UNIVERSITY OF ZULULAND

THE INFLUENCE OF FAMILY BIRTH ORDER ON THE CAREER CHOICES OF STUDENTS AT THE UNIVERSITY OF ZULULAND

By

AYANDA SMANGELE LUCRICIA SIMA

Student no: 2010 87 656

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KwaDlangezwa

SUPERVISOR: PROFESSOR D.R NZIMA

JANUARY 2017
DECLARATION

I, Ayanda Smangele Lucricia Sima declare that this dissertation represents my own work, both in conception and in execution. All sources that have been used or cited have been indicated and acknowledged by means of complete references.

_______________________  30/01/2017
A.S.L Sima  Date
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“For in Him we live, we find our being and we move….” Acts 17:28
DEDICATION

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ABSTRACT

The current study examines the influence of family birth order on the career choices of students at the University of Zululand. The objectives of the study were:

- To establish the extent to which family birth order influence students’ career choices.
- To determine whether there is a relationship between the students’ characteristics such as age, gender, race and their career choices.

Data was collected using both qualitative and quantitative methodology. The convenience sampling was employed in selecting the thirty students for the study. To collect data unstructured, semi-structured interview questions were formulated and a self-administered questionnaire to address objective number two, Interview questions consisted of close-ended and open-ended questions which were conducted to the students in determining the influence of their family birth order on their career choices. Qualitative data analysis was employed in order to draw conclusion about the influence of the students’ family birth order on their career choices. Research findings led to the following inferences: Family birth order of students has an influence on their career choices. Some students believed that had they been born before or after their original birth order in the family, they would have chosen a different career. Others believed their birth order position had somehow pressured them to choose different a career from what they had always wanted to do. Other students mentioned that even though their birth order was that of a youngest child in the family, they somehow felt the pressure that is said to be expected by the first born in the family; hence they chose careers that were typically assumed by the first-borns. The findings also revealed that some participants chose their careers because their siblings had followed the same career paths and so they felt it was better to pursue similar a career path as their siblings. Age was one of the factors that might have had an influence on their career choices, the students revealed that their age did play a significant role on their career choices, that if it was not for their age they would have chosen their seemingly “dream careers”. The findings revealed that most students felt their race had an influence on their career choices and that they still felt that if they were a different race, more opportunities
were going to be offered to them to choose the careers they wanted. The results revealed that there is a gap between career orientation and the students’ career choices. The findings also revealed that there is a need for psycho-career education for students at the university right from before they enroll in their first year. Based on the findings, recommendations for career counseling, psycho-career education, a more active career guidance center were put forward in order to empower students with career guidance and development.

Key concepts: Birth order, Career choices
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CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1. INTRODUCTION

Career plays an essential and a fundamental role in the person’s life not because it determines the form of income, but because it may affect one’s personality, concepts in life, and their career. Therefore, it is a choice and a quest of one’s life time work or ones’ success in their scope of profession. In a nutshell, career is the totality of work one does in his lifetime and is unique to each and every one; it is of significance to every person as they prepare for the future. Career choice is often hard to decide, mainly as one’s life will depend on it. Herr (2005) indicates that career is mainly the experience where one learns and prepares to engage in work as part of their way of living.

The original career development theorists Ginzberg, Axelrad, Ginzberg, Jones and Herman(2009) have included some of the influences such as autonomy and developmental milestones on how an individual develops a career decision process, whereas the cognitive theorists (Japsen & Dilley, 2001) have focused mainly on cognitive processes that the individual undergoes or uses in career decision making. These theorists from the developmental and cognitive perspectives recognise, even though sometimes only indirectly or covertly, the influence of the family on the choice of an individual’s career. There remains, however, a noteworthy gap in the literature in the part of attempting to understand the influence of family birth order. In the current study the researcher argued that this breach may be a representation of a missing link that may help further the purposes into understanding all the possible variables influencing career choice, like that of the influence of family birth order on career choices of students in the university.

