THE CAREER DEVELOPMENT OF ADOLESCENTS IN A CHILDREN’S HOME:
A CAREER SYSTEMS PERSPECTIVE

ASHA DULLABH

Submitted in partial fulfilment of the requirements for the degree of

MAGISTER ARTIUM IN CLINICAL PSYCHOLOGY

in the Faculty of Health Sciences
at the
University of Port Elizabeth

January 2004

Supervisor: Professor M. B. Watson
Co-Supervisor: Professor C. D. Foxcroft
Co-Supervisor: Dr. M. McMahon
Many people have been invaluable parts of my system in this research process. I acknowledge and thank them in the following graphic.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td>ix</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>x</td>
</tr>
</tbody>
</table>

## CHAPTER 1: INTRODUCTION
- Adolescent Career Development  2
- Context of the Study           6
- Structure of the Study         8

## CHAPTER 2: THEORY REVIEW
- Adolescent Development         9
- Career Development Theory      13
- Super’s Life-span Life space Theory  15
  - Evaluation of Super’s Theory  17
- The Context of Career Development for Adolescents 20
- Systems Theory Framework       22
  - Systems Theory Constructs    23
  - The Individual System        26
  - The Social System            28
  - The Environmental/Societal System  30
  - Recursiveness                33
CHAPTER 3: RESEARCH REVIEW

The Individual System 42

Age 43

Gender 45

Culture, Values and Beliefs 47

Interests and Personality 51

Ability, Disability, Physical Attributes and Health 53

Summary 55

The Social System 55

Summary 60

The Environmental/Societal System 61

Environmental Conditions 62

Socio-economic Status 64

Summary 66

CHAPTER 4: RESEARCH METHODOLOGY

Introduction 68

Problem Formulation 68

Primary and Specific Aims 69

Research Approach 70
CHAPTER 5: RESULTS AND DISCUSSION

Introduction 93

Qualitative Results Regarding the Adolescents’ Present Career Development 94

Summary of Qualitative Results 105

Quantitative Results Regarding System Influences 106

The Individual System 107

The Social System 113

The Environmental/Societal System 117

Past, Present and Future Influences 120

Summary of Quantitative Results 123

Qualitative Results of the Reflection Process 125
CHAPTER 6: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Introduction 131
Conclusions 132
  The Individual System 134
  The Social System 135
  The Environmental/Societal System 136
Summary 137
Limitations 137
Recommendations for Future Research 138
Concluding Remarks 140

REFERENCES 141
APPENDICES 171
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>The Individual System</td>
<td>27</td>
</tr>
<tr>
<td>Figure 2</td>
<td>The Social System</td>
<td>28</td>
</tr>
<tr>
<td>Figure 3</td>
<td>The Environmental/Societal System</td>
<td>31</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Process Influences</td>
<td>34</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Individual System Influences</td>
<td>43</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Frequency Counts for Individual System Influences</td>
<td>107</td>
</tr>
<tr>
<td>Figure 7</td>
<td>Frequency Counts for Social System Influences</td>
<td>113</td>
</tr>
<tr>
<td>Figure 8</td>
<td>Frequency Counts for Environmental/Societal System Influences</td>
<td>117</td>
</tr>
<tr>
<td>Figure 9</td>
<td>Constellation of Most Prominent Influences</td>
<td>124</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Sample Description (N = 16)</td>
<td>73</td>
</tr>
<tr>
<td>Table 2</td>
<td>Data Analysis Methods</td>
<td>88</td>
</tr>
<tr>
<td>Table 3</td>
<td>Topics Related to Present Career Development</td>
<td>94</td>
</tr>
<tr>
<td>Table 4</td>
<td>Adolescents’ Present Career Development</td>
<td>95</td>
</tr>
<tr>
<td>Table 5</td>
<td>Part-time or Voluntary Work</td>
<td>97</td>
</tr>
<tr>
<td>Table 6</td>
<td>Life Roles</td>
<td>98</td>
</tr>
<tr>
<td>Table 7</td>
<td>Future Employment Options</td>
<td>100</td>
</tr>
<tr>
<td>Table 8</td>
<td>Decision-Making</td>
<td>103</td>
</tr>
<tr>
<td>Table 9</td>
<td>Additional Social System Influences</td>
<td>113</td>
</tr>
<tr>
<td>Table 10</td>
<td>Past, Present and Future Influences</td>
<td>120</td>
</tr>
<tr>
<td>Table 11</td>
<td>Reflection Process Findings</td>
<td>126</td>
</tr>
</tbody>
</table>
## LIST OF APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>My System of Career Influences (Revised Format)</td>
<td>171</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Experiential Learning Exercise</td>
<td>180</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Information Letter and Consent Forms</td>
<td>184</td>
</tr>
</tbody>
</table>
ABSTRACT

Adolescents in a children’s home are exposed to unique experiences from an early age. These adolescents develop in a system with early deprivation experiences, which may result in developmental and adjustment problems that impact on several spheres of their lives, including their career development. Given the lack of South African career research on adolescents, the present study aimed to explore and describe the career development of adolescents in a children’s home. Specifically, this exploration takes the perspective of the systems theory framework of career development which is comprised of three interrelated systems, namely the individual, social, and the environmental/societal systems.

The research approach was exploratory and descriptive in nature and was conducted both within a qualitative and quantitative framework. A workbook titled My System of Career Influences (McMahon, Patton, & Watson, 2003a), was used to collect the data. A non-probability, purposive sampling technique was employed to obtain the sample which consisted of 16 English-speaking adolescents, aged between 13 and 17 years. Age, gender and culture were not considered in this study.

The qualitative data was subjected to content analysis to identify themes, while frequency counts were used for the quantitative data. The results indicate that the present sample of adolescents is presently in the process of exploring and crystallizing their career choice, therefore fitting well within Super’s (1990) theoretical career stage of Exploration. The majority of the adolescents indicated that their present career situation involves making choices regarding schools, subjects, and participation in activities.

Quantitative findings indicate that all influences within the three interrelated career systems have an influence on the career development of adolescents in a children’s home. Based on frequency counts, individual system influences such as personality, health, interests and abilities were identified as prominent influences. Within the social system, prominent
influences included parents, friends, teachers and reading. Within the environmental/societal system, influences such as financial support, location of universities, availability of jobs, and opportunities to work overseas were identified as prominent influences. In addition, adolescents were able to reflect on their personalized diagram of system influences and thus to examine the interrelatedness of the three systems.

The present study highlights the applicability of both the systems theory framework and the My Systems of Career Influences measure in exploring and describing the career development of adolescents in the unique contexts within which they live. Limitations and recommendations for future research based on the present findings are suggested.

Key Words: Adolescents; Career Development; Career Systems Theory; Children’s Home.
CHAPTER 1
INTRODUCTION

A number of authors have highlighted the developmental infancy of career development theory (e.g., Brown, 1990; Hackett & Lent, 1992). While theoretical propositions and models have grown during the last four decades, there is consensus within the career literature that the status of career theory is inadequate and incomplete, and lacking in comprehensiveness and coherence (Brown & Brooks, 1996). Since 1990 researchers have started to question the universality or even appropriateness of career theories for South Africans (Stead & Watson, 1998; Stead & Watson, 2002; Watson & Stead, 2002). Decades of South African career research and practice within western career models has only been debated in more recent times. Much of this debate has focused on the appropriateness of established theories’ conceptualization of the contextual factors in the career choice process (Naiker, 1994; Stead & Watson, 1998). The relevance of such theory among black South Africans (Van Niekerk & Van Daalen, 1991) and the specific need to recontextualise and redefine theoretical constructs such as developmental stages, self-concept (Stead & Watson, 1998), career maturity, and occupational typologies (Watson, Stead, & Schonegevel, 1998; Wheeler, 1992), is critical if established theory is to have any meaning in the South African context.

The field of career development, like other fields of psychology, has a variable and complex theoretical base. The importance of contextual factors in career choice and career development has been under-emphasised, although various authors (e.g., Young, Valach, & Colin, 1996) have consistently reminded the field that contextualist, holistic, systemic, or developmental-contextual approaches to career psychology need serious consideration. The need for an integrating strategy has been emphasized by many writers in the field, culminating in an international conference that called for convergence in career development
theories (Savickas & Lent, 1994). While the complexity of career theory reflects the complexity of career behaviour (Blustein, 1997) the need for a corresponding complex and cohesive grand theory (or group of theories) is not supported by all writers. However, there is a belief that the adoption of an integrative theoretical framework based on a systems theory framework can provide coherence to the field by providing a comprehensive conceptualization of many existing theories and concepts relevant to understanding career development (Patton & McMahon, 1999). Against this background, the systems theory framework of career development (STF: Patton & McMahon, 1999) has emerged. The STF is not designed to be a theory of career development, rather the systems theory framework is introduced as the basis for an overarching framework within which all concepts of career development described in most career theories can be usefully positioned and used, both in theory and practice.

The proposal of a systems theory perspective is not designed to compete with or devalue existing career theories. Rather, the significance of this perspective lies in its capacity to refocus on the individual and to unite different career theories under one broader framework. The systems theory framework of career development provides the breadth necessary to unite career theories, while individual career theories provide the depth needed to account for specific concepts. Thus, systems theory and existing career theories are complementary and can coexist compatibly.

Adolescent Career Development

Adolescents face a range of developmental issues. It is a period that is characterized by profound biological, psychological and social developmental changes. Along with their physical development and their increasing sexual awareness, adolescents are required to make career decisions that may affect the rest of their lives. Children’s earliest career fantasies involve jobs that sound exciting or have high visibility. During adolescence, they
begin assessing their interests and abilities realistically as they consider potential careers. Thus, adolescents begin to look at career options from a more realistic perspective. Their ability to consider multiple relevant influences helps them evaluate their own interests and abilities and make tentative career choices reflecting what they believe they might enjoy.

Super (1990; Super, Savickas, & Super, 1996) has indicated that exploring and crystallizing career choice is an important developmental task for adolescents. Adolescents enter career transitions with the goal of becoming independently functioning adults as they strive to meet evolving personal and career-related needs (Super, 1990; Super et al., 1996). Rapid and escalating changes in the labour market and post-secondary educational opportunities mean that adolescents today are confronted with many challenges. The transition from school to work has become challenging because of increasing technology and job complexity, less effective coordination among high schools, universities, and job markets, and the increasing fluidity of careers over the life span. The transition into becoming an active part of the workforce is a complicated one. There are many personal, social, and environmental factors that come into play during this transition. It is believed that successful work transition depends on how well adolescents navigate previously learned career tasks (Lent, Hackett, & Brown, 1999) such as interest crystallization, the development of decisional skills, and career exploration. These tasks are introduced in the elementary school years and continue developing throughout high school through to adolescents’ entry into the workplace. The transition into the workforce is one that requires a long preparatory period and is followed by a long period of adjustment to social and environmental roles (Lent et al. 1999).

Little is known about how adolescents make career decisions, the antecedents of such decisions, and the various influences on them. With such uncertainty, it is easy to see why more effort in the career education and career research of adolescents is needed (Blustein,
The adolescent stage is the most critical stage where decision points that impact on future career choices take place. Many adolescents may reach this developmental stage with insufficient or misleading career information and with stereotyped attitudes about career choice. Several career theories, as well as career research, have suggested that adolescents who extensively explore themselves and their environments choose careers that are satisfying, productive, and congruent (Blustein, 1997; Brooks, Cornelius, Greenfield, & Joseph, 1995).

One of the primary outcomes of career exploration in adolescence is the articulation of career plans, which culminates in coherent goals and choices that are well-integrated with the adolescent’s self-concept (Super et al., 1996). Unfortunately, some adolescents may limit their career exploration and commit to career choices without a sufficient period of exploratory activity or, conversely, they may engage in prolonged exploration without committing to a career choice (Jordaan & Super, 1974; Savickas, 1999).

Career development involves one’s whole life, not just one’s occupation. More than that, it concerns the ever-changing contexts of one’s life. The importance of acknowledging career development over the life span is incorporated in the following definition: “Career development is the total constellation of psychological, sociological, educational, physical, economic and chance factors that combine to shape the career of an individual over the life span” (Sears, 1982, p. 139).

During the past decade there have been far-reaching changes in the social and political structure in South Africa. In a recent, definitive historical perspective of the development of career psychology in South Africa, Nicholas, Pretorius and Naidoo (1999) clearly demonstrate how sociopolitical and economic factors have prescribed the field of career psychology in South Africa, with career education practices in South Africa still reflecting the marked inequalities which characterized apartheid education structures
(Akhurst & Mkhize, 1999). Naiker (1994) has emphasized the importance of sociological factors in the career choice of South African adolescents and criticized the efforts of the early developmental and trait-and-factor theorists for largely omitting contextual factors in career choice.

Research on the career development of adolescents has received little attention in South Africa to date. Unsound career decisions can have far-reaching negative implications for the adolescent’s future career development and life satisfaction. It is important, therefore, that attention be paid to variables that differentiate between the career mature (i.e., career ready) and the career immature adolescent, specifically individual, social and environmental variables that might influence such career development. Established career theory suggests that an understanding of the career choice process is largely dependent on an understanding of how individuals translate their personal development into a career choice within a relatively stable micro and macro-environment (Patton & McMahon, 1999). The emphasis in most career theories has been on describing the microcosm of individual personal development (Patton & McMahon, 1999) and this has resulted in less emphasis being placed on the macro-environment in which individuals choose to pursue their career identities. Stead and Watson (2002) suggest that career theories make most sense when there is some balance in the dynamic interplay between individual career development and the contextual factors surrounding such development.

In their presentation of the STF, Patton and McMahon (1999) describe the sequential development of their framework from the intrapersonal system, through to its connection with the social system, the environmental/societal system, and the influences from the past, present, and future, thus providing an integrative theoretical framework based on systems theory relevant to understanding career development. Patton and McMahon (1999) suggest that the STF may be used as a qualitative assessment tool. Drawing on the possibilities
offered by the STF for career development (Patton & McMahon, 1999) as a qualitative assessment process, the authors developed the *My System of Career Influences* workbook (McMahon, Patton, & Watson, 2003a). The workbook is grounded broadly in constructivist theory and specifically on the STF of career development (Patton & McMahon, 1999). Against this background, it was decided to determine the usefulness of the My System of Career Influences Workbook in exploring and describing the career development of adolescents in a children’s home within the three interrelated systems of the individual system, the social system, and the environmental/societal system.

**Context of the Study**

The adaptability of the systems theory framework is most apparent when it is applied to the career development of a particular individual in a particular context. With regard to the present study, the context in which the present sample of adolescents live is that of a children’s home. This distinctive context can be regarded as a unique macro and micro system, with its own individual, social and environmental systems, and it presents with contextual elements that differ from those of a normative family system. The purpose of children's homes is to provide a permanent family environment for children who have lost their parents or whose parents are unable to care for them. The aim of the children’s home is to allow children to grow up in conditions similar to those found in a normal family. Thus, they attend public schools and are encouraged to integrate with the surrounding community.

While many contextual factors such as peer pressure and school subject selection exist even in the context of a children’s home, there are also contextual factors that are either lacking or that present as unique additional factors in this specific context, for example that of family influence. Family influence is an important factor in assisting adolescents with the career choice process. Adolescents form many of their attitudes about future work and career choice as a result of interactions with their families (Lankard, 1995). Thus, family
background provides a basis from which adolescent career planning and decision making evolve. For adolescents in a children’s home, this form of family interaction may be lacking.

There are several contextual factors that may influence adolescent career development, with various career theorists attempting to integrate influences such as social systems and context into career development theory. The systems theory framework integrates most contextual factors which may influence an individual’s career choice process. Using systems theory, Osipow (1983) states that:

Elements of the social, personal, and economic situation within which individuals operate may be more explicitly analysed, and the relationships of the larger systems to one another may be more clearly understood than in the traditional approaches to behaviour, which tend to emphasize only one major segment of the individual or the environment (p. 320).

Thus, systems theory provides an opportunity to develop a framework to represent the complex interrelationships of the many influences on career development. Significantly, systems theory offers a framework for blending what different disciplines can bring to career theory, as well as establishing congruence between theory and practice, that has not previously existed in the career literature. In addition, the systems theory framework emphasizes individuals and their unique contexts, an emphasis that has been consistently called for in the South African career literature (Stead & Watson, 1998; Stead & Watson, 2002; Watson & Stead, 2002).
Chapter 2 provides a theoretical background of the adolescent stage of development in relation to Erickson and Piaget’s stages of development. In addition, Super’s theory is outlined and an emphasis is placed on the exploration stage of career development. Most of Chapter 2 places emphasis on the newly emerged systems theory framework (STF) of career development. An overview of international and national research on influences that may play an influential role in the career development of adolescents is provided in Chapter 3. The research on these influences is grouped and described within the three interrelated systems of the STF, namely: the individual system, the social system and the environmental/societal system. In Chapter 4, the aims are delineated and the methodology used to investigate these aims is presented. Descriptions of the sample, data collection methods, procedures and data analysis techniques are provided. Chapter 4 concludes with an outline of the techniques employed to ensure the trustworthiness of the data collected. The results of the data collected are presented and discussed in Chapter 5. Finally, a critical evaluation of the present study is provided in Chapter 6, which also outlines the conclusions drawn from the research results. The limitations of the study are examined and recommendations for further research are suggested. Appendices and a list of references are provided at the end of the treatise.
CHAPTER 2
THEORY REVIEW

This chapter focuses on theoretical considerations relevant to this study. It provides a brief introduction into the adolescent stage of development, which relates to Erickson’s psychosocial stage of Identity versus Role Confusion and Piaget’s formal operational stage of cognitive development. The current status of career development theory is discussed, placing an emphasis on Super’s life-span, life-space theory of career development along with a brief evaluation of Super’s theory. The bulk of the chapter places emphasis on the newly emerged systems theory framework that describes the development of concepts and principles inherent in systems theory and provides a brief description of the key elements of systems theory that clearly illustrates the essence and advantages of this perspective that forms the foundation for this research study.

Adolescent Development

There are several career developmental theorists that have focused their attention on adolescence, as it is a time when educational commitment to career choices is made. Life-stage theorists, such as Super (1990; Super et al., 1996), have been helpful in identifying developmental tasks that are important for adolescents in the career decision making process. However it is important to describe the cognitive and emotional factors that influence career decision making. According to Piaget (1977), abstract thinking is a process that greatly facilitates career planning. Adolescence is a time during which individuals start a gradual process of developing their ability to solve problems and to plan. There are individual differences in when an adolescent develops the ability to think abstractly. As they develop and grow, planning becomes more ordered, permitting adolescents to introspect and think about themselves in a variety of situations. It is at this point that adolescents can more accurately picture themselves working in occupations than they could a few years earlier.
This ability is known as formal thought, which occurs in the last of Piaget’s (1977) four stages of cognitive development. By the time adolescents have developed the ability to think logically, they are apt to be quite idealistic, expecting their world to be logical when it is not. Hence, the process of job entry and job selection can help young people become more realistic in their thinking (Inhelder & Piaget, 1958). Cognitively, the period of formal thought is likely to bring the adolescent into conflict with parents and teachers, as adolescents are likely to think that they are right and others are wrong.

Just as Piaget has identified adolescence as a time of mild turmoil, so too has Erickson (1982) identified, in terms of psychosocial development, adolescence as a time of identity and role confusion. Erik Erikson’s theory of human development is broad, with several implications for career development. Influencing more career theorists than any other single developmental theory, Erikson’s life-stage approach is frequently cited by Super (1990) as influential in his own theory (Sharf, 2002). Of particular interest are Erikson’s conceptualizations about adolescent identity issues. The focus of this section will be on the Identity vs. Role Confusion stage and its relationship to other stages as they affect career development.

According to Erikson (1982), developing a sense of identity is the main task of the Identity vs. Role Confusion Stage (ages 12 to 18 years), a stage which coincides with puberty and adolescence. Identity is described as the characteristics that establish who people are and where they are going. Healthy identity is built on success in passing through earlier stages. Children’s success in attaining trust, autonomy, initiative, and industry has much to do with their developing a sense of identity. The physical changes of puberty, the onset of sexual maturity and the social expectation on adolescents to make a career choice, all force adolescents to re-examine earlier certainties. The quest for identity often causes adolescents to clash with the rules of society and with persons who are close to them. It is during this
stage that adolescents may become confused in their search for identity and a suitable social role. Erikson explains typical adolescent behaviour patterns, such as participation in group activities, falling in love, developing an interest in success and achievement, as part of this search for identity. The ego gain which results from a satisfactory resolution of the identity development crisis is termed reliability by Erikson (1982). This ego strength is characterized by certainty about the adolescent’s own identity, an accepting awareness of other possible identity choices which the adolescent could have made, and a capacity for loyalty towards one’s social role or roles.

It is clear that Erikson’s work has had a broad influence on developmental psychology. According to Hergenhahn (1984), Erikson’s theory is widely regarded as one of the most useful psychological theories, and several of the concepts formulated by Erikson, such as ego strength, identity, and identity crisis, are now part of our everyday vocabulary. Although Erikson’s theory is often criticised as flowing chiefly from unverified speculation, it must be pointed out that there is a fair body of research in support of his ideas, particularly studies on identity and adolescence (Marsella & Corsini, 1983). While career development theorists have been attracted to Erikson’s model, the direct application of Erikson’s theory to career development issues has been minimal. There has been minimal research conducted by Erikson on career development and there is an overall lack of literature on career related issues within Erikson’s theory. Although Erickson has written frequently on issues concerning the identity crisis, his work does not provide clear prescriptions for the counsellor or psychotherapist. According to Sharf (2002), Erikson presents an artistic rather than a scientific view of the identity crisis.

In response to this, Marcia (1999) has modified Erikson’s work so that research can be conducted on important aspects of identity development. According to Marcia, career identity can be viewed as consisting of four developmental statuses that most adolescents go
through, namely diffusion, moratorium, foreclosure and achievement. *Diffusion* refers to having few clear ideas of what one wants and not being concerned about the future. *Moratorium* is a time, often more than several months, in which one explores options while wanting a direction but not having one. *Foreclosure* refers to making a choice, often based on family tradition, without exploring other options. *Achievement* refers to knowing what one wants and making plans to attain a career goal. According to Marcia (1999), identity achievement is usually viewed as the most desirable and the most mature status.

Whereas most developmental theories, such as those of Piaget and Erikson, do not specifically attend to career related issues, their theories still remain particularly important as they influence other areas of development, such as abstract thought and identity. While Marcia (1999) attempted to modify Erikson’s work so that research could be conducted on important aspects of career identity, other researchers also began investigating the importance of career identity within other domains of development. According to research conducted by Skorikov and Vondracek (1998), career identity tends to precede the development of identity in other domains, such as religion, politics, lifestyle and interpersonal relations. The same authors also suggest that career development in early adolescence is particularly important as it influences other areas of identity development. From these findings, it is evident that adolescence should not only be described within general developmental theory but also within career development theory.

As early as junior high school, adolescents need to decide whether they want a “vocational track,” a “university track” or something else. The ability to deal with these decisions varies greatly among adolescents. There are many career theorists that have studied those aspects of adolescent development that are pertinent to the career choice process, such as interests, capacities, and values. Among the more influential is Donald Super’s life span, life space theory of career development. Over the years, career theory has developed into
career development theory, therefore the following section will describe such development in order to provide a broader context for describing Super’s theory. The section begins with a brief exploration of career development theory, with a later emphasis on Super’s life-span, life-space theory of career development.

**Career Development Theory**

There are many broad definitions of career development, one of which Brown and Brooks (1990) described as being “for most people a lifelong process of getting ready to choose, choosing, and typically continuing to make choices from among the many occupations available in our society” (p. xvii). However, over a number of years the importance of acknowledging career development over the life span was incorporated in the following definition: “Career development is the total constellation of psychological, sociological, educational, physical, economic and chance factors that combine to shape the career of an individual over the life span” (Sears, 1982, p.139). Sears’ dynamic definition encompasses the individual, the environment, interaction, and change as the key elements of a definition of career development.

According to Brown (1990), Hackett and Lent (1992), and Isaacson and Brown (1993), career development theory is still in its infancy. It is suggested that, while theoretical propositions and models have proliferated during the previous four decades, career development theory remains inadequate and incomplete (Brown 1990). Furthermore, both Brown (1990) and Gallos (1989) argue that career development theory is lacking in comprehensiveness and coherence, particularly in its failure to account for diversity within populations. In addition, career development theory has been criticized for focusing on intraindividual issues to the detriment of contextual issues (Collin & Young, 1986). Despite these inadequacies, the field of career development theory has experienced considerable growth in recent years and, while some theoretical formulations have been accorded less
Historically, career development theory has focused on either content or process (Patton & McMahon, 1999). Content refers to the influences on career development, such as interests and values, and process refers to accounts of change over time as well as to career decision-making processes. Some major theories focusing on the content of career development include the psychological approaches of Holland’s (1985; 1992) trait and factor theory, Bordin’s (1990) psychodynamic theory and Brown’s (1996) values-based theory. The developmental theories of Ginzberg, Ginsburg, Axelrad, and Herma, (1951) and Super (1990; Super, et al., 1996) have attempted to account for the process of career development by identifying a series of stages through which individuals pass. More recently, the need for career theory to take into account both content and process has been recognized (Vondracek, Lerner & Schulenburg, 1986).

One of the most influential career development theories has been that of Donald Super (1990, Super et al., 1996). Super was the first to acknowledge career development across the lifespan. Because of this, Super’s theory is most noted as a developmental one, or a theory of process. However, it is also significant that he acknowledged content with his Archway of Career Determinants, thus Super’s theory takes into account both content and process.

