr>
<tr>
<td>Realistic (e.g., “cook”, “sewer”, “dishwasher”)</td>
<td>67 (10.45%)</td>
<td>38 (13.38%)</td>
<td>29 (8.12%)</td>
<td></td>
</tr>
<tr>
<td>Investigative (e.g., “doctor”, “lawyer”)</td>
<td>5 (0.78%)</td>
<td>1 (0.35%)</td>
<td>4 (1.12%)</td>
<td></td>
</tr>
<tr>
<td>Artistic (e.g., “designer”, “dancer”)</td>
<td>3 (0.47%)</td>
<td>2 (0.70%)</td>
<td>1 (0.28%)</td>
<td></td>
</tr>
<tr>
<td>Social (e.g., “cleaner”, “domestic worker”, “nurse”)</td>
<td>164 (25.59%)</td>
<td>78 (27.46%)</td>
<td>86 (24.09%)</td>
<td></td>
</tr>
<tr>
<td>Enterprising (e.g., “bank manager”, “street vendor”, “model”)</td>
<td>5 (0.78%)</td>
<td>2 (0.70%)</td>
<td>3 (0.84%)</td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
<td>0 (0.00%)</td>
<td></td>
</tr>
<tr>
<td>Other Responses</td>
<td></td>
<td></td>
<td>Males (n=284)</td>
<td>Females (n=357)</td>
</tr>
<tr>
<td>Housework Activities (e.g., “cleaning”, “cleaning floors”, “cleaning house”)</td>
<td>353 (55.07%)</td>
<td>148 (52.11%)</td>
<td>205 (57.42%)</td>
<td></td>
</tr>
<tr>
<td>Child Care Activities (e.g., “take care of babies”, “guide babies”)</td>
<td>27 (4.21%)</td>
<td>9 (3.17%)</td>
<td>18 (5.04%)</td>
<td></td>
</tr>
<tr>
<td>Business Related Activities (e.g., “selling”, “selling clothes”, “seller”)</td>
<td>3 (0.47%)</td>
<td>2 (0.70%)</td>
<td>1 (0.28%)</td>
<td></td>
</tr>
<tr>
<td>Place or Field of Work (e.g., “shop”, “communication”, “bakery”)</td>
<td>5 (0.78%)</td>
<td>1 (0.35%)</td>
<td>4 (1.12%)</td>
<td></td>
</tr>
<tr>
<td>Manual Labour Activities (e.g., “making cars”, “making books”, “heavy lifting”)</td>
<td>3 (0.47%)</td>
<td>1 (0.35%)</td>
<td>2 (0.56%)</td>
<td></td>
</tr>
<tr>
<td>Uncodeable (e.g., “buying clothes”, “sea”, “using alcohol”)</td>
<td>6 (0.94%)</td>
<td>2 (0.70%)</td>
<td>4 (1.12%)</td>
<td></td>
</tr>
</tbody>
</table>
When compared with the occupational aspirations expressed by the participants earlier in the present study (see Tables 6 and 9), these results indicate a discrepancy between occupational aspirations and the occupational gender stereotypes held by children regarding what jobs men can do. Earlier results indicated that Social type jobs were amongst the two most frequently named occupational typologies for the children’s occupational aspirations.

Table 29 shows the breakdown of the status levels of jobs that participants indicated men cannot do. The data in this table is based on two fifths of the total responses in this section which were coded according to Holland’s occupational typology and status level classification. The remaining responses in this section were coded within the ‘other responses’ categories and as such did not receive status level codes. The large majority of these ‘other responses’ comprised housework activities which, despite not being assigned a formal status level code, are indicative of unskilled activities.

Unskilled status level jobs comprised almost two fifths of the responses which received status level codes. High status level jobs account for a further one third of the responses. The results suggest that boys indicated unskilled jobs more frequently than girls, who mentioned high status jobs more frequently than boys as being jobs that men cannot do. When taking the data in Table 29 into account, along with the large number of housework activities (n = 353) which were not given a status level, it becomes increasingly clear that the rural Xhosa-speaking South African children in the present research do not view unskilled jobs as work that men can do. This corresponds with the findings in Table 24 which showed that
participants indicated only a small percentage of unskilled jobs as being jobs that men can do.

Table 29

*Frequency Counts (and Percentages) of Jobs Men Cannot Do according to Status Level: Total Sample and Gender*

<table>
<thead>
<tr>
<th>Holland’s Status Level</th>
<th>Total Sample (n=243)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males (n=120)</td>
<td>Females (n=123)</td>
</tr>
<tr>
<td>High Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g., “nurse”, “social worker”, “bank manager”)</td>
<td>81 (33.33%)</td>
<td>28 (23.33%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>53 (43.09%)</td>
</tr>
<tr>
<td>Middle Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g., “prison officer”, “police officer”, “sports coach”)</td>
<td>10 (4.12%)</td>
<td>3 (2.50%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 (5.69%)</td>
</tr>
<tr>
<td>Skilled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g., “cook”, “mechanic”, “hairdresser”)</td>
<td>25 (10.29%)</td>
<td>14 (11.67%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11 (8.94%)</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g., “construction worker”, “sewer”, “welder”)</td>
<td>30 (12.35%)</td>
<td>16 (13.33%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14 (11.38%)</td>
</tr>
<tr>
<td>Unskilled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g., “domestic worker”, “cleaner”, “babysitter”)</td>
<td>97 (39.92%)</td>
<td>59 (49.17%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38 (30.89%)</td>
</tr>
</tbody>
</table>

The findings which have been described so far in this section may be further understood when considering the most frequently named jobs which are described in Table 30. The total number of responses shown in this table does not reflect the total number of responses to this question, but rather the responses which comprise the jobs listed most frequently by participants. These responses each account for at least 5% of the total responses and together total 356 and account for approximately half of the responses in this section. Informal housework activities such as ‘washing dishes’ and ‘cooking’ were listed most frequently as jobs that women can do. Together these responses account for over one fifth of the total
responses in this section. The unskilled job of ‘domestic worker’ was the most frequently listed formal job.

Table 30

*Most Frequently Named Jobs that Men Cannot Do according to Holland’s Typology and Status Level: Total Sample*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=641)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Worker</td>
<td>Social</td>
<td>Unskilled</td>
<td>53 (8.27%)</td>
</tr>
<tr>
<td>Nurse</td>
<td>Social</td>
<td>High</td>
<td>38 (5.93%)</td>
</tr>
<tr>
<td><strong>Other Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing Dishes</td>
<td>Housework Activities</td>
<td>74 (11.54%)</td>
<td></td>
</tr>
<tr>
<td>Cooking</td>
<td>Housework Activities</td>
<td>72 (11.23%)</td>
<td></td>
</tr>
<tr>
<td>Washing Clothes</td>
<td>Housework Activities</td>
<td>42 (6.55%)</td>
<td></td>
</tr>
<tr>
<td>Cleaning House</td>
<td>Housework Activities</td>
<td>41 (6.40%)</td>
<td></td>
</tr>
<tr>
<td>Cleaning</td>
<td>Housework Activities</td>
<td>36 (5.62%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 31 shows the jobs which boys listed most often as being jobs men cannot do. The occupations listed most frequently by boys are the same as those listed by the total sample although they are listed in a different order. Boys listed the informal housework activity ‘washing dishes’ most frequently followed by the formal Social
type job of ‘domestic worker’. Boys' other responses included more informal housework activities such as ‘cooking’, ‘cleaning house’, and ‘washing clothes’.

Table 31

*Most Frequently Named Jobs that Men Cannot Do according to Holland's Typology and Status Level: Boys*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=284)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Worker</td>
<td>Social</td>
<td>Unskilled</td>
<td>30 (10.56%)</td>
</tr>
<tr>
<td></td>
<td>Other Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washing Dishes</td>
<td>Housework Activities</td>
<td>33 (11.62%)</td>
<td></td>
</tr>
<tr>
<td>Cooking</td>
<td>Housework Activities</td>
<td>29 (10.21%)</td>
<td></td>
</tr>
<tr>
<td>Cleaning House</td>
<td>Housework Activities</td>
<td>19 (6.69%)</td>
<td></td>
</tr>
<tr>
<td>Washing Clothes</td>
<td>Housework Activities</td>
<td>18 (6.34%)</td>
<td></td>
</tr>
</tbody>
</table>

It is notable that all the jobs listed by boys as being jobs men cannot do involve housework activities although one, namely ‘domestic worker’, refers to a formal job rather than informal housework activities. It can be seen in Table 32, that girls also listed both formal and informal jobs amongst their most frequent responses to this question. The housework activity of ‘cooking’ was listed most frequently by girls’ as a job that men cannot do and accounts for over one tenth of girls’ responses. Another housework activity, ‘Washing dishes’, accounts for a further one tenth of jobs girls listed most frequently as jobs that men cannot do. A number of other housework activities such as ‘washing clothes’, ‘cleaning’, ‘cleaning house’ and ‘cleaning floors’
were also listed frequently by girls as being jobs that men cannot do. Together with these informal activities, girls also listed ‘nurse’ a Social type job from the high status level category and ‘domestic worker’ an unskilled status level job from the Social typology.

Table 32

**Most Frequently Named Jobs that Men Cannot Do according to Holland’s Typology and Status Level: Girls**

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=357)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse</td>
<td>Social</td>
<td>High</td>
<td>24 (6.72%)</td>
</tr>
<tr>
<td>Domestic Worker</td>
<td>Social</td>
<td>Unskilled</td>
<td>23 (6.44%)</td>
</tr>
<tr>
<td>Other Activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooking</td>
<td>Housework Activities</td>
<td>43 (12.04%)</td>
<td></td>
</tr>
<tr>
<td>Washing Dishes</td>
<td>Housework Activities</td>
<td>41 (11.48%)</td>
<td></td>
</tr>
<tr>
<td>Washing Clothes</td>
<td>Housework Activities</td>
<td>24 (6.72%)</td>
<td></td>
</tr>
<tr>
<td>Cleaning</td>
<td>Housework Activities</td>
<td>23 (6.44%)</td>
<td></td>
</tr>
<tr>
<td>Cleaning House</td>
<td>Housework Activities</td>
<td>22 (6.16%)</td>
<td></td>
</tr>
<tr>
<td>Cleaning Floors</td>
<td>Housework Activities</td>
<td>18 (5.04%)</td>
<td></td>
</tr>
</tbody>
</table>

The results in this section indicate that the rural Xhosa-speaking South African boys and girls in the present sample do not view housework activities and domestic
work as jobs that men can do. The following section describes the children’s perceptions about what jobs are suitable for both men and women to do.