The current study took a family systems perspective by Alfred Adler in an effort to help further the understanding of family constellation/birth order influence on the students’ career choices at the University of Zululand. A family birth order means the order a child is born; for example first born, middle born or only child. Birth order is at times assumed to have a deep and long-term effect on the psychological
development of a person. The present study will determine the significance of family birth order and the influence it has on students’ career choices.

1.2. LITERATURE REVIEW

Despite the body of research that explored the associations of observed family-of-origin interaction patterns e.g. quality of family relationships, degree of control and organisation in the family to occupational identity and career decision-making, previous studies have suggested that a number of factors can form and influence the career path an individual chooses (McQuerrey, 2007), beginning with how one’s family shapes one’s discernments of different employment choices. McQuerrey (2007) put forward that whether one is raised with principles of certain professions, or looking for a career that suits one’s adult family life, these elements need to be wisely reflected. Therefore, the current study seeks to determine the influence of family birth order on the making of students’ career choices.

Alika and Ijeoma (2012) studied the association between peer group and parental influence on career choice in engineering profession among Nigerian adolescents. The results presented that there was no significant relationship between peer group and parental influence on career choice in engineering among adolescents. In contrast (Ogowewo & Oghenekome, 2010) conducted a study on influences prompting career choice among secondary school students. The results of the study revealed that the choice of career was gender biased and it was revealed that the factors that influenced the students’ choice of career were basically: awareness, life motivation, and nature of the career, prestige attached to profession, intellectual ability, and high salary potential and job opportunity prospects.

However, the above-mentioned studies were conducted in Nigeria and little research has been done on birth order and career choices in a South African context like the Kwa-Zulu Natal province. Therefore this leaves a significant gap that has inspired the researcher to conduct a study in and around Kwa-Zulu Natal while adding more
value to our understanding of students’ career choices from a South African perspective.

Eget and Leslie (2009) conducted a research on individuals with developmental disabilities and there was minimal focus on career aspirations of these individuals. There were assumptions that children who grow up with disabled siblings gravitate toward the helping careers. Their study investigated variables of sex, birth order, and size of family on vocational preference. Impacts of siblings, parents, and the school were also explored. The results showed that there was no significant difference regarding sex, birth order or family size even with the evidence that transpires in the literature. Statistical significance was established for those who reported an interest in a helping career and having a social personality type irrespective of their sibling.

Yamamura and Eiji (2014) studied the influence of siblings and birth order on income reallocation preferences. According to Yamamura and Eiji, experiences in childhood are assumed to influence preference formation for redistribution in adulthood, such that, eldest male children who experience loss because of parental redistribution are less likely to validate government-mandated redistributions as adults. Conversely, younger children enjoy benefits from parental redistributions as a result of having a large number of older siblings. Younger children are somehow more likely to endorse redistribution. The significant findings were that: (1) the first-born child was less likely to prefer income redistribution when the child was male. However, such a tendency was not observed when the child was female. (2) The larger the number of elder brothers, the more likely an individual endorsed income redistribution. However, the number of elder sisters did not impact the preference. (3) The number of younger siblings did not affect the preference for redistribution irrespective of the sibling’s gender.

Barclay and Kieron (2014) in their comparative study on birth order and educational attainment relied on evidence from fully adopted groups. Their study employed data on completely adopted sibling groups to examine if the explanation for regularly observed negative effects of birth order were physiological or social in origin. They compared adopted siblings of different birth order to see whether birth order amongst
children is associated with educational attainment and the likelihood of having entered tertiary education. The findings proposed that differences in educational attainment by birth order are driven by intra-family social dynamics.

Middleton and Loughead (2008) carried out a study to identify the effects of parental guidance on the child’s learning and their upcoming career choices. The results obtained from the study reveal that illiterate parents have little or no time for their child’s education, while a child from educated home backgrounds is said to show more interest in education, do not show lack of motivation and parents forcing them to do their will. It was also revealed that only a few students are interested in their parent’s occupation. Findings from the study reveal that illiterate parents have no interest in their children’s academic growth, and parents were not a factor influencing the career choices of students. With such findings the present study will focus more on the influence of family birth order than on parental factors.