This research study places emphasis on Super’s life span life space theory of career development as it provides a comprehensive understanding of career behaviour, with specific emphasis on the stage of adolescence. As such it offers a broader theoretical context for understanding the career development of adolescents.
Super’s theoretical formulations have been recognized as representing one of the most influential theories in the field of career development (Osipow & Fitzgerald, 1996). Super’s work encompasses the broader perspective of life span career development. His theory advanced previous thinking on career development by suggesting that such development did not conclude in young adulthood but rather continued throughout the life span of an individual. Super’s (1990; Super et al., 1996) life-span, life-space approach to career development combines life-stage psychology and social role theory in order to convey a comprehensive picture of multiple-role careers, together with their determinants and interactions. Today Super’s theory stands firmly as an eminently useful model for comprehending career development and for organizing career education and counselling (Brown & Brooks, 1996).

Super (1990; Super et al., 1996) provides a life-career rainbow to graphically portray life-span, life-space career development. His rainbow has two primary dimensions, time and space. The life-space dimension of the rainbow depicts life theatres and roles; it addresses the social situation in which an individual lives. The life-span dimension of the rainbow depicts life stages and demarcates such stages to coincide with childhood, adolescence, adulthood, middlescence, and senescence. The person lives in the intersection of these two dimensions. According to Super (1990; Super et al., 1996), self-concept accounts for individuals’ subjective views of their careers and supplements their objective views of career relevant values, interests, and abilities.

Super (1990; Super et al., 1996) views career choice as a continuous process through life. At different stages of life, different developmental tasks must be accomplished in order to achieve career maturity. Two major tenets of Super’s theory are that career development is lifelong and that the self-concept is shaped as each phase of life exerts its influence on human
behaviour (Savickas, Super, & Super, 1996). Furthermore, Super (1990; Super et al., 1996) states that careers develop as individuals master challenges that are usually in the form of demands to change and these can be prompted by predictable developmental tasks loosely associated with chronological age or by unpredictable adaptive tasks that bear no relation to age or do not occur in a linear progression.

Super (1990; Super et al, 1996) proposed five major life stages, of which only the first two will be explored in the present research. The first stage is that of Growth (4 to 13 years of age), where children develop an understanding of the meaning of work and begin to form a self-concept of who they are and how they differ from others. Children begin to develop basic skills that will equip them eventually for work in the broader community. They also display increased confidence in their ability to do well at tasks and to make their own decisions. During this same period of Growth, children are also expected to develop their social skills and to balance such social cooperation with a competitive attitude aimed at reaching an optimal point of functioning. Towards the end of the Growth stage, children acquire an adult conception of time and become more aware of and concerned about their long-term future. There are four major career developmental tasks that apply to the Growth stage: becoming concerned about the future, increasing personal control over one’s own life, convincing oneself to achieve in school and at work, and acquiring competent work habits and attitudes.

The second stage is that of Exploration (14 to 24 years of age) in which adolescents increase their understanding of themselves and their abilities. They also begin to explore the world of work in order to make initial choices that will result in the implementation of a career choice. In this second stage, individuals encounter the career developmental tasks of crystallising, specifying and implementing a career choice. Much of Super’s research has focused on investigating this Exploration stage, particularly studying how high school and
college students grow in readiness (i.e. career maturity) in order to make educational and career choices (Phillips & Blustein, 1994). The construct of career maturity was described by Super (1990) to assess these developmental tasks of adolescence and young adulthood and their readiness to make an effective career choice. Super viewed maturation as the innermost process in adolescent career development because career choice readiness clearly increases with chronological age and school grade. Super (1990; Super et al., 1996) has indicated that exploring and crystallizing career choice is important for adolescents and young adults. What seems evident is that adolescents enter career transitions with the goal of becoming independently functioning adults, as they strive to meet evolving personal and career-related needs.

**Evaluation of Super’s Theory**

This section evaluates life-span, life-space theory by focusing on specific strengths and weaknesses. In general, the strengths and weaknesses of life-span, life-space theory are those common to all functional theories. The most significant weakness of life-span, life space theory is that its propositions are really a series of summative statements which, although closely related to data, lack a fixed logical form that could make new contributions of their own. In this sense, it is not a well-constructed theory in that concepts are not carefully defined, no hierarchy has been developed among them, and the hypotheses that have been developed have all but been ignored by researchers. Super (1990; Super et al., 1996) has contended that his ideas apply equally to all population groups and are thus comprehensive. Because the development of self-concept is influenced by gender, ethnicity, culture and socioeconomic status, in other words by the individual system, it seems likely that the developmental processes Super describes in his theory do not apply in the same way to all groups or contexts.
Thus, there remains a question about the comprehensiveness and generalisability of Super’s theory. For example, there are some factors important to career development in an African context which appear to be lacking from Super’s theory. Stead and Watson (1999) have provided examples such as ethnic identity, discrimination, and unemployment. According to Stead and Watson (1999), Super’s theory of career development as well as his holistic view of the self-concept were devised in a context where an individual had different options when making a career decision. Widespread unemployment makes this difficult to apply in the South African context, thus calling for Super’s hypotheses about socio-political, socio-economic and familial factors to be explored within the unique South African context. According to Swanson (1992), increased research on life-space constructs among adolescents and young adults is needed as well as more research on life-span constructs among middle and older adults. Furthermore, Swanson has articulated the need for a greater integration of the life-span and life-space dimensions of research.

Despite these acknowledged weaknesses, Super’s theory is still regarded as a theory that has considerable utility for both practice and research in career psychology (Osipow & Fitzgerald, 1996). According to Savickas and Super (1993), one of the strengths of Super’s theory includes its “close tie to empirical findings, data-oriented propositions, and avoidance of premature attempts at logico-deductive explanatory postulates” (p. 143). Bordin (1990) has stated that the power of Super’s overarching thinking is apparent in how readily new ideas and trends are immediately compatible with his work. Furthermore, Bordin comments that “Super’s comprehensive conceptual work has splendidly stood the test of time” (p. 132).

In addition to the strengths and weaknesses outlined above, there are several refinements to Super’s theory that were suggested by Herr (1997) in an attempt to further advance and articulate life-span, life-space theory. Herr (1997) identified five possible areas in which Super’s theory could be refined. The first category involved the improvement of
several fundamental concepts such as replacing self-concept dimensions and metadimensions with a social constructionist framework and replacing career maturity with career adaptability. The second and third categories involved continued increased attention to the impact of economic changes and the reaction of social barriers to career development as well as ideas regarding gender and culture differences. These variables need to be examined in depth in terms of their implications for the meaning of work, for work identity, and for new or emerging career patterns in many nations, more specifically within the South African context. For example, women are becoming more fully incorporated into the labour force and are occupying leadership roles in traditional and in non-traditional occupations, therefore greater attention to gender issues in role salience and career decision making needs to be applied in life-space, life-span perspectives. In addition, Herr (1997) suggests that more research needs to be directed to the adolescent population who are bound for immediate employment.

The final two categories of refinement dealt with evaluating and improving the model and measures for career development assessment and counselling. Herr (1997) suggests that more work needs to be done in constructing and evaluating assessments such as the Work Importance Study, and the Career Pattern Study as they do not measure all of the factors that Super describes in his various discussions of the life-span, life-space approach. Furthermore, additional studies are warranted of models of the translation of the self-concept into choice as this occurs in different nations and cultures, as are studies of cultural differences in decision styles.

The preceding sections have provided a brief description of both adolescent development and career development theory in general. A description of Super’s life-span, life-space theory was provided in order to conceptualize and understand career development during the stages of growth and exploration. The application of Super’s theory within the
South African context was also briefly explored when evaluating Super’s theory. The following section attempts to integrate this information as well as to include another variable, that of context. The additional focus on context will lead this chapter into the introduction of the systems theory framework specifically chosen for the present research.

**The Context of Career Development for Adolescents**

The educational structure of the South African secondary school system is such that adolescent career decision points frequently coincide with course and subject selection. These decision points are also triggered by *external contextual factors*, such as pressure from parents or peers, university access, availability of funds or a family move, or by *internal contextual factors*, such as career satisfaction/dissatisfaction, desire for further studies or desire to learn new skills. At the time of educational decision points, students are usually encouraged to evaluate themselves by exploring factors such as their attitudes, values, interests, and abilities. Thereafter, they are expected to seek information on possible career choices and to apply decision making processes and skills in order to arrive at a decision. This approach can be viewed as a reductionist approach which may not meet the needs of all adolescents. For instance, adolescents may not have accurate self-perceptions or information about careers and they may have difficulty matching their self perceptions with job prerequisites.

A reductionist approach overlooks the potential significance of contextual factors in adolescent career decision making. Making a career decision requires input from various sources, including family, peers, school, employers and the media, all of which hold a set of beliefs, values or attitudes. Career decisions are also made within a societal or environmental context, within which many factors need to be considered in relation to adolescents’ career development. Thus, adolescents constantly receive information (overtly or covertly) from elements of the context within which they live. This information helps to shape not only the
adolescent’s self-concept but also their concepts about the world of work. Adolescents’ career decisions need to be viewed therefore within the context in which they live.

What has become apparent in recent career theory is an increasing emphasis on the person and context as coexisting and jointly defining each other. Vondracek, Reitzle and Silbereisen (1999) suggest that most work on career identity does not attend to the importance of environmental factors. Vondracek and his colleagues are concerned with the effect of social, political, and historical factors on individuals that influence them and their career identity. Vondracek et al. (1999) stresses the importance of the timing of career choices within their specific contexts, as such timing can retard or advance career identity development. This focus on the broader context of development is referred to as developmental-contextual theory. One of the basic tenets of the developmental-contextual view is that people, by interacting with their changing context, provide a basis for their own development. In addition, Vondracek et al. (1999) also identified the three key elements in career development as the individual, the context, and the relationship between the two. Vondracek et al. (1999) suggest that there has been an overemphasis on individual factors, such as values, abilities, and interests in career choice, at the expense of contextual issues, such as family-of-origin issues.

The developing trend in the focus on family-of-origin issues has emerged as a result of the work of theorists in other areas such as family systems theorists. The influence of family on career development has been discussed by theorists since the time of Parsons (1909). Parsons (1909) and Super (1990; Super et al., 1996) both drew attention to two themes related to family that have persisted in the career literature up to the present time, those of biological or genetic influences and relational or interactive influences. The recognition of family as an influence can be traced throughout the history of career theory, with major attention being given to the influence of childhood family experiences in the work
of Roe (1957), Bordin’s (1990) psychoanalytic theory, and refinements of Holland’s (1973; 1985; 1992) theory. The inclusion of context as relevant to career development has led to the identification of a large number of relevant variables. Blustein (1994) identified the breadth of contextual variables as occurring at two levels, social context and societal context.

The field of career development has a variable and complex theoretical base. The need for an integrating strategy such as a systems theory framework has been emphasized by many in the field of career psychology (Patton & McMahon, 1999). The following section describes an integrative framework based on systems theory that offers coherence to the career field by providing a comprehensive conceptualization of the many existing career theories and concepts relevant to understanding career development.

**Systems Theory Framework**

The emergence of systems theory in the field of psychology has essentially been a reaction to the traditional, classical, analytic, or positivist worldview on which much of our thinking has been based. Systems theory is well established in various psychological fields, such as family therapy, but it is a relatively new development in the field of career psychology. This has ultimately resulted in the development of a systems theory framework (STF) of career development, which has been defined as a specific attempt to provide a synthesis of existing career theoretical literature using a metatheoretical structure (Patton & McMahon, 1999).

In 1992, McMahon first presented the concept of STF as a contextual model for understanding adolescent career decision making. Since then, it has been argued that context is an integral part of systems theory and that decision making is an integral part of career development. Hence the present research focuses on both the context and the career decision making of a clearly defined group of adolescents. Systems theory is used to illustrate interrelationships in the context of individual career development. It provides a framework
for a macro-level analysis of theory and it also facilitates a micro-level analysis of an individual’s career development. It comprises of key principles that underly the framework of systems theory. However, since the application of systems theory to career development is a relatively recent phenomenon, the identification of a coherent set of principles is still emerging. In understanding career theory and career behaviour within a systems framework, the following constructs will be briefly discussed as key principles of systems theory: wholes and parts, patterns and rules, acausality, recursiveness, discontinuous change, and open and closed systems.

**Systems Theory Constructs**

An essential element of systems theory is a focus on the unity of the system, on a whole that is greater than the sum of its parts. Thus, in terms of career development, individuals and their contexts would be regarded as a whole, and the interactive process between individuals and their contexts would be regarded as the interdependence of parts (Patton & McMahon, 1999).

**Rules and patterns** have both been constructed by human systems. According to Patton and McMahon (1999), rules can be regarded as a special form of a pattern that has been constructed by human systems (e.g., code of conduct or communication). Rules and patterns vary according to different systems. For example, different children’s homes may have different rules, and societal and cultural norms may also vary. Relating to career behaviour, it would be vital to identify both individual patterns (e.g., resistance to change) and contextual patterns (e.g., ongoing changes). At the same time, it would be important for career theorists to allow for some flexibility regarding the principles of rules and patterns.

Relating to the focus on patterns and relationships occurring within wholes, **acausality** refers to the reduction in attention given to causality. In terms of career theory, there is a restriction in existing theories that focus on causal explanations of career behaviour,
“This is because of that”). While causal explanations provide a practical way of making sense of most behaviour, understanding living systems as organic wholes would prove more beneficial and therefore would require less of a reliance on the concept of causality (Patton & McMahon, 1999).

With the reduction of causality also comes the reduction of linearity. Much of our conceptualizations about time, space, and development is expressed in linear terms. However, within the systems framework, the focus is on nonlinearity. Plas (1986) coined the term *recursive* as a starting point to describe nonlinearity. He stated that:

A recursive phenomenon is the product of multidirectional feedback, which occurs as functional and arbitrarily identifiable parts of a system emerge in transactions across time and space. A recursion is nonlinear, there is mutuality of influence. Any event that can be identified within a recursive human network can be viewed as the product of experience and anticipation. That is, any isolated movement or moment can be seen to be influenced by events in the past, present, and future. (p. 62)

Past, present, and future are linear constructions but they are also influential in our present thinking and behaviour in a recursive manner. Relating to career theory, various constructs and processes identified by theorists as relevant to career development are mutually and recursively influential in an individual’s career behaviour.

There is a great emphasis on ongoing change within systems theory. Systems theory accounts for change that is construed as slow and long-term, that is, growing, developing or evolving as well as change that occurs suddenly or spontaneously. This sudden or spontaneous change to a new form of system functioning is termed *discontinuous change*, and has been identified as occurring during major life crises. Within career theory, it is noted
that individual behaviour must change along with the rapid changes occurring within the workplace environment. This may produce discontinuous change within an individual system, therefore career planning must become increasingly flexible and adaptable (Patton & McMahon, 1999).

In systems theory, it is important to distinguish between open and closed systems. A closed system is impassable and therefore resistant to information introduced from the outside, whereas an open system can be understood only in relation to its necessary and actual outside environments. Therefore attempting to understand people’s functioning separate from their contexts would be the same as treating them as closed systems. It is the relevance of the environment that makes human systems open rather than closed systems. Bronfenbrenner (1977) described four structures as a way of categorizing environments, namely the microsystems, mesosystems, exosystems, and macrosystems. According to Bronfenbrenner (1977), the microsystem is described as “the complex of relations between the developing person and environment containing that person, e.g., home or school.” (p. 514). A mesosystem is a system of microsystems and includes the various settings in which an individual participates. The exosystem includes nonspecific formal and informal structures that impinge on the immediate settings in which the person is found, for example, the neighborhood or mass media. Finally, according to Bronfenbrenner (1977) the macrosystem “refers to the overarching institutional patterns of the culture or subculture, such as the economic, social, educational, legal, and political systems, of which micro-, meso-, and exosystems are concrete manifestations” (p. 515).

The purpose of this section has been to outline key principles of systems theory in order to understand and conceptualize the systems theory framework (Patton & McMahon, 1999). The next section will delineate in broader detail the several key interrelated systems that comprise the systems theory framework (STF). The STF comprises of three interrelated
systems, including the intrapersonal system of the *individual, the social system, and the environmental/societal system*. This research will clearly focus on the intrapersonal system of each adolescent participant, as well as their social and environmental/societal systems, all of which specifically relate to their unique living circumstances, that is, a children’s home. The processes between these three systems are explained via the recursive nature of interaction within and between these systems, change over time, and chance. The following subsection examines the first of these systems, the individual system.

**The Individual System**

The individual system is composed of several intrapersonal content influences including gender, age, self-concept, health, ability, disability, physical attributes, beliefs, personality interests, values, aptitude, skills, world of work knowledge, sexual orientation, and ethnicity. The individual is regarded as the centre of the career choice and development process. Thus, the individual system is regarded as the centre of the STF. Although the role of the individual in career decision making is central, this role has typically been regarded as passive, with the individual being shaped by his or her ability, gender, and other related influences.

Many developments encourage the active involvement of the individual in the career decision-making process. The theoretical work of Bandura (1977) in developing the concept of self-efficacy emphasized individuals’ abilities to act on their environment rather than merely responding to environmental experiences (McMahon, 1992). Recently, more theorists have suggested that the role of individuals in their own career development is becoming more important due to changes in the workplace. Super (1990) clearly identifies the individual as the central component or “keystone” (p. 221) in his Archway model in a similar way to the STF, where the individual is placed as the most central feature. Thus, the centre of the STF is a circle representing the individual that contains a range of intrapersonal features influencing
career development, features that are possessed by all individuals but are different for each individual (see Figure 1). The intrapersonal influences included in Figure 1 are those more frequently featured in the descriptions of career theorists, as well as some that have traditionally been neglected.

Figure 1

The Individual System


In the present research, each adolescent of the children’s home will be represented as a separate circle in the centre of the STF, reflecting their individual system. Each adolescent is a system in his or her own right, with other influences represented by other subsystems. These other subsystems will form outer layers of this centered circle. The completed circle contains, thus, a range of subsystems that are processed by all individuals but that are different for each individual. The following subsection examines the second interrelated system, the social system.
**The Social System**

An individual as a system does not live in isolation but rather as part of a much larger system. In reality, life roles exist only in relation to this larger system. Thus, the individual coexists within a broader contextual system that is itself composed of smaller subsystems. This broader system can be divided into two subsystems, the social contextual system (i.e., the other people systems with which the individual interacts) and the environmental/societal contextual system (i.e., the environment and society). Within the STF, it is useful to represent these subsystems separately. Figure 2 represents the principal social influences with which individuals interact or from which they receive input.

Figure 2

*The Social System*

Influences representing the content of the social contextual system include factors such as the adolescent’s peers, family, media, community groups, the workplace, and education institutions. Vondracek, Lerner and Schulenberg (1983) identified the important contextual variables that have been categorized within the social system as community structure and size, school climate, and family context variables, such as birth order and family size, maternal and paternal employment status and paternal encouragement. The same authors also highlighted the interaction between systems by emphasizing that socioeconomic status and ethnicity of family are relevant influences.

There are several social groups to which most adolescents belong, especially the family of origin, several school subgroups such as classes and activity groups, and the peer group (McMahon, 1992). These social groups have been described as the principal agents of socialization for adolescents (Borow, 1984; Jepsen, 1989). Although this comment refers to adolescents, the influence of these groups is insidious throughout life, as acknowledged in Super’s (1990) Archway model. For adolescents living in a children’s home, it could be assumed that some of these specific social groups may be lacking, specifically the family of origin.

The influence of the media has in the past received scant attention in the career theory literature. Jepsen (1989) identified the media as being a potential socializing influence. In fact, much information from the environmental/societal system is transmitted to individuals through the media. The workplace and education institutions are also factors that may influence individuals directly or indirectly. It is important to note that each of these social structures is also the source of values, beliefs, and attitudes that may be conveyed to the individual in a variety of ways. For example, changes in curriculum in educational institutions, such as the recent outcomes based teaching programmes in South Africa, can alter the perceptions and opportunities of individuals.
The composition of the social system is a life-long process and will change throughout life as the individual moves in and out of groups, for example, changing schools or homes. In Figure 2, the social systems that are common to most individuals have been represented. However, most individuals will belong to significantly more groups, such as interest groups, peer groups or service clubs. Thus, in considering the social system of individuals it is vital to explore the exact nature of the systems within which they function. The following subsection examines the third interrelated system, the environmental/societal system.

**The Environmental/Societal System**

The individual also lives within a broader system, that of society or the environment. The environmental/societal system as represented in Figure 3 includes influences such as political decisions, historical trends, globalization, socioeconomic status, the employment market, and geographical location. These influences might seem less directly related to the individual, yet their influence can be profound. For example, the influence of geographic isolation has been underrated as an influence in career development. According to Collett (1997), rural isolation may influence the nature of schooling received, employment opportunities, the availability of role models, and access to career information. The status of suburbs in cities can also serve as an influence, where the better location of some suburbs can positively affect the employment opportunities of residents (Patton & McMahon, 1999). Some suburbs are also better serviced than others in that in some suburbs there may be restricted transport facilities to and from work or educational institutions.
There is often a close link between political, socioeconomic, historical and geographic influences in cities and in rural locations. Decisions of governments on issues such as funding for schools or universities may have profound effects on individuals. Political and historical influences may also account for the beliefs, values, and attitudes held by age cohorts, such as...
the values held by school leavers at times of high employment compared with those at times of low employment (Patton & McMahon, 1999).

With regard to the South African context, variables such as politics, economics and prevailing environmental/societal conditions have perniciously affected the nature and form career psychology has taken in South Africa (Nicholas, Pretorius, & Naidoo, 1999). Furthermore, Nicholas et al. (1999) suggested that the multifarious inequities of apartheid in South Africa have led to disparate realities and differential access to educational and vocational opportunities for the different race groups. In South Africa, research conducted by Cloete (1980) and Mtolo (1996) have shown that school leavers have very limited career knowledge and this will clearly impact on effective career decision making. Inadequate career education in secondary schools, coupled with the negative impact of the policies of the apartheid system, has led to many South Africans making career choices that are based on trial and error.

The inclusion of employment markets as one of the important influences in the STF provides an opportunity for employment to be seen as part of the broader life context, as employment market trends can be a significant influence on the demand for tertiary courses and can influence the curriculum of schools and universities. Advances in technology and rapid technological change have also created a link between the employment market and historical influences. Thus, globalization has been given some attention in the career development literature as it is relevant in relation to changing organizations and changing workplaces and in the broader context in which individuals live. According to Hansen (1996), there are ten global issues that are considered most relevant in the career counselling context: “Technological Change, Environmental Degradation, Human Rights, Multiculturalism, Migration, Changing Gender Roles, Violence, World Population, Issues, Spirit and Meaning, and New Ways of Knowing” (p. 25). It is quite clear that the effects of globalization are far
reaching in the areas of information about the world of work, provision of jobs in particular
areas, and the importance of transferability of skills. These are continuing to have an effect
on our lives and therefore pose ongoing challenges for career counsellors.

As explained earlier in this chapter, the STF comprises of several process influences. The
STF would not be complete without recognition of the processes of influence both within
and between systems. Among those that have been previously explained are recursiveness,
change over time, and chance. Each of these processes will briefly be explored. Figure 4
represents these process influences. The following subsection examines the first process
influence, that of recursiveness.

**Recursiveness**

Recursive interaction contributes to the microprocess of decision making and the
macroprocess of change over time (Patton & McMahon, 1999). Vondracek, Lerner and
Schulenberg (1986) has similarly referred to the concept of dynamic interactions in
describing the fact that “complex, multidirectional relations exist between an individual and
his/her context, and that changes in one of the multiple sources of development will influence
changes in all others” (p. 187). It is believed that the concept of dynamic interactions comes
closest to describing the process of interaction of recursiveness, focusing on the
multidirectionality of influence and the relationships between all systems.

According to McMahon (1992), recursiveness incorporates many key aspects of
influences, such as their nonlinear, acausal, mutual and multidirectional nature, as well as
including the ongoing relevance of the past, present, and future. Each of the systems and
subsystems is an open system and is therefore permeable to influence. Significantly, as the
nature of the influences changes, so too does the degree of influence.
Figure 4

Process Influences

The influences of the intrapersonal system are also not static, and a recursive interaction takes place between these influences, as well as between them and social and environmental/societal influences. Therefore, in terms of practice, career development facilitators become part of the interconnected system of influences affecting the career development of individuals. In addition, a change in one part of the system or in one system produces a change in another part of the system, and individuals and their systems will experience their own recursiveness.

**Change Over Time**

As Super (1990; Super et al., 1996) has stated, career development is a life span phenomenon. Hence, change over time refers to decision making processes which account for the integral role of past, present and future influences. This is depicted within the STF as a broader system of time within which individuals and their particular systems move. The path of career development is one of constant evolution and may incorporate forward and backward movements. Similarly, according to Freeman (1993) this evolution is referred to in Super’s theory as “emergent career decision making” by Super (1990; Super et al., 1996). The recursive interaction between the individual and the social and environmental-societal systems reflects the reformulation of career theory away from a basic linear model to incorporate aspects of the life cycle and changing demands of life roles. Thus, to consider career development without looking backward into the past or without looking forward to the emerging future is indeed short-sighted.

**Chance**

Although unpredictable, the concept of chance needs to be considered in the STF as the influence of chance can be profound and its importance as a possible influence on career development needs to be acknowledged and included in the STF. According to Miller (1983), chance is defined as “an unplanned event that measurably alters one’s behaviour” (p. 17) and
can be referred to as luck, fortune, accident, or happenstance, for example genetic endowments. With an array of influences, it is unreasonable to assume that an individual’s career development will always be planned, predictable, or logical. Chance can affect any one of the three interrelated systems. For example, an accident or illness may produce a disability, a chance meeting may open up new employment prospects or being placed in a children’s home might reduce options for further career opportunities. Importantly, within the systems theory framework the emphasis on chance is that it occurs only as it is perceived by the individual observer.

As with any new theory or framework, it is important to provide an evaluation of the STF and its implications. The following section will provide a brief evaluation of the STF as well as the implications of the framework for career theory, for career decision making, and for the relationship between theory and practice.