**Jobs both men and women can do**

The previous four sections of this chapter have described the jobs that participants regarded as jobs that either men or women could or could not do. This section describes the data gathered when children were asked to list jobs which they thought both men and women can do. Initial data analysis revealed that a number of participants answered this question in a manner contrary to what was intended by the researcher. While 70.89% of participants answered this question in a manner consistent with what was expected (that is, they listed jobs which either men or women could do), the remaining 29.11% answered in an inconsistent manner.

Two kinds of inconsistent responses were noted by the researcher, namely *contradictory responses* which contradicted responses given by the participants to earlier questions in the present research. In this instance, a participant has indicated that a certain job can be done by both men and women having already listed the same job as a job that cannot be done by men or women. These contradictory responses were given by 23.97% of the participants. The other kind of inconsistent response involves a “*men can..., women can...*” answering style in which participants answered as follows: “men can wash cars, women can wash dishes”. The problem with this kind of response is that it cannot be taken as a reflection of the jobs that participants believe both men and women can do, but rather suggests jobs that either men or women can do. This kind of response seems to repeat the responses to earlier questions relating to the jobs that either men or women can do and
accounts for a further 4.11% of participants in this section. There were three other participants who provided answers which were inconsistent with what was expected for the question for reasons other than the two which have been described here.

Because of these inconsistent answering patterns, the researcher has chosen to analyse only the responses which were deemed consistent during initial analysis. As such, the totals reflected in this section do not reflect the total responses given by all participants as all inconsistent responses were excluded from this analysis. A total of 207 participants responded to this question in a manner which was deemed to be consistent with what was expected. These participants provided a total of 497 consistent responses. Participants each named between one and nine jobs which equates to a mean of 2.4 responses per participant who answered consistently. Approximately one quarter of the responses in this section could not be classified according to Holland’s occupational typology and these responses were thus coded according to the ‘other responses’ categories with the majority of the ‘other responses’ falling into the housework activities category.

Table 33 shows a breakdown of these responses according to Holland’s typologies. Here it can be seen that Social type jobs were listed most frequently and account for one third of the responses on which the data in this section are based. Realistic type jobs were listed second most frequently and account for approximately one fifth of the responses. Investigative type jobs made up over one tenth of the responses, with housework activities the fourth most frequently listed occupations which the participants thought both men and women could do. These findings support earlier findings in the present study regarding Social type jobs being regarded as jobs that both men (See Table 22) and women (See Table 13) can do.
Table 33

Jobs Both Men and Women Can Do according to Holland’s Typology, and Gender

<table>
<thead>
<tr>
<th>Code</th>
<th>Total Sample (n=497)</th>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males</td>
<td>Females</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(n=233)</td>
<td>(n=264)</td>
<td></td>
</tr>
<tr>
<td>Holland Typology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realistic (e.g., “gardener”, “furniture maker”, “mechanic”)</td>
<td>96</td>
<td>50</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(19.32%)</td>
<td>(21.46%)</td>
<td>(17.42%)</td>
</tr>
<tr>
<td>Investigative (e.g., “lawyer”, “doctor”, “magistrate”)</td>
<td>77</td>
<td>32</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(15.49%)</td>
<td>(13.73%)</td>
<td>(17.05%)</td>
</tr>
<tr>
<td>Artistic (e.g., “fashion designer”, “singer”, “presenter”)</td>
<td>19</td>
<td>11</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.82%)</td>
<td>(4.72%)</td>
<td>(3.03%)</td>
</tr>
<tr>
<td>Social (e.g., “teacher”, “sportsperson”, “security guard”)</td>
<td>171</td>
<td>82</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(34.41%)</td>
<td>(35.19%)</td>
<td>(33.71%)</td>
</tr>
<tr>
<td>Enterprising (e.g., “model”, “bank manager”, “president”)</td>
<td>11</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.21%)</td>
<td>(2.58%)</td>
<td>(1.89%)</td>
</tr>
<tr>
<td>Conventional (e.g., “secretary”, “charted accountant”, “accountant”)</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.80%)</td>
<td>(0.00%)</td>
<td>(1.52%)</td>
</tr>
<tr>
<td>Other Responses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housework Activities (e.g., “cleaning house”, “making coffee”, “washing”)</td>
<td>67</td>
<td>23</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(13.48%)</td>
<td>(9.87%)</td>
<td>(16.67%)</td>
</tr>
<tr>
<td>Child Care Activities (e.g., “looking after kids”)</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.01%)</td>
<td>(0.86%)</td>
<td>(1.14%)</td>
</tr>
<tr>
<td>Business Related Activities (e.g., “business person”, “seller”, “office work”)</td>
<td>14</td>
<td>8</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.82%)</td>
<td>(3.43%)</td>
<td>(2.27%)</td>
</tr>
<tr>
<td>Place or Field of Work (e.g., “tavern”, “grocery shop”, “school”)</td>
<td>18</td>
<td>13</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.62%)</td>
<td>(5.58%)</td>
<td>(1.89%)</td>
</tr>
<tr>
<td>Manual Labour Activities (e.g., “heavy lifting”, “washing cars”, “lifting cars”)</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.01%)</td>
<td>(1.29%)</td>
<td>(0.76%)</td>
</tr>
<tr>
<td>Uncodeable (e.g., “having a job”, “in love”, “eating”)</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.01%)</td>
<td>(1.29%)</td>
<td>(2.65%)</td>
</tr>
</tbody>
</table>
What is most noticeable in Table 33 is the frequency of Realistic type jobs which were listed by participants as being suitable for both men and women to do. This is notable because earlier findings in the present research suggested that children did not think that Realistic type jobs could be done by women (See Table 18).

Table 34 shows the breakdown of the status levels of the jobs in this section which were coded according to Holland’s occupational typology and status level categories. The results in this table reflect the status level data for approximately four fifths of the consistent responses on which the data in this section is based and does not include the 119 responses which were coded according to the ‘other responses’ categories as these responses were not assigned a status level. The data in this table show that over half of the responses to this question indicate that high Status level jobs are jobs that both men and women can do. Semi-skilled status level jobs were listed second most frequently and account for approximately one fifth of the responses. Jobs from the middle status level account for over one fifth of the jobs which participants indicated as jobs that both men and women can do. A small number of participants listed jobs from the skilled and unskilled status level categories.

The results in this section demonstrate that the rural, Xhosa-speaking children in the present research regard Social type jobs as jobs that both men and women can do. They also listed a number of Realistic and Investigative type jobs as jobs that both men and women can do. In terms of status level, it appears that the participants in the present research view more high status level jobs amongst the jobs that they believe both men and women can do. They also listed a number of jobs from the middle and semi-skilled status level categories.
Table 34

*Frequency Counts (and Percentages) of Jobs that Both Men and Women Can Do by Status Level and Gender*

<table>
<thead>
<tr>
<th>Holland’s Status Level</th>
<th>Total Sample (n=378)</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Males (n=181)</td>
</tr>
<tr>
<td>High Level</td>
<td>210 (55.56%)</td>
<td>93 (51.38%)</td>
</tr>
<tr>
<td>(e.g., “fashion designer”, “sportsperson”, “teacher”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Level</td>
<td>59 (15.61%)</td>
<td>32 (17.68%)</td>
</tr>
<tr>
<td>(e.g., “security guard”, “police officer”, “sports coach”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled</td>
<td>22 (5.82%)</td>
<td>10 (5.52%)</td>
</tr>
<tr>
<td>(e.g., “cook”, “taxi driver”, “mechanic”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>66 (17.46%)</td>
<td>37 (20.44%)</td>
</tr>
<tr>
<td>(e.g., “gardener”, “bus driver”, “driver”)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td>21 (5.56%)</td>
<td>9 (4.97%)</td>
</tr>
<tr>
<td>(e.g., “farm worker”, “cleaner”, “clothes washer”)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 35 provides a breakdown of the most frequently named jobs that both men and women can do. These responses total 189 and account for almost two fifths of the responses in this section. Responses were included in this table if they accounted for at least 5% of the total responses to the question.

The most frequently named job that participants believed both men and women can do is that of ‘teacher’, a Social type job in the high status level, which accounts for between one tenth and one fifth of the total responses. The remaining three most frequently named jobs cover a range of occupational typologies and status levels with ‘police officer’, a middle status level Social type job being named second most frequently as a job that both men and women can do, followed by ‘doctor’, a high status level Investigative type job and ‘gardener’, an unskilled status level Social type job. These results suggest that occupations from a wide range of
occupational typologies and status levels were named by participants in response to this question.

Table 35

*Most Frequently Named Jobs that Both Men and Women Can Do according to Holland's Typology and Status Level: Total Sample*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=497)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>75 (15.09%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>46 (9.26%)</td>
</tr>
<tr>
<td>Doctor</td>
<td>Investigative</td>
<td>High</td>
<td>41 (8.25%)</td>
</tr>
<tr>
<td>Gardener</td>
<td>Realistic</td>
<td>Semi-Skilled</td>
<td>27 (5.43%)</td>
</tr>
</tbody>
</table>

Table 36 shows the breakdown of the most frequently named jobs that boys think both men and women can do. The jobs listed most frequently by boys follows the same trend as the total sample and it can be seen that ‘teacher’ was the most frequently named job that boys listed as being a job that both men and women can do and accounts for over one tenth of boys’ responses. ‘Police officer’ was listed second most frequently by boys as being a job that both men and women can do and is followed by ‘doctor’ and ‘gardener’.
Table 36

*Most Frequently Named Jobs that Both Men and Women Can Do according to Holland’s Typology and Status Level: Boys*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=233)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>33 (14.16%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>27 (11.59%)</td>
</tr>
<tr>
<td>Doctor</td>
<td>Investigative</td>
<td>High</td>
<td>20 (8.58%)</td>
</tr>
<tr>
<td>Gardener</td>
<td>Realistic</td>
<td>Semi-Skilled</td>
<td>14 (6.01%)</td>
</tr>
</tbody>
</table>

Table 37 shows the breakdown of the jobs listed most frequently by girls as being jobs that both men and women can do.