A lot has been written today about career choices and development. Previous literature has focused mainly on personality traits that influence an individual’s career choices. Other authors have tried to explain the career selection process by focusing on specific variables of early childhood that may influence one’s choice of career.

Furthermore (James, 2004), observed whether the home has influence on the child’s learning of the essential concepts of life. This reason and most of the habits and basic adjustment were said to have been established during pre-school years. The study highpoints that the home and parents occupy the most fundamental position in the child’s education. To escalate students’ interest and ability to use their hands and brains, it is important that parents are involved in giving anticipated assistance or guidance to the children with regards to life-time choices. However, the present study will focus on one factor that has not been directly focused on by a lot of previous research, which are family birth order and its influence on career choices of students at University of Zululand.

Interest in how students make their career decisions has inspired considerable research over the past decades. For example, Haveman and Wolfe (2005) have included exploration of the influence of family background on educational attainment. Most of these studies have centred on high school completion or total years of
schooling. Moreover parental education, family income and family heads occupational status were found to be positively related with the offspring’s educational achievement (Biblarz & Raftery, 2009).

In contrast (Duffy & Mrie, 2013), conducted a research on the influence of birth order and gender on narcissism as it relates to career development. The study discovered the relationship between self-development as exposed in the domain of narcissism and the process of professional development as evidenced in career values, planning and decisiveness/self-efficacy. It was recommended that this relationship would be impacted by family birth order and gender. The major outcomes of their study were that superiority (a measure of grandiosity) forecasts humane career values and career decisiveness. Hence, superiority is a better predictor of altruistic career values than decisiveness. This study provided discernment into the relationship between narcissism and the vocational/career development processes but did not emphasis on how birth order influences career choices.

While the current study focused on how family birth order influences the career choices of students, Raftery & Biblarz (2009) found that individuals with more siblings had lower educational attainment leaving a significant gap to further the research. Conversely, Astone and McLanahan, (2006) found the opposite on the education of single-parent households. These studies pertain to the level of education completed and the socio-economic status. However, only a few studies have examined family birth order.

Davies and Guppy (2007) established that students from families with lower socio-economic status were more likely to take more lucrative fields of study. In addition, few studies on the choice of university major have examined differences between male and female students in the effects of socio-economic status (Greene, 2008). Yet Ware & Lees (2011), propose that men from families of high socio-economic status were more likely to major in science than were other men.

Additionally, Greene’s (2008) descriptive analysis established that more male business majors came from wealthier families than female business majors. He
speculated that men, unrelatedly of socio-economic background, were more likely to be driven by money and status in their choice of majors. Women from less prosperous families were also often motivated by money and job security. However, Greene’s findings did not take into consideration differences in other factors such as family constellation/birth order of the participants.

Furthermore, a related study has reconnoitred the influence of role models on education and career choices. Hackett (2005) claims that the mothers’ influence as a role model was certainly related to the non-traditionalistic nature of the daughters’ career choice at tertiary level. In addition, Douvan (2005) found that women whose mothers worked outside the home were more likely to aspire to higher-skill innovative and prestigious jobs than were those women whose mothers were full-time house wives. On the other hand, White & Campbell (2013) conducted a study on the relationship of psychological birth order to career interests. The results indicate that it is not the birth order itself that is vital, but the pattern of behaviors and attitudes that emerge from family experiences, that play a role in career interests.

Bohmer (2014) carried out a comparative study on the influence of birth order and family size on prominent American women’s selection of careers. The analysis revealed that second-borns selected careers in science more frequently than other birth orders; last borns chose careers in performing arts most often; writers were more likely to be first borns; and reformers, regardless of birth order, came from larger families.