**Evaluation of a Systems Theory Framework**

The STF perspective addresses many criticisms evident in the career theory literature. As a result, there are many advantages in a STF approach towards integrating career theories and towards integrating theory and practice. McMahon and Patton (1999) outline the following advantages:

1. The important contribution of all career theories can be recognized.

2. A STF can place extant theories in the context of other theories, and their interconnections can be demonstrated. By viewing the whole picture of interconnecting influences on career development, a systems theory perspective can also recognize the interconnections between theories and view them in the context of other theory.
3. A systems theory perspective recognizes the contribution to career development theory and practice of other disciplines. For example, in discussing the influence of family on an individual’s career development, reference can be made to family therapy principles. Therefore, the STF offers the potential for integrating psychological and sociological theories of career.

4. Systems theory brings to career development a congruence between theory and practice and new approaches for use in career practice. Systems theory is well-established in other counselling fields, such as family therapy. As a result, its application to career development brings with it well-established techniques that can be used by practitioners.

5. The emphasis in career development is placed on the individual and not on theory. Therefore, systems theory can be applicable at a macro level of theory analysis, as well as at a micro level of individual analysis.

6. A systems theory perspective enables practitioners to choose from the theory that which is most relevant to the needs and situation of the individual.

7. Systems theory offers a perspective that underlies the philosophy reflected in the move from positivist approaches to constructivist approaches.

The implications of the STF perspective are that it provides the breadth necessary to unite various career theories, while such individual career theories provide the depth needed to account for specific concepts. While emphasizing a multitude of influences on individual career development, the individual remains the most important factor in career development. This perspective is confirmed by Super (1990) when he states that it is the individual “in whom all the personal and social forces are brought together” (p. 203). With regard to the issues of gender, racial/ethnic/cultural groups, sexual orientation, and socioeconomically disadvantaged groups, the STF provides adequate attention to the recursive nature of the
interaction among the variables that influence differential opportunity structure, including psychological, economic and sociopolitical variables. In addition, a STF perspective focuses on the dynamic interactions between the individual and historical, social, political, economic, cultural, technological, and organizational influences in understanding career decision making and planning. With the emphasis on the individual, a systems theory perspective allows for multiple meanings and explanations of the purpose of work and its significance to individuals. Put simply, within the STF a career could be viewed as the pattern of influences that coexist in an individual’s life over time.

Summary

This chapter has initially presented a review of the adolescent stage of development from Piaget’s cognitive development stage of formal operational thought and from Erikson’s psychosocial stage of identity development. Each developmental stage in life presents challenges and difficulties that require new skills and responses. Most developmental theorists agree that adolescents must confront two major tasks, those of achieving autonomy and independence, and forming an identity. The career theory of Super offers life stages during which individuals need to achieve certain developmental tasks. For adolescents, these stages are those of Growth and Exploration. Super has indicated that exploring and crystallizing career choice is important for adolescents and young adults during these developmental stages. However, career identity and the context in which such identity emerges, when viewed together with various contextual influences, has been found to be another useful perspective on adolescent career development. The emergence of the systems theory framework allows the influences of the social, personal, and economic situation within which adolescents operate to be more explicitly analysed, and the relationships of the larger systems to one another to be more clearly understood. Significantly, systems theory offers a framework for the blending of what different disciplines can bring to career theory, as well as
attempting congruence between theory and practice. While the STF has already been broadly described in this chapter, its adaptability and elasticity become more apparent when it is applied to the career development of particular individuals at various points in their lives.

In the following chapter, the STF will be developed further by delineating research conducted both nationally and internationally within the three interrelated systems, namely the individual, social and environmental-societal systems.
CHAPTER 3
RESEARCH REVIEW

The study of career behaviour exemplifies many issues about research in the social sciences today. Not only does it attract attention from a host of social science disciplines, but career is the subject of interdisciplinary study (Young & Borgen, 1990). For most people in Western society, career represents a practical construct both individually and socially. Thus, like many social science topics, it is studied for its own sake in order to extend our understanding. However, its study is also important for the development of appropriate career resource centres and to identify effective programmes and interventions that can aid individuals in their own development (Watson & Stead, 1993).

While the study of career theory has experienced considerable growth in recent years, theorists (e.g., Brown, 1990) have noted the need for a more comprehensive theory to describe the complexity of career development. The value in providing a more integrative theoretical picture of career development has been acknowledged. Thus, the concept of integration or convergence within career development theory has emerged (Borgen, 1991; Osipow, 1990). Authors have called for the integration of career theory through the development of an overarching theory or framework of career development (Dawis, 1994; Hackett, Lent, & Greenhaus, 1991).

The perspective presented in the present research draws on career development and systems theory. While a systems perspective is relatively new to career development theory, its potential for career developmental research was acknowledged as early as 1983 (McMahon 1992). However, such potential as an overarching career theory framework has not been explored (McMahon, 1992), with career behaviours studied mainly from an intrapsychic perspective. While there is sufficient literature available on family systems theory and career behaviour, there has been no research completed within the newly emerged
systems theory framework (STF) in terms of career constructs. This research has therefore taken a pioneering stance in conducting career research within this new theoretical systems approach to the career development of adolescents.

As described in chapter 2, the STF consists of three interrelated systems namely the individual system, the social system, and the environmental-societal system. Each of these systems is composed of several intrapersonal content influences. According to the STF, specific intrapersonal content influences are related to specific systems. While many of these intrapersonal content influences within all three systems have been broadly researched, other influences still require research.

In relation to the context of adolescents in a children’s home, there has been limited research conducted in general, with an absence of research on the career development of such adolescents. Most South African research conducted with adolescents within the context of a children’s home have been phenomenological studies focusing on the adolescents’ experience of their life-world (Lategan, 1999; Mudaly, 1984) and on the development of their self-concept through an enrichment programme (Van der Riet, 1985). Other South African studies have examined early care giving experiences and attachment styles (Bisogno, 1998), improving the intellectual competence, academic achievement and self-esteem of pre-adolescents (Clark, 1987) and the educational responsibility of the house parent (Naidu, 1997). No research on adolescents in children’s homes has examined their career development.

This chapter reviews a range of both international and national career research, with a focus on empirical findings that underpin career theory, that emphasize the broader concept of adolescent career development, and that emphasize an integrative picture of systems theory influences. The review will attempt to group and describe relevant research findings of several intrapersonal content influences that focus on adolescents within the three well
defined and interrelated systems of the STF. To begin with, this chapter will present relevant research findings of the intrapersonal content influences found within the individual system of the STF.

**The Individual System**

The individual system of the STF is composed of several intrapersonal content influences including gender, age, self-concept, health, ability/disability, physical attributes, beliefs, personality interests, values, aptitude, skills, world of work knowledge, sexual orientation, and culture. As mentioned earlier, not all of these influences have been researched within the field of career psychology. Nor can all influences within the individual system be examined within the confines of the present research. When deciding which influences to review, the researcher was guided primarily by the STF. As described later in chapter 4, the development of the My System of Career Influences (MSCI) workbook (McMahon, Patton, & Watson, 2003a) utilized in this study, is based entirely on the STF. In examining individual system influences, the MSCI brings together twelve influences, namely: age, gender, ability, disability, coping strategies, personality, interests, culture, beliefs, values, physical attributes and health.

Just as there is little agreement in the literature on the grouping of career development theories, so there are diverse opinions on how to group individual system influences. However, the application of the STF to career development allows for disparate influences described in the literature to be grouped together, with an emphasis on the interrelatedness of such influences. Thus the present review attempts to group research describing these influences based on their interrelatedness and their interactive nature. In addition, this research review is less interested in what one particular study states about a particular influence and more interested in trends, whether contradictory or not, across studies.
Figure 5 indicates the grouping of the twelve influences of the Individual System based on their interrelatedness as outlined in the career literature. This review will present research findings pertaining to these five groupings of influences, while acknowledging the interactive nature of such influences. The research review will flow from international to national research findings. In general, there seems to be a far greater volume of research conducted internationally than nationally.

Age

The importance of age has been illustrated in the development of stage theories such as that of Super (1990) and has been accepted by many writers (e.g., Guthrie & Herman, 1982). As early as 1966, De Fleur proposed that the chronological age of individuals was an important link to the maturation of their concepts of the career world. In more recent times, career development theorists have de-emphasized the influence of age per se in favour of other indices of time such as school grade (e.g., Crites, 1981). For example, Guthrie and Herman (1982) concluded that school grade is more positively related to career development...
in adolescents than age where a difference of one or even several chronological years may make little difference in an individual’s career maturity score. Similarly, Krau (1987) believes that age influences work value formation less because of maturation factors but more because of the acquisition of educational experiences in relation to the start of a career. Other career research suggests that children’s knowledge of occupations seems to become more comprehensive and detailed as they become older, thus suggesting that age does play a role in an individual’s career development (Edwards, Nafziger, & Holland, 1974; McCallion & Trew, 2000; McMahon & Patton, 1997; Seligman, Weinstock, & Heflin, 1991; Seligman, Weinstock, & Owings, 1988).

Although research on age as an influence in career identity development has received comprehensive attention, the results demonstrate mixed trends. In terms of Marcia’s (1999) developmental statuses of career identity, international research indicates a general trend towards identity achievement steadily increasing with age during adolescence, whereas diffusion decreases (e.g., Grotevant & Thorbecke, 1982). However, various other international studies indicate no significant differences in the career identity development of adolescents of different ages (e.g., Adams & Fitch, 1982; Archer, 1982; Waterman, 1985).

Other career constructs have been examined in relation to age. For instance, in examining the construct of career self-efficacy (i.e., people’s beliefs about their capabilities to exercise control over events that affect their lives), few studies have commented on whether age or the passage of time impact on career self-efficacy expectations in adolescents. Self-efficacy has been applied to various fields of psychology; however it is career self-efficacy research that will remain the focus of discussion in this section. International research has investigated career self-efficacy in high school students (e.g., Noble, Hackett, & Chen, 1992; Post-Kammer & Smith, 1985), however no age differences were described. On the other hand, Hearly, O’Shea, and Crook (1985) and Creed, Patton and Watson (2002)
hypothesize that career attitudes and confidence in one’s career progress and decision making may be a developmental phenomenon that matures with age.

Researching age as a career influence may present additional problems in South Africa. Cloete (1980) points out that age and grade level in school are closely related internationally, thus choice of either influence may not be crucial. However, in South Africa, particularly with disadvantaged populations, such a direct relationship does not exist and several career researchers have suggested that it may prove more feasible to utilize grade level than chronological age. The findings on the influence of age or school grade in national career research are mixed. Some South African research on senior high school learners suggests there is a developmental trend with constructs such as career decision making self-efficacy (e.g., Eaton, 2001; Williams, 2001) and career maturity (Patton, Watson, & Creed, 2004; Watson & van Aarde, 1986). However, when reviewing career identity development, national research supports international findings in that there are no significant differences in the career identity development of adolescents across different ages (e.g., Ackermann, 1995).

Generally, the debate of age versus school grade remains prominent in career research studies. While some research clearly indicates a developmental age trend in relation to various career constructs such as career self-efficacy, other research studies suggest that grade level should be examined rather than age. In addition, there is limited research conducted on high school populations making any definite conclusions about developmental processes premature.

Gender

Most career research indicates that gender plays an influential role in the career development process of adolescents. Sex stereotypes are learned at an early stage and affect the degree to which both sexes perceive given careers as being legitimate options. Among the many international studies conducted specifically with adolescents, general trends suggest
that there are significant gender differences in terms of career development. Examples of such research findings are that adolescent females engage in greater career exploration and planning (Wallous-Broscious, Serafica, & Osipow, 1994), tend to score higher on measures of career maturity (Brown, 1997; Hartung, 1997; Luzzo, 1995; Super, 1990; Taveira, Silva, Rodriguez, & Maia, 1998), have greater career self-efficacy (Betz & Hackett, 1981; Post-Kammer & Smith, 1985), are more likely to aspire to mid-level and higher level occupations (Rojewski, 1997), and aspire more to clerical and service positions (Fottler & Bain, 1980).

In relation to males, international research suggests that adolescent males believe they have more control over their career decision making (Powell & Luzzo, 1998), score lower on measures of career maturity (Rojewski, 1994), are lower in career self-efficacy (Betz & Hackett, 1981), aspire to mid-level occupations (Rojewski, 1997), and aspire more to craft and labour positions (Fottler & Bain, 1980).

While a variety of gender differences in the career development of adolescents has been identified, other studies have found no gender differences. For example, no significant gender differences were found regarding the career identity status of high school learners (Archer, 1985; Dellas & Jernigan, 1987; Grotevant & Thorbecke, 1982; Watermann, 1985). In addition, no gender differences were identified in career decision making self efficacy when comparing South African and Australian high school learners (Creed, Patton, & Watson, 2002).

National research has found adolescent females to be largely in the moratorium stage of identity formation while adolescent males could not be classified into any particular career identity status stage (e.g., Ackermann, 1995). Adolescent females tend to score higher than adolescent males on work values such as altruism, personal development, and social interactions (Langley, Du Toit, & Herbst, 1992). South African adolescent females have also been found to be more inner orientated in their work values, attaching greater importance to
humanitarian and social values, while males were found to be more realistic and physical in their work value needs (Langley, 1995). Female adolescents find values such as cultural identity, risk taking and the use of all their talents important, while males value authority, creativity, and risk (Zeier, 1992). In terms of life role development, female adolescents have been found to be more committed to the student, citizen and homemaker roles, whereas male adolescents scored higher on all aspects of the leisurite role (e.g., Langley, 1992). No significant gender differences have been found with South African adolescents in relation to career self-efficacy (e.g., Eaton, 1996), career decision making self-efficacy (e.g., Williams, 2001), career maturity (Patton, Watson, & Creed, 2004; Watson & Van Aarde, 1986) and in the development of career identity (e.g., Botha & Ackermann, 1997; Williams, 2001).

**Culture, Values and Beliefs**

One theory that acknowledges culture, beliefs and values is Super’s (1990) theory of career development. One of the identified strengths of Super’s theory is its flexibility in incorporating cultural influences (Fouad & Arbona, 1994). Super’s constructs of career development, career maturity, life-roles, values, self-concept and adaptability have all been investigated by a number of researchers with various African American adolescent samples (Carter & Cook, 1992; Evans & Herr, 1994; Fouad & Arbona, 1994; Fouad & Bingham, 1995; Parham & Austin, 1994). One specific area of research with adolescents of diverse cultural backgrounds has been the study of career maturity, that is, their career developmental readiness. Research indicates that adolescents who scored low on measures of career maturity were more likely to be African American, educationally disadvantaged, male, and indecisive about their career choice (e.g., Fouad & Kelly, 1992; Rojewski, 1994; Westbrook & Stanford, 1991). Compared to white high school students, research indicates that Asian high school students score lower in career maturity and indicate a stronger preference for a dependent style of decision making (e.g., Leong, 1991; Leong & Serifica, 1995). The latter studies
suggest the need for more research on the use of Super’s concept of career maturity with adolescents of diverse cultural backgrounds.

In relation to beliefs, various career theories have placed significant emphasis on career self-efficacy (i.e., the belief in one’s ability to perform certain career tasks) as an influence in the career development process (e.g., Bandura, 1990; Krumboltz, 1979, Lent, Brown, & Hackett, 1994, 1996). Career research has examined ethnic identity in relation to the perceived career self-efficacy of adolescents and results indicate significant ethnic differences, suggesting that ethnic identity contributes to adolescents’ perceptions of their ability to achieve academically and to find meaningful careers (e.g., Lauver & Jones, 1991; Smith, Walker, Fields, Brookins, & Seay, 1999).

Research on culturally diverse groups has also focused on career interests. For example, research has found that African American high school students tend to have fewer interests than white students, score higher than white students in artistic interests and lower in scientific, technical, mechanical, and outdoor career interests (Sewell & Martin, 1976). However, other research suggests there is not sufficient information to determine how accurately career interest inventories measure the likes and dislikes of culturally diverse groups (e.g., Helms & Piper, 1994; Leung, Ivey, & Suzuki, 1994; Tracey, Watanabe, & Schneider, 1997).

With regard to work values, the majority of international research has examined work values in relation to school grade level. Findings show that most third through eighth graders identified money as the reason for work, with few mentioning personal satisfaction and development (e.g., Emmett, 1989). Little change in values was found from the fifth through eleventh grades, leading researchers to conclude that work values are already well-established by the fifth grade. In general, career research has indicated that values are influential in the choice of career for adolescents and ultimately in the level of satisfaction in such a career.
(Lebo, Harrington, & Tillman, 1995). Researchers such as Emmett (1989) state that little research has been conducted to establish the work values patterns of young adolescents and university students.

In South Africa, there has been limited research that describes the career development of South Africa’s diverse population groups. Much of South African career research prior to 1990 focused on white participants (De Bruin & Nel, 1996) on the assumption that their Western heritage would justify the use of international theories, constructs and instruments. Thus a factor for concern is the skewed nature of South African career research regarding the country’s various ethnic groups. For instance, according to De Bruin and Nel’s (1996) overview of South African career research, less than ten percent of such research has focused on black South Africans.

Consistent with international research, several of Super’s (1990) career constructs have been examined in South Africa, across different cultures. For example, South African research on career maturity invariably shows significant differences in the career maturity level of adolescents from different cultural groups, with adolescents from previously disadvantaged cultural groups being less career mature (e.g., Beggs, 1990; Hickson & White, 1989; Langley et al., 1992; Reid-Van Niekerk & Van Niekerk, 1990). National research clearly indicates a cultural difference in the career maturity of high school learners (Langley, 1990; Watson, Stead, & De Jager, 1995), but the work of Baloyi (1996) suggests that such cultural differences may be due largely to socio-economic status. Baloyi found no statistically significant difference between the career maturity of black and white secondary students attending private high schools. Within the South African context, Stead and Watson (1998) suggest that it may be more appropriate to focus on role maturity than on career maturity, as this broader emphasis would allow a particular culture or individual to define which life roles are salient.
In examining career interests on a national level in relation to culture, a general trend has emerged with black South African high school students concentrating mostly in the social service and educational fields and least in the technical fields, therefore fitting predominantly within Holland’s (1985) Social and Investigative occupational typologies (Watson, Foxcroft, Horn, & Stead, 1997; Watson & Stead, 1993). Such occupational aspirations appear unrealistic when matched to trends in the South African labour market which reflect an increasing shortfall in the scientific and technological fields. Similar to international findings (Rounds & Tracey, 1996; Ryan, Tracey, & Rounds, 1996), South African research conducted by Watson, Stead, and Schonegevel (1998) has found that a measure based on Holland’s (1985) theory fails to provide any definable interest structure for black adolescents and other non-Westernized samples.

Other South African studies have examined career identity in relation to culture, with contradictory findings. Some studies suggest that black adolescents have above average career identity (e.g., Williams, 2001) in relation to their white and coloured counterparts, while other studies indicate that black adolescents’ career identity is far lower than their white and coloured counterparts (e.g., Hickson & White, 1989). Other South African research has indicated no significant cultural differences in the developmental level of career identity between white and black adolescents (e.g., Thom, 1988).

In examining career self-efficacy, South African research suggests a statistically significant and positive relationship between career self-efficacy and the range of occupations considered by black adolescents (Seane, 1998). In addition, there have been several South African investigations that have examined self-efficacy in relation to culture (e.g., Dlala, 1997; Mofokeng, 1996) but these have applied the construct more to academic achievement than to career process.
Consistent with international research, the work values of urban black South African adolescents has been examined in relation to influences such as grade and gender, with little research on other South African cultural groups. Work values have been found to differ in relation to different South African cultural groups. For example, black adolescents value salary (e.g., Kota, 1999), while white adolescents value risk taking (e.g., Zeier, 1992).

**Interests and Personality**

Holland’s (1985) theory of career choice brings together the two influences of interests and personality. Underlying Holland’s theory is the assumption that career interests are one aspect of personality and therefore that a description of an individual’s career interests is also a description of the individual’s personality (Weinrach & Srebalus, 1990). In addition, both personality and interests have been found to be moderately related to career abilities (Ackerman & Heggestad, 1997). Recent international studies have examined how well Holland’s theory fits people from diverse cultural backgrounds. Results indicate that Holland’s circular structure of interests/personality types adequately represented the interest structure of diverse cultural groups (Day, Rounds, & Swaney, 1998; Swanson, 1992). While interests have already been discussed in relation to diverse cultural groups, another area of research involves studying the relationship of Holland’s personality types to various personality characteristics. For example, research has found that Holland’s six personality types fit with those of the NEO five factor model (Tokar & Fisher, 1998; Tokar & Swanson, 1995). On the other hand, Crook (1982) found only partial support for the relationship of personality to career development in adolescents.

It has been suggested by several researchers that personality factors appear to be particularly important in the career development of adolescents from disadvantaged and minority groups (Greenhaus & Simon, 1976; Putman & Hansen, 1972; Tolbert, 1980). Despite established theoretical formulations about the influence of personality factors on
career development supportive research remains scarce. While limited research beyond the
1980’s has examined the impact of personality in relation to career development, personality
still remains an important construct that needs to be considered in career research. Most
research in this field has examined the relationship of attitudinal dimensions of career
development to various personality factors. Emphasis has fallen mainly on the self-concept,
self-esteem and locus of control, all of which are attributes of personality (Kishor, 1981;
Lokan & Biggs, 1982; Wallous-Broscious et al., 1994).

Early research relating career decision behaviour to personality characteristics has
found undecided high school students to be lower in self-esteem (e.g., Barrett & Tinsely,
1977; Kishor, 1981), overly sensitive, compulsive and withdrawn (Watley, 1965), more
external and fearful of success (Taylor, 1982), and with high trait anxiety (Fuqua, Seaworth,
& Newman, 1987). Various other personality traits have been studied in relation to career
development. Early research conducted with adolescents have found career mature
adolescents to be less deferent in their relationships with others, more independent and
forceful (e.g., Bartlett, 1971); more self-controlled, less expedient and more concerned with
social standards (e.g., Laubscher, 1977); more responsible (e.g., Speights, 1979); and
perceive themselves as more intelligent, accurate and industrious (e.g., Khan & Alvi, 1983).

In relation to career decision behaviour national studies have found undecided
adolescents to be external in their locus of control (Stead, 1988), high with trait anxiety
(Stead, 1988), and diffuse in their career identity (Du Toit, 1986; Stead, 1988). South African
research has established a relationship between personality traits and work values in
adolescents, suggesting a pattern that adolescents who are better adjusted also attach greater
value to independent performance in their work (e.g., Kota, 1999; Neethling, 1983). In
addition, certain values have been found to be related to specific personality types using
Holland’s (1997) typology with a sample of undergraduate students. For example, the
enterprising and social personality types valued ability utilisation, achievement, economic
security and personal development the most (e.g., Hall, 2001). In addition, eleven values
were found to be statistically significant predictors to the Realistic personality type, seven for
the Investigative personality type, twelve for the Artistic type, five for the Social type, seven
for the Enterprising type and nine for the Conventional personality type (Hall, 2001). The
findings from these studies support the belief that values are significant predictors and
contributors to differences among personality types.

**Ability, Disability, Physical Attributes and Health**

Dawis and Lofquist (1984) define abilities as “reference dimensions for skills” (p. 233). The construct of abilities is needed in order to conceptualise a vast array of work skills. Raskin (1985) has hypothesised that the developmental processes of career identity and career development correspond significantly because both require the attainment of dimensions of career maturity. These dimensions include the acquisition of self-knowledge, including the evaluation and assessment of individual abilities, interests, aptitudes, objectives and values; active exploration and processing of career information; integration of self-knowledge and knowledge of the career world; and decision-making skills, all of which impact on an individual’s ability.

While ability has received comprehensive attention in the literature, disability has received scant attention, with some mention in the work of Mitchell and Krumboltz (1990) and Lent, Brown, and Hackett (1994). For example, Mitchell and Krumboltz (1990) suggest four categories of factors that influence an individual’s career decision-making process, one of which is genetic endowment and special abilities. This category includes the acknowledgement of influences such as appearance, health, ability and disability. The STF suggests it is timely to include disability as an influence in its own right rather than as an
adjunct to ability. The majority of career research both nationally and internationally has examined disability in relation to learning disabilities.

International studies have compared adolescents with and without learning disabilities in relation to constructs such as career maturity and career salience (e.g., Koestenblatt, 1999; Ohler, Levinson, & Barker, 1995; Smedley, 2000). Results indicate a consistent trend that learning disabled adolescents score significantly lower on career maturity scales than their more abled counterparts. In addition, these studies have found that the severity of the learning disability had the most negative impact on the career construct of career maturity, while another trend suggests that learning disability did not impact on the career commitment of the two groups (e.g., Koestenblatt, 1999).

National studies have examined learning disability in relation to aptitude profiles and scholastic achievement (e.g., Flanagan, 1992) and in relation to the personal characteristics of learning disabled boys (e.g., Nell, 1989). Several studies have focused on developing realistic career identities for learning disabled children (Apter, 1974; Booyse, 1988) in an attempt to assist them in coping with their disability. The results of these studies suggest a trend that formation of a realistic career identity is possible if the individual is able to establish a definite self-identity.

Health has been seen as important indirectly through career theory’s attention to genetic endowments and disability (Mitchell & Krumboltz, 1990). A holistic and integrated view of individuals needs to emphasize physical and mental health in relation to career choice and development. However, research has not yet begun to recognize the importance of health as an influence on the career development process.

While no research on a national level has examined the influence of health and physical attributes, theory (e.g., Mitchell & Krumboltz, 1990) suggests that career counsellors need to examine these influences in the career counselling process.
Summary

Research related to the influences of the individual system have been grouped according to the STF and described. General trends were identified across research studies. This research has highlighted the interactive nature of many individual system influences. One example would be the interactive nature of values with other influences such as age, gender, culture, beliefs, interests and personality. Career interests also emphasize an interactive relationship with other influences such as personality, gender, culture and values. In addition, all individual system influences reviewed in this section have demonstrated an interactive relationship to much broader career constructs such as career maturity, career identity and career self-efficacy.