Table 37

*Most Frequently Named Jobs that Both Men and Women Can Do according to Holland’s Typology and Status Level: Girls*

<table>
<thead>
<tr>
<th>Job</th>
<th>Typology</th>
<th>Status</th>
<th>Total (N=264)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>Social</td>
<td>High</td>
<td>42 (15.91%)</td>
</tr>
<tr>
<td>Doctor</td>
<td>Investigative</td>
<td>High</td>
<td>21 (7.95%)</td>
</tr>
<tr>
<td>Police Officer</td>
<td>Social</td>
<td>Middle</td>
<td>19 (7.20%)</td>
</tr>
<tr>
<td>Lawyer</td>
<td>Investigative</td>
<td>High</td>
<td>15 (5.68%)</td>
</tr>
</tbody>
</table>
Again, these responses are consistent with the trend found within the total sample, with similar jobs being listed most frequently by both boys and girls. The only changes which can be seen are that the job of ‘lawyer’ also appears amongst the jobs which girls listed most frequently as being suitable for both men and women to do and that the semi-skilled Realistic type job of ‘gardener’ was not amongst girls’ most frequently named jobs.

This section has described the jobs that participants regard as being jobs that either men or women can or cannot do. It has also described data regarding the jobs that participants regard as being jobs that both men and women can do. It is interesting to note that, compared with their responses regarding their own occupational aspirations in the previous section, the responses in this section included a greater frequency of informal jobs and activities together with formal occupations. This suggests that when asked about jobs that men and women can do in general, participants interpreted the question more broadly than when they were asked to name their own personal occupational aspirations. The following section explores the data relating to the gender perceptions of children regarding a number of specific occupations.

**Gender and Occupation**

The final section of this results chapter reports on the participants’ responses to Form 3 which invited them to indicate whether specific jobs could best be done by males or females or equally well done by males and females. The occupations provided for this question are representative of all six of Holland’s occupational typologies as well as a range of status level categories and generally well known to
the participants. The results in this section are organised according to Holland’s typologies and the data are displayed graphically in the form of pie charts which illustrate the responses for boys on the left and girls on the right. In order to set these results within the context of the South African labour market, findings from the recent Labour Force Survey (Statistics South Africa, 2006) have been included in the description in order to provide insight into employment trends within these twelve occupations in South Africa.

**Gender and Occupation: Realistic type occupations**

The occupation of “electrician” is classified within the South African Dictionary of Occupations (Taljaard & Van Mollendorf, 1987) as a Realistic type job. Figure 2 shows the children’s responses relating to the job of ‘electrician’.

![Figure 2. Gender perceptions for the occupation: 'electrician'.](image)

The majority of both boys and girls indicated that the work of an electrician can best be done by men, with very small percentages of the children indicating that
women or both men and women could do the job of electrician equally well. This data is consistent with the most recent employment trends which show that the majority (97.08%) of electricians in South Africa are men (Statistics South Africa, 2006). Earlier findings in the present research indicated that Realistic type occupations were listed by large percentages of the participants as occupations that men can do, and occupations that women cannot do (see Tables 16 and 21).

**Gender and Occupation: Investigative type occupations**

Three of the occupations in this section are classified as Investigative type occupations in South Africa namely, ‘medical scientist’, ‘lawyer’, and ‘dentist’. All three of the Investigative occupations in this section fall in the high status level category. Figure 3 shows the breakdown of boys’ and girls’ gender perceptions of the job of ‘lawyer’.

**Figure 3. Gender perceptions for the occupation: ‘lawyer’.*
The South African Labour Force Survey (Statistics South Africa, 2006) indicates that 69.72% of Lawyers in South Africa are men. Despite the majority of lawyers in the country being males, the results in Figure 3 for both boys and girls indicate that many of the children in the present sample view this occupation as one that men and women can do equally well. A very small number of boys indicated that they thought women could do this job best while over one third of boys believe that men can fulfil the job of ‘lawyer’ best. Girls also showed some openness to both men and women doing the job equally well and only a small number of girls believe that lawyer is a job that women can do best. One fifth of girls indicated that the occupation of a lawyer is best done by men.

It can be seen in Figure 4, the majority of boys and girls believe that both men and women can do the Investigative type job of ‘medical scientist’ equally well. South African Labour statistics indicate that three quarters of “medical researchers” in South Africa are female (Statistics South Africa, 2006).

![Figure 4. Gender perceptions for the occupation: 'medical scientist'.](image-url)
One quarter of boys chose to indicate that this job was done equally well by either males or females, less than one fifth of girls indicated specific gender suitability for this job. More boys than girls indicated that the job of ‘medical scientist’ could best be done by women.

The Investigative type occupation of ‘dentist’ was also viewed by relatively large numbers of boys and girls as being done equally well by men and women, as can be seen in Figure 5, despite labour statistics indicating that this occupation is presently male dominated with over two thirds of dentists in South Africa being male (Statistics South Africa, 2006).

![Figure 5. Gender perceptions for the occupation: 'dentist'.](image)

This Investigative type job was indicated as being best done by men by close to one third of boys and over a quarter of girls. Only a small number of boys and girls indicated that women could do this job best. Once more, a greater number of boys than girls indicated that the job of ‘dentist’ could best be done by females.

The majority of participants in the sample have indicated that all three Investigative, high status level occupations can be done equally well by both males
and females. It has previously been found that Investigative type occupations make up a large number of the occupational aspirations of the participants in the present sample (see Tables 4 and 6). The data from Form 2 illustrates, however, that Investigative type occupations were not frequently indicated as occupations that either women or men could do (see Tables 11 and 21).

**Gender and Occupation: Artistic type occupations**

The occupations of ‘jeweller’ and ‘reporter’ are both classified as Artistic type occupations in the South African Dictionary of Occupations. These two occupations each represent a different status level category with ‘jeweller’ being classified as a skilled status level job and ‘reporter’ as a high status level job. Two fifths of boys indicated that ‘jeweller’ is a job best fulfilled by men, and one third of boys believe that this job can be done equally well by both men and women (see Figure 6). National labour statistics indicate that in South Africa, 75.76% of jewellers are male and 24.24% are female.

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th></th>
<th>Girls</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Both</td>
<td>Males</td>
</tr>
<tr>
<td></td>
<td>23.19%</td>
<td>34.78%</td>
<td>42.03%</td>
<td>16.88%</td>
</tr>
</tbody>
</table>

*Figure 6. Gender perceptions for the occupation: 'jeweller'.
Jeweller was considered to be an occupation which women can do best by over one fifth of boys. The results for girls are similar and also suggest that jeweller is an occupation which girls think can be done equally well by both men and women, although more girls and boys indicated that jeweller was a job which men can do best.

Figure 7 illustrates that ‘reporter’ is clearly seen by the majority of boys and girls as being done equally well by both men and women. Of the remaining responses, it appears that more children indicated that women could fulfil the job of reporter best compared with men, who were selected by only a small percentage of boys and girls. No labour statistics were available for this specific occupation.

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>78.99%</td>
<td>81.82%</td>
</tr>
<tr>
<td>12.32%</td>
<td>12.99%</td>
</tr>
<tr>
<td>8.70%</td>
<td>5.19%</td>
</tr>
</tbody>
</table>

*Figure 7. Gender perceptions for the occupation: ‘reporter’.*

**Gender and Occupation: Social type occupations**

Four of the occupations in this section are classified as Social type occupations in South Africa, namely ‘sports coach’, ‘teacher’, ‘detective’, and ‘prison officer’. These four Social type occupations represent two status level categories, namely high status level (‘teacher’) and middle status level (‘sports coach’, ‘detective’, and ‘prison officer’).
officer’). It can be seen in Figure 8 that over half of both boys and girls appear to view ‘sports coach’ as an occupation which males can do best, with only small percentages of boys and girls indicating that women are best suited to being a sports coach. Two fifths of boys and one third of girls indicated that the occupation of sports coach could best be done by both men and women. No employment statistics were available for the job of ‘sports coach’.

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>Females</td>
</tr>
<tr>
<td>2.17%</td>
<td>5.19%</td>
</tr>
<tr>
<td>57.25%</td>
<td>60.39%</td>
</tr>
</tbody>
</table>

Figure 8. Gender perceptions for the occupation: 'sports coach'.

Close to 90% of boys and girls indicated that men and women can both fulfil the job of ‘teacher’ equally well (see Figure 9). Despite the results indicating that the rural Xhosa-speaking children in the present sample believe that ‘teacher’ is an occupation which can be done equally well by men and women, a small number of children chose to indicate that it was best done by either men or women. It should be noted that in an earlier section of the present chapter, participants listed the job of teacher most frequently as a job that women can do (see Table 13). This seems
consistent with national labour statistics which show that 60.50% of “teaching professionals” in South Africa are female and 39.49% are male. Furthermore, the same labour survey suggests that women account for greater percentages of pre-primary (79.89%) and primary (75.87%) school teachers than men. The gender division for secondary school teaching professionals is more equally distributed with 44.15% males and 55.82% females (Statistics South Africa, 2006).

![Figure 9. Gender perception for the occupation: ‘teacher’.](image)

The data represented in Figure 10 illustrate the gender stereotyping of the Social type job of ‘detective’. Over half of both boys and girls in the present research indicated that this occupation is done best by both men and women. Close to two fifths of boys and girls indicated that this occupation was best done by men. Less than one percent of boys indicated that women could best fulfil the job of ‘detective’. A small number of girls indicated that the job of a detective could best be done by women.
Figure 10. Gender perceptions for the occupation: 'detective'.

These results suggest that, while the rural Xhosa-speaking children senior primary school children in the present sample are open to both men and women doing the work of ‘detective’ best, there is still a fairly strong belief that it is an occupation which is best fulfilled by men. This is consistent with national labour trends which show that over four fifths of “police inspectors and detectives” in South Africa are men (Statistics South Africa, 2006).

Figure 11. Gender perceptions for the occupation: 'prison officer'.