Lastly, a lot of work by Ginzberg, Ginsburg, Axelrad, Jones, & Herman (2006) has been reviewed with regard to the influences of career choices of students, but little has been researched on how some theoretical framework concepts have an impact on career choices of students. Based on the original Adlerian concept of family birth order, the position or constellation at which one is at in the family can influence one’s personality type as well as what they become later in life. Hence the present study will focus on how each of the students’ family birth order has had an influence on the career choices they have made.
1.3. PROBLEM STATEMENT

The family may desire what they think best suits or best for each member thereof, but this may affect an individual positively if they can cope with it, but also negatively when such a person has other preferences in mind. Greenwall (2002) states that most people have once or more experienced people in different service departments, who have come across as though they had never enjoyed or voluntarily chosen their jobs. Furthermore, (Mania, 2013) suggests that undergraduate students require assistance in order to make the right career choices. Such issues have inspired the present study to peruse what may be the causal factors of such common social issues.

At times one may be forced to take on certain careers just because they are the first born in the family. According to Alfred Adler’s original theory, a first born child may possess the authoritative, leadership or motherly traits. It is supposed that one who is a first born child may feel a need to lead and be authoritative in the family which may lead them into choosing a career that may be convenient for them to be able to take care of their siblings, and to lead. However, this may affect an individual’s personal career aspirations just because of the psychological pressure the birth order or family constellation impose on them. The consequence of this is that the student may not concentrate on the family needs and so may not adjust positively towards the career. This sometimes leads to students’ waywardness, secret cult involvement, crime, poor academic performance, lack of passion in what they do, thereby affecting the service they are supposed to render in the society.

To prevent and avoid issues such as incompetence in the respective fields of work of the students after graduation, research should be done in order for the University of Zululand to implement policies that enhance and encourage the students’ vocational career aspirations and focus less on other extrinsic influences such as money, family influence or parental influences. Therefore, the present study seeks to determine if the students’ family birth order has an influence in their career choices and how their family birth order influenced their career choices.
1.4. **OBJECTIVES OF THE STUDY**  
- To establish the extent to which family birth order influences students’ career choices.  
- To determine whether there is a relationship between the students’ characteristics such as age, gender, race and their career choices.

1.5. **RESEARCH QUESTIONS**  
- To what extent does family birth order influence the students’ career choices at the University of Zululand?  
- Is there a relationship between students’ characteristics such as age, gender, race and their career choices?

1.6. **INTENDED CONTRIBUTION TO THE BODY OF KNOWLEDGE**

The present study will discuss how a student’s birth order, which is openly related to family size and having brothers and sisters in certain combinations, is an important factor that counselors can tap on when helping their clients during the career selection process. Psychologists and educational departments may refer to the study when implementing career development policies as well as considering the family dynamics of the learners and students in general.

Since career plays a significant role in the life of an individual, not only because it determines the arrangement of income, but also because it impacts the individual’s personality and the society as a whole, the present study will create a contemporary and innovative approach to career development and career selection suitable for a diverse society with different career aspirations.

1.6. **OPERATIONAL DEFINITION OF TERMS**

*Family birth order:* in the current study, family birth order shall refer to the order and position a student is born in their family, for example: first born, middle child, last
born, only or a family constellation. (Rodgers, Cleveland, Van Den Oord & Rowe, 2000)

**Career choices:** in the present study, career choices shall mean the academic choices or degrees the students are pursuing (Sharf, 2016)

**University students:** In the present study, university students refers to someone admitted in the university (Soanes & Hawker, 2014)

**Parental influence on career choices:** In the present study, the concept shall mean any particular factors derived from parents of students that may have a positive or negative impact on the students’ career choices. (Gordon & Steele, 2015)

1.7. **RESEARCH METHODOLOGY**

The present study employed both qualitative and quantitative methods of data collection and analysis.

1.8. **RESEARCH DESIGN**

A research design is a idea of conducting research which is implemented in an attempt to find solutions to the researcher’s questions and therefore a response to a series of decisions about how best to answer focused questions (Gall & Borg, 2003).

A qualitative case study was used in the present study. This method was used in attempt to recognise the perspectives and responses of the participants. A case study relies on numerous forms of data in order to form an in-depth case (Maxwell, 2012). This will permit the researcher to develop categories and themes based on the data collected.