Despite established theoretical formulations about the influence of these individual system influences on career development, supportive research remains scarce on the majority of these individual influences, specifically on a national level. There is an absence of career-related research that examines adolescents who find themselves living in particular contexts, such as a children’s home. The majority of research conducted with adolescents in a children’s home context is phenomenological in nature, that is, it specifically examines the life-world experiences of adolescents living in a children’s home. The following section presents an overview of findings relating to social system influences.

The Social System

As described in Chapter 2, an individual as a system does not live in isolation but rather as part of a much larger system. Thus, the individual coexists within a broader contextual system that is itself composed of smaller subsystems. This broader system can be divided into two subsystems, the social contextual system (i.e., the other people systems with which the individual interacts) and the environmental/societal contextual system (i.e., the environment and society). Influences representing the content of the social contextual system
include factors such as the adolescent’s peers, family, media, community groups, the workplace, and educational institutions. Similarly to the individual system, not all these influences have received attention in career research. The present review will examine general trends identified in career research on the social influences that have been most widely researched, such as the influence of television, teachers, family and peers.

Key potential career role figures for children and adolescents are parents, teachers, public figures such as athletes and television personalities, and people with whom they come into contact with in their own community, such as police officers (Sharf, 2002). Although there are various portrayals of careers on television, relatively little is known about what adolescents learn from these portrayals. International research conducted with children and adolescents has shown that watching television has an influence on children and adolescents’ occupational aspirations (McMahon & Patton, 1997; Signorielli, 1993; Wright, Huston, Truglio, Fitch, Smith, & Piemyat, 1995).

Regarding the influence of teachers on career development, the majority of international research has focused on young children. Research findings suggest that the attitudes of teachers and guidance counsellors towards certain careers may have a significant impact on the occupational aspirations of children (e.g., Smith & Croom, 2000). These findings do not support research conducted with adolescents. Here, general trends in research suggest that the career development of adolescents is more influenced by their parents (usually the same sex parent) than by their teachers (Bregman & Killen, 1999; Davies & Kandel, 1981; Dillard & Campbell, 1981; Pallone, Hurley, & Rickard, 1973; Young, Antal, Bassett, Post, DeVries, & Valach, 1999). In addition, Sharf (2002) suggests that adults are important role models for adolescents in learning about the world of work and the development of their own career self-concept. From the above international studies, it can be
concluded that, while teachers play an influential role in the career development of young children, parents are rated as being most influential in the career development of adolescents.

The family has traditionally been thought of as an important influence in the career development of adolescents and various studies attest to this (e.g., Botha & Ackermann, 1997; Lankard, 1995). The influence of family on the career development of adolescents has been examined in terms of parental education, occupational levels of parents and the impact of dysfunctional family patterns, as well as in relation to career maturity, career identity, career aspirations and attachment. For example, international research has suggested that levels of parental education have the most impact on the educational plans and career aspirations of adolescents (e.g., De Ridder, 1990; Mortimer, 1992). International research suggests a trend for career mature adolescents to use information from the family and the community to make curriculum choices and to contemplate future involvement in the world of work (DeRidder, 1990; Hesser 1984; King, 1989; McNair & Brown, 1983; Penick & Jepsen, 1992).

In studying attachment, several researchers have reported that attachment and emotional closeness to the mother, as well as attitudes that were similar to those of both parents, were predictive of confidence in career decision making and in being realistic about career choices in adolescence (e.g., Felsman & Blustein, 1999; Ketterson & Blustein, 1997; O’Brien, 1996). In addition, research has emphasized the importance of extended family members and siblings as a particularly important influence in the career development of adolescents (Kenny & Perez, 1996; Schultheiss, 2000; Schultheiss, Buhin, Medina, & Spillance, 1997).

However, international career research indicates contradictory findings regarding the influence of parents. For example, some researchers have established that many adolescents themselves do not acknowledge any significant parental influence in their eventual career or
educational choices (e.g., O’Neil, Ohld, Tollefson, Barker, Piggot, & Watts, 1980; Sebald, 1989). However, O’Neil et al. (1980) caution that this research has been conducted with younger adolescents who may report lack of family influence as reflecting on their desire for increasing independence.

Another trend in career research (e.g., Morrow, 1995; Scott & Church, 1999) suggests that the failure of adolescents to engage in meaningful career exploration can be symptomatic of dysfunctional family behaviours. For example, overidentification (i.e., undifferentiation) with the family because of extreme family loyalty (i.e., extreme cohesion) can negatively affect the development of autonomy in adolescents. Undifferentiated adolescents have difficulty in distinguishing their own wishes, thoughts, and goals from those of other family members (Zingaro, 1983) while adolescents from enmeshed or disengaged families may have difficulty mastering career development tasks because they are unable to distinguish their own from parental goals and expectations (Penick & Jepsen, 1992).

To date, research and theory have focused on how adolescent-parent relationships influence specific career developmental tasks. Yet as adolescents develop, international research suggests that the focus of adolescents’ relationships shifts with increased emphasis and emotional energy devoted to peers and close friends (Berndt, 1996; Josselson, 1992). In examining career identity, empirical evidence for the influence of peers on the development of career identity during adolescence is limited. Some studies indicate a trend for a relationship between peer association and career identity, even though such relationships are not of great significance (e.g., Dorr & Lesser, 1980; Felsman & Blustein, 1999).

Several other studies suggest that peers are far less influential than parents in determining long term goals such as career choice and educational plans (e.g., Kandel & Lesser, 1972). Although preliminary research has confirmed meaningful relationships between peer relatedness and specific subsets of adolescent development (e.g., Berndt, 1996;
Meuss, Dekovic, & Iedema, 1997), the influence of adolescent peer relationships on the career exploration and commitment processes needs to be examined further.

National research on social system influences have focused largely on the role of parents, teachers and television, specifically in examining the occupational knowledge and aspirations of Black South African adolescents. National research on the occupational knowledge and aspirations of black South African adolescents has found guidance teachers and parents to be ranked as far more important sources of occupation informational than all other sources (Watson & Stead, 1993). However, in relation to young children, South African research has found that neither parents nor television have a significant influence on children’s occupational aspirations (Dean, 1998). The above cited career research shows the consistency of international and national findings regarding the influence of teachers and television on adolescents’ career development. International and national research suggest that the school environment which includes the influence of teachers is most influential for young children, while both international and national studies suggest that parents are influential figures in the career development of adolescents.

In examining parental influence, national research has focused on the relation between parental career status and career identity development among Xhosa-speaking adolescents (Botha & Ackerman, 1997). This research suggests a trend for career identity development among Xhosa-speaking adolescents to be significantly correlated with the school qualifications of the mother, as well as with the employment status and the level of occupation of both parents. Other research has examined the construct of career maturity in relation to occupational levels and results indicate that the occupational level of parents has no significant influence on the level of career maturity of adolescents, specifically adolescents from disadvantaged cultural groups (e.g., Thom, 1988; White, 1986). In addition, research suggests a trend for the same sex parent to play a more influential role in the career
choice of adolescents (e.g., Maesela, 1994; Thom, 1988). No South African studies were found that have examined attachment in relation to the career development of adolescents.

While no research has examined the specific context of a children’s home in relation to career development, several national researchers have focused on the life-world of adolescents living in a children’s home (e.g., Lategan, 1999; Mudaly, 1984). These more general research studies regarding influences such as parents, family and home indicate that adolescents living in a children’s home feel rejected, abandoned and alienated from parents and family, and consequently feel adrift. Given the lack of parental influence in the context of a children’s home, various other social system influences would probably play a more influential role in the career development for adolescents residing in this unique context.

In examining the role of peers, there is a lack of national research that has examined the influence of peers in relation to career development in adolescence. One particular study examined the occupational knowledge and aspirations of black South African adolescents and found guidance teachers and parents to be ranked as far more important sources of occupation information than peers (Watson & Stead, 1993). While international theories and research on the influence of peers have recognized their importance in the field of career development, there is a need for more studies both internationally and nationally.

Summary

The interactive nature of influences between systems has clearly surfaced in the examination of social system influences. For example, the influence of family has been examined in relation to many individual system influences such as culture, interests, gender and age. Similarly to the individual system, the majority of social system influences have been examined in relation to much broader career constructs such as career maturity, career identity, career aspirations, parental education and parental levels of occupation. The majority of both international and national research has focused on the influence of family.
influential role of television and teachers has been examined in relation to occupational aspirations. Research on the role of peers is limited, while no research was found that specifically examined influences such as community groups on the career development of adolescents.

As with the individual system influences, there are influences that have not been recognized as potential research topics within the societal system. While influences such as the school, media, community groups, the workplace, and education institutions remain part of the societal system, limited research was found examining these influences particularly with reference to adolescents and the career development process. Given the unique context of this study, that of a children’s home, no research was found that examined the influence of family and peers in relation to the “different” family systems that have been created in a children’s home. This calls for researchers to consider such substitute family systems in a children’s home context, specifically regarding the impact they have on the career development process. The following subsection examines the role of the larger environmental/societal system, specifically focusing on how this system impacts on the career development of adolescents.

**The Environmental/Societal System**

The individual also lives within a broader system, that of society or the environment. The environmental/societal system includes influences such as political decisions, historical trends, globalization, socio-economic status, the employment market, and geographical location. There appears to be a general movement towards recognizing that career development can be more fully understood within a relational perspective that includes the dynamic interaction between the developing person in a changing context (Vondracek, Lerner, & Schulenberg, 1986). Super (1990) has recognized the importance of situational determinants and he has differentiated between remote determinants, that is the social
structure and economic conditions and intermediate determinants, that is the community and family. Super proposed that career development takes place as the individual chooses and shapes a variety of work and non-work related roles in four environments: home, community, school, and workplace.

While there is a wealth of career theory to support the role of environmental/societal influences in the career development process (e.g., Gottfredson, 1996; Mitchell & Krumboltz, 1996) there remains a lack of research both internationally and nationally that examines environmental/societal influences in relation to career development. Therefore, general trends found in the career literature and career research regarding certain environmental conditions will be provided.

**Environmental Conditions**

Literature (e.g., Gottfredson, 1996; Krumboltz, 1994; Lent, Brown, & Hackett, 1994, 1996; Super, 1990) suggests that there are several conditions and events, categorized as social, educational, and occupational, that affect an adolescent’s career development. Such factors may be planned or unplanned, but they are usually beyond the control of the adolescent. In addition, changes in society have had a great effect on the available career options. For example, technological developments such as improved transportation have created new opportunities. The use of computers to process and store information in a wide variety of fields also has had a great impact on the labour market. The availability of education is influenced by both social and personal factors, for example, the degree to which an individual’s parents both value higher education and have the ability to provide financial assistance. Related to this is the school system that the adolescent attends and the effect of the teachers and the resources in that system on the development of the individual’s interests and abilities. In relation to career maturity, research (e.g., Schmitt-Rodermund & Silbereisen, 1998) has demonstrated that career maturation is influenced by differences in social and
political systems, reflecting the relevance of the developmental contextual theoretical model of Vondracek, Lerner and Schulenberg (1986).

On a national level, politics, economics and prevailing social conditions have affected the nature and form career psychology has taken in South Africa (Nicholas, Pretorius, & Naidoo, 1999). If one examines the national context within which career development takes place rather than career theory itself, then it is clear that many South Africans’ career development has been disadvantaged, with limited opportunities to explore and commit themselves to long-term careers (Van Niekerk & Van Daalen, 1991), that unstable and unpredictable environmental factors have continuously impacted on most South African adolescents, making it difficult for them to conceptualize their career development in sequential stages (Stead & Watson, 1998). In this regard, Stead and Watson (1998) have also suggested that, due to the unique features of South African society, the career maturity construct may be inappropriate. In general, published research is lacking within the South African context. In their review of research conducted in South Africa between 1980 and 1990, De Bruin and Nel (1996) could only find 22 published articles. From these published articles, there was a noticeable bias in favour of white samples, with more than 50% of research undertaken focused on this population group. The lack of published research on disadvantaged populations impovershishes the knowledge base that could inform and guide career counselling practices in South Africa.

National research has demonstrated that school leavers have limited occupational knowledge (Cloete, 1981; Mtolo, 1996) and that this impacts on effective career decision making (Watson & Stead, 1993). The results of various South African studies have indicated an inverse relationship between the percentage of black high school students expecting to enter professional and skilled occupations and the actual percentage employed at such levels (e.g., Mojalefa, 1980; Watts, 1980). Research has stressed that the present South African
economy requires trained people in science and technology (e.g., Cloete, 1981; Maree, 1989; Watson, Foxcroft, Horn, & Stead, 1997; Watson & Stead, 2002; Webb, 1990). A general trend found in national studies suggests that adolescents tend to aspire more to Social and Investigative occupations (De Bruin, 1999; Stead, 1996; Watson, Foxcroft, Horn & Stead, 1997; Watson & Stead, 1993). Such aspirations appear unrealistic when matched to trends in the South African labour market which reflect an increasing shortfall in the scientific and technological fields. With the dismantling of the apartheid system, career researchers have found that previously disadvantaged black students have been required to make rapid social adjustments in order to be prepared to enter occupations which have previously been denied to them (Leach, 1994; Naiker 1994). It is suggested that an understanding of the career choice process can best be facilitated by researching career development in historical (e.g., Nicholas, Pretorius, & Naidoo, 1999), political (e.g., Santos & Ferreira, 1998), ecological (e.g., Alvi, 1997), and cultural (e.g., Fouad & Arbona, 1994) contexts among numerous others.

Socio-economic Status

While research is limited in relation to the environmental/societal system both internationally and nationally, socio-economic status has proved to be one influence within the environmental system that has received considerable attention. In a review of the literature on contextual influences, Schulenberg, Vondracek, and Crouter (1984) have suggested that socio-economic status is one of the most powerful and consistent environmental predictors of occupational aspirations and attainment. They concluded that, in general, “SES begets SES” (p. 131).

Socio-economic status has been discussed throughout this chapter in presenting other research findings related to other system influences. The present review examines socio-economic status in relation to influences such as occupational levels, values, career maturity, career identity and career aspirations, especially within the South African context.
Trends in national research suggest a positive relationship between socio-economic status and career maturity among coloured high school pupils (e.g., Watson, 1984). That is, the higher the level of socio-economic status, the higher the career maturity score. Other research suggests differences in the career values of adolescents from different socioeconomic classes (e.g., Alexander, 1990). For adolescents from a higher socio-economic class, security and personal satisfaction are important, whilst the kind of work and the compensations of work are of the greatest importance for adolescents coming from lower socio-economic status groups. Some research has found socio-economic status not to be an influence in career development. For instance, when examining the traditional versus non-traditional career choices of South African black adolescents, research suggests that socio-economic status does not play a significant role in the career choice process (e.g., Maesela, 1994). Adolescents from underdeveloped and traditional communities normally experience relatively few problems in achieving an occupational identity, because they have a small spectrum of alternative choices that are reasonably uncomplicated (Maesela, 1994).

The present socio-political and socio-economic changes in South Africa imply a much wider spectrum of career opportunities for black adolescents, which may complicate the process of career choice significantly. The few South African studies which have explored the influence of socioeconomic status on career development indicate that socioeconomic status is a significant predictor in the occupational aspirations of high school students. More specifically, the lower the socioeconomic status, the lower the occupational levels adolescents aspire to (Cherian, 1991; Cloete, 1980; Westaway & Skuy, 1983). Other research has demonstrated that, as a consequence of the socioeconomic conditions of most black families, many black high school students are compelled to pursue any career that does not require post-matric training (e.g., Horn, 1995). The political transformation presented within the environmental system will take time to have an impact on the contexts within which
adolescents establish their career paths. The focus of future research needs to move towards critical issues such as unemployment, career barriers, economic factors and the role of career education in the career choice process.

**Summary**

The environmental/societal system influences not only lacks in research studies but also in its theoretical foundation. There seems to be a lack of research within this system both internationally and nationally. In this section, career theory was presented which focused on environmental conditions which emphasize social factors and educational conditions. Specific reference was made to the South African context. Socio-economic status which is often an identified influence in career research was also explored, particularly in its focus on influences such as occupational aspirations. National research findings were presented regarding the relationship between socio-economic status and influences such as career maturity, values, and career identity. There is a total absence of research on such influences as political decisions, historical trends, globalization, the employment market, and geographical location, all of which comprise of the environmental/societal system. With the many changes taking place within the South African context and its diverse populations over the years, research on these influences is essential.

In conclusion, for the most part South African career research mirrors international trends. Researchers should focus on career issues pertinent to South Africa such as unemployment, economic factors, career barriers, school to work transition, and the role of culture in career choice (Stead & Watson, 1998). Research on the career development of adolescents has received little attention in South Africa to date. Unsound career decisions can have far-reaching negative implications for the adolescent’s future development and life satisfaction. New perspectives such as the present study are needed to assist career research in revealing the web of relational connections in which the career and work lives are
embedded. Moreover, the context within which career development occurs needs to be more extensively examined in South Africa. Culture, age, socio-economic background, and family structure must be attended to in an attempt to identity the role that these influences play as careers unfold.

The following chapter describes the methodology of the present research which aims to examine the career development of adolescents living in a specifically defined context.
CHAPTER 4
RESEARCH METHODOLOGY

Introduction

It was established in earlier chapters that there is considerable empirical evidence for the role of systems theory elements in the field of career psychology. In Chapter 2, a description of the theory was provided, while Chapter 3 provided relevant research findings specifically related to influences found within the three interrelated systems of the systems theory framework. This chapter provides the problem formulation, an in-depth description of the research methodology used to investigate the aims of the study, the pros and cons of such a methodology, the sampling method, a description of the measures used, how the research was conducted, as well as the data analysis procedures employed.

Problem Formulation

It is well established that career choice embodies complex interactions between the affective, cognitive, interpersonal, behavioural and psychomotor characteristics of most individuals. It is also mediated by, amongst other influences, individuals' values, skills, beliefs, family history, peers, school climate, community, environment as well as other variables that may unfold over time (Patton & McMahon, 1999). Super (1990; Super et al., 1996) has indicated that exploring and crystallizing career choice is an important developmental task for adolescents and young adults. What seems evident is that adolescents enter career stages, such as Super’s Exploration Stage with the goal of becoming independently functioning adults, as they strive to meet evolving personal and career-related needs (Super, 1990; Super et al., 1996). Rapid and escalating changes both in the labour market and in post-secondary educational opportunities mean that adolescents today are confronted with many challenges.
Adolescents in a children’s home are exposed to other difficult developmental experiences from an early age. These adolescents develop in a system with early deprivation experiences, resulting in developmental and adjustment problems which impact on different spheres of their lives, including their career development (Lategan, 1999). Given the lack of South African research of this particular context, this study aims to explore and describe the career development of adolescents in a children’s home from a systems theory perspective in terms of its three interrelated systems, namely the individual, the social, and the environmental/societal systems.

Tyler (1978) has suggested that careers do not simply exist, but rather that they are developed. Such development needs to be studied, but in terms of “the development of the shaper rather than the shaped” (Tyler, 1978, p. 223). Therefore it is imperative to study not only individuals themselves but also the factors that surround individuals, i.e. the social and the environmental systems that take on the role of the shaper. Furthermore, Tyler states that individual career development is better understood using qualitative rather than quantitative methods. This introduction provides some context and rationale for the aims of this research study.

**Primary and Specific Aims**

The primary aim of this study is to explore and describe the career development of adolescents living in a children’s home in terms of three interrelated systems, namely the individual, the social and the environmental/societal systems. To achieve the primary aim, the following specific aims were generated:

1. To explore and describe the present career development of adolescents living in a children’s home.
2. To explore and describe the influences of the three interrelated systems of the systems theory framework.
This specific aim was explored with respect to four sub-aims, namely:

2.1 To explore and describe the influence of individual system variables on the career development of adolescents in a children’s home.

2.2 To explore and describe the influence of social system variables on the career development of adolescents in a children’s home.

2.3 To explore and describe the influence of environmental/societal variables on the career development of adolescents in a children’s home.

2.4 To explore and describe the past, present and future influences on the career development of adolescents in a children’s home.

3. To explore and describe the adolescents’ reflections of their selected influences from the three interrelated systems, namely the individual, the social and the environmental/societal system.

Immature career decisions can have far-reaching negative implications for the adolescent’s future development and life satisfaction. New perspectives such as the present study are needed to assist career research in revealing the web of relational connections in which career behaviour is embedded. Moreover, the context within which these connections occur can no longer be ignored. Culture, age, socio-economic background, and family structure need to be considered in our understanding of individuals’ career development.

**Research Approach**

The primary and specific aims guided the methodological approach adopted for the present study. The broad methodological approach used in this study included both a qualitative and a quantitative paradigm. In a scientific study the nature of the data determines the methodology used. For numerical data, a quantitative methodology is used; if the data is verbal, the methodology is qualitative (Leedy, 1993). According to Bogdan and Biklin (1992), qualitative research has its origins in the phenomenological perspective which
emphasises the subjective. This approach accepts that there are numerous ways of interpreting experiences that constitute an individual’s reality. It is essential to note that there are various types of qualitative research, although all types share to some degree the goal of understanding research participants from their own perspective. Qualitative research is often used in the initial stages of a study when not enough is known about the research topic, either from a theoretical or a research perspective. In this case, a qualitative approach is relevant to the present study as the aim is to explore and describe within the newly emerged systems theory framework the career development of adolescents who live in a unique context.

According to Schurink (1996), the quantitative paradigm is based on positivism which takes scientific explanation to be nomothetic (i.e., based on universal laws). Its main aims are to objectively measure the social world, to test hypotheses and to predict and control human behaviour. In contrast, the qualitative paradigm stems from an antipositivistic, interpretative approach, is idiographic, holistic in nature, and its main aim is to understand social life and the meaning that people attach to everyday life. This study falls within the broad sphere of both qualitative and quantitative research as the data gathered was both verbal and numerical in nature. In this study the primary source of data was the adolescents themselves, and this data was in the form of written responses to open-ended questions as well as the completion of diagrams, by means of ticking appropriate influences that may have an impact on their career development. The data obtained from the written responses to the open-ended questions provided the qualitative verbal data, while the frequency of responses on the diagrams provided the quantitative numerical data.

Furthermore, the present research is exploratory and descriptive in nature. The present study is exploratory as its purpose is to gain familiarity with a relatively unknown phenomenon and, more specifically, to achieve new insights into this phenomenon, to explicate central concepts and constructs, to determine priorities for future research and to
develop hypotheses with regard to the specific phenomenon (De Vos, 1998). The study is
descriptive in nature as the aim is to portray accurately the characteristics of a particular
group. The perspective of the systems theory framework was the focus of such examination
and description in this study. According to Cozby (1993), exploratory-descriptive research
has a primary and necessary goal for the development of scientific knowledge. Exploratory-
descriptive research is advantageous in that it increases our understanding of a particular field
or construct, and it allows for the development of theory. It also allows for the generation of
hypotheses that can be tested experimentally in the future.

**Sampling Strategy and Sample**

A non-probability purposive sampling technique was used to draw the participants for
the present study. As the population was easily accessible, this method of sampling reduced
aspects of time and costs. Non-probability purposive sampling is based entirely on the
judgment of the researcher in that the sample is composed of elements which contain the
most characteristic, representative or typical attributes of the population (Singleton, 1988).
This technique is closely associated with exploratory research (Neuman, 2003).

With regard to purposive sampling, Bernard and Whitley (2002) state that researchers
use their judgment to select the membership of the sample based on the goals of the research.
The advantage of purposive sampling is that researchers can use their research skill and prior
knowledge to choose respondents. Furthermore, Cozby (1993) reported that the advantage of
this type of sampling lies in the fact that it is less expensive in terms of time and costs. The
disadvantage of purposive sampling is that the participants have unequal chances for being
included in the sample. In other words, the sample is not randomly selected (Dane, 1990).
Although purposive sampling can provide the researcher with a great deal of data, the sample
would probably not be representative of the population and this poses limitations on the
generalizability of results. However, as the present study is exploratory in nature, it is not the
intention that the findings should be generalizable. Despite the disadvantages regarding non-probability purposive sampling, Patton (1987) pointed out that this is the most commonly employed sampling strategy.

The sample for this study comprised of 16 English-speaking adolescents from a children’s home in the Nelson Mandela Metropole. The requirements for inclusion in the sample were that the adolescents were between the ages of 14 and 17 years, that they were all English-speaking, and that they were all residing in the children’s home for at least a minimum of three years. Proficiency in English was required as the measure is only available in English. This was established in that all respondents had passed English at Grade 7 level, and that English was taken as their first language at school. The variables of gender and culture were not used as inclusion or exclusion variables for the present sample. The mean age for the sample group was 15 years 0 months (SD = 1.03). Of the sample, 3 respondents were in Grade 7, 6 respondents were in Grade 8, 5 respondents were in Grade 9, and 2 respondents were in Grade 10. Table 1 provides a clearer description of the selected sample.

Table 1
Sample Description (N = 16)

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

It was decided to make use of one particular children’s home because it became apparent that different homes functioned differently, with each using their own unique structure, rules and standards. This might have impacted on the validity and reliability of the study, particularly given the systemic framework of the present research. The children’s
home that was chosen operates on a unique system that differs from other homes in the Nelson Mandela Metropole. It would therefore be important to gain some understanding of this broader context from which the participants were drawn. This distinctive context in which the present sample of adolescents lives can be regarded as having a unique macro and micro system, with its own individual, social and environmental systems. It also presents with contextual elements that differ from those of a normative family system. The purpose of the children's home is to provide a permanent family environment for children who have lost their parents or whose parents are unable to care for them. Eight to ten boys and girls of various ages grow up as brothers and sisters in a family unit, with each family living in a house of its own. The head of the family is regarded as the mother and she provides the children with care and affection and the sense of security they need to ensure sound psychological development.

From the present sample, the majority of participants were placed in the children’s home either because their parents were deceased or due to their parents abusing alcohol and drugs. Some of the participants’ parents were unknown, while at other times it was reported that the parents were unable to support their children. In exceptional cases, it was reported that the participants’ parents were in prison, and in other cases it was reported that the one parent was murdered by the other.