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>76.81%</td>
</tr>
<tr>
<td>Females</td>
<td>18.84%</td>
</tr>
<tr>
<td>Both</td>
<td>4.35%</td>
</tr>
</tbody>
</table>
Figure 11 illustrates a clear trend towards ‘prison officer’ being seen by both boys and girls as a job best done by males. A small number of boys indicated that women should best fulfil the job of ‘prison officer’, while one fifth believed it was an occupation which both men and women could do best. Three fifths of girls indicated that ‘prison officer’ is an occupation that men can do best, and close to one third of girls believe that it is an occupation that can be done equally well by both men and women. Only a small percentage of girls hold the belief that ‘prison officer’ is an occupation best done by women. No labour statistics were available for this specific occupation.

**Gender and Occupation: Enterprising type occupations**

For most named occupations, boys’ and girls’ occupational gender stereotyping has been similar for specific occupations. In Figure 12 it is clear that boys and girls differ in their beliefs about which gender can best do the Enterprising, high status level job of ‘bank manager’.

![Figure 12. Gender perceptions for the occupation: 'bank manager'.](image-url)
Examining the boys’ responses first, it can be seen that just over half of the boys in the present sample indicated that bank manager is a job that men do best. A small number of boys indicated that women could best be bank managers. The remaining two fifths of boy’s responses indicated that both men and women can fulfil this job equally well. Turning to the results for girls, it can be seen that three-fifths of girls believe that both men and women can best be bank managers. Less than one tenth of girls indicated that women could do this job best, and one third of girls indicated that the job is best fulfilled by men. No labour statistics were available for this specific occupation.

**Gender and Occupation: Conventional type occupations**

Figure 13 illustrates the gender stereotyping of the sample towards the occupation of ‘accountant’, a Conventional type job from the high status level category. Here it can be seen that the majority of boys and girls believe that both men and women can do the job of accountant equally well.

![Figure 13. Gender perceptions for the occupation: 'accountant'.](image)
Smaller percentages of boys and girls indicated a gender stereotype towards this specific occupation. According to the latest Labour Force Survey by Statistics South Africa, 57.90% of accountants in South Africa are men and 42.10% are women.

The results in this section seem to suggest that boys and girls view most of the twelve specific occupations as being suitable for men and women to do, which suggests a relatively low level of occupational gender stereotyping towards these specific occupations. It can be noted that there is a trend in these results that suggests that children attach lower levels of occupational gender stereotypes to occupations in the high status level category (for example, lawyer, medical scientist, dentist, reporter, teacher, accountant), and greater levels of gender stereotypes to those in middle (for example, sports coach, prison officer) and skilled (for example, jeweller) status level categories.

The results also indicate that some occupations, such as sports coach and prison officer, are seen by the majority of the sample as occupations which men rather than women can do best. Another trend which is noticeable in these results is that there are no occupations which the children in the present research indicated as being clearly occupations that women rather than men can do best. In fact, ‘jeweller’ is the only occupation in this section for which more than one fifth of participants indicated it as a job that women rather than men could do best. These findings suggest that, while many children are able to acknowledge that occupations can be equally well done by both women and men, there remains a general trend in the responses given by the rural Xhosa-speaking senior primary school children in the present sample to exclude women from certain occupations.
Summary

This chapter has described the results of the present research. A notable finding was that, when the participants were asked to list their own occupational aspirations, the majority of their answers were for formal occupations which were codeable according to Holland’s occupational typology and status level categories. This is in contrast to the answers given when children were asked to list the jobs that they regard as being jobs that men and women can do. Here participants seemed to adopt a much broader understanding of the questions and listed both formal occupations such as ‘police officer’, ‘doctor’ and ‘pilot’ together with many informal activities such as housework, manual labour and business related activities which could not be coded according to Holland’s theory and therefore necessitated the establishment of the ‘other responses’ categories by the researcher.

The results in this chapter indicate that the rural Xhosa-speaking senior primary school children in the present sample tend to aspire to high status level occupations in the Social and Investigative typologies. The children in the present sample have also shown the tendency to aspire to more high status level occupations in general. The occupational gender stereotypes of children seem to suggest that, despite their occupational aspirations, children limit the range of occupations which they believe men and women can do.

With regards to occupational gender stereotypes, it would seem that children view Social type occupations and household chores most frequently as jobs that women can do. The results also indicate that the occupations listed as being jobs that women can do fall mostly in the high status level category, although housework activities which were most frequently listed as being jobs that women can do have
not been given a status level, but could be indicative of unskilled activities. This suggests a schism between girls’ occupational aspirations and the kinds of occupations which they named as being suitable for women to do.

The findings regarding the occupations which men can do suggest that the children in the present research listed Realistic occupations most frequently as jobs that men can do. Conversely, they listed Realistic type occupations least often as being jobs that women can do. It was also established in the findings that housework activities and other ‘domestic’ occupations, such as cleaner and domestic worker, are not seen by the participants as jobs that men can do.

It would appear that the children in the present study view occupations from a wider range of typologies and status levels as being jobs that men can do, and occupations from a more limited range of typologies and status levels as being jobs that women can do. Having said this, it is important to note that Investigative type occupations were not listed frequently as occupations which men can do, despite this typology being the most popular when boys listed their favourite occupational aspirations. The Investigative typology was also popular as an occupational aspiration for girls and was not mentioned among the occupations participants listed as being jobs that women can do.

The following chapter will discuss some of the most important findings from this chapter, as well as to compare and discuss the present findings within the context of the theory and research discussed in Chapters 2 and 3.
CHAPTER 6
DISCUSSION

Having presented the results of the present research in the previous chapter, this chapter provides a more detailed discussion of these findings by integrating them with the child development and career development theories presented in Chapter 2. The findings will also be discussed in relation to the extant research presented in Chapter 3. Throughout the chapter, various systemic influences will be discussed in order to embed the findings within the South African context and, more specifically, within the rural context in which the present sample finds itself.

This chapter will be structured according to the aims of the study, i.e.:
1. to explore, describe and compare the occupational aspirations, in terms of their typology, of male and female rural Xhosa-speaking South African senior primary school children;
2. to explore, describe and compare the occupational aspirations, in terms of their status level, of male and female rural Xhosa-speaking South African senior primary school children; and
3. to explore, describe and compare the occupational gender stereotyping of male and female rural Xhosa-speaking South African senior primary school children.

The chapter therefore begins with a discussion of the results relating to children’s occupational aspirations. This is followed by a discussion of the findings relating to the occupational gender stereotyping of jobs by children in the present study.
**Occupational Aspirations**

The first two aims of the present research involve the exploration and description of the occupational aspirations of the participants in terms of their occupational typology and status levels. This section discusses the most important findings relating to these aims and how they relate to existing career theory and previous career research. The findings will also be discussed within the broader South African context with reference to the systemic influences of the Systems Theory Framework (STF, Patton & McMahon, 1999, 2006) which were introduced in Chapter 3.

When asked about their occupational aspirations, all participants were able to list a number of occupations which they were interested in doing one day. Interestingly, the mean number of responses \( (n = 2.7) \) in the present research is the same as the mean number of responses for similar South African research conducted by Els (2004) using the same measure (RCAS, McMahon & Watson, 2001) with a Xhosa-speaking sample from urban primary schools. This suggests the present rural sample has responded to the RCAS in a manner which is similar to previous research involving urban Xhosa-speaking primary school children.

All participants were also able to identify one favourite occupational aspiration from amongst those listed. This is consistent with both national (Els, 2004) and international (McMahon, Gillies, & Carroll, 1999) research on children’s occupational aspirations. The findings in the present research provide some support for Piaget’s (1952; 1972) theory of cognitive development in so far as rural Xhosa-speaking South African children have demonstrated the ability to think about their occupational futures and, based on that thinking, list a number of jobs which they are interested in doing when they grow up. This suggests that these children are in
the formal operational stage of Piaget’s theory as they are beginning to formulate, test and evaluate hypotheses in relation to their occupational futures, and to consider occupational possibilities based on their growing experience of themselves and the world around them in a manner which is more cognitively complex than would be expected from younger children.

These findings are partially supportive of previous South African research which has consistently found Social type occupations to be the most popular amongst predominantly white English-speaking boys and girls (Cox, 2004; Crause, 2006; Dean, 2001; Hargreaves, 2007; Olivier, 2004). The prevalence of Social and Investigative type occupational aspirations was also noted by Els (2004) whose research focused on urban Xhosa-speaking South African primary school children. Els established, however, that Investigative type occupations rather than Social type occupations were named most frequently by both boys and girls as their favourite occupational aspirations followed by Social type occupations. This is in contrast to the present research findings which showed Social type occupations (such as ‘police officer’, ‘traffic officer’, and ‘social worker’) as being listed most frequently as girls’ favourite occupational aspirations. Boys in the present research, however, did select Investigative type occupations (such as ‘doctor’, ‘lawyer’, and ‘climatologist’) most frequently as their favourite occupational aspirations which provides some support for Els’ earlier findings.

South African research therefore seems to indicate that the popularity of different occupational typologies varies depending on the sample group, with some researchers finding that Social type occupational aspirations are most popular for predominantly white English-speaking school children (Crause, 2006; Hargreaves,
2007) and others finding that black Xhosa-speaking boys and girls tend to aspire to more Investigative type occupations (Els, 2004). The present research found an even more complex pattern of occupational aspirations in that rural Xhosa-speaking South African girls tended to aspire more towards Social type occupations and rural Xhosa-speaking boys tended to aspire more towards Investigative type occupations. This difference between girls’ and boys’ occupational aspirations has not been noted in previous research.

The popularity of Investigative type occupations for boys can to some extent be explained by the higher frequency with which boys listed the Investigative type occupation of ‘doctor’ as their favourite occupational aspiration. This job alone accounts for close to one third of boys’ favourite occupational aspirations. The same job only accounted for one fifth of girls’ favourite occupational aspirations. A far greater percentage of girls than boys listed the Social type occupation of ‘teacher’ which provides some explanation for the popularity of Social type occupational aspirations amongst girls. Another explanation for these findings may be related to the tendency for boys and girls to aspire to occupations along traditional gender lines. The Investigative type occupations of ‘doctor’ and ‘lawyer’, which together make up over one third of boys’ favourite occupational aspirations, are both traditionally male-dominated jobs, while the jobs listed most frequently by girls, such as ‘teacher’, ‘social worker’ and ‘nurse’, are all traditionally female jobs (Statistics South Africa, 2006).