1.8.1. **Sampling design**

A convenience sampling method was employed in this study. This type of sampling is chosen purely on the basis of availability. Participants are selected on the basis of their availability, because they are accessible and articulate (Struwing & Stead, 2011). In the present study, students were the convenient sample.
1.8.2. Research instrument

The information was obtained by means of unstructured and semi-structured interviews to address objective number one.

Also, a self-administered questionnaire was employed. Unstructured interviews do not have programs of questions. The interviewer adjusts, and generates questions as the interview progresses (Struwing & Stead, 2011). Semi-structured interviews include pre-determined questions that are presented to all interviewees consistently and systematically. The interviews enable the interviewer to probe and deviate from these questions (Struwig & Stread, 2011). The interviews were conducted individually. The study also used a self-administered questionnaire to obtain the students' biographical characteristics such as age, gender, race and choice of career (degree).

1.9. Data analysis
The study employed content analysis technique to analyse qualitative data. This refers to the gathering and analysis of textual content (Struwing, 2011). The researcher concentrated on communal themes and patterns from different participants. The impression of content analyses is that the many words of the text are classified into significantly fewer categories. Struwing (2011) further defines that the quantitative method as the systematic empirical investigation of observable phenomena using statistical, mathematical techniques. The SPSS (Statistical Package for the Social Sciences) was employed to analyse quantitative data (students' characteristics).

1.9.1. Description and selection of participants
The participants were recruited from the University of Zululand's main campus. Recruitment was performed via lecturers, students and by word of mouth. Participants were of any age but had to meet the requirements of being registered students in the university. Thirty third year level participants from the Departments of Educational Psychology and Special Education at the University of Zululand were recruited to participate in the interviews. Each participant was a representative of the field for the purpose of attempting to represent the career choice.
1.9.2. Description of procedures

All participants were informed upon arrival at the Department of Educational Psychology and Special Education to read and sign an informed consent. Participants were required to produce a student registration card as a proof that they met the inclusion criteria. Participants were instructed to enter the interview room individually for confidentiality reasons and because interviews were conducted individually, the interviewer observed and took notes during the interviews. The interview session for each participant was a maximum of thirty minutes to ensure that the participants answered and fully responded to the interview questions satisfactorily. After each interview session, the researcher ensured that all recordings and notes about the participants were saved and kept in confidentiality. All the data was saved and stored using the researcher’s personal computer drive and kept in a private file.

1.10. ETHICAL CONSIDERATIONS

The researcher got ethical clearance from the Higher Degrees Committee of the University of Zululand for permission to use students as participants in the study. The participants were informed about the aim of the study. The subjects’ responses or information were kept confidentially. Participants were also given an informed consent to sign, stating that their participation in the study was voluntarily and should they wish to withdraw from the study, they may freely do so. The findings were reported anonymously. The researcher ensured that a high standard of ethical behaviour was maintained throughout the study.

The researcher ensured that the dignity, respect, safety and wellbeing of the participants were adhered to. The researcher was also considerably sensitive to the participants’ diversity: cultures, languages, beliefs and customs. If it was deemed to be necessary, the researcher went through the debriefing of the study and gave debriefing immediately.
The researcher prevented participants' harm. The researcher was aware of all potential harm to the participants that might occur during the research and took appropriate measures to reduce it until the termination of the study. The researcher has reported data accurately and corrected errors if they were discovered. Lastly, the researcher used appropriate citation and avoided plagiarism.

1.11. PROJECT MANAGEMENT ISSUES

1.11.1. Resources

The study had no special resource implications. The resources were adequate, apart from the usual from the normal research and travel grants, since the study was conducted at the University of Zululand and the researcher is a student in the institution.

1.11.2. Intellectual Property and Innovation

Apart from the usual copyright issues, the researcher did not expect any special intellectual property rights to come from this study.