Measure

The measure used was the “My System of Career Influences” Workbook (MSCI; McMahon, Patton, & Watson, 2003a). While the systems theory framework (STF) has already been described in chapter 2, its adaptability and elasticity are more apparent when it is applied to the career development of a particular individual at different developmental stages. To illustrate the adaptability and usefulness of STF as a tool for career development, the qualitative assessment tool known as the MSCI workbook was developed by McMahon,
Patton, and Watson (2003a) and is presently available in a final revised form. The MSCI was developed within the framework of systems theory (Patton & McMahon, 1999). Such a framework can be used to map an individual’s career story throughout his or her career development. In addition, two of the three authors were involved in the development of both the systems theory framework and the MSCI, thereby providing a sound theoretical foundation for the newly developed measure. For all of the abovementioned factors, the MSCI proved to be the best available, and indeed the only measure to utilize in this study.

The MSCI was chosen as it contains questions and themes that are directly related to the systems theory perspective which is the theoretical base for the present research. The measure provides a structured format that elicits the necessary and relevant information required from respondents, without the need of any specific method of interviewing. Interviewing would create certain research design disadvantages. It is time consuming and, furthermore, the vast amount of data collected through the process of interviewing makes ordering and interpretation difficult. Interviews usually also need to be conducted by researchers themselves and not by other interviewers (De Vos, 1998). The MSCI workbook was administered to respondents on an individual basis. The process of administration of this measure was conducted by experienced and trained registered career counsellors. The counsellors undertook a facilitative role in the administrative process by taking respondents through the measure in a step-by-step process.

The development of the MSCI was informed by suggestions proffered for the development of qualitative career assessment processes (McMahon, Patton, & Watson 2003b). The following subsection will first report on a brief description of the MSCI as well as its development and refinement. Thereafter, an overview of the process of testing the MSCI will be described, together with the initial findings and resultant refinements to the MSCI. Lastly, the final stage of development of the MSCI will be outlined.
Description of the MSCI

The MSCI is a nine-page workbook [see Appendix A] divided into various well-defined sections, that guides respondents through a reflection of their current career choice situation. The entire workbook provides respondents with brief information, step-by-step instructions, examples and a place to respond. The instructions are client focused and, as with other qualitative assessment instruments, items are personalized using phrases such as “you may like” and “your thoughts”. The cover page of the MSCI workbook requires respondents to complete biographical questions relating to age, sex, grade, and school.

The MSCI has three different sections. The first section of the measure, titled *My Present Career Situation*, addresses the first aim of this study. It begins with seven open-ended questions inviting respondents to respond on their current career choice situation. Essentially items seek information on topics such as life-roles, employment options and earlier even tentative career decisions. Open-ended questions provide the participant with an opportunity to write any answer in the open space provided. The open-ended question has advantages when a variable is relatively unknown or unexplored. In such a case, open-ended questions enable the researcher to better explore the variable and to obtain some idea of the spectrum of possible responses (De Vos, 1998). Further advantages of open-ended questions are provided by Bailey (1994) who suggests that open-ended questions can be used when all of the possible answer categories are not known, or when the investigator wishes to see what the respondent views as appropriate answer categories.

Bailey (1994) suggests that the disadvantages of open-ended questions include that they may lead to the collection of worthless and irrelevant information. In response to this, a pilot study was conducted to evaluate the level of responses in order to avoid the collection of worthless and irrelevant information. The pilot study led to a refinement process in which the workbook was adjusted and an introductory exercise was written into the workbook. Another
disadvantage of open-ended questions is that data are often not standardized from person to person, making comparison or statistical analysis such as computation of percentages difficult. With regard to this, the aim of this study was merely to explore and describe, therefore no comparisons or statistical analysis was required. Further disadvantages are that coding is often difficult and subjective, leading to low intercoder reliability. In this regard, an independent coder was used to verify and moderate the data analysis process. Yet another disadvantage is that open-ended questions are designed to be general and to explore all dimensions of the research topic which in turn may be too general for the respondent to understand what is meant, requiring the use of probes or of more specific follow-up questions administered by the interviewer. To overcome this disadvantage, the registered counsellors who administered the measure were trained and provided with a standard set of probing questions to promote standardization of the administration process. Open-ended questions also require more paper and make the questionnaire look longer, possibly discouraging some respondents who do not wish to answer a lengthy questionnaire (Bailey, 1994). However, the MSCI does not only consist of open-ended questions, in fact a large section of the workbook requires respondents to complete diagrams, therefore a good balance is maintained between the use of open-ended questions that yields verbal data and the use of diagrams that yields data that can be treated numerically. This leads to a description of the second part of the measure.

In the second section of the workbook respondents begin to explore the three interrelated systems by selecting from standard influences provided to them, as well as adding or modifying these influences and indicating the level of importance of the influences that they can identify with. The processes between these systems are also measured via the recursive nature of interaction within and between these systems, change over time, and
chance, and looking at the individual’s past, present and future career influences. This section of the measure addresses the second aim of the study.

The third section of the workbook required respondents to integrate all the information from the previous diagrams in a step-by-step diagram on a page provided to them, thus ultimately providing a personalized diagram of their own individual system of career influences and then reflecting on it. Respondents are required to respond to ten open-ended questions in the reflection process. According to Kolb (1984), structured and thoughtful debriefing is essential in order to maximize learning from such activities. With regard to this, the debriefing structured into the MSCI takes two forms. The first is a reflective process whereby respondents examined each of the MSCI steps and created their own MSCI diagram (page nine of the workbook). Secondly, a guided reflection based on a series of questions focused on their personalized MSCI diagram (page eight of the workbook) is facilitated which also encouraged the counsellor and respondent to engage in a collaborative discussion about the meaning of the client’s MSCI diagram and the resultant learning that had taken place. This is titled Reflecting on My System of Career Influences, where respondents were given the opportunity to respond to ten open-ended questions that allowed them to reflect on their process of exploring the three interrelated systems. While the workbook may be self-guided, it is preferable that career counsellors or teachers interact with clients at each step and provide support and clarification where necessary (McMahon, Patton & Watson, 2003b). This qualitative approach encourages respondents to think systematically and systemically, and to draw the constellation of influences in their system at various points in their life, for example school leaving age. By drawing their current constellation of influences and comparing them, respondents’ narratives or stories of their life career may be explored.
As with the development of standardized psychological tests and inventories, the items for the MSCI were developed and tested on different samples and revised according to the findings of the testing. This development and refinement process was conducted in two stages. While the two completed stages have focused on the instrument itself, the third phase which is still underway will focus on embedding the MSCI into a more comprehensive facilitated experiential and reflection process that will be guided by a facilitator’s manual.

The measure has been tested in a two-stage cross-national process on Australian and South African samples in 2001 and 2002. This ultimately resulted in the measure being revised and finalized in 2003. The testing was conducted in university settings in Australia and South Africa with groups of masters level students enrolled in career development courses. The analyses were then compared across nations and cross-national themes identified. Five areas were identified as needing refinement or further development, namely language, instructions, terminology and examples, developmental appropriateness, layout, and positive comments. In essence, the abovementioned areas in the measure were adjusted and refined before an adolescent version of the MSCI was introduced. With regard to this study, the researcher used the adjusted and refined adolescent version.

The testing with the adolescent sample in this research was conducted in two phases, both of which were on an individual one to one basis. The first phase was that of a pilot study. On the basis of feedback from the registered career counsellors regarding the pilot study, an introductory exercise was designed to introduce participants to the concepts of systemic thinking, which is the focus of the MSCI measure. In Phase two, the registered career counsellors worked with the initial sample of adolescents on the introductory process which took the form of an experiential learning exercise prior to administering the MSCI. The process of the pilot study, the pilot study findings as well as the development of the introductory exercise will be described in the following subsections.
Pilot Study

The aim of the pilot study was to assess whether respondents understood the instructions, whether the total experimental setting seemed plausible, and whether any confusing questions were asked by respondents. Thus, the pilot study provided the researcher with an opportunity to make any necessary changes in the procedure before field work commenced. Postgraduate registered career counsellors were trained in the administration of the measure for the pilot study. The measure was administered on a one-to-one basis. The training of the registered career counsellors included familiarizing them with the directions for administration and the content of the test. To ensure such familiarity, the administrators were provided with relevant literature on the theory on which the measure was constructed and they were requested to work through the measure themselves before administering it to the pilot sample.

In addition to the extensive training that was provided to the administrators by the researcher, process meetings were held prior to and subsequent to the pilot study in order to clarify and review the procedure prior to the actual administration. As mentioned earlier, the MSCI is a newly developed qualitative measure which has not previously been utilized in research. Therefore, the pilot study also allowed the registered career counsellors who were collecting the data to become comfortable with their roles and to standardize their procedures. It was agreed that the questionnaire would be answered in a structured format, with test administrators facilitating each question (in effect, each page of the MSCI) with the individual respondents. A standard set of instructions for every section was provided to each test administrator in order to ensure standardization of procedure.

Four adolescents were selected for the pilot study according to the sample variables described earlier. Of the four selected, two were male and two were female. The mean age of the pilot study sample was 13 years 7 months. All four adolescents were able to speak and
understand English, and they had all been residing at the children’s home for a minimum of three years.

The average duration for the administration of the MSCI was 1 hr 45 min, excluding a break of 10 minutes. The four respondents seemed shy and anxious at first but later began to relax and feel more comfortable. Initially, respondents showed interest and were cooperative. However, halfway through the measure it was noted that respondents began to lose interest, became restless and tired, and lacked enthusiasm. The pilot study proved to be beneficial, as many problem areas were identified through clinical observations from the administrators and from feedback provided by the respondents. These areas of concern will now be discussed in greater detail.

Pilot Study Findings

When combining the feedback received from administrators and the respondents, it was established that respondents felt tired and unmotivated to complete the measure. The adolescents found it difficult to understand the wording of some of the questions, making it difficult for them to comprehend what was required of them. Respondents often provided the exact examples given in the MSCI as their responses to questions and diagrams. Some of the examples did not seem applicable for the South African context which led to further confusion. In terms of the three interrelated systems, respondents seemed to grasp the idea of the individual and social systems; however, they still limited their responses to the examples given in the MSCI. The environmental/societal system and the past, present, and future diagram resulted in the greatest confusion. What became evident was that these adolescents found it difficult to think systemically as they were unable to recognize and comprehend the idea of different interrelated systems. In the process of consolidating the feedback, the researcher recognized the importance of taking into consideration the context in which these children had been brought up as well as their present circumstances. All these factors could
have contributed to their way of thinking and provided a possible reason for their difficulty in thinking systemically. Respondents did however enjoy the transferring of their information onto the final sheet of the MSCI. The use of different colour pens made this task more enjoyable and interesting.

The administrators also found it difficult to probe and question respondents appropriately, as they felt they lacked relevant background information on the respondents. In addition, the administrators found that they also required a venue that would ensure comfortable and satisfactory seating, lighting, ventilation, temperature, and noise level. The above-mentioned concerns led to changes being made to the MSCI and its administration before commencement of the actual study. The changes will be discussed in the next section.

**Refinement of the MSCI**

The measure was revised. Certain words were changed and all examples were deleted. All situational variables, such as time and place of testing, and environmental conditions such as noise level, ventilation and other distractions were reconsidered, as these factors may have contributed to the motivation, concentration and performance of the respondents. The researcher formulated a standard clinical observation sheet as well as an information sheet for administrators to complete as part of the administration process. Furthermore, the administrators together with the researcher agreed to view each respondent’s file before administering the MSCI to extract relevant information, such as the respondent’s biographical details, background details, reason for admittance into the children’s home, information on schooling and the general behaviour of respondents. The file information assisted administrators with regard to probing and questioning when administering the measure and the researcher was able to use the file information as part of the discussion of the findings later in the research process which would add to the richness of the data.
Apart from these changes, the most significant change was in assisting and guiding respondents to think systemically. This identified problem area was processed with two of the developers of the MSCI workbook, resulting in a revision of the MSCI with consensus from the developers of the MSCI. This revision entailed the inclusion of an introductory exercise. The researcher achieved this by developing an introductory non-career related exercise which could be described as an experiential learning exercise that assisted respondents in thinking in terms of the three interrelated systems before attempting to complete the MSCI. This experiential exercise is outlined in the following section.

**Experiential Learning Exercise**

The aim of the experiential learning exercise was to guide respondents towards thinking about themselves in terms of systems, specifically focusing on themselves (the individual system), on their more immediate environment (the social system) and on the more macro level of society (the environmental system). The experiential learning exercise was titled “*Thinking about Yourself*” [see Appendix B]. It is an exercise that is administered on a one-to-one basis with the respondent and it serves as a warm up exercise in order to encourage individuals to think systemically before attempting the MSCI. The allocated time for the completion of this warm up exercise is forty-five minutes. The materials required for the experiential learning exercise include three pieces of coloured paper circles. The researcher decided on a yellow circle to represent the individual system, a green circle to represent the social system and a blue circle to represent the environmental/societal system. Glue is also required for this exercise.

The basic concept of the experiential learning exercise is related to the systems theory framework, in that the exercise requires respondents to place a circle within a larger circle and thereafter within a much larger circle. These circles are representative of the three systems found within the systems theory framework and they clearly demonstrate that an
individual lives not in isolation (individual system), but rather as part of a larger system (social system) which, in turn, is part of an even larger system (the environmental/societal system).

The exercise begins with the individual system (small yellow circle) in which respondents are required to think about themselves in terms of a bubble that has many different parts, all of which make up who the individual is. The administrators are provided with specific probing questions to facilitate this process. Respondents then write down their responses to these questions within the circle. Once the administrator has processed all the probing questions regarding the individual system, the respondent’s circle of responses as represented by the yellow circle is placed on the bigger green circle, representing a system within a system framework. The green circle is then processed in the exact same manner as the yellow circle was, with the probing questions now related to the social system. These specific probing questions are once again provided to the administrator and respondents write their responses within the green circle. The same procedure applies for the facilitation of the environmental/societal system variables. The respondent finally adds the much larger blue circle to the two smaller circles. The final outlook of the exercise is three circles that increase in size to represent the three interrelated systems. None of the questions in the experiential learning exercise are career-related.

Once this initial experiential exercise is completed, the administrator provides the respondent with a short break before administering the MSCI. The findings related to the adolescent sample in the actual study revealed that the introductory process was well received by respondents and that they were certainly better prepared for the MSCI. Participants completed the MSCI more quickly and more comprehensively.

In summary, preliminary pilot testing of the MSCI with adolescents indicated that the adolescents needed a richer and more comprehensive experiential learning process. In this
regard, an introductory non-career related process was developed to introduce the concepts of systemic thinking. In addition, some wording was changed on the MSCI and all examples were removed. The pilot study, the refinement process, and the development of the introductory non-career related experimental exercise all took place before the final administration of the measure to the sample.

Procedure

A number of children’s homes were contacted in the Nelson Mandela Metropole to obtain a database of possible respondents who could be utilized in the present study. Variables that needed to be considered included age, gender, language, school grade, date of admission into the home, as well as the number of adolescents at each home. It was decided to make use of a sample from one particular children’s home as this met all the relevant and necessary requirements.

Formal contact was established with this children’s home and verbal and written consent was provided for the researcher to conduct the research. Letters were provided in which all potential respondents were informed of the nature and purpose of the study [see Appendix C]. Included in these letters was a clear description of the confidential and voluntary nature of the research as well as a consent form. However, before field work commenced, several meetings were held with the management of the children’s home to discuss and finalize all the specific aspects of the testing procedure. During the process of these meetings, several concerns were noted. These included the motivation and concentration levels of the respondents, the use of their leisure time to complete the measure, whether respondents would understand the layout of the measure and how the respondents would benefit from the research conducted. These concerns were addressed and final arrangements for the testing were made.
Four registered career counsellors were trained to assist the researcher with the administration of the MSCI. Before administration commenced, both the researcher and the administrator viewed each respondent’s file and completed a file information sheet that was drawn up by the researcher to ensure that appropriate and valuable information was extracted and recorded. In preparation for the completion of the measure, the administrator provided the participant with a brief introduction into the purpose and procedure of the research. This assisted in establishing an initial tester-test taker relationship. The respondent was thereafter requested to complete the consent form. Administrators then proceeded with the administration of the introductory exercise as described earlier in this chapter. A short break was then provided before commencing with the administration of the MSCI workbook. After completion of the MSCI, each administrator was required to complete a clinical observation sheet provided by the researcher in which testing behaviour and any other relevant information could be recorded. Feedback was provided to each participant on an individual basis once the administrator had collated all the data received. The feedback placed an emphasis on the more predominant influences identified within each of the three systems that were explored.

Data Analysis

As this study was both qualitative and quantitative in nature, the resultant data was subject to both qualitative and quantitative methods of analysis. As described earlier in this chapter, the MSCI is a qualitative measure that is comprised of both open-ended questions that yield verbal responses as well as diagrams that yield data that can be treated as being numerical. In relation to the first specific aim of the study, qualitative verbal data was gathered. With regard to the verbal data, all responses to all open-ended questions were analyzed making use of content analysis to identify themes. Content analysis is defined as a method of studying and analyzing written or oral communications in a systematic and
objective manner to assess certain psychological variables (Aiken, 2000). Tesch’s model (in Creswell, 1994) was used as the framework for the process of content analysis. Tesch proposed a step by step process of data analysis in qualitative research. The first step is to obtain a sense of the whole by reading through all the responses carefully. While reading, specific themes or topics are written down for each question. Thereafter, each of these themes is coded according to similar responses found across the sample. The responses are then reduced to categories.

Two out of the seven questions were coded according to theoretical constructs. Question 3 (page 2 of the workbook) regarding the topic of life-roles was coded according to Super’s construct of life-roles. Super (1990) describes six major life-roles, namely: homemaker, worker, citizen, leisurite, student, and child. Themes were identified according to these six life-roles. Similarly question 4 (page 2 of the workbook) regarding employment options was coded according to Holland’s (1997) typological theory of career choice. Underlying Holland’s theory is the assumption that career interests are one aspect of personality and a description of an individual’s career interests is also a description of the individual’s personality. Holland’s typology categorizes people into one of six broad types of personality: realistic (R), investigative (I), artistic (A), social (S), enterprising (E), or conventional (C). As a result, Holland’s type theory is commonly referred to as the RIASEC model (Holland, 1997). Therefore, themes were coded according to the primary codes of the RIASEC model. The resultant themes for all qualitative data were presented in table format.

In relation to the second specific aim of the study, quantitative data was gathered for the first three sub-aims associated with the second aim of the study. The quantitative data obtained from the diagrams were quantified by merely adding up the responses, that is, ticks and asterisks made by each respondent across all diagrams. The ticks represented the factors that the respondents found influential in their career development across the three interrelated
systems and the asterisks represented the influences that the respondents considered important in their career development. This data was thereafter presented as frequency counts with the use of doughnut pie charts. The fourth sub-aim was analyzed by means of content analysis to identify themes.

In addressing the third specific aim of the study, data was once again analyzed by means of content analysis to identify themes. Frequency counts for each theme are provided and the results are presented in table format. Table 2 provides a summary of how the data was analyzed in relation to the aims of the study.

Table 2
Data Analysis Methods

<table>
<thead>
<tr>
<th>Specific Aims of the Study</th>
<th>Method of Analysis</th>
<th>Presentation of Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To explore and describe the present career situation of adolescents living in a children’s home.</td>
<td>Qualitative method of analysis by means of content analysis to identify themes.</td>
<td>Significant themes presented in table format. Frequency counts and examples of verbatim responses are given.</td>
</tr>
<tr>
<td>2. To explore and describe the influences of the three interrelated systems of the careers systems framework on the career development of adolescents in a children’s home. More specifically to explore and describe: 2.1 Individual system influences. 2.2 Social system influences. 2.3 Environmental/societal system influences. 2.4 To explore and describe the past, present and future influences on the career development of adolescents in a children’s home.</td>
<td>Quantitative methods of data analysis by means of frequency counts for first three sub-aims. Qualitative method of analysis by means of content analysis to identify themes.</td>
<td>Results presented by means of doughnut pie charts for the first three sub-aims. Frequency counts are provided. Significant themes presented in table format. Frequency counts and examples of verbatim responses are given.</td>
</tr>
<tr>
<td>3. To explore and describe the adolescents’ reflections of their personal diagram of system influences.</td>
<td>Qualitative method of analysis by means of content analysis to identify themes.</td>
<td>Significant themes presented in table format. Frequency counts and examples of verbatim responses are given.</td>
</tr>
</tbody>
</table>
The present study also made use of Guba’s (1981) model for verifying the trustworthiness of qualitative data. Guba’s (1981) model is based on the identification of four aspects of trustworthiness that are relevant to both quantitative and qualitative studies: truth value (credibility); applicability (transferability); consistency (dependability) and neutrality (confirmability). Truth value asks whether the researcher has established confidence in the truth of the findings for the subjects or informants and the context in which the study was undertaken (Lincoln & Guba, 1985). In qualitative research, truth value is usually obtained from the discovery of human experiences as they are lived and perceived by informants. Lincoln and Guba (1985) termed this credibility. Sandelowski (1986) has suggested that a qualitative study is credible when it presents such accurate descriptions or interpretation of human experience that people who also share that experience would immediately recognize the descriptions.

As this study is exploratory and descriptive in nature, the discovery of human experiences as they are lived and perceived by informants was obtained, therefore creating truth value. Among the many strategies to increase credibility is the use of a field journal. Although not termed a field journal, one strategy employed in this research to increase credibility was the use of a clinical observation sheet that each administrator was required to complete as well as continuous process meetings between the researcher and the administrators that were held throughout the research process. The information obtained from the clinical observation sheet together with information shared in the process meetings was recorded. It contained questions, problems, frustrations, thoughts, feelings, ideas and hypotheses that were generated by contact with the sample group. In writing these personal thoughts and feelings about the research process, the researcher became aware of biases and preconceived assumptions. Once aware of these biases, the researcher altered and refined the process of data collection and analysis to enhance the credibility of the research.
Applicability or transferability refers to the degree to which the findings can be applied to other contexts and settings or with other groups. Applicability is not considered as relevant to qualitative research as it is to quantitative research because its purpose is to describe a particular phenomenon or experience rather than to generalize. According to Sandelowski (1986), if the assumption is made at the beginning of the study that the findings are descriptive in nature, then the applicability criterion may not be relevant. In relation to this, the aim of this study was merely to explore and describe, not to make generalizations, therefore the criterion of applicability or transferability was not considered.

The third criterion of trustworthiness known as consistency or dependability considers the consistency of the data, that is, whether the findings would be consistent if the inquiry were replicated with the same participants or in a similar context. Unlike the relatively controlled experimental quantitative environment, the qualitative field setting may be complicated by extraneous and unexpected variables. According to Duffy (1985), the key to qualitative work is to learn from the informants rather than to control them. Moreover, instruments that are assessed for consistency in qualitative research are the researcher and the informants, both of whom vary greatly within a research project. Thus, variability is expected in qualitative research and consistency is defined in terms of dependability. In relation to this research, several strategies were employed to enhance dependability. Firstly, the exact methods of data gathering, analysis, and interpretation of this qualitative research process were described. Such dense description of methods provides information as to how repeatable the study might be or how unique the situation is (Kielhofner, 1982). Another means that the researcher used to increase the dependability of the study was to conduct a code-recode procedure on the data during the analysis phase of the study. After coding a segment of data, the researcher waited at least two weeks and then returned and recoded the same data and compared the results. The use of colleagues and methodological experts (i.e., peer
examination) to check and verify the research plan and its implementation was another means of ensuring dependability.

The fourth criterion of trustworthiness is neutrality or confirmability, that is, the freedom from bias in research procedures and results (Sandelowski, 1986). Neutrality refers to the degree to which the findings are a function solely of the informants and conditions of the research and not of other biases, motivations, and perspectives (Guba, 1981). One strategy employed to enhance neutrality was to use a team of supervisors familiar with qualitative methods rather than using a single supervisor.

All of the abovementioned criteria as set out by Guba to ensure trustworthiness of qualitative data were adhered to by employing the different strategies outlined above. Furthermore, an experienced and trained independent coder was used to verify the identified themes and to oversee the data analysis process.

**Summary**

This chapter has outlined the research methodology employed in this study. The aims of the study were preceded by a brief rationale for the need for the present research. The exploratory-descriptive nature of the study is appropriate for investigation of the newly emerged perspective of the systems theory framework. The sample of respondents was selected from one particular children’s home. The qualitative measure used in this study was the newly developed MSCI workbook. The development and refinement process of this measure was provided, with an emphasis on the refinement process. A pilot study was conducted as part of this research procedure to further refine the measure. This led to the development of an experiential learning activity that served as an introductory exercise prior to administering the MSCI.

An overview of the research process was outlined in the procedure section. The method of data analysis used both qualitative and quantitative means to analyze the data. The
qualitative data obtained from the responses to the open-ended questions were subjected to content analysis, while the data obtained from the diagrams were quantified to provide frequency counts. These were represented as doughnut pie charts. Furthermore, Guba’s (1981) model was employed for assessing the trustworthiness of qualitative data.

The next chapter provides the results and an in-depth discussion of the findings. The results and discussion will be presented in accordance with the aims of the study.
CHAPTER 5
RESULTS AND DISCUSSION

Introduction

The empirical findings of this study are presented in this chapter and are structured according to the aims of the study. The primary aim of this study is to explore and describe the career development of adolescents in a children’s home from a systems theory perspective in terms of three interrelated systems, namely the individual, social and environmental/societal systems. To explore the primary aim, three specific aims were formulated that are closely aligned to the data gathered from the measure. The results and the discussion will be presented in accordance with these three specific aims of the study.

The first part of this chapter focuses on a comprehensive description of the present career development of adolescents residing in a children’s home, which is the focus of the first aim of this study. As the data was qualitative in nature, major themes were identified using content analyses which will be presented in table format. For the qualitative findings, verbatim quotes are provided in italics to illustrate findings.