Along with Social and Investigative type occupations, boys also listed a number of Realistic type occupations (such as ‘pilot’ and ‘electrical engineer’) as being their favourite occupational aspiration. Girls did not show the same interest in Realistic
type occupations but rather, together with their interest in Social and Investigative type occupations, listed a number of Artistic type occupations (such as ‘singer’, and ‘musician’). The emergence of Realistic and Artistic type occupational aspirations amongst boys and girls respectively has previously been established by Hargreaves (2007) and Crause (2006). In predominantly white South African primary school children, both researchers noted a decline with increasing age in the popularity of Social type occupations in favour of Investigative, Realistic and Artistic type occupations. The children in the present study are at an age which is consistent with the findings of these researchers. These findings are further supported by international research (Bandura, Barbaranelli, Capara, & Pastorelli, 2001; Cook et al., 1996; Helwig, 1998a; Phipps, 1995) which has found a similar trend towards Social and Investigative type occupations with additional interest being shown in Realistic and Artistic type occupations. It has been found both nationally (Hargreaves, 2007) and internationally (Hewitt, 1975; Nelson, 1978; Sandberg, Ehrhardt, Ince, & Meyer-Bahlburg, 1991) that children’s range of occupational aspirations increases with age, although some international research has shown no increase or the reverse trend (Arap-Maritim, 1984; Miller & Stanford, 1987; Trice, 1991). Interestingly, Grobler (2000) previously found that no black primary school children aspired to Artistic type occupations, a finding which is challenged by the present research which demonstrates that approximately one tenth of girls’ favourite occupational aspirations were for Artistic type occupations such as, “singer”, “musician”, and “actor”.

The difference between Grobler’s (2000) findings regarding Artistic type occupations and the present findings may be attributed to the influence of age which
has consistently been found to influence the career development of children
black children (i.e., 5 years of age), whereas the present research has an older
sample (i.e., 11 to 13 years of age) that is likely to be beginning to identify more
readily with celebrity figures and role models as they reach and continue to develop
through adolescence. This may be further necessitated because many of the
children’s parents have had to find work in the urban areas and as such, in the
absence of familial figures, children may be forced to look towards other public and
media figures as role models.

Based on their age, the participants in the present sample fall within two of
Erikson’s (1950; 1993) stages of psychosocial development. A smaller number of
participants fall in the stage of industry versus inferiority (6 to 11 years of age) while
the majority of participants fall into the stage of identity versus role confusion (11 to
18 years of age). In this latter stage, individuals negotiate the complex transition
between childhood and adolescence. This stage is characterised by the process of
children discovering who they are and where they fit into society. This process
includes the development of a growing range of personal preferences including
those regarding occupational aspirations. During this time, individuals begin to find
ways of expressing their new found preferences as an attempt to display their
growing identity. All participants in the present research were able to list a number
of occupational aspirations and also to select one of these as their favourite
occupational aspiration. This suggests that they are at a point in their psychosocial
development at which they can identify and communicate some of their own
personal occupational preferences which have developed through the integration of
their growing sense of self and their unique sociocultural roles and experiences. This ability suggests that the findings of the present study are supportive of Erikson’s theory of psychosocial development in so far as participants showed signs of their developing ego identity with specific reference to the development of an occupational identity. These findings also demonstrate the influence of a wide range of system influences which have influenced the occupational identity formation of the participants in the present research in so far as different children have shown aspirations towards many different jobs.

The findings provide mixed support for Gottfredson’s (1981; 2005) theory of circumscription and compromise. This theory suggests that, based on their age, participants in the present study are becoming increasingly oriented to social valuation. This was evident in the data which show that the majority of occupational aspirations were for high status level occupations. The trend towards higher status level occupational aspirations was noted for both boys and girls, although girls listed a greater percentage of high status level occupational aspirations as being their favourite compared with boys. Internationally, Phipps (1995) found that a greater percentage of girls relative to boys indicated occupational aspirations in the high status level category. These trends are further supported by other international research that found that children’s occupational aspirations tended to be towards higher status level occupations that involve more complex functions, require a higher level of education and also carry a greater level of prestige (Bobo, Hildreth, & Durodoye, 1998; Cook et al., 1996; Helwig, 1998a).

National research findings support those of the present research in relation to the trend for children to aspire to higher status level occupations (Cox, 2004;
Crause, 2006; Dean, 2001; Hargreaves, 2007; Olivier, 2004). Els (2004) noted remarkably similar trends amongst urban black South African primary school children to those in the present research. She found that, while both boys and girls tend to aspire to higher status level occupations, more boys than girls aspire to middle status level occupations with a greater percentage of girls aspiring to occupations in the high status level category. It is interesting to note that when comparing Els’ findings to those of the present research there appear to be remarkably similar trends amongst both rural and urban Xhosa-speaking children’s occupational aspirations and gender stereotypes.

Other South African research has found that for younger children a greater percentage of boys aspire towards high status level occupations compared with girls who aspire to a greater percentage of middle status level occupations (Dean, 1998, 2001; Grobler, 2000). Earlier studies with younger children found different trends to those in the present research, and this difference may be explained by the influence of increasing age on the status level of children’s occupational aspirations. The children in the present research are much older than those in Dean (1998; 2001) and Grobler’s (2000) studies and, as such, are becoming increasingly aware of the importance of income and education which according to Gottfredson (1981; 2005) leads to a shift towards the more prestigious occupational aspirations which can be seen in these findings.

The majority of participants’ favourite occupational aspirations were for high status level occupations (such as “doctor”, “lawyer” and “teacher”) which generally require some form of tertiary education, as well as for middle status level occupations (such as ‘police officer’, ‘traffic officer’, and ‘security guard’) which
generally require further education and training beyond the secondary school level. This may suggest that, even though participants’ parents did not have access to tertiary education during the apartheid era and were therefore generally unable to obtain employment in occupations requiring this kind of education, the new generation of children from these areas have developed aspirations towards occupations from status level categories above those that many of their parents were able to attain in the past. As such they have developed these occupational aspirations despite the fact that it is most likely that their parents are either unemployed or working in occupations requiring little or no education. This finding may provide some support for Schultheiss’ (2003; 2005) theory which highlights the relational influences in the way in which children socially construct their occupational aspirations. In this case these occupational aspirations may have been constructed by participants who view these jobs as being able to provide a better lifestyle than that offered by their parents jobs. In this way, children’s occupational aspirations may have been influenced away from certain jobs having observed their parents in these jobs.

Information relating to participants’ parental educational and occupational status levels was not gathered in the present research, although reports from school principals indicated that the majority of the participants’ parents were unemployed and were thus unable to pay the token school fees which were asked by the schools used in the present research. Contextual indications are that the participants’ ability to fulfil their occupational aspirations may be challenged by influences such as poverty and geographical location which continue to make access to tertiary education challenging for poor rural children. There are further challenges posed by
influences such as the historical trends and political decisions which form part of South Africa’s apartheid past. The fact that these influences stretch back to before many of the present sample were born, highlights the temporal influences of past, present and future on children’s career development in which all of the interrelated systems of the STF (1999; 2006) are located.

**Most Frequently Named Occupational Aspirations**

When examining the most frequently named occupational aspirations, support is found for the career development theories of Super (1980; 1990) and its post-modern revision by Savickas (1997; 2005) in so far as the present findings clearly demonstrate that career development begins early in childhood. Children in the present research find themselves in Super’s Growth stage (0 to 14 years of age). An important feature of the growth stage is curiosity, which is an important element of career adaptability and also leads to the development of the self concept. This happens as children increasingly take notice of their environment and observe adult career role models within their community. The findings in the present research provide support for Super’s growth stage in so far as rural Xhosa-speaking South African children have shown that they have begun to develop occupational aspirations towards some of the most visible jobs in their community such as ‘police officer’, ‘doctor’, ‘teacher’, ‘social worker’ and ‘nurses’. It is to these jobs that the participants in the present research would have had the most exposure through schools, clinics and the social welfare system. It is also these jobs which appear to have been most frequently incorporated into the emerging occupational identities of the participants in the present research. In addition, Watson and Stead (1993) found
that these occupations are seen as more prestigious within the black South African community. Broadly speaking, all of these frequently listed occupational aspirations could also be grouped together as being “helping” or “service” related jobs, a fact which has been noted by previous researchers (Cherian, 1991; Els, 2004; Nel & Mkhabela, 1987; Watson, Foxcroft, & Stead, 1987).

Support is also found for Savickas’ (1997, 2005) notion of career construction as an ongoing process during which individuals weave their life experiences together as their careers are actively constructed throughout their life-span. It appears that participants have developed occupational aspirations based on their own personal experiences of seeing various jobs being carried out within the context of their own rural communities, as well as to jobs to which they have been exposed more indirectly.

The usefulness of Savickas’ revision of Super’s original ideas can clearly be seen in the rural context in which the present sample finds themselves embedded, as it is within the complex array of context specific influences that these individuals must grow and develop as they adapt to the unique challenges which face them continually. The fact that individuals listed a wide range of informal work related activities as jobs that men and women can do suggests that within their context the idea of career construction is clearly relevant as they attempt to make meaning out of the various informal work opportunities which are available to them. Many of these informal jobs hold little or no intrinsic rewards and are simply an effort towards survival. Furthermore, many of the informal jobs (such as household and childcare activities) offer no financial reward and even some of the more formal jobs (such as ‘construction worker’, ‘gardener’ and ‘farm worker’) which can be described
as seasonal work or piece work provide little or no financial security due to their limited duration.

This notion of career stands in strong contrast to the grand career narrative initially proposed by Super which suggests a more linear process of life-long advancement through a formal occupation or profession and as such the present research challenges the original ideas of Super’s theory and suggests that, while this theory may provide valuable insight into the career development of some populations, its usefulness within the context of the present research may be somewhat limited.