1.11.3. Harvesting the research

My research topic, the thesis structure and the research methodology create the possibility of contributing to the institution’s body of knowledge and provide the university’s Students Services Department and Social sciences Department with pointers regarding career counselling and career guidance for the student body.

1.11.4. Personal interests and qualifications

The research contributed to my Master’s degree qualification as part of the coursework.
1.12. THE ORGANISATION OF STUDY

The present study will be divided into five chapters.

**Chapter 1** provides an introduction and explanation, statement of the problem (research questions, motivation, and intended contribution to the body of knowledge, knowledge dissemination and operational definition of terms) also the objectives of the study.

**Chapter 2** reviews the literature on the influence of family birth order on the career choices of students at the university, and reviews the findings of previous literature.

**Chapter 3** focuses on the research design, sampling design, research instrument to be used, scoring, data analysis (tools to be used and the reasons for that), descriptive procedures and ethical considerations.

**Chapter 4**: this chapter presents the research data and the analysis.

**Chapter 5** focuses on the summary of the finding/ results and evaluation as well as the recommendations for future studies.

1.13. **SUMMARY**

Chapter one gave the background to the study, the essential research questions as well as the objectives. Important terms which constitute a formal discourse in the study were defined. In this chapter the methodology and design were also outlined. The researcher also looked at the techniques which were adopted to ensure validity and the reliability of the instrument. The next Chapter will outline the discourses and the theoretical framework which underpin the present study.
CHAPTER TWO

LITERATURE REVIEW

2.1. INTRODUCTION

Career plays an essential and a fundamental role in the person’s life not because it determines the form of income, but because it may affect one’s personality, concepts in life, and their career. Therefore, it is a choice and a quest of one’s life time work or ones’ success in their scope of profession. In a nutshell, career is the totality of work one does in his lifetime and is unique to each and every one; it is of significance to every person as they prepare for the future. Career choice is often hard to decide, mainly as one’s life will depend on it. Herr (2005) indicates that career is mainly the experience where one learns and prepares to engage in work as part of their way of living.

The original career development theorists Ginzberg, Axelrad, Ginzberg, Jones and Herman (2009) have included some of the influences such as autonomy and developmental milestones on how an individual develops a career decision process, whereas the cognitive theorists (Japsen & Dilley, 2001) have focused mainly on cognitive processes that the individual undergoes or uses in career decision making. These theorists from the developmental and cognitive perspectives recognise, even though sometimes only indirectly or covertly, the influence of the family on the choice of an individual’s career.

There remains, however, a noteworthy gap in the literature in the part of attempting to understand the influence of family birth order. In the current study the researcher argued that this breach may be a representation of a missing link that may help further the purposes into understanding all the possible variables influencing career
choice, like that of the influence of family birth order on career choices of students in the university.

2.1.1. Some factors influencing career choices

Saini (2012) discovered that when generation X was growing up India, the more accepted and therefore preferred education streams were medicine and engineering. Not much consideration was given to where the interest or the competence of the individual lay. Saini (2012) further stated that as the economy and the job opportunities emerged, parents and their wards became aware of a more diverse set of career choices. Role models in sports and other not so recognised careers began to emerge.

Furthermore, Saini (2015) stated that a survey conducted in Southern African schools of grade ten students revealed that a large number were not sure what careers they would like to choose, yet they are at a critical juncture where they needed to choose which subjects to keep, in grade eleven and which ones to give up. Therefore, it was discovered that wrong choices result in organisations losing millions every year, in attrition, low morale costs and re-training. However, the costs of choosing the wrong career do not take place in companies alone, but also young professionals go through demotivation and depression as well.

Wong (2009) further quantified that out of 11,000 Canadians, 10-12% of the participants surveyed admitted to have chosen the wrong career path and additional 24% of the participants were unsure if they had made the right choices. Another survey of 115,000 participants from 33 countries found out that up to 50% of the participants felt that they had chosen the wrong career path. Such statistics are a confirmation that many people struggle with the issue of finding themselves in the wrong career path for a variety of reasons. This is not only an issue in Canada, but also throughout the world, even in countries like South Africa.
Wong (2009) further noted that the cause for these wrong choices were several and varied from person to person. For those who had embarked on their career paths, it is fundamental for them to recognise when and if they are on the wrong path and then take effective steps about it.