The second part of this chapter involves presenting the findings of the three interrelated systems. This addresses the second aim of this study, which has been subdivided into four sub-aims. The subdivision of the second aim delineates the three distinct systems of the systems framework, namely the individual, the social and the environmental system as well as its relation to past, present and future influences. Doughnut pie charts have been used to graphically present the influences selected by adolescents as having an impact on their career development as well as the rating of importance of these influences. The discussion of these selected influences will be presented within all three systems.

The third part of this chapter addresses the third aim of this study and focuses on the major themes that were identified during the reflection process of each adolescent’s personal
Qualitative Results Regarding the Adolescents’ Present Career Development

This section addresses the first aim of this study. As detailed in chapter 2, adolescence is a developmental period during which individuals begin to introspect and think about themselves in a variety of life situations. It is at this point that adolescents can often more accurately picture themselves working in occupations than they could a few years earlier. Most career literature indicates that Super’s (1990) career development theory is one of the most influential (Osipow & Fitzgerald, 1996). According to Super et al. (1996), adolescence is a stage that allows for exploration of the world of work in order to make initial choices that will result in the implementation of a career choice. Section one of the My Systems of Career Influences (MSCI) measure allowed for such exploration, as adolescents began to think about their life roles, employment options and previous career decisions that they had encountered.

Table 3 provides an overview of the topics covered by the seven open-ended questions in section one of the measure.

Table 3

Topics Related to Present Career Development

| 1. Description of present career situation |
| 2. Part-time or voluntary work considered. |
| 3. Life roles. |
| 4. Employment options. |
| 5. Previous career decisions encountered. |
| 6. Strategies or approaches in decision-making. |
| 7. Help with decision-making. |

General themes became evident from the adolescents’ responses to the open-ended questions regarding these seven topics. The identified themes related to these topics are
outlined in the tables that follow. The themes are discussed based on the frequency with which each theme was mentioned. A frequency count of four or above was used to denote major themes as this represented 25% or more of the sample. A frequency of less than four denoted minor themes. Verbatim quotes from adolescents regarding the specific themes are included. Similar quotes made by other adolescents are only cited once throughout this chapter. The first topic will now be discussed in relation to the identified themes. The results obtained from the content analysis regarding the adolescents’ description of their present career development are presented in Table 4.

Table 4

Adolescents’ Present Career Development

<table>
<thead>
<tr>
<th>Major Themes</th>
<th>Frequency</th>
<th>Examples of verbatim responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making subject choices.</td>
<td>6</td>
<td>“I want to choose subjects”</td>
</tr>
<tr>
<td>Thinking about career options.</td>
<td>4</td>
<td>“Thinking about what I want to do, I want to be a soccer player, or a computer person”</td>
</tr>
<tr>
<td>Continuing to study further.</td>
<td>4</td>
<td>“To decide whether to continue school or not”</td>
</tr>
<tr>
<td>Choice of high school.</td>
<td>4</td>
<td>“I want to study further”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“About to choose a high school”</td>
</tr>
<tr>
<td>Minor Themes</td>
<td></td>
<td>Examples of verbatim responses</td>
</tr>
<tr>
<td>Information gathering.</td>
<td>1</td>
<td>“I’m finding out more information”</td>
</tr>
<tr>
<td>No career exploration.</td>
<td>1</td>
<td>“Not really thinking about jobs now”</td>
</tr>
</tbody>
</table>

As can be seen in the above table, four major themes became evident in the exploration of the adolescents’ present career situation. Over a third of all adolescents indicated that they are presently in the process of choosing subjects, while a quarter of adolescents indicated that they were thinking about career options and considering whether to
further their secondary level studies or not, with the same percentage indicating that they were faced with choosing a high school. Erikson (1982) describes typical adolescent behaviour patterns such as developing an interest in success and achievement as part of the search for a career identity. This theme suggests that the present adolescents are in the process of developing an interest in success and achievement in terms of further studies, and in terms of choices regarding which school to attend and which subjects to choose. While one adolescent was thinking of leaving school, the majority seemed to show a keen interest in completing school and studying further, both of which are typical behaviour patterns of adolescents who are searching for a career identity. The present career development of adolescents in this study was thus characterized by an exploration of choice of high school, choice of school subjects, thoughts of future employment options as well as thoughts of furthering their studies.

Apart from these major themes, there were some minor themes identified. General responses were made by particular adolescents regarding their present career situation which emerged as minor themes. These responses varied from statements such as “I’m finding out more information” to “Not really thinking about jobs now”. Such responses suggest two minor themes, that of information gathering and lack of career exploration. In terms of Marcia’s (1999) developmental statuses of career identity, these adolescents seem to be between the diffusion and moratorium statuses. While some adolescents presented themselves as having few clear ideas of where their present career development is, others indicated that they are exploring options and seeking a career direction.

Table 5 presents themes related to part-time or voluntary work that has been considered or even been undertaken by the adolescents.
Table 5
Part-time or Voluntary Work

<table>
<thead>
<tr>
<th>Major Themes</th>
<th>Frequency</th>
<th>Examples of verbatim responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>No part-time or voluntary work.</td>
<td>6</td>
<td>“None”</td>
</tr>
<tr>
<td>Helping out at home.</td>
<td>5</td>
<td>“Help with washing clothes and dishes”</td>
</tr>
<tr>
<td>Earning through part-time work.</td>
<td>4</td>
<td>“Part-time entrepreneur, selling cards, selling popcorn”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor Theme</th>
<th>Examples of verbatim responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary (non-paid) work.</td>
<td>“Voluntary work at an old age home”</td>
</tr>
</tbody>
</table>

With regard to part-time or voluntary work considered or undertaken at any time in the past or present, a major theme that emerged was that a third of the adolescents stated that they either had not undertaken or were not currently undertaking such work activities. However, in responding to this question it seemed as if several adolescents considered their duties in the home as voluntary work. Helping out at home, washing dishes and cleaning one’s room were all considered as voluntary work.

Notwithstanding the above, another theme that emerged was that a quarter of the adolescents have sought part-time work which allowed them to earn money. This part-time employment proved to be entrepreneurial in nature, for example: “selling popcorn and sweets”, and “selling cards”. In addition, a minor theme became evident in that one adolescent undertook voluntary non-paid work at an old age home.

In examining the adolescents’ responses regarding part-time or voluntary work, it became evident that their responses could be clearly fitted within specific life roles. Super (1990) describes six major life roles: homemaker, worker, citizen, leisurite, student, and child. Although life roles were more specifically examined in the next topic covered in the MSCI (see Table 6), certain life roles can be identified when exploring the extent of part-time and voluntary work undertaken. For example, the homemaker role is clearly evident in that
several adolescents stated that they helped out at home by washing dishes and clothes and taking care of their room. This could possibly be a function of the system according to which the children’s home is run. Another significant life role that emerged was that of the worker role. The worker role can be ascribed to the fact that, given the nature of the question, these adolescents view their duties of helping out at the home as a worker role even though it was also regarded as voluntary work. Furthermore, the worker role was also evident in the fact that some adolescents are engaged in part-time work after school and during the holidays. Yet another life role that emerged was that of the citizen role, in that one adolescent had undertaken voluntary work at an old age home. The results indicate therefore that, while some of the adolescents have not yet explored the possibility of part-time or voluntary work, other adolescents have engaged in some part-time and voluntary work and have thus discovered several life roles such as the worker role, the homemaker role and the citizen role.

In examining the topic of voluntary and part-time work in Table 5, Super’s (1990) construct of life roles was introduced. The results from Table 5 suggest that the present adolescents have established contact with the worker, citizen and homemaker roles. Table 6 presents the themes identified in relation to the specific topic of life roles. The adolescents’ responses have been classified in relation to Super’s (1990) concept of life roles, that is, the six major life roles of homemaker, worker, citizen, leisurite, student, and child.

<table>
<thead>
<tr>
<th>Major Themes</th>
<th>Frequency</th>
<th>Examples of verbatim responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisurite Role</td>
<td>14</td>
<td>“Sportsperson, Soccer player, Karate trainer, dancer”</td>
</tr>
<tr>
<td>Citizen Role</td>
<td>10</td>
<td>“Choir member, Church member”</td>
</tr>
<tr>
<td>Student Role</td>
<td>7</td>
<td>“Prefect, Class captain, Library member”</td>
</tr>
<tr>
<td>Minor Themes</td>
<td></td>
<td>Examples of verbatim responses</td>
</tr>
<tr>
<td>Homemaker Role</td>
<td>1</td>
<td>“I am a family member”</td>
</tr>
</tbody>
</table>
As indicated in Table 6, the leisurite role seems to be a more prominent role compared to the rest of the identified life roles, with sport being the main activity. Approximately 88% of the sample of adolescents indicated that sport played a role in their life. The most common sports were soccer and karate, with both male and female adolescents participating in these activities. This is understandable as qualitative information gathered regarding the activities offered by the home indicate that soccer and karate are among the few extra mural activities offered to the adolescents. The adolescents at this particular children’s home spend most of their recreation time on the soccer field or attending karate classes. Another important theme identified was the citizen role, which included participation in the church, the choir, as well as being a youth group member.

A third theme was the student role. Several adolescents indicated that they were involved in activities such as “prefect”, “camp leader”, “class captain” and “library member”. These activities, several of which can be characterized as demonstrating leadership abilities, suggest strong involvement in the student role. The homemaker role served as a minor theme as only one adolescent described himself as “a family member”. In examining the construct of life roles, it became evident that the leisurite role, the citizen role and the student role are of importance during this stage of adolescence. However, as identified in the discussion of Table 5, the homemaker and worker life roles are also considered by adolescents. To understand what gives adolescents’ life structure meaning, it is necessary to consider their involvement in a variety of life roles including, but not limited to, the student role.

Super’s (1990) increasing emphasis on life roles has led to the concept of role salience which suggests that at any one time in an individual’s life some roles are more important than others. According to Super et al. (1996), during childhood and adolescence leisure may be an important role which assists with the development of interpersonal skills. In addition, Super
et al. (1996) has stated that in adolescence, citizen and worker roles may become more important but that these are generally limited. The present findings suggest that these adolescents tended to think more about the leisure, citizen and student roles, all of which may enhance and guide their interpersonal skills as stated by Super et al. (1996). The findings therefore are consistent with Super et al.’s (1996) construct of life roles in relation to the career development process of adolescents. In addition, the results demonstrate variation in the general interests of adolescents. Furthermore, these results are fairly consistent with previous research findings by Vondracek and Skorikov (1997) who found that student, work, and leisure interests of high school students are closely interrelated.

Table 7 presents the future employment options considered by the adolescents. Their responses have been coded using Holland’s (1997) typology of occupations and resultant themes have been identified.

Table 7  
Future Employment Options

<table>
<thead>
<tr>
<th>Major Themes</th>
<th>Frequency</th>
<th>Examples of verbatim responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>23</td>
<td>“Air hostess, social worker, teacher”</td>
</tr>
<tr>
<td>Investigative</td>
<td>14</td>
<td>“Lawyer, doctor, psychologist, Chef, panel beater, computers”</td>
</tr>
<tr>
<td>Realistic</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor Themes</th>
<th>Examples of verbatim responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprising</td>
<td>“Manager, Businessman,”</td>
</tr>
<tr>
<td>Conventional</td>
<td>“Secretary”</td>
</tr>
</tbody>
</table>

Underlying Holland’s theory is the assumption that career interests are one aspect of personality and therefore that a “description of an individual’s vocational interests is also a description of the individual’s personality” (Weinrach & Srebalus, 1990, p. 39). Holland (1992) has explained that individuals develop preferences for certain activities as a result of
their interaction with “cultural and personal forces including peers, biological heredity, parents, social class, culture, and the physical environment” (p. 2) and that these preferences become interests in which individuals develop competencies. Personality types are indicated therefore by the choice of school subjects, hobbies, leisure activities, and career interests and choices are reflected by personality. Holland’s theory describes the career decision maker in terms of six personality/interest types: realistic, investigative, artistic, social, enterprising, or conventional.

The major themes identified across the present sample indicate that the social, investigative and realistic interest types are most prominent. The social type suggests that these adolescents have good social skills, are friendly and enjoy involvement with people and working in teams. The most common occupations listed by social type adolescents in the sample included occupations such as social worker, teacher, nurse, and psychologist. The investigative type suggests that these adolescents are analytical and precise, good with detail, and prefer to work with ideas and enjoy problem solving and research. The most common occupations listed by these adolescents in the sample included options such as doctor, lawyer, and engineering. The realistic type of adolescent has practical abilities and would prefer to work with machines or tools rather than people. These adolescents in the sample considered employment options such as chef, builder, electrician, pilot and hairdressing. When considering responses across the sample, it became evident that many of the employment options listed by each adolescent fitted into more than one interest type. Many adolescents indicated employment options that fitted both within the Social and Investigative types. This suggests that many of these adolescents are undifferentiated and it also indicates that they have a variety of interests. In addition, two minor themes were identified. The first was the enterprising interest type where three adolescents indicated that they would like to engage in enterprising activities, such as becoming a manager, entrepreneur, or a businessman. The
enterprising type suggests that such adolescents are energetic, enthusiastic, resourceful and forceful. The second minor theme was for the conventional interest type where one adolescent indicated a preference for becoming a secretary. Adolescents who fit into the conventional type can be described as conforming, careful, methodical, practical and persistent.

The findings of this study are consistent with previous national research on Holland’s typology which indicates that black South African high school students identify predominantly with Holland’s (1985) Social and Investigative occupation typologies (Watson, Foxcroft, Horn, & Stead, 1997; Watson & Stead, 1993). Such aspirations appear unrealistic when matched to trends in the South African labour market which reflect an increasing shortfall in the scientific and technological fields.

In relation to interests, Gottfredson (1981, 1996) has suggested that individuals only focus on careers within their own social space, that is, careers that fall within their parameters of acceptable alternatives. Many of the employment options provided by the present adolescents could be considered as either related to the children’s home or people they have contact with on a regular basis. For example, in relation to the social type, these adolescents have frequent contact with social workers, teachers and nurses.

Table 8 presents relevant themes regarding the topic of decision-making as part of the adolescents’ present career development. When reviewing the adolescents’ responses regarding previous career decisions made, two themes were identified. The first theme relates to previous career decisions made with respect to choice regarding activities, hobbies, or sport. The second theme identified suggests that previous career decisions were made with respect to school activities. The responses by several of the adolescents varied from wanting to study further to taking extra lessons. This theme relates to one of the major themes identified earlier in Table 4, that of continuing to study further.
The two themes identified could furthermore possibly be related to the adolescents’ life roles at the present time. As discussed earlier in this chapter, the present adolescents could identify with the leisurite and student roles. The responses by the adolescents suggest a possible relation between their life roles and their previous career-related decisions. In relation to their student role, it would seem appropriate for them to make decisions related to school, while their leisurite role entails decisions that need to be made regarding activities, hobbies or sport.

Table 8

<table>
<thead>
<tr>
<th>Decision-Making</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics</td>
</tr>
<tr>
<td>Previous career decisions made.</td>
</tr>
<tr>
<td>Decision-making strategies or approaches.</td>
</tr>
<tr>
<td>Help regarding career decisions.</td>
</tr>
</tbody>
</table>

Table 8 provides further information on the two themes identified related to the topic of career decision making strategies or approaches. The first theme suggests that to some degree a strategy was employed in making a career decision. In contrast to this, the second theme suggests no strategy or approach in the decision making process. In relation to the first theme, most adolescents indicated that thinking about likes/dislikes, interests, future
education, and considering their options, gathering information, as well as considering the consequences of decisions made were all strategies employed in making career decisions. On the other hand, the second theme suggests that some adolescents have employed no real decision making strategies in their previous career decision making. These adolescents have indicated that they make decisions by merely asking for help or in talking to others.

One way in which to understand the present results would be to refer to research conducted by Creed, Patton, and Watson (2002) on the construct of career decision-making self-efficacy. Their findings were consistent with expectations that career-decision-making self-efficacy develops the older the adolescent becomes. In addition, national research also suggests that there is a developmental trend in the career decision making self-efficacy of South African adolescents (Eaton, 2001; Williams, 2001). Although all participants in this study were in the adolescent stage of development, their ages ranged from 13 to 17 years. It could be speculated that there is a developmental trend in employing a strategy or approach in decision making. In examining the results of this study closer, it became evident that the younger adolescents in the sample did not indicate a decision making strategy, while the older adolescents employed some decision making strategy. However, because age and grade level were not included as research variables, it would be impossible to make conclusive statements, therefore the explanations presented are merely speculative in nature.

With regards to the topic of seeking help regarding career decision making, further themes were identified and reported in Table 8. Most adolescents indicated that, within the context of a children’s home, the house mother plays a major role in helping them with decision making. Friends and teachers were other sources of help identified by the adolescents. However, another major theme was that the adolescents in the sample indicated that they experienced a lack of support and help in making decisions. Some adolescents reported that they had no one that they could ask for help from and that there was no support.
In studying attachment, O’Brien (1996) reported that attachment and emotional closeness to the mother and attitudes that were similar to those of both parents were predictive of confidence in career decision making and in being realistic about career choices in adolescence. Considering the context of the children’s home, these particular adolescents may lack attachment and emotional closeness with their parents which may then impact on their confidence in making career decisions. In effect, the present results indicate that the house mother plays a significant role in forming emotional closeness with these adolescents and consequently in assisting them in their decision making. There are thus several systems other than the family system that may have an influence on adolescent career decision making as indicated by the findings of this study. The results indicate that the help and influence of both friends and teachers also play a role in the career decision making process.

The following section provides a brief summary of the qualitative findings pertaining to the present career development of these adolescents in a children’s home.

**Summary of Qualitative Results**

The first part of this chapter has addressed the first aim of the study in which the present career development of a sample of adolescents was explored. Major and minor themes were identified across seven career related topics. Topics covered influences such as part-time and voluntary work, life roles, employment options and career decision making. The results were ascribed to constructs such as Marcia’s (1999) career identity statuses, Super’s (1990) construct of life roles, Super’s (1990) exploration stage, as well as Erickson’s (1982) theory of identity. In addition, the results of this study were evaluated against previous research studies and they suggest that the present adolescents are in a process of searching for and developing their career identity. The findings also suggest that these adolescents fit well within Super’s exploration stage of exploring and crystallizing their career choice.
The second part of this chapter examines the influences within the three interrelated systems that impact on the career development of adolescents. This relates to the second aim of the study and the results are quantitative in nature.

**Quantitative Results Regarding System Influences**

While the first part of this chapter focused on addressing the first aim of this study, the second section addresses the second aim of this study which explores and describes the three interrelated systems of the systems theory framework, namely the individual, social and environmental systems as well as its relation to past, present and future influences. Thus, the second aim has been subdivided into four sub-aims to allow for the exploration of each system, as well as its relation to past, present and future influences. The results of each of these sub-aims will be individually presented and discussed. Given the nature of the MSCI, adolescents begin to explore the three systems sequentially by selecting influences that they feel may influence their career development. These influences are selected from a standard set of influences that are provided to adolescents within each system. Furthermore, an opportunity is provided for adolescents to add to or modify influences as well as to rank the importance of their selected influences.

The results have been presented in the form of pie charts across all three systems. These results are based on frequency counts for each influence. The four influences with the highest frequency counts across all three systems will be termed “prominent influences”. The findings will be presented by means of two pie charts within each system. One pie chart will present the influences that were selected across the sample as being influential in their career development. The ranking of importance of the influences selected will then be presented in a second pie chart. Where applicable, the influences that were added or modified by adolescents will be presented in tabular form. This format for presenting and discussing the results will remain consistent for the exploration of the first three sub-aims. To begin with,
the results of the individual system will now be presented and discussed in order to address the first sub-aim.

**The Individual System**

In exploring the individual system, the MSCI allows adolescents to select from a variety of twelve intrapersonal influences, all of which are potential influences in career development. In addition, the adolescents were asked to identify the influences that were most important in their career development. Figure 6 provides a visual representation of the results. The pie chart titled *Individual System Influences* provides the frequency counts for each influence selected by the adolescents as having an influence on their career development. The pie chart titled *Rating of Importance* provides the frequency counts of the extent to which each influence was selected as being important in the adolescents’ career development.

**Figure 6**

*Frequency Counts for Individual System Influences*

![Diagram showing Individual System Influences and Rating of Importance](image)

When examining the individual system influences, it becomes clear that all the influences provided were selected as having an influence on the career development of the
adolescents. The influences that received the highest number of endorsements were personality (selected by all 16 adolescents), health (selected by 94% of the adolescents), abilities (selected by 81% of the adolescents), coping strategy (selected by 75% of the adolescents), and interests (selected by 75% of the adolescents). Influences that received moderate endorsement from the sample were values (selected by 62% of the adolescents) and beliefs (selected by 56% of the adolescents). Influences that were less strongly endorsed as influencing the career development of the present adolescents were culture (selected by 25% of the adolescents), gender (selected by 31% of the adolescents), disability (selected by 31% of the adolescents), age (selected by 44% of the adolescents), and physical attributes (selected by 44% of the adolescents).

The results indicate that personality was selected by the entire sample of adolescents as having an influence on their career development. Furthermore, when examining the rating of importance of the individual system influences, personality remained the most prominent influence in that 81% of adolescents rated personality as being one of the most important influences they selected from the range of influences available.

The influence of personality development has been emphasized by the developmental approach to career choice over the past three decades (e.g., Bordin & Kopplin, 1973; Roe & Lunneborg, 1990). However, as early as 1971, Bartlett stated that research on personality maturity can be readily applied to career maturity, for the latter is seen as an aspect of the former (Super, 1990, Super et al., 1996). The prominent influence of personality as indicated in the findings of this study can be related to and supported by much earlier research which found personality influences to be particularly important in the career development of disadvantaged and minority groups (e.g., Greenhaus & Simon, 1976; Tolbert, 1980). South African research has established a relationship between personality traits and work values in
adolescents, suggesting a pattern that adolescents who are better adjusted also attach greater value to independent performance in their work (e.g., Neethling, 1983).

While personality was identified as having an important influence on career development, so too was health. While no career research has previously examined health as a construct in relation to career development, the findings of this research study indicate that health was identified as an important influence in the career development of adolescents, more so than influences such as interests, abilities or coping strategies. Furthermore, in examining this rating of importance, 80% of adolescents considered health to be an important influence in their career development.

Within the context of the children’s home, the children are made aware of the importance of maintaining a healthy lifestyle as many of them come from disadvantaged backgrounds where health facilities were either not available or not adequately equipped to provide the necessary remediation and knowledge to maintain a healthy lifestyle. The children’s home therefore encourages regular clinic visits and a health promoting environment. It seems understandable therefore that health was selected by most adolescents.

Influences such as interests, ability and coping strategies were also indicated as being influential in the career development of adolescents. However in examining the rating of importance of these influences, there was a drop in the percentages of the number of adolescents selecting these influences as being important to them. Only 58% of adolescents selected interest as being important, a drop of 17 percentage points from the initial pool of adolescents who indicated interest as influential in their career development. Similarly, only 38% of adolescents selected abilities as being important and only a third selected coping strategies as important, indicating a drop in percentage of 43 and 42 percentage points respectively in relation to the high percentage of adolescents indicating abilities and coping strategies as being influential in their career development. Therefore, while these influences
are considered to be influential in career development, almost half of the adolescents did not identify them as being important influences in their career development.

In examining the influence of interests, the results reviewed earlier in this chapter regarding adolescents’ interests in employment options indicated that many of the adolescents fitted more than one interest type (e.g., Social and Investigative type), thus indicating a variety of interests. These findings are consistent with earlier national studies that suggest that South African high school students’ occupational aspirations are predominantly in the social service and educational fields and rarely in the technical fields, which fall within Holland’s (1985) Social and Investigative occupational typologies (Watson, Foxcroft, Horn, & Stead, 1997; Watson & Stead, 1993).

Abilities and coping strategies are also considered to play a role in the development of interests, all of which are well related to Super et al.’s (1996) construct of career maturity. The more career mature individuals become, the more they will be influenced by their interests, abilities and coping strategies (Super et al., 1996).

While much research has focused on influences such as age, gender and culture, the findings from this study suggest that these influences are not as influential for the present adolescents as previous research findings might have suggested. In fact they are of less importance than other intrapersonal influences. National research suggests that researching age as a career influence may present additional problems in South Africa. Cloete (1980) points out that internationally age and grade level in school are closely related, thus choice of either influence may not be crucial. However, in South Africa, particularly with the disadvantaged background of some groups, such a direct relationship does not exist and several career researchers have suggested that it may prove more feasible to utilize grade level than chronological age.
Disability and physical attributes were also not considered to influence career development. In rating the importance of age as an influential variable in career development, only one adolescent regarded age to be most important. Similarly, only two adolescents indicated gender, disability and physical attributes to be important, while three adolescents indicated values, beliefs and culture to be important. While no research on a national level has examined the influence of health and physical attributes, theory (e.g., Mitchell & Krumboltz, 1990) suggests that career counsellors need to examine these influences in the career counselling process.

Influences such as beliefs and values took preference in relation to age, gender, culture, disability and physical attributes. This is understandable considering the age range of the present sample. At the age of 15 years, adolescents are able to take their goals and values into consideration when making a career decision (Sharf, 2002). In addition, Sharf (2002) states that, while adolescents may not know how to weigh their interests, capacities, and values, they nevertheless have the necessary building blocks for career choice. The influence of values in the present study is consistent with research conducted by Schulenberg, Vondracek, and Kim (1993) who concluded that “during adolescence, higher career certainty reflects greater engagement in a vocational identity search and a more active consideration of work values” (p. 268). In general, research has indicated that values are influential in the choice of career during adolescence (Lebo, Harrington, & Tillman, 1995). When considering influences such as age and educational levels, Krau (1987) believes that age influences work value formation less because of maturation influences but more because of the acquisition of educational experiences in relation to the start of a career. These findings suggest the interactive nature of most influences in the process of career development in adolescence. For example, national research has indicated the interactive nature of values with influences such
as gender (e.g., Langley, 1995), culture (Kota, 1999), and personality (Hall, 2001) among other influences.