The findings relating to the most frequently named occupational aspirations by both boys and girls reveals that boys listed the traditionally male jobs of ‘doctor’ and ‘police officer’ most frequently. Girls listed both traditionally male (‘doctor’ and ‘lawyer’) and traditionally female (‘teacher’ and ‘social worker’) jobs amongst their most common responses. These findings suggest that boys tend to aspire to occupations that are traditionally associated with their gender to a greater degree than girls who show greater openness to occupational aspirations which are traditionally viewed as male dominated. This reflects on a Xhosa society in which male and female roles have traditionally been well defined with each gender playing a different role within the household and community. Men as the traditional leaders have been responsible for the more formal acquisition of wealth and prestige, while women have carried the domestic responsibilities including those of maintaining the home and looking after the children (Pauw, 1994). These traditional roles have begun to change as environmental/societal systemic changes on the political climate in South Africa have made it possible for both men and women to seek more formal
forms of employment. The changing nature of traditional gender roles in Xhosa culture has been discussed in Chapter 1 and it would seem that, despite these changes, many of the rural Xhosa speaking children in the present research still hold occupational aspirations along traditional lines although this trend appears to be stronger amongst boys than girls.

The tendency for girls to aspire to a number of traditionally male jobs is supported by international research which has found that girls are more likely than boys to aspire to jobs which are not traditionally seen as suitable for their gender (Gorrell & Shaw, 1988; Griffin & Holder, 1987; Raffaele-Mendez & Crawford, 2002; Spare & Dahmen, 1984). Other studies have found no significant difference in boys’ and girls’ attitudes towards which jobs are more suitable for men or women to do (Gregg & Dobson, 1980; Stockard & McGee, 1990). Some research has found that, while boys continue to hold gender stereotyped occupational aspirations with increasing age, older girls are more likely to choose jobs which are traditionally seen as more suitable for males (Helwig, 1998c). This trend, which has been found in the present research, may be explained by the fact that researchers have found that children ascribe greater prestige to traditionally male jobs (Bobo et al., 1998; Helwig, 1998b; Liben, Bigler, & Krogh, 2001; Phipps, 1995; Sandberg et al., 1991).

The participants in the present research are becoming more aware of the social valuation of jobs (Gottfredson, 1981, 2005) and, as career theory suggests, they begin developing occupational aspirations towards higher status level occupations regardless of the gender stereotypes which may exist in relation to those occupations. Based on the present findings, support for this notion is evident in the occupational aspirations of the girls in the present research. International research
by Bobo et al. (1998) and Gottfredson (1981; 2005) found that with increasing age and maturity, children seem to base their occupational aspirations less on gender stereotypes and more on status level, as was the case for girls in the present sample.

Another influence which must be considered with regards to the status level of rural Xhosa-speaking children’s occupational aspirations is that of socioeconomic status. Extant research has found socioeconomic status to have a mixed influence on the status level of children’s occupational aspirations. Some researchers have suggested that the lower the socioeconomic status of the participants, the lower the status levels of occupational aspirations they hold (Cloete, 1980, Grobler, 2000). Other researchers have found that children in the 10 to 14 year age group aspire to jobs from the high status level category regardless of their own socioeconomic status level (Liben et al., 2001; Stroeher, 1994). National research supports this latter notion as urban Xhosa-speaking children from lower socioeconomic levels were found to aspire towards more high status occupations (Els, 2004) which is consistent with the findings for the rural Xhosa speaking primary school children in the present research. The following section discusses the occupational gender stereotyping of jobs by the children in the present sample.

**Occupational Gender Stereotyping**

The third aim of the present research was to explore, describe and compare the occupational gender stereotyping of male and female rural Xhosa-speaking South African senior primary school children. The findings in this section are closely related to Gottfredson’s (1981; 2005) theory which is concerned with the way in which
children circumscribe their occupational aspirations based on various factors including gender and social status. The children in the present research are between nine and thirteen years of age. This means that the sample falls in Gottfredson’s stage of orientation to social valuation. In the previous stage which highlighted six to eight year old children’s orientation to sex roles, Gottfredson suggested that children’s occupational aspirations are influenced most by their orientation to gender but in the stage in which the children are now, their evaluation of jobs is said to be based on their increasing awareness of the level of prestige associated with a particular job.

It has already been stated that the girls in the present research have based their occupational aspirations more on occupational status levels than on occupational gender stereotypes. Girls were found to aspire to more traditionally male jobs in the high status level and did not appear to circumscribe their occupational aspirations based on an orientation towards gender, but rather demonstrated that they have become more influenced by their orientation towards social status. This finding provides support for Gottfredson’s (1981; 2005) theory in relation to the circumscription of occupational aspirations by rural Xhosa-speaking South African girls.

The occupational aspirations of boys also appear to support Gottfredson’s (1981; 2005) theory as boys’ most frequently named occupational aspirations, which in addition to being traditionally male jobs, are also examples of more prestigious status level occupations (that is, high and middle status level occupations). These findings may be suggestive of the fact that boys find themselves between stages with a tendency to be influenced by gender as well as a growing influence of social
valuation. The findings relating to participants’ occupational aspirations, which have already been discussed, set a meaningful platform on which to introduce the findings relating to the occupational gender stereotypes of rural Xhosa-speaking children.

**Jobs that men and women can do**

Having discussed the findings relating to participants’ occupational aspirations, this section discusses the findings relating to the jobs that participants regard as being jobs that men or women can do as well as the jobs that participants regard as being jobs that both men and women can do. An interesting finding in the present research is that when asked about the jobs that they would like to do when they grow up (that is, occupational aspirations), participants in the present research listed mostly formal occupations which could be coded according to Holland’s typology and status level category. This is in contrast to the responses which were given by participants to questions which asked about which jobs men and women can and cannot do. Here participants appear to have interpreted the question much more broadly and, along with formal occupations, they have listed a wide range of ‘other responses’ which include a large number of informal housework activities as well as other work related activities (see Table 5) which could not be coded as formal occupations. This suggests that in terms of occupational aspirations, children have identified with formal occupational titles (such as, “doctor”, “lawyer”, and “nurse”). When asked what jobs men and women can and cannot do, participants seem to list a much wider range of informal work related activities such as housework activities and childcare activities. This may reflect the informal nature of the work which they have observed adult men and women in their community.
undertaking – something which is perhaps the product of the lack of formal employment opportunities which are available for people in rural communities. This may also reflect traditional gender roles within Xhosa culture as the findings show that housework activities and childcare activities have been clearly defined by the participants as jobs that women can do and as jobs that men cannot do.

The findings in this section suggest that both boys and girls attach gender based stereotypes to a wide range of occupations. In doing so, they are essentially circumscribing the jobs which they view as suitable for men and women to pursue and as such are limiting their own scope of occupational aspirations. When asked to name jobs that women can do, two fifths of the jobs listed by all participants were Social type occupations (for example, ‘teacher’, ‘domestic worker’ and ‘nurse’). One quarter of the responses fell in the household activities category which included informal household activities such as ‘cleaning house’, ‘cleaning floors’, and ‘kitchen work’. All of these occupations and activities could be classified as traditionally female jobs. Over half of the occupations listed by the participants as being jobs that women can do fall in the high status level category (for example, “teacher”, “doctor”, “nurse”) with the next most popular status level category being the unskilled status level category.

When examining the jobs which were indicated by all participants as jobs that women cannot do, we see that Realistic type occupations (for example, ‘construction worker’, ‘mechanic’, and ‘road construction worker’) were listed most frequently. These jobs can all be seen as traditionally male jobs and all fall in lower occupational status levels (that is, skilled, semi-skilled and unskilled status level categories). Over half of the jobs listed by participants as being jobs that men can do are
Realistic type occupations (for example, ‘construction worker’, ‘furniture maker’, and ‘painter’). The jobs that were listed as being jobs that men can do represent a number of occupational status levels, with the greatest percentage being for semi-skilled status level occupations such as “construction worker”, “fisherman”, and “driver” which accounted for two fifths of the responses (despite not having featured amongst the children’s occupational aspirations expressed earlier within the present research). High status, middle status and skilled status level categories each accounted for between one tenth and one fifth of the responses. When looking at the jobs listed most frequently by participants as being jobs that men can do it can be seen that these are all traditionally male jobs such as ‘construction worker’, ‘gardener’ and ‘police officer’. Boys and girls listed the same jobs most frequently as being jobs that men can do.

When looking at the jobs listed most frequently by the participants as being jobs that men cannot do, we see that the majority of these are housework activities such as ‘washing dishes’, ‘cooking’ and ‘washing clothes’. These findings again seem to demonstrate the well defined gender roles which have traditionally been a strong part of Xhosa culture. Participants also listed some formal occupations from the Social typology such as ‘nurse’ and ‘domestic worker’. All of the jobs which were listed most frequently as jobs that men cannot do appear to be traditionally female jobs. Boys and girls listed the same jobs as being jobs that men cannot do.

Further insight into the way in which rural Xhosa-speaking children gender stereotype occupations was gathered by asking them to say whether 12 specific jobs could be done best by men, women or by both men and women. The findings from this question show that for seven of the jobs listed, participants indicated that the
jobs could be done equally well by either men or by women. It is interesting to note that of the seven jobs which participants indicated as being jobs that both men and women could do equally well, six were high status level occupations (that is ‘lawyer’, ‘medical scientist’, ‘dentist’, ‘reporter’, ‘teacher’, and ‘accountant’) and one was a middle status level occupation (‘detective’). This suggests that children tend to see higher status level occupations as being more suitable for both men and women to do compared with lower status level occupations which seemed to reflect more distinct gender stereotyping. Participants felt three of the jobs (that is, ‘electrician’, ‘sports coach’ and ‘prison officer’) could best be done by men and none of the jobs were believed to be done best by women. Two jobs, namely ‘jeweller’ and ‘bank manager’, received mixed responses with no clear preference being shown by either boys or girls. These findings suggest that, while many children are able to acknowledge that jobs can be done best by men or by both women and men, there remains a general trend amongst the participants in the present research to exclude women from certain jobs.

These results clearly demonstrate that rural Xhosa-speaking boys and girls tend to stereotype jobs along traditional gender lines. Both boys and girls listed jobs which are traditionally stereotyped for either males or females when asked about jobs that men or women can do. Furthermore, participants ruled out jobs as jobs that either men or women can do based on traditional gender distinctions. This suggests that children see certain jobs as being jobs that only women can do, and others as jobs that only men can do. These findings are supported by both international (Furlong & Biggart, 1999; Garrett, Ein, & Tremaine, 1977; Gorrell & Shaw, 1988; Harris & Satter, 1981; Hartung, Porfeli, & Vondracek, 2005; Hewitt,
1975; Riley, 1981; Sellers, Satcher, & Comas, 1999; Tremaine & Schau, 1979; Watson & McMahon, 2005) and national (Crause, 2006; Hargreaves, 2007) research findings which have found a tendency for children to stereotype jobs along traditional gender lines.