However, Wong (2009) did not offer specific recommendations regarding choosing the wrong career paths. Thus Greenhaus, (2009) endorsed that the youth could complete self-assessments, make decisions based on their interests/passion and not on their parents’ interests, take wider variety of courses at high school and college to get a broader exposure to different fields and travel/volunteer to get exposure to different fields.

Ogowewo and Oghenekome (2010) conducted a research on factors influencing career choice among secondary school students. The results of the research revealed that the career choice was gender biased and the factors that influenced the students’ choice of career were: life ambition, interest, challenging nature of the career, prestige attached to the profession, intellectual ability, high salary potential and job opportunity. In contrast, Alika and Ijeoma (2012) studied the relationship between parental and peer group influence on career choice in the engineering profession among Nigerian adolescents. The findings revealed that there was no significant relation between parental and peer group influence on the career choices of the adolescents.

However the above-mentioned studies were conducted in Nigeria and little research has been done on birth order and career choices in a South African context like Kwa-Zulu Natal province. Therefore, this leaves a significant gap that has inspired the researcher to conduct a study in and around Kwa-Zulu Natal while adding more value from a South African perspective.

Despite the body of research that explored the associations of observed family-of-origin interaction patterns e.g. quality of family relationships, degree of control and organisation in the family to occupational identity and career decision-making,
previous studies have suggested that a number of factors can form and influence the career path an individual chooses (McQuerrey, 2007), beginning with how one’s family shapes one’s discernments of different employment choices. McQuerrey (2007) put forward that whether one is raised with principles of certain professions, or looking for a career that suits one’s adult family life, these elements need to be wisely reflected. Therefore, the current study seeks to determine the influence of family birth order on the making of students’ career choices.

2.2. Theoretical framework (Family birth order)

The current study takes a family systems perspective by Alfred Adler in an attempt to help further the understanding of family birth order influence on the students’ career choices at the University of Zululand. A family birth order refers to the psychological order a child is born in the family e.g. first born, middle child or the only child. The birth order is believed to have a profound and lasting effect on psychological development of an individual.

According to Adler (1964), birth order influences personality and may later on affect an individual’s career aspirations. He asserted that birth order often can leave an indelible impression on the individual’s style of living, which is a habitual way of dealing with tasks of love, social relations and career. Adler (1964) also stated that other birth order factors that should be considered are: the spacing in years between siblings, the varying circumstances of the parents over time and the total number of children.

Adler’s classic description of the effects of birth order contains the following principles: 1. children of the same family are not born into the same environment, the second child is born into a different psychological situation than the first. 2. It is not the actual order of the birth, but the psychological situation which is significant. If the first born is feeble-minded, then the second born may assume the role of the first born. 3. Noticeable difference age between siblings tends to reduce competition
between them. 4. Birth order is not a definite determinant, only an influence. (Adler, 1964, pp. 96-120).

According to the original theory by Adler (1964), first born children are typically believed to be conscientious, serious, directive, goal-orientated, aggressive, exacting, conservative, organised, high in self-esteem, and generally anxious. He further stipulated that they may acquire the concept of power at a young age, this can be expressed in their desire to help, protect and lead others and thus may choose careers in line with these traits.

Moreover, it is said that the first born may also have the drive to redeem praise from their parents that they received before their siblings were born. The first born may then feel unloved through the perceived loss of parents’ love to the new baby. Adler (1964) referred to this as being “dethroned” by the younger siblings. Later on the first born may become authoritative and strict. The first born is more likely “a great believer of power and the laws” (Adler, 1964, p.102). A first born’s feeling of a fear of losing the top position may make them more risk averse, and thus more likely to pursue steady careers.