When considering previous career developmental research in general, influences such as age, gender and culture have served as relational research variables in examining much broader constructs such as beliefs, values and career maturity, rather than being examined as individual constructs (e.g., Creed, Patton, & Watson, 2002; Krau, 1987). Therefore, while age, gender and culture are not as influential as other influences in the career development of adolescents, the interactive nature of such influences can be acknowledged in relation to the more prominent influences.

In addition to each adolescent rating the importance of the influences that they selected, they also had the opportunity to add or modify influences. However, within the individual system, no such additions or modifications were made.

In summary, the results indicate that within the individual system of the STF the influences of personality, health, abilities, interests and coping strategies are considered to be the more prominent influences in the career development of adolescents. Of these, based on frequency counts, personality, health and interests were rated by most of the adolescents as important influences in relation to the remaining influences. However, to some degree, all intrapersonal influences within the individual system remain integral components of career identity and maturity in general. While the most important influences within the individual system have already been identified and discussed, there is a need to explore and integrate these influences within the larger system. The following section will present findings related to social system influences which addresses the second sub-aim of aim two of this study.
The Social System

As with the individual system, there are influences within a much larger system that impact on the career development of adolescents. This larger system is known as the social system. The MSCI allows adolescents to select from six influences those they consider may have an influence on their career development. Figure 7 offers a visual representation of the frequency counts for each of these six influences selected across the total sample as having an influence on career development. Additional social system influences identified by the adolescents as having an influence on their career development are presented in Table 9.

Figure 7
Frequency Counts for Social System Influences

![Frequency Counts for Social System Influences](image)

Table 9
Additional Social System Influences

<table>
<thead>
<tr>
<th>Additional Influences</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended Family Members</td>
<td>2</td>
</tr>
<tr>
<td>Doctor</td>
<td>2</td>
</tr>
<tr>
<td>Siblings</td>
<td>2</td>
</tr>
<tr>
<td>Children’s Home staff</td>
<td>3</td>
</tr>
<tr>
<td>Karate Instructor</td>
<td>1</td>
</tr>
<tr>
<td>Social Worker</td>
<td>1</td>
</tr>
</tbody>
</table>
As demonstrated in Figure 7, the results indicate that all influences within the social system were identified as playing an influential role in the career development of the adolescents in the sample. While the influence of teachers, parents and friends were endorsed by the majority of adolescents in the sample, the influence of youth group, reading and television were identified by less adolescents as being an influence. Most adolescents (87%) identified teachers, parents and friends as being influential. Reading was identified by 75% of the adolescents, 62% identified youth group, while television was identified by 37% of the adolescents. In examining the importance of each influence, 81% of the adolescents selected parents as being an important influence in their career development, 50% of the adolescents found reading to be important, 43% indicated that friends were important, while 37% of the adolescents regarded teachers as being important. Once again, television was found to be of lesser importance with only three adolescents suggesting it as an important influence in their career development. The influence of parents was indicated as a prominent influence for most of the adolescents, despite the fact that their biological parents were absent. It should be noted that earlier in this chapter, it was identified that the house mother plays a significant role in assisting the adolescents with decision making. It is possible that the adolescents were referring to their house mother who plays the role of a parent in the context of the children’s home, rather than to their biological parents.

With regard to the influence of teachers, the findings of this study show consistency with previous research, for example, national research conducted by Dean (1998) suggests that the greatest influence on South African children was related to their school environment. More specifically, the influence of teachers on the career development of South African adolescents has been regarded as being a significant one (Stead & Watson, 1993).

National and international research findings are inconsistent with regard to the influence of television on the career development process. International research conducted
with children has shown that watching television has an influence on children’s occupational aspirations (Wright, Huston, Truglio, Fitch, Smith, & Piemyat, 1995). In addition, research conducted by McMahon and Patton (1997) found that media such as television, radio and print do have an influence on the occupational aspirations of both children and adolescents. On the other hand, national research conducted by Dean (1998) found that television is not a major influence in the career development of children. Similarly, national research conducted by Stead and Watson (1993) ranks several other influences such as parents and teachers as more important than any other influences (such as television) in the career development of adolescents. While television was identified by over a third of the present adolescents, the influence of reading was selected by three-quarters of the adolescents, indicating that print may be more influential than television. Therefore, the results of this study regarding the influence of television are consistent with previous national research conducted with adolescents, indicating that television is not a major influence in the career development of adolescents.

In relation to the influence of youth group, this influence could possibly be related to life roles as demonstrated in Table 6 earlier in this chapter. Many adolescents indicated participating in a youth group as being one of their life roles. Therefore, rating youth group as being influential in their career development is appropriate, as it is also a life role that most of these adolescents participate in. In addition, the possibility exists that youth group equates with peer influence, as youth group entails interaction with peers. With an absence of research on the influence of a youth group, the present research findings cannot be supported or rejected by previous research. However, the findings do suggest that being part of a youth group does in fact have an influence on the career development of adolescents.

Most career research has focused on the significant role of family, more specifically parents and peers, in an adolescent’s development of a career identity (e.g., Ackermann &
Botha, 1998; Lankard, 1995). Gottfredson (1981, 1996) proposes that individuals attend to readily available sources of information first, such as parents and friends, and often fail to consult more useful sources. The findings of this study indicate that both parents and peers are prominent influences in the career development of the present adolescents. In addition, Table 9 indicates additional influences that were added as being influential on career development such as siblings and extended family members. Within the context of a children’s home, these additions seem appropriate in that these adolescents often have siblings who also live at the home, and many of them visit their extended family members during holidays. Other influences added by some adolescents were the influence of staff at the children’s home, the influence of a doctor, the karate instructor, as well as the social worker. Once again, these are people with whom these adolescents have regular contact, and thus they have been regarded as being influential in their career development process.

The present findings suggest that all the influences within the social system play a role in the career development of adolescents, but that several influences, such as parents, teachers and friends, have been identified as being more important than others. Once again, these influences add to the constellation of influences that are integral components of career identity and maturity in adolescents. While the most important influences within the individual system and social system have been identified and discussed, there is a need to explore and integrate these influences within an even larger system. The following section will present findings related to the environmental/societal system, thus addressing the third sub-aim of the second aim of this study.
**The Environmental/Societal System**

As with both the individual system and the social system, there are also influences within an even larger system that impact on the career development of adolescents. This system is known as the environmental/societal system. The MSCI allows adolescents to select from six influences which ones they consider to have an influence on their career development. Figure 8 offers a visual representation of the frequency counts selected across the sample of adolescents for each of the six influences.

When examining the results in Figure 8, it is clear that certain influences are considered more prominent than others. Influences such as opportunities to work overseas (selected by all adolescents), availability of jobs (selected by 81% of adolescents), as well as financial support (selected by 81% of adolescents) take preference in relation to other influences such as location of universities (selected by 68% of adolescents), financial cost (selected by 62% of adolescents) and local area (selected by 44% of adolescents).

**Figure 8**

Frequency Counts for Environmental/Societal System Influences

![Frequency Counts Chart]

In rating the importance of environmental/societal influences, 68% of the adolescents regarded the opportunity to work overseas as being important, 56% of the adolescents rated availability of jobs and location of universities as important, 50% of the adolescents regarded
financial support as being important, 37% of the adolescents selected financial cost and 25% of the adolescents regarded their local area as playing an important influence in their career development.

The results indicate that the opportunity to work overseas is a prominent influence in the career development of the adolescents in the sample. At the same time, they also regard financial support and the availability of jobs as influential. Considering the deprived circumstances that resulted in these adolescents living in a children’s home, financial support and financial cost is an area of concern as the survival of the children’s home is based on sponsorships received from outside organizations with little support from government. Therefore finance would certainly be an influential factor as few of these adolescents may have the opportunity to attend university and to find a job or even work overseas. As reported by the children’s home, bursaries from various universities are offered to adolescents who excel in their academic work, however the trend has been that few of these adolescents strive towards attaining these bursaries to further their career development. It has further been reported by the children’s home that the present adolescents lack the motivation and perseverance to even complete their high school years, which could result in a high percentage of them leaving school before grade 12.

While no previous research is available to support the present findings, literature on the influence of environmental influences, specifically within the South African context, is available. While the influence of local area was not a prominent influence, Mitchell and Krumboltz (1996) state that conditions such as living in a polluted environment or an environment subject to extreme cold or high temperatures have an impact on an individual’s career choice. Furthermore, area of residence, together with socioeconomic status, provides the setting in which an adolescent becomes familiar with the world of work and the opportunities it offers (Mitchell & Krumboltz, 1996). The results of this study have found
that many of the adolescents easily identified with employment options similar to those of people with whom they come into contact on a regular basis, such as a social worker, teacher, and doctor.

With regard to the South African context, influences such as politics, economics and prevailing environmental/societal conditions have affected the nature and form career psychology has taken in South Africa (Nicholas, Pretorius, & Naidoo, 1999). Furthermore, Nicholas et al. (1999) have suggested that the inequities of apartheid in South Africa have led to disparate realities, and differential access to educational and career opportunities for the different race groups. With the dismantling of the apartheid system, career researchers have found that previously disadvantaged students have been required to make rapid social adjustments in order to be prepared to enter occupations which have previously been denied to them (Leach, 1994; Naiker 1994). The present socio-political and socio-economic changes in South Africa imply a much wider spectrum of career opportunities for disadvantaged adolescents, which may complicate the process of career choice significantly. It is suggested that an understanding of the career choice process can best be facilitated by researching career development in historical (e.g., Nicholas, Pretorius, & Naidoo, 1999), political (e.g., Santos & Ferreira, 1998), ecological (e.g., Alvi, 1997), and cultural (e.g., Fouad & Arbona, 1994) contexts among others.

All six influences within the environmental/societal system were selected to some degree as having an influence on the career development of adolescents. While some influences were considered by the majority of the adolescents as influential, other influences were considered less influential. Overall, the influences considered to be of greater influence in the career development of adolescents are working overseas, location of universities, and the availability of jobs.
Past, Present and Future Influences

This section attempts to address the fourth sub-aim of the second aim of the study, by exploring and describing the past, present, and future influences on the career development of adolescents. The MSCI allows adolescents to select from four influences which ones they consider to have an influence on their career development. These four influences incorporate past, present and future influences. Once again, adolescents were provided with the opportunity to add or modify influences. Themes were identified across all responses. Table 10 provides the relevant themes identified while exploring past, present and future influences.

Table 10  
Past, Present and Future Influences

<table>
<thead>
<tr>
<th>Themes</th>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Themes</td>
<td>Nothing (11 instances)</td>
<td>Lifestyle (6 instances)</td>
<td>Want to work overseas (14 instances)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The children’s home (4 instances)</td>
<td>Want to combine family and work (10 instances)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interests (4 instances)</td>
<td>Interests (4 instances)</td>
</tr>
<tr>
<td>Minor Themes</td>
<td>Visiting a doctor (2 instances)</td>
<td>Improving skills (1 instance)</td>
<td>No minor themes</td>
</tr>
<tr>
<td></td>
<td>Watching a movie (1 instance)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 10, one major theme emerged in terms of past with 68% of the adolescents suggesting that there were no past influences impacting on their career development. This theme indicates that not many of the present adolescents regard their past experiences as being influential in their career development. Two minor themes became
evident, with two adolescents identifying past visits to their doctor as being influential in their interest in becoming doctors themselves. Watching a movie was also identified as a minor theme with one adolescent indicating that it had an influence on his/her career development. This relates well to theory which states that individuals usually focus on careers within their own social space (Gottfredson, 1996). In addition, both minor themes could also be categorized as social system influences. This suggests that social system influences may be important influences during adolescence and that, as past influences, they impact on career development during the exploration stage.

With regard to present influences, three major themes were identified. Lifestyle was identified by 37% of the adolescents as being an influence on their present career development. This theme suggests that these adolescents are at present exploring the lifestyle they would like to have in terms of determining their future career development. This theme could possibly be related to the future-related theme of wanting to combine family and work, particularly as this dictates the lifestyle that one would like to have. The context of a children’s home was identified as the second major theme. This theme could possibly suggest that many of the adolescents view their present living circumstances in a children’s home as an influence that impacts on their career development either positively or negatively. Another theme that emerged was that of interests. This theme suggests that adolescents’ career interests (e.g., wanting to become a doctor) are presently influencing their career development in terms of them exploring and crystallizing their career choice. A minor theme that emerged was the need to improve one’s skills. This theme suggests the notion that in improving one’s skills one would be better able to achieve and therefore ensure a successful career development process.

In examining future influences, three major themes were identified. The first theme that emerged was that 87% of the adolescents identified with a desire to work overseas. In
attempting to work overseas in the future, it can be hypothesized that these adolescents would have to work hard and achieve their desired goals. The findings relating to this theme are consistent with the results regarding environmental/societal system influences, where all adolescents indicated that working overseas is an influence on their career development. This theme confirms that working overseas is a prominent influence for the present adolescents, specifically when considering their future. Another future-related theme identified by 62% of the adolescents indicated that they would like to develop their career in such a way that they would be able to combine family and work. This trend is developing rapidly in South Africa with many people working from home. This theme suggests that the upcoming generation are possibly considering careers that would enable them to combine family and work. The third major theme was the influence of interests. This is understandable in that the adolescents are presently in the exploration stage of their career, therefore they are still in the process of crystallizing, specifying and implementing a career choice, thus their interests would play a role in their future as they move towards Super’s establishment stage.

The interrelatedness of the three systems becomes clearer when examining the past, present and future influences. The interactive nature of many of these intrapersonal influences suggests that influences within each system could at any time also represent a past, present or future influence. The adolescents themselves also acknowledged this during the reflective process where they re-examined each of the systems and created their own system of influences that could be referred to as a constellation of influences. The following section presents a summary of the quantitative findings by providing a diagram and description of the constellation of influences that were identified in this study.
Summary of Quantitative Results

While it was interesting to examine the influences selected by adolescents as influential in their career development as well as the importance of each influence and past, present and future influences, it is essential to integrate and summarize these findings into a constellation of influences. All influences regardless of importance within all three systems were identified as having some influence on career development. As part of a reflective process adolescents were provided with an opportunity to re-examine each of the systems and to create their own personal diagram. Adolescents’ personal diagrams are therefore a representation of all the influences impacting on their career development.

Instead of presenting a specific example of the diagram of a particular adolescent, the researcher has explored all three interrelated systems across the entire sample of adolescents and has created a diagram based on frequency counts to represent the four influences endorsed most frequently as having an impact on career development within each of the systems. This diagram not only serves as an example of how adolescents formulated their own personal diagram of their system of influences, but it also serves to provide a summary of the quantitative findings of this study across all the adolescents regarding the influences in their career development. Figure 9 offers a visual representation of the constellation of influences across all systems and all adolescents. The three interrelated systems have been differentiated according to colour.

Yellow represents the four most prominent individual system influences selected by adolescents as having an influence on their career development. These included influences such as personality, interests, health and abilities. Green represents the prominent influences of the social system which includes friends, parents, teachers and reading. Blue represents the most prominent environmental/societal influences and includes influences such as
opportunities to work overseas, location of universities, availability of jobs and financial support.

Figure 9
Constellation of Most Prominent Influences

The orange circles represent past, present and future influences. While the majority of the adolescents did not indicate any past influences, others indicated that a previous visit to the doctor and watching a movie influenced their career development. With regard to present influences, three prominent themes were identified, that of lifestyle, the children’s home and the role of interests. Finally, when examining future influences, the majority of adolescents
indicated that working overseas and combining family and work were future influences that would impact on their career development. In addition, interests were also considered to be a future influence.

**Qualitative Results of the Reflection Process**

As part of the reflection process, adolescents were required to answer ten open-ended questions based on their personalized diagram of system influences. The following section presents the qualitative findings related to this process which in turn addresses the third aim of this study. Of the ten questions, one question examined the feelings of adolescents as they examined their own personal diagram of system influences. This particular question could not be coded in the same manner as the rest of the questions. Therefore a general theme was identified. The theme identified suggests that all adolescents experienced a general positive feeling towards their personal diagram of system influences. Examples of some responses included feelings such as “feeling amazed”, “happy”, “good”, “determined”, “fine”, “okay”, and “glad”.

The remaining nine questions were coded, grouped and categorized in relation to the three interrelated systems, namely the individual system influences, the social system influences and the environmental/societal system influences. In addition, past, present and future influences were also included. Frequency counts are provided with respect to the number of instances each system influence was mentioned. Examples of the particular system influence are provided in italics. Table 11 presents the frequency counts and examples of responses to the nine questions examining the adolescents’ process of reflection. In examining the results of the reflection process holistically, it is evident that there is no one particular system that the adolescents reflected on more than the others. In addition, the adolescents also reflected on past, present, and future influences in their personal diagram of system influences.
<table>
<thead>
<tr>
<th>Question</th>
<th>Individual System influences</th>
<th>Social System influences</th>
<th>Environmental/societal System influences</th>
<th>Past, present and future influences</th>
</tr>
</thead>
<tbody>
<tr>
<td>What stands out most for you?</td>
<td>“Personality, interests, abilities” (8 instances)</td>
<td>“Family, friends, parents” (3 instances)</td>
<td>“Children’s home, working overseas, availability of jobs” (7 instances)</td>
<td>“The lifestyle I anticipate” (2 instances)</td>
</tr>
<tr>
<td>What stands out least for you?</td>
<td>“Personality, skills, disability, culture” (4 instances)</td>
<td>“Parents, reading” (3 Instances)</td>
<td>“Finance, availability of jobs, local area” “Children’s home” (5 Instances)</td>
<td>“Want to combine family and work” (2 influences)</td>
</tr>
<tr>
<td>What has surprised you about your system of career influences?</td>
<td>“My interests” (1 instance)</td>
<td>“Working overseas, cost of options” (3 instances)</td>
<td>“My local area, working overseas, financial support, availability of jobs” (6 instances)</td>
<td></td>
</tr>
<tr>
<td>What have you noticed that you were not previously aware of?</td>
<td>“Interests, beliefs” (6 instances)</td>
<td>“Friends, family” (2 instances)</td>
<td>“Working overseas” (3 instances)</td>
<td>“I want to combine family and work” (1 instance)</td>
</tr>
<tr>
<td>What has been confirmed for you?</td>
<td>“Gender, health” (2 instances)</td>
<td>“Friends” (3 instances)</td>
<td>“Working overseas” (2 Instances)</td>
<td>“The lifestyle I anticipate” (1 instance)</td>
</tr>
<tr>
<td>What would you like to change?</td>
<td>“Personality” (4 instances)</td>
<td>“Friends” (3 instances)</td>
<td>“Working overseas, availability of jobs” (2 Instances)</td>
<td></td>
</tr>
<tr>
<td>What would you like to remain the same?</td>
<td>“Interests, personality, abilities” (7 instances)</td>
<td>“Parents, friends, family” (5 instances)</td>
<td>“Working overseas, financial support” (5 instances)</td>
<td></td>
</tr>
<tr>
<td>Of those influences you located closest to you, which do you think is most important to you?</td>
<td>“Skills, beliefs, interests, culture” (5 instances)</td>
<td>“Friends, parents, doctors, school” (9 instances)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which of these influences have you encountered in previous career decisions?</td>
<td>“Skills, beliefs, interests, culture” (5 instances)</td>
<td>“Friends, parents, doctors, school” (9 instances)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The first two questions of the reflection process examined the influences that stood out for each adolescent as well as those influences that did not. Approximately 50% of the adolescents indicated individual system influences, such as personality, interests and abilities as influences that stood out for them in their personal diagram of system influences. These reflections are consistent with earlier findings in this study regarding individual system influences, which indicated that personality and ability were among the more prominent influences selected by the adolescents as having an influence on their career development. On the other hand, 25% of the adolescents indicated individual system influences such as personality, skills, disability and culture as influences that stood out least for them.

Within the social system, 18% of the adolescents identified with influences such as family, friends and parents, while another 18% indicating that parents and reading were influences that stood out least for them. These reflections are consistent with the research findings on the social system influences that indicated friends and parents as prominent influences in the career development of adolescents. In addition, 44% of the adolescents reflected environmental/societal influences, such as the children’s home, the availability of jobs and the possibility of working overseas as outstanding influences while at the same time, 31% indicated that similar influences such as the children’s home and availability of jobs stood out least for them. Two adolescents indicated lifestyle as a influence that stood out for them, while another two suggested the possibility of combining family and work as an influence that stood out least for them.

The adolescents were also asked to indicate the influences that surprised them about their system of career influences. Over a third (37%) of the adolescents identified with environmental/societal system influences as influences that surprised them. These influences included influences such as “working overseas”, “the availability of jobs”, “financial cost” and “local area”. As discussed in Chapter 3, little research has been conducted that examines
environmental/societal influences such as these, indicating the need for future researchers to look at constructs that fit within the environmental/societal system.

The fourth question in the reflection process examined the influences that adolescents noticed about their personal diagram of system influences which they were not previously aware of. Similarly to the influences that surprised them, three adolescents identified with environmental/societal influences such as working overseas and financial cost. In addition, one adolescent indicated interests while another adolescent identified with wanting to combine family and work. These findings suggest that these adolescents are now beginning to view their career development within a systemic approach. In examining the influences that surprised the adolescents about their system of career influences, one theme that emerged was that most adolescents found the possibility of working overseas surprising. Other surprising influences identified by adolescents included influences such as local area, financial support, and whether jobs were available.

Five adolescents indicated that, within the individual system, their interests were confirmed for them as they explored their personal diagrams, while one adolescent identified with beliefs. Within the social system, influences such as the influence of family and friends were confirmed for two adolescents, while three adolescents identified with environmental/societal influences as influences that were confirmed for them.

As adolescents reflected on the process of developing their personalized diagram of system influences, they were provided with the opportunity to identify influences that they would like to change. Ten of the sixteen adolescents indicated that there was nothing that they would like to change, while four did not respond to this question. Of the remaining two adolescents, health and gender were identified as influences that they would like to change in their personal system of career influences. Interestingly, the influences selected were those that an individual has minimal control over and therefore cannot change easily.
The adolescents also indicated the influences which they would like to remain the same. While the majority did not respond or had nothing that they would like to remain the same, personality was identified by three adolescents as an influence that they would like to remain the same. Within the social system, friends was identified by two adolescents, while availability of jobs and the possibility of working overseas were also influences that two adolescents wanted to remain the same.

As part of the reflection process, adolescents were once again asked to indicate their most important influences as they viewed their integrated personalized diagram of system influences. Within the individual system, personality, interests and abilities were identified which shows consistency with earlier findings in this study. Social system influences such as parents, friends and family were also considered important and is also consistent with earlier findings of this study. In addition, working overseas and financial cost were identified as important influences.

Finally, adolescents had to identify from their personalized diagram the influences that they had encountered in their previous career decisions. The social system influences of friends, parents, doctors and school were identified as influences that were encountered in previous career decisions. Individual system influences such as skills, beliefs, interests and culture were also identified. Interestingly, no influences within the environmental/societal system were identified as being encountered in previous career decisions.

In examining the results of the reflection process holistically, the themes suggest that the present adolescents are in a process of exploring their career development as well as in search for a career identity. In addition to understanding career behaviour, Super (1990) emphasizes that the career maturity construct is central to the career development process. It refers, broadly, to the individual’s readiness to make informed, age-appropriate career decisions and cope with career developmental tasks (Savickas, 1984). Crites’ (1971) model of career maturity proposed that it consists of affective and cognitive dimensions. In examining
the adolescents’ responses within the reflection process, it becomes clear that the adolescents were able to reflect both cognitively and affectively on their personal diagram of system influences.

The cognitive dimension relates to these adolescents’ ability to explore and reflect on the three interrelated systems that impact on their career development process. In relation to the affective dimension, results indicate that the adolescents were able to reflect on their attitudes and feelings towards their personalized diagram of system influences. The findings are also consistent with Piaget’s (1977) theory which suggests that as adolescents develop and grow, planning becomes more ordered, permitting adolescents to introspect and think about themselves in a variety of situations (or systems, as applicable to this study). It is at this point that adolescents can more accurately picture themselves working in occupations than they could a few years earlier. This ability is known as formal thought, which occurs in the last of Piaget’s (1977) four stages of cognitive development. The reflection process has therefore indicated that these adolescents are in the formal thought stage of Piaget’s theory which has in turn permitted them to introspect and think about the three interrelated systems that may be impacting on their career development.

The following chapter will present the conclusions related to this study. Limitations of the study as well as recommendations for future research will also be discussed.
CHAPTER 6
CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

Introduction

For more than 30 years, both nationally and internationally, the field of career development has called attention to the need to ensure the relevance of career theory and practice for culturally diverse populations and contexts (e.g., Fitzgerald & Betz, 1994; Leong, 1995; Richardson, 1993, 1996; Savickas, 1995, Stead & Watson, 1998; Watson & Stead, 2002). Career theory and practice have long emphasized personal variables (e.g., abilities, needs, interests) but have only recently begun focusing on environmental variables (e.g., family, socio-economic status), in addressing cultural and contextual issues (Hartung, 2002). Some newer career theories and counselling models are emerging that give greater emphasis to contextual variables (e.g., Bingham & Ward, 1996; Brown, 1996; Fouad & Bingham, 1995; Vondracek, Lerner, & Schulenberg, 1986; Young, Valach, & Collin, 1996). In an effort to expand these established career theories, the systems theory framework (STF) has emerged. This theoretical framework provides an overarching framework within which all concepts of career development described in most career theories can be integrated and applied both in theory and practice (Patton & McMahon, 1999).