From the results it would appear that, despite the large number of high status level occupations which were listed as jobs that women can do, participants still see women as being likely to gain employment in unskilled occupations as well as also needing to fulfil a wide range of domestic chores. The prevalence of housework activities may also be reflective of the influence of culture on children’s career development as men are not expected to take care of domestic activities in Xhosa culture, whereas women are required to take on the dual role of income generation as well as taking care of the domestic household chores (Els, 2004; Hickson & White, 1989; Schonegeval, 1997).

These findings provide mixed support for Gottfredson’s (1981; 2005) theory which would suggest that children in the present research should begin excluding lower status occupations as they begin to become more focused on the level of social prestige attached to certain jobs. It was found that both boys and girls selected more high status level occupations as their favourite occupational aspirations regardless of gender stereotypes. But when asked to say whether listed jobs were jobs that either men or women can do, participants listed a wide range of unskilled occupations and informal housework activities (which are also indicative of unskilled occupations).

The frequency with which unskilled occupations (for example, ‘domestic worker’, ‘cleaner’ and ‘house cleaner’) have been listed in the present research seems
consistent with the employment trends amongst rural black South Africans where, despite high levels of unemployment, it is common place for black women to work as domestic workers, taking care of the household chores for more affluent people who can afford to employ someone to take care of these household activities. It is also reflective of the impact of unequal access to education which was prominent during the Apartheid era which meant that participants’ parents were forced to pursue unskilled work opportunities (Afolayan, 2004). This may provide an explanation for the large number of low status level occupations which were listed by participants as being jobs that women can do. This may also be seen as a reflection of the children’s occupational expectations and as such there appears to be some disparity between their high status level occupational aspirations and their low status level occupational expectations. This fact is highlighted when considering that informal housework activities were listed frequently as jobs that women can do despite the fact that no participants listed housework activities amongst their occupational aspirations.

This section of the chapter has discussed the findings relating to children’s tendency to stereotype occupations according to gender stereotypes. The major trends which emerged were the fact that both boys and girls tended to exhibit gender stereotypical attitudes towards certain occupations as being jobs that men and women can or cannot do. Occupational gender stereotyping was found to occur along traditional gender lines with children listing traditionally female occupations as being jobs that women can do, and jobs that men cannot do. Children listed traditionally male occupations as jobs that men can do, and as jobs that women cannot do. High status level occupations tended to be seen as jobs that both men
and women can do compared with lower status level jobs which were more readily seen as being more suited for one or other gender.

Thus far, this chapter has presented a discussion of the most salient findings in the present research. It has been structured according to the aims of the study and as such began with a discussion of the data relating to children's occupational aspirations. Major trends which emerged were the tendency for girls to select occupational aspirations based on status level and regardless of gender stereotypes, whereas boys seemed to continue to develop occupational aspirations along gender stereotypical lines. These findings provide some support for Gottfredson's (1981; 2005) stages of circumscription and compromise, especially when explaining the development of girls' occupational aspirations. Boys' occupational aspirations seemed to provide partial support for Gottfredson's theory as boys tended to circumscribe their occupational aspirations in ways which would be expected of younger children.

The second half of the chapter presented a discussion of the results regarding the way in which children ascribe certain gender based stereotypes to jobs. Children were also found to hold gender stereotypes regarding the jobs which they believe are jobs that men and women can do, ruling out gender non-traditional jobs for both genders and listing gender traditional occupations as being suitable for both men and women to do.

The final section of this chapter will conclude the present research with a discussion of the limitations which exist within the study as well as the present researcher’s recommendations for future researchers in the field of South African children's career development.
Limitations and Recommendations

Throughout the present research, the researcher has been faced with a number of limitations that have provided some insight which can be used as recommendations to aid and direct future research. These limitations and recommendations will be briefly discussed in this final chapter.

In order to achieve the aims of the present research, the researcher chose a quantitative, exploratory and descriptive research method. While this approach provides a number of benefits to the researcher (such as synthesising large amounts of quantitative data into meaningful descriptions), it also presents a number of limitations which need to be acknowledged and negotiated by the researcher. One of the limitations inherent in the present research methodology is the fact that exploratory, descriptive research is usually seen as an initial step, to be followed by further research and as such this form of research rarely yields definitive answers to research questions (Neuman, 2006). Despite this, the researcher believes that the aims of the present research have been achieved in so far as further baseline information regarding the career development of a previously under-researched South African population group has been explored and described.

Furthermore, this research method does not allow for the controlling of extraneous variables. In the present research, such extraneous variables include the manner in which data was collected by field workers. Despite the fact that all field workers received the same training in order to standardise data collection, it was not possible to control the level of rapport and understanding that was achieved between field workers and participants during data collection. The language barrier was a further variable which, despite every effort being made to minimise its impact
(such as, the translation of the measure into Xhosa and the use of trained Xhosa-speaking field workers), may still have affected the findings of the present research. It is also possible that field workers may have inadvertently said more than intended during data collection sessions which may have influenced the children's responses. Because the researcher does not speak Xhosa, he was not able to control for this possibility.

Another limitation which must be considered is that because the research employed non-probability, purposive sampling, it cannot be known to what extent the sample represents the broader population (Gravetter & Forzano, 2006; Neuman, 2006; Whitely, 2003). However, this type of sampling was considered appropriate as the aim of the study was to collect baseline information about an under-researched population. While the present research obtained a relatively large sample, it may not be considered representative of all Xhosa-speaking rural senior primary school learners. This means that results cannot be generalised beyond the sample group. The use of this sampling method could have reduced the external validity of the study. It is therefore recommended that future researchers explore ways to ensure more equal gender distribution within their samples in order to allow for more meaningful comparisons to be made between boys and girls.

Statistically, the research was limited by the use of descriptive as opposed to inferential statistics which means that it was only possible to summarise and describe the data and this did not allow for making statistically significant comparisons between sets of data. Furthermore, there is no basis for making predictions or estimates based on the present data. However, descriptive statistics were selected as they are appropriate to the aims of the present research and
allowed for the collection of baseline data from a previously under-researched population. This kind of analysis is also appropriate for use with the nominal data that were gathered. Future researchers could consider making use of inferential statistics which would allow for the determination of significance levels within the data.

Further limitations include the fact that no formal data was gathered relating to parental employment status, household income and other socioeconomic influences which may have provided valuable contextual information with which to compare the findings of the present research. This was largely unavoidable within the rural context of the present research because of variables such as low level of literacy amongst learners’ parents and the lack of identifiable adult guardians, a fact which is largely due to the impact of poverty and HIV/AIDS on families in rural South Africa. In order to address this limitation, the researcher gathered information relating to the socioeconomic status of the participants’ families through informal discussions with school principals in order to be able to reflect on this within the discussion of the present results.

Further recommendations relate to the recent changes in the South African education system, specifically in relation to the implementation of the compulsory Life Orientation subject which includes career education programs. In the light of concerns raised by other researchers (Cox, 2004; Hargreaves, 2007) regarding the validity and impact of these programmes, it is recommended that the results from studies such as the present research can be used to provide valuable insight and guidance for school counsellors and curriculum developers. There remains a need for further research to be carried out in order to continue to inform the process of
implementing effective career education at the primary school level. In this regard, it is recommended that further research be carried out with previously under-researched population groups, especially in rural areas and with a wider variety of cultural and socioeconomic samples. Such diversity within future research would allow for comparisons to be made between groups as well as allow for more targeted interventions to be developed in order to provide the most meaningful intervention within different socioeconomic and cultural contexts.

The present research introduced the Systems Theory Framework (STF) of career development (Patton & McMahon, 1999, 2006) as a useful overarching framework within which to consider the multiplicity of influences which stimulate or militate against rural children as they attempt to develop their occupational self concept. Despite the use of this theory as an organisational framework for the discussion of the extant research in Chapter 3, the aims of the present research did not allow for the extensive use of the STF in the discussion of the research findings. Future research which is able to further integrate this framework would provide valuable insight into the complex individual, social and environmental-societal influences which are characteristic of the South African career development context.

A number of recommendations arise from the findings of the present research. Due to the contradiction between children’s occupational aspirations and the occupations which they actually listed as being jobs that men and women can do, future research may aim to explore and compare the occupational aspirations of children along with their occupational expectations, that is, the occupations which they expect to pursue in future.
In conclusion, the present researcher makes no claims to have provided definitive answers to the multitude of questions within the field of South African children’s career development, but it is hoped that the present findings will go some way towards providing baseline data which can be used to inform decision making at all levels with regards to the career development of rural Xhosa-speaking senior primary school learners.


Braamfontein: Skotaville.


*Journal of Vocational Behavior, 59*, 252-261.


APPENDIX A

Career Survey

We are interested in finding out what young people think about careers and work, and we would like you to help us by answering the questions contained in this booklet. There are no right or wrong answers. Please write the best and most honest answer that you can think of.


Age: __________________________________
Gender: (please circle)  Male   Female
School: __________________________________
Isikolo:
Class: ________________________________
Ibanga:
Today's Date: __________________________
Usuku Ianamhlanje:
Form 1

1. **What jobs are you interested in doing when you grow up?**
   Yeyipi imisebenzi onomdla wokuyenza xa usele umdala / ukulile?

2. **Of those jobs you wrote down, which one is your favourite?**
   Kule uyibhale phantsi – ngowuhi owuthanda kakhulu?

3. **What is it about you that would make you good at your favourite job?**
   Yintoni ngawe enokwenza ukuba ubengcono kakhula kulomsebenzi uwuthanda kakhulu?

4. **Who could influence you toward or away from choosing jobs?**
   Ngubani onokwenza ukhethe okanye ungakhethi imisebenzi?

5. **What could influence you toward or away from choosing jobs?**
   Yinto enokwenza ukhethe okanye ungakhethi imisebenzi?

6. **How did you find out about those jobs that you wrote down?**
   Ufumanise njani ngalemisebenzi uyibhale phantsi?

7. **How else could you find out information on jobs?**
   Ungaphinde waziswe njani ngemisebenzi?

8. **When you think about jobs, what information do you need to find out?**
   Xa ucinga ngemisebenzi, udinga eyiphli ingcaciso ulwazi onokuthi ulusebenzise?

9. **What do you do at school that might help prepare you for the jobs that interest you?**
Yintoni oyenzayo esikolweni enokuthi ikuncede ekuzilungiselenteni kulemisebenzi uyifumanisa inomdla?

Form 2

1. **Write down some jobs you think women can do.**
   Bhala phantsi eminye yemisebenzi ocinga abafazi anokuyenza.

2. **Write down some jobs you think women cannot do.**
   Bhala phantsi eminye imisebenzi ocinga abafazi awanako ukuyenza.

3. **Write down some jobs you think men can do.**
   Bhala phantsi eminye imisebenzi ocinga amadoda anako ukyenza.

4. **Write down some jobs you think men cannot do.**
   Bhala phantsi eminye imisebenzi ocinga amadoda awanako ukuyenza.

5. **Write down some jobs you think both men and women can do.**
   Bhala phantsi eminye imisebenzi ocinga amadoda nabafazi anokuyenza kunye.
## Form 3

Think about whether you think the following jobs could be best done by males, females or both. If you think the job would be best done by a male, tick the box under the heading Male. If you think the job would be best done by a female, tick the box under the heading Female. If you think the job could be done equally well by males and females, tick the box under the heading Both.


<table>
<thead>
<tr>
<th>Example: Umzekelo:</th>
<th>teacher</th>
<th>Male</th>
<th>Female</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>umfundisi-ntsapho</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>a) electrician</td>
<td>umsebenzi wombane</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) medical scientist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) detective</td>
<td>umcuphi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) dentist</td>
<td>uqquirha wamazinyo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) jeweler</td>
<td>umenzi wobucwwebe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) reporter</td>
<td>umthuthi-ndaba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) sports coach</td>
<td>umqeqeshi wezemidlalo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h) teacher</td>
<td>umfundisi-ntsapho</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) bank manager</td>
<td>i-manejara yebhanka</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j) lawyer</td>
<td>igqwetha</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k) prison officer</td>
<td>i-ofisa yesentilongweni</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l) accountant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Form 4

For each of the groups of jobs below, write down something that they ALL have in common. If you don’t think they have anything in common write “nothing”. See the examples below before starting. Circle any words you don’t understand.

Example:
Umzekelo:
builder, gardener, hairdresser = **work with their hands**
Umakh, umlini,umenzi wenwele = basebenza ngezandla zabo

ambulance officer, police officer, bus driver = **they help people**
ambulance officer, i-ofisa yamapolisa, umqhubi webhasi = banceda abantu

teacher, truck driver, scientist = **nothing**
umfundisi-ntsapho, umqubi wetrakha, scientist = ayikho

a) motor mechanic, hairdresser, pilot =
mlungisi wemoto, umenzi wenwele, umqhubi wenqwelo moya
___________________________________________________________________________
___________________________________________________________________________

b) vet, doctor, scientist =
ugqirha wezilwanyana, ugqirha, scientist =
___________________________________________________________________________
___________________________________________________________________________

c) actor, fashion designer, singer =
umdlali weqonga, menzi wempahla, imvumi
___________________________________________________________________________
___________________________________________________________________________

d) teacher, nurse, receptionist =
umfundisi-ntsapho, umongi (kazi), i-receptionist =
___________________________________________________________________________
___________________________________________________________________________

e) lawyer, sales assistant, bank manager =
igqwetha, umncedisi-mthengisi, i-manejara yebhanka =
___________________________________________________________________________
___________________________________________________________________________

f) secretary, accountant, bank worker =
unobhala, accountant, umsebenzi wasebhankeni =
___________________________________________________________________________
___________________________________________________________________________
Form 5

Write down things a student may learn or do at school that might be helpful in the following jobs.
Bhala phantsi izinto umfundi angazifunda okanye azenze esikolweni ezinobaluncedo kulemisebenzi ilandelayo.

a) police officer
   i-ofisa yamapolisa

b) vet
   uggirha wezilwanyana

c) model
   unobuhle

d) ambulance officer
   i-ofisa yesithuthi sabagulayo

e) lawyer
   igqwetha

f) secretary
   unobhala

Thank you for answering these questions
APPENDIX B

Career Development of Rural South African Children Project

Project Information Statement/ Letter of Invitation to School Principals

My name is Paul Longe, and I am a Psychology Masters student at the Nelson Mandela Metropolitan University (NMMU). I am conducting research on the career development of children in grades six and seven under the supervision of Professor Mark Watson (NMMU, South Africa) and Dr. Mary McMahon (University of Queensland, Australia). The Provincial Department of Education has given approval to approach schools for my research. A copy of their approval is contained with this letter. I invite you to consider taking part in this research. This study will meet the requirements of the Human Ethics Committee of the Nelson Mandela Metropolitan University.

Aims of the Research

The research aims to:

• develop greater understanding about rural children’s career knowledge, and
• identify factors that influence rural children’s thinking about careers.

Significance of the Research Project

The research is significant in three ways:

1. It will provide information about children’s career knowledge.
2. It will provide information about what influences children’s thinking about careers.
3. It will provide schools and teachers with greater understanding about the influence of schools on the career development of children.
Benefits of the Research to Schools
1. Dissemination of results to schools, Eastern Cape Department of Education, and the broader public.
2. The results will inform curriculum development in career education.

Research Plan and Method
Data will be collected by means of a survey administered to all grade 6 and 7 learners. Permission will be sought from the learners and their parents prior to their participation in the research. Only those who consent and whose parents consent will participate. The survey will be administered by a research team from NMMU during a lesson time to be decided on by the school and will take approximately 40 minutes to complete. All information collected will be treated in strictest confidence and neither the school nor individual learners will be identifiable in any reports that are written. Participants may withdraw from the study at any time without penalty. The role of the school is voluntary and the School Principal may decide to withdraw the school’s participation at any time without penalty. The survey is not collecting information of a sensitive nature. However, if a learner requires support as a result of their participation in the survey steps can be taken to accommodate this.

School Involvement
Once I have received your consent to approach learners in grades 6 and 7 to participate in the study

- I will arrange for informed consent to be obtained from participants parents
- I will arrange a time with your school for data collection to take place
- I will obtain informed consent from participants
- I will, together with a research team administer the Career Survey to all grade 6 & 7 learners who have given informed consent

Further information
This project is being conducted as part of a larger international study on children’s career development that already includes a sample of approximately 400 Australian
participants and 800 participants from South Africa. Dr McMahon is a principle researcher in this international study. No identifiable data will be entered into the international database.

Attached for your information are copies of the Parent Information and Consent Form and also the Participant Information Statement and Consent Form.

**Invitation to Participate**

If you would like your school to participate in this research, please complete and return the attached form.

Thank you for taking the time to read this information.

Paul Longe
Psychologist in training
NMMU

Prof. Mark Watson
Supervising Psychologist
NMMU
Career Development of Rural South African Children Project
School Principal Consent Form

I give consent for you to approach learners in grades 6 and 7 to participate in the Career Development of Rural South African Children Project.

I have read the Project Information Statement explaining the purpose of the research project and understand that:

- The role of the school is voluntary
- I may decide to withdraw the school’s participation at any time without penalty
- Learners in grades six and seven will be invited to participate and that permission will be sought from them and also from their parents.
- Only learners who consent and whose parents consent will participate in the project
- All information obtained will be treated in strictest confidence.
- The learners’ names will not be used and individual learners will not be identifiable in any written reports about the study.
- The school will not be identifiable in any written reports about the study.
- Participants may withdraw from the study at any time without penalty.
- A report of the findings will be made available to the school.
- I may seek further information on the project from Paul Longe on 041 504 2330.
- Non-identifiable data from this study will be entered into an international database of a larger study.
Please return to: Paul Longe
UCLIN
PO BOX 77000
Nelson Mandela Metropolitan University
6031
Dear student,

My name is Paul Longe, and I am a Psychology Masters student at the Nelson Mandela Metropolitan University. I am conducting research on the career development of children in grades six and seven under the supervision of Professor Mark Watson (NMMU, South Africa) and Dr. Mary McMahon (University of Queensland, Australia). The Nelson Mandela Metropolitan University (NMMU) has given it approval for the conduct of the study. The Eastern Cape Provincial Department of Education has given approval for me to approach schools to conduct my research. This study will meet the requirements of the Human Ethic Committee of the Nelson Mandela Metropolitan University. The School Principal has agreed to allow me to approach learners in grades 6 and 7 to participate in the study.

I would like to invite you to complete a survey. I have also provided information about the survey to your parents or guardians which you will be asked to take home to them. I am also seeking their permission for you to participate. You may only participate if both you and your parents/guardians consent.

The survey will take approximately 40 minutes to complete.

This research project will be used to:

- help understand more about children's career knowledge, and
• identify factors that influence children’s thinking about careers.

A summary report will be sent to all participating schools.
This project is being conducted as part of a larger international study on children’s career development that already includes approximately 400 Australian participants and 800 South African participants. Information gathered in this project will be included in the international database. Individual children will not be identifiable in the international database.

Please discuss your participation in this project with your parents. If you are happy to complete the survey, please sign Student Consent Form and return it to your teacher.

Thank you for taking time to read this invitation.

Paul Lange
Psychologist in training
NMMU

Prof. Mark Watson
Supervising Psychologist
NMMU
Career Development of Rural South African Children Project
Participant Consent Form

I have read the Project Information Statement for Participants explaining the purpose of the research project and I understand that:

• I will complete a brief survey.
• My participation is voluntary.
• I may withdraw from the study at any time without penalty.
• I have discussed the project with may parents/guardians
• My name will not be used when any reports about the survey are written.
• Information from this project will be entered into an international database.
• My name will not be used in the international database.

• A summary report will be made available to the school.
• I may seek further information on the project from Paul Longe on 041 504 2330.

I am willing to complete the survey.

Name: __________________________________

Signature: _______________________________

Date: _________________________________