This final chapter of the present study initially discusses the applicability of the STF for the career development of adolescents living in the unique context of a children’s home. Conclusions reached will be based on the research findings described in Chapter Five, and will be presented according to the three interrelated systems of the STF, namely the individual system, the social system and the environmental/societal system. Recommendations for future research will thereafter be provided. Certain limitations of the present study will also be acknowledged.
Conclusions

Although earlier career theorists and researchers did not use systems theory to provide an overarching theoretical framework for the field of career development, systems theory has influenced the thinking of career theorists for over a decade (Patton & McMahon, 1999). These applications have been at three levels. First, several authors (e.g., Blustein, 1994; Bordin, 1994; Collin & Young, 1986; Osipow, 1983) have acknowledged the potential of systems theory for furthering the integration of career theory and practice. Second, other writers (e.g., Hershenson, 1996; Miller-Tiedeman, 1989) have incorporated specific aspects of systems theory into their theoretical formulations. Finally, theoretical frameworks of human development derived from general systems theory have been adopted as frameworks within which to further understand specific aspects of career behaviour (e.g., Vondracek & Fouad, 1994; Vondracek & Kawasaki, 1995). The STF was developed in order to provide a useful overview of important influences on career development as identified by the many theorists and researchers who have contributed to the understanding of career development.

While the concept of systems theory has been acknowledged, no research has previously examined the applicability of systems theory framework to the career development of adolescents, more specifically, within unique contexts such as that of a children’s home. The findings of this study suggest that the STF provides coherence to describing the many influences on career development and the many theories of career development. The usefulness of the STF in understanding career developmental theory was highlighted in that the STF placed an emphasis on both content and process. Under content, the framework identified influences applicable to the adolescents in the sample and to their context, thereby outlining key influences on their career development. Under process, the framework identified the existence of recursive interaction processes within the adolescent and within the context, as well as between the adolescent and the context.
In relation to the findings of the present study, the adolescents’ present career development status indicates that they are in the process of exploring and crystallizing their career choice. This is consistent with Super’s (Super et al., 1996) Exploration stage of career development. The process of exploring and crystallizing their career choice was clearly evident in these adolescents as many indicated that their present career situation involved making choices regarding schools, subjects, and participation in activities. A few adolescents reported having sought part-time work in furthering their career development process, while several adolescents were able to identify with the leisurite and citizen role, specifically participating in sports and other activities. In terms of future employment options, most adolescents indicated an interest in social and investigative careers which demonstrate consistency with previous national research on adolescents’ occupational aspirations.

From the above, it is clear that these adolescents are in the process of developing their career choice. There are several influences that impact on this development. The applicability of systems theory in the present study has provided an opportunity to represent the complex interrelationships of influences that impact on the career development of adolescents. As adolescents interact with the various interrelated systems namely the individual, social and environmental systems, they continually collect information that is influential in their career development. The following sub-sections present the conclusions of this study derived from exploring and describing the career development of adolescents in a children’s home from a systems theory perspective. Conclusions related to the individual, social and environmental/societal systems will be discussed in turn. It must be noted before discussing these conclusions from the research findings that the results of this study are exploratory and descriptive in nature. They are not conclusive, therefore, and they should be regarded as such throughout the following sub-sections.
The Individual System

Many of the influences represented in the individual system have been acknowledged in existing career theories and have been discussed in relation to research presented in Chapter 3. The interactive nature of many influences within the individual system was highlighted in Chapter 3. While all influences were selected to some degree as having an influence on the career development process, the findings of this study suggest several prominent influences that play a role in the career development of adolescents living within the context of a children’s home. Influences such as personality, health, interests and abilities were identified as being prominent influences in the career development of these adolescents.

While influences such as personality, interests and abilities have received considerable attention in existing career theories and research studies, the influence of health has received scant attention in both theory and research. It has been suggested that a holistic view of individuals needs to emphasize physical and mental health in relation to career choice and development, therefore it seems timely to include health in the STF framework as an influence in its own right (Patton & McMahon, 1999). In viewing the result of this study holistically, influences such as personality, interests and abilities continually surfaced in the exploration and description of the adolescents’ career development. Several adolescents in the children’s home identified with personality, interests and abilities as influences that stood out the most for them as they reflected on their personalized diagram of system influences. In addition, personality was identified by most adolescents as being an important influence and most adolescents reflected that they would like their personality, interests and abilities to remain the same.

Relating to individual system influences is the social system which emphasizes the interaction between the individual and society. Conclusions related to the social system will be discussed in the next section.
The Social System

Jepsen (1989) has commented that “an adolescent’s social environment is comprised of several primary social groups to which most adolescents belong, especially the family of origin, the several subgroups in school such as classes and activity groups, and the peer friend group” (p. 73). With regard to the unique context of a children’s home, some of these social groups do not exist, specifically that of the family of origin. Interestingly, most adolescents in the present study indicated parents as being an influence in their career development process. While several adolescents know of their parents’ whereabouts, the majority of the adolescents in the children’s home do not have any contact with their parents. Several adolescents have some form of contact with their family of origin in that they have siblings also residing at the children’s home. These findings could possibly be ascribed to the fact that these adolescents view the staff at the children’s home as being their family, as several adolescents indicated additional influences, such as house mother, social worker, staff at the home, and their siblings as having an influence on their career development.

All influences within the social system were regarded to some degree as having an influence on the career development of the present sample of adolescents. Similarly to the individual system influences, several influences such as parents, television, school and peers have received considerable attention in career theory and research, while other social system influences have been neglected. The social system influences that were identified as being more prominent influences in the career development of the present sample of adolescents living within the unique context of a children’s home included parents, friends, teachers and media. In addition, the same social system influences were identified as the influences that stood out for several adolescents as they reflected on their personalized diagram of system influences. Relating to the social system is the environmental/societal system which
emphasizes the interaction between environment and society. This system will be discussed in the next section.

The Environmental/Societal System

Influences within the environmental system may seem less directly related to the individual, yet such influence can be profound. As stated in Chapter 3, environmental/societal influences have been underrated as a factor in career development. Environmental/societal system influences such as financial support, location of universities, availability of jobs, and opportunities to work overseas were all identified as prominent influences in the career development of the present sample of adolescents living in a children’s home. These adolescents placed a major emphasis on the environmental/societal system as they reflected on their personal diagram of system influences. Holistically, the results of this study indicate that these adolescents are able to think systematically and within much broader contexts. For example, many environmental/societal influences were identified as standing out for them. Some of these influences surprised them and seemed to be influences that they were not previously aware of. In addition, working overseas and financial support was regarded as influences that were considered among the most important in their personal diagram of system influences. Influences such as wanting to work overseas and wanting to combine family and work were identified by the majority of the adolescents as being future influences that will impact on their career development process.

The importance of acknowledging the restrictions imposed by the socio-political environment has been emphasized by a number of authors both nationally and internationally (e.g., Stead & Watson, 2002; Vondracek & Fouad, 1994; Watson & Stead, 2002). In this regard, future researchers should focus on career issues pertinent to South Africa such as unemployment, economic factors, career barriers, school to work transition, and the role of culture in career choice.
Summary

Holistically, the results indicate a consistent pattern of similar themes emerging as the adolescents explored influences within the three interrelated systems, rated the importance of these influences, related these influences to past, present or future influences, and reflected on their personalized diagram of system influences. Specific influences within each of the systems were identified as being more prominent influences in the career development of adolescents in the unique context of a children’s home. The findings indicate an ongoing relationship between subsystems as well as changes that occur over time as a result of these continual interactions, thus emphasising past, present and future influences.

The results indicate that adolescents in a children’s home are able to think systemically in exploring their career development. Clearly, systems theory is becoming increasingly influential in career development theory. It has the potential to contribute to our understanding of the detail and dynamic complexity of career development.

Limitations

Certain limitations hampered the conducting of the present study and must be acknowledged in order to critically evaluate the study’s conclusions and the research findings on which they are based. Even though this study was explorative and descriptive in nature and the findings cannot be generalized, the sample of adolescents living in a children’s home was relatively small. Due to the small sample this study was not able to examine subject variables such as gender, age and culture which could have provided a more comprehensive understanding of the career development process of the present sample of adolescents in their unique context. A larger sample would have been beneficial in this regard.

In addition, only one children’s home was utilized in this study. The unique structure and conditions of this particular children’s home could possibly have impacted on the results of this study as each children’s home operates according to their own unique system at a
micro and macro level. One would therefore need to interpret the results of this study with caution, as the results could possibly be influenced by the unique system of the particular children’s home utilized in this study and therefore be more of a reflection of the system and conditions employed by this particular children’s home.

Generally, there is a substantial gap in the amount of research conducted both internationally and nationally with adolescents residing in a children’s home, with no research in particular that has examined career constructs. The present study represents pioneering research in not only examining adolescents within a specific context but also utilizing the newly emerged systems theory framework and its recently developed measure. Therefore, the findings of this study could not be examined against the findings of previous studies.

The My Systems of Career Influences (MSCI) workbook utilized in this study is a newly developed measure that had not previously been utilized in research. However, the development and validation process of the measure indicated that the measure has content and construct validity. The pilot study conducted in this study highlighted some areas of the measure that required refinement. Once a refinement process had taken place, it became evident that the adolescents could think systemically and that the measure was constructive in terms of eliciting useful information. The MSCI also has the advantage of being qualitative, thus allowing for the emergence of influences that are usually harder to explore in quantitative measurements.

**Recommendations for Future Research**

The measure may require further refinement. For instance, it is suggested that in examining the rating of importance of the influences within each system, the measure should specify a certain number of influences to be rated as being influential. For example, respondents should be asked to indicate the top three influences that are important to them
within each of the three systems of the STF. This will provide a clearer understanding of the most important influences impacting on the career development of adolescents.

It is recommended that more research be undertaken to address the career development of adolescents in unique contexts, such as a children’s home. The particular children’s home utilized in this study is an international organization with children’s homes located in various countries. Therefore, cross-cultural studies can be conducted to examine the similarities and differences in the influences of adolescents that belong to the same unique context but live in different countries, thus addressing the need for more research that considers environmental/societal system influences. In view of the lack of research on environmental/societal influences, cross-cultural studies would enhance the understanding of how environmental/societal influences, in particular, impact on career development, specifically considering South Africa’s sociopolitical history.

In addition, comparison studies can be conducted between two different children’s homes to examine how different systems or conditions employed can impact on an adolescent’s career development. Furthermore, comparison studies can be conducted to examine career development in relation to different cultures and genders. Within the South African context, it would be interesting to examine the differences between white and black adolescents in a children’s home. Research has previously regarded black adolescents as a disadvantaged group. However, within the context of a children’s home, all individuals regardless of culture are disadvantaged. A comparison study can also be conducted to compare the similarities and differences in the career development of adolescents living with their family-of-origin and adolescents living in a children’s home.

While systems theory is well-established, considerable research is needed that examines the impact of various systems on career development at various developmental stages, with different cultures and gender, and within a variety of contexts.
Concluding Remarks

The career development of adolescents in a children’s home was investigated from the perspective of the STF of career development. The findings suggest that all influences within the three interrelated systems, namely the individual, social and environmental/societal systems, have an influence on the career development of adolescents in a children’s home. The impact of the systems theory framework on the career development of adolescents has been discussed with a view to recommendations for enhancing this newly emerged theoretical framework. Limitations and recommendations for future research on the study of the career development of adolescents have been mentioned.

This study has attempted to demonstrate the application of the systems theory framework by utilizing the MSCI measure to examine the influences that play a role in the career development of adolescents in a children’s home. By focusing on the three interrelated systems of the systems theory framework, elements of the personal, social, and environmental situation within which adolescents interact and develop were more explicitly understood.
REFERENCES


Zeier, R. E. (1992). *An investigation into the role played by values in the career choice of a group of standard ten pupils according to the scale of values.* Unpublished masters treatise, University of Stellenbosch, Stellenbosch.

Appendix A

My System of Career Influences (Revised Format)

My System of Career Influences (MSCI)

A reflection on my career decision

Completing this booklet will help you think about the many influences that are part of the process of making career decisions. For example, how important are your parents, your current school, your grades in school, your friends and where you live to the present thoughts you have about your career direction?

There are usually many influences that people have to consider before they can make career decisions. Influences can direct people toward or away from a choice, and are not necessarily positive or negative.

Most people find that identifying their own individual influences helps them to understand what is important to them in making decisions.

As you work through this booklet, read the instructions carefully and take your time. When you have completed it, you will be asked to transfer the information onto a separate sheet. This will help you to see the most important influences for you in relation to making a career decision at this time. It is important to note that these influences and their level of importance will vary over time.

Date of birth:  ________________

Sex:  Male  Female (please circle)

Today’s date:  ________________

School or organisation:  ________________________________

School grade:  8  9  10  11  12

Copyright © 2003 by McMahon, Patton, & Watson
My present career situation

1. Briefly describe your present career situation in the space provided below. For example, you may need to choose subjects at school, or you may be thinking about your first part-time job or what you will do when you leave school.

__________________________________________________________________________________
__________________________________________________________________________________

2. List below the part-time or volunteer work you have considered or have done at any time in the past and now.
   a)                             b)

3. Think about life-roles you have other than that of student. These may include roles such as sportsperson, choir member, class captain, youth group member.
   a)                             c)                             
   b)                             d)                             

4. List below any employment options that you have considered for your future.
   a)                             c)                             
   b)                             d)                             

5. List below any previous career decisions that you have made (e.g., choosing subjects to study, choosing to continue or discontinue activities such as music or sport).

__________________________________________________________________________________
__________________________________________________________________________________

6. What strategies or approaches have you used in your previous decision-making.
   _______________________________________________________________________________
   _______________________________________________________________________________
   _______________________________________________________________________________

7. Who has helped you or provided advice with your previous career decisions?
   _______________________________________________________________________________

Copyright © 2003 by McMahon, Patton, & Watson
Thinking about who I am

When people are making career decisions there are usually many influences that make them special as a person. For example, you may have an outgoing personality, or a special ability such as being good at mathematics. It may be important to you to earn a lot of money or to help people.

On the diagram below are some examples of influences on a career decision. Read the examples carefully and take time to think about yourself.

1. Tick the influences that apply to your current career decision.
2. Write on the diagram any other influences you can think of that are not listed.
3. Mark with an asterisk (*) those that you think are really important or a big influence on you.
Thinking about the people around me

When people are making career decisions, sometimes others around them may influence their thinking. For example, parents may suggest jobs they think are suitable, you may have talked to someone whose job sounds interesting, or someone e.g., a sister, brother, or friend may be critical of something you want to do. Sometimes people read about or see or hear something on TV or radio that influences their decision.

On the diagram below are some examples of influences on a career decision. Read them carefully and take time to think about your own life.

1. Tick the influences that apply to your current career decision.
2. Add any others that you can think of that are not listed.
3. Mark with an asterisk (*) those that you think are really important or are a big influence on you.
Thinking about society and the environment

When people are making career decisions, it is sometimes important to consider the influence of the society in which they live and the environment around them. For example, some people live in areas where there are few job opportunities, and for others the cost of a study course or living expenses, or the availability of transport may influence their decision.

Below are some examples of influences on a career decision. Read the examples carefully and take time to think about your own life.
1. Tick the influences that apply to your current career decision.
2. Add any others that you can think of that are not listed.
3. Mark with an asterisk (*) those that you think are really important or are a big influence on you.
**Thinking about my past, present and future**

Some of the influences you have already considered may have occurred in the past and yet still affect your career decision. For example, you may have seen a movie years ago that gave you some ideas about an occupation that interests you.

Sometimes decisions may be influenced by future considerations. For example, some people may know that they want to work overseas.

Sometimes career decisions may be affected by things in people’s present lives that they want to keep the same or want to change. For example, they may not want to move from where they currently live.

**Below are some examples of influences on a career decision. Read the examples carefully and take time to think about your own life.**

1. **Tick the influences that apply to your current career decision.**
2. **Add any others that you can think of that are not listed.**
3. **Mark with an asterisk (*) those that you think are really important or are a big influence on you.**

---

*Copyright © 2003 by McMahon, Patton, & Watson*
Representing My System of Career Influences

Now that you have had a chance to reflect on some influences on your career decision, it is time for you to put them all together in a step-by-step diagram on the chart provided to you. Below is an example that may help you.

Work in pencil so that you can erase easily. You will need to turn back through the pages you have just completed.

1. **Turn back to Page 3.**

First of all, think about where you want to place yourself in the diagram. Are you in the centre, off to one side, or in a corner? How will you represent yourself, e.g., as a circle, a square, or some other shape? How big will you be? How will you represent the other influences you identified on this page? Think about how big these influences are? Where will they be in relation to you?

2. **Go to Pages 4, 5, and 6 in turn.**

Think about where you will place each influence on your diagram. As you place each influence on your diagram, think about its size and shape. How big or small will it be? How close to or far away from you will it be? What shape will it be? What will be adjacent to it or overlapping it?

3. **Once you have finished your diagram, you may use colours etc to complete your diagram.**

4. **You have now completed a diagram of your System of Career Influences.**

**Example:**  
Jane’s System of Career Influences

Jane is fifteen years old and chose to represent her System of Career Influences in this way. She has included influences from each page of the workbook. You can see that Jane had three influences from Page 3 to include in her system, two influences from Page 4, two from Page 5, and one from Page six.

Copyright © 2003 by McMahon, Patton, & Watson
Reflecting on My System of Career Influences

Now that you have drawn your System of Career Influences, it is time to reflect on what you have noticed or become aware of. The following questions might guide your thinking as you look at your diagram.

- What stands out most for you?
- What stands out least for you?
- What has surprised you about your System of Career Influences?
- What have you noticed that you were not previously aware of?
- What has been confirmed for you?
- What would you like to change?
- What would you like to remain the same?
- How do you feel as you look at your System of Career Influences?
- Of those influences you located closest to you, which do you think is most important? How do you explain its importance?
- Which of these influences have you encountered in previous career decisions? How did they help you? If they did not help you, how did you deal with them?

Copyright © 2003 by McMahon, Patton, & Watson
My System of Career Influences

Copyright © 2003 by McMahon, Patton, & Watson
Appendix B

Experiential Learning Exercise

Thinking about Yourself

Aim:
To allow the individual to start thinking about themselves in terms of systems, focusing first on themselves, then on what’s around them and then on the much larger society. The focus is on the individual, and not on their career.

Setting:
Administered on a one-to-one basis.

Materials
- Three pieces of coloured paper (yellow, green and blue) cut into circles.
  - Small Yellow Circle – represents the Individual system. (Yourself)
  - Bigger Green Circle – represents the Social system (Your surroundings)
  - Even Bigger Blue Circle – represents the Environmental/societal system (The world)
- Glue or prestik

Instructions

Yellow Circle
Start with the Yellow circle. Say, “Let’s pretend that this circle is you, a big bright yellow you. We can call it a bubble. Let’s write your name in the middle of this circle. Now I want you to think about this bubble as having many different parts, let’s divide this bubble into its different parts. All of these different parts are part of you, now I want you to think about yourself, and all the factors that make up who you are.”

Use some of these probing questions:
How would you describe yourself?
How old are you?
Are you a boy or girl?
How do you look?

Developed by Asha Dullabh (2003)
What do you enjoy doing?
Are you healthy? What makes you feel healthy?
How would you describe your personality?
What do you believe in?
What do you think you do well in?
What do you struggle with or find difficult to do?
What makes you special?

“Now, this is called our individual system, and all these things are very important, as this is what makes you special”

**Green Circle**
Continue with “In life, we are not alone, we do not live all alone, and there are a lot of people and places around us. This means that we would need another bubble in our life. So let’s include another bubble as part of our first bubble.” Stick the smaller yellow circle on top of the bigger green circle. Use prestik or glue.

Use some of the following probing questions:
Now I want you to think about all the places that are around you? Name a few.
Now think about all the people that are around you? Who are they?
Where all do you go in a day?
And during the weekend?
Name some of the exciting places that you have visited?
We learn a lot from many people and places that are around us? How else can we learn about life in general? Provide example of TV, if individual is unsure.

**Developed by Asha Dullabh (2003)**
“So there are many things on the outside that are also part of our life, and from which we learn from. So this can be described as our social system because this is where we learn a lot of information from. But once again, each one of us is part of a much bigger circle, and that is the world.”

Introduce the blue circle. Stick the green circle (which has the yellow circle already stuck on,) onto the blue circle.

"Just like you are an individual (point to yellow circle), you are also part of a bigger bubble, that is everything around you (point to green circle), but both you and what’s around you is part of a much bigger bubble, and that is the world (the blue circle)’’.

**Blue Circle**

“Now let us think about what’s part of our world”.

**Use some of these probing questions:**
- What is the name of our city?
- Name a few of the other cities that are part of our world?
- How do we get to other cities? Looking for the term – Transport
- What do we find in big cities? Looking for things like factories, shops, businesses, universities.
- What do we need to be able to live in the world? E.g. Money
- How do we make money? E.g. Working
- Where do we find work?
- Is there work available?
- Can we work anywhere in the world?

---

Developed by Asha Dullabh (2003)
“As you can see there are many influences that make up who we are, we are not alone, but part of a bigger bubble, that of our surroundings, our social system (point to green circle), and we are also part of our world (point to blue circle) and this can be called our environment. All of these factors in all three circles influence who we are, they help us make decisions”.

Give participant a break, before continuing to administer the MSCI.

Now say that you would like them to think about the same three systems, but now they are going to look at what makes up their career. What are some of the factors that influence their career, or what they would like to become one day.

Start with the question on page 2, no. 4 on the MSCI. You may rephrase the question and say:
“*What would you like to become one day? Or
What would you like to do when you finish school?*

Then take the respondent through the MSCI workbook, focusing on the three systems. Once you have completed the transfer of all the system influences onto page 9 of the MSCI workbook, complete the seven reflection process questions on page 8 of the MSCI workbook. Finally go back to complete the remaining questions on page 2 of the MSCI workbook.

You have now completed the administration of the MSCI workbook.
My name is Asha Dullabh and I am completing a Masters degree in Clinical Psychology at the University of Port Elizabeth. I would like to conduct a study into the career development of adolescents in a children’s home from a career systems perspective. I am seeking permission for a group of English-speaking adolescents from your children’s home to participate in this study. Permission to conduct the study has been granted by the University of Port Elizabeth. The specific aim of this study is to explore and describe the career development of adolescents in a children’s home in terms of three interrelated systems, namely: the individual, social and environmental/societal systems. The results of the study will be used to:

- help understand more about the unique systems influencing the career development of adolescents in a children’s home,
- enhance the relatively new career systems theory framework.

Career choice and development is important during adolescence, as this is the time when adolescents are becoming concerned about the future, increasing their understanding of themselves and their abilities and beginning to explore the world of work in order to make choices that will result in the implementation of a career choice. The Children’s Home will benefit from being part of this study as the results will provided a clear description of the influences impacting on adolescents who live within the context of a children’s home. With this relevant information at hand, possible career development workshops can be tailor made and implemented to suit the needs of adolescents who are residing in a children’s home in order to guide them in their career development process. The Children’s Home will receive all results in writing in the form of a treatise, which will add to the growing literature and research projects being conducted with the Children’s Home both nationally and internationally.
Systems theory is used to illustrate interrelationships in the context of individual career development. It provides a framework for a macro-level analysis of theory and it also facilitates a micro-level analysis of an individual’s career development. Each adolescent who participates will be asked to complete a career systems workbook. They will be required to write their date of birth, gender and name of school on the measure. **All information obtained will be treated in the strictest confidence. The learner’s name will not be used and individual children will not be identifiable in any written reports about the study.** A report of the findings will be made available to your organization. Furthermore to ensure that the learners have a clear understanding of what is required of them, English-speaking postgraduate registered career counsellors will be trained to administer the measure and participants will be given the opportunity to respond in the language of their choice.

The voluntary nature of this study must be emphasized, as any participant is free to decline to participate and may withdraw from the study at any time without prejudice. We would greatly appreciate your involvement in this research study, and we hope that you will enjoy the experience with us. To grant consent for your particular home and group of adolescents to participate, please complete the attached form.

If you have any further enquiries please feel free to contact me on 041 5850533.

Kind Regards

Ms Asha Dullabh

_______________________________________
Intern Clinical Psychologist
University of Port Elizabeth

_______________________________________
Supervisor: Prof. M.B. Watson  Co-Supervisor: Prof. C.D. Foxcroft
CONSENT FORM

Informed Consent for a Psychological Research Study

I, (Name & Surname)_________________________________________, voluntarily grant
my consent to allow a group of adolescents from the Children’s Home to serve as
participants in an exploratory study to be conducted by Asha Dullabh who is presently
completing her treatise at the University of Port Elizabeth (UPE) Psychology Department as
a requirement for her Masters Degree in Clinical Psychology. I have read the letter
explaining the purpose of the research study and I understand that the adolescents’
participation will involve the completion of a career systems workbook.

I understand that the adolescents are free to decline to participate and may withdraw from the
study at any time without prejudice.

I understand that all the information obtained will be treated in strictest confidence and that
no names will be used in any reports about the study.

I understand that I can contact Asha Dullabh on 041 5850533 for more information about the
study.

__________________________________________ ______________________________
Print Name Management
Children’s Home Signature

__________________________________________
Date
**Invitation to participate in a career research project**

Dear Adolescent

My name is Asha Dullabh and I am completing a Masters degree in psychology at the University of Port Elizabeth. I am interested in finding out what may influence your career development and would like to invite you to complete a workbook for me.

The workbook will take about one hour to complete. Your responses in the workbook will be treated in **the strictest of confidence**. You are thus kindly requested to answer all questions as honestly and openly as possible. Your home and the University of Port Elizabeth have granted me permission to conduct this research. Your cooperation will be sincerely appreciated.

If you are willing to complete the workbook for me, please sign the letter below.

Thank you for taking time to read this invitation.

Asha Dullabh

_________________________________
Intern Clinical Psychologist
University of Port Elizabeth

---

**Consent Form**

I am willing to complete the career workbook.

I can withdraw from the research at any time.

My name will not be used in anything written about the research.

I can contact Asha Dullabh on 041 5850533 if I want to find out more about the workbook.

Name:__________________________________
Signature:_______________________________
Date:___________________________________