Furthermore, Adler (1964) in the original Family systems Theory suggested that the middle child often have a sense of not belonging. They fight to receive attention, affirmation, validation from parents because they often feel they are being ignored. The middle child is a “runner” chasing success, more revolutionary in outlook. With that stated, there is an assumption that the middle child tends to be sensitive to injustice or mistreatment and thus may likely pursue career in justice or maybe social sciences.

Additionally, the Adlerian theory stipulates that although middle children are neglected both by family and researchers, they in fact benefit from this in future. They tend to become more independent, feel less pressure to conform and are more empathetic. This then gives them skills as employees and excellent team players and partners.
By contrast, Gordon and Nicholson (2010) discovered that middle children are more driven. Gordon and Nicholson (2010) further stated that more often firstborns are perceived as having the ambition as opposed to other siblings, but middle children are as ambitious. Middle children are more interested in principles and concepts like justice or prestige, a few famous examples like suffragette Susan B Anthony, the Polish freedom fighter Lech Walesa. Studies also stipulate that middle children are often fascinated by social causes, they also great innovators and team leaders, such as Bill Gates.

One study by Salmon and Schumann (2011) revealed that 85% of middle children were more open to new ideas such as cold fusion as opposed to the 50% of first borns. Recent studies on birth order also discuss that middle children are justice seekers, like Nelson Mandela and Susan Anthony. They are focused on justice; they perceive injustice in their family and are attuned to the needs of others as they grow older.

According to Adler (1964) younger children are different in that they are never displaced by a new-born; they are the babies of the family. Therefore, in that way they continue to be babies until adulthood. The last-borns tend to appear youthful throughout their lives. Adler (1964) further asserts that youngest children often receive more attention from family. Thus, the youngest children may be indulged, spoiled in many ways than other siblings.

The youngest children experience good things from others, thus they may grow up expecting good things from life, and therefore, they tend to be optimists rather pessimists. Occupations such as clergy, nurse, social worker, actor, and singer are common careers for youngest children. They tend to be less ambitious compared to other siblings.

Lastly, Adler (1964) theory further assumes that the youngest children may be more of followers than leaders, and will gladly follow a leader they respect. If the youngest assumes a leadership position, they are often well-liked, but their authority may not be efficient or taken seriously, thus they may choose careers that are self-involved.
Therefore, the current study was informed by the Adlerian concept of family birth order, to determine and explain how the concept has an influence particularly on the career choices of students at the University of Zululand.

2.3. Theoretical framework (Career choices)

The current study takes on the career development theory by John Holland. According to Holland (2008), careers are determined by the relationship between our personality and the environment. John Holland’s Theory of Career Choice (RIASEC) stipulates that when choosing a career, most people prefer working with people who are like them in terms of their personality make up. Holland (2008) insists that people search for environments that will allow them to use their abilities and skills while expressing their attitudes and values.

Holland’s theory focuses mainly on the concept that most people present and fit into one of the six personality types: Realistic, Investigative, Artistic, Social, Enterprising and Conventional. Holland (2008) further states that the Realistic type enjoys working with hands, fixing, assembling, tools, machines, designing, building, driving, measuring, caring for and working with plants. According to Holland (2008), the Realistic type would normally prefer careers such as a farmer, builder, engineer, computer technician, horticulturist and physical education.

Holland (2008) further states that the Investigative personality type enjoys researching, discovering, experiments, asking questions and solving problems. The investigative type is more likely to choose careers along the lines of analytical thinking and logic such as computer literacy, communication sciences, research, medical and other health occupations.
Holland’s theory stipulates that the Social type enjoys working with people to inform, train, treat, heal, serve and is concerned about the wellbeing of others. The Social type prefers communicating orally or in writing. Nurses, counsellor, police, secretary, waiter. Salesperson: these careers are mostly likely to get chosen by the Social type.

Furthermore, Holland (2008) asserts that the Enterprising type enjoys leading, working in business, promoting, selling, persuading, developing ideas, managing, planning, spokesperson, accounting, executive positions, meeting people.

The last one of the personality type is the Conventional type. Holland (2008) further states that the conventional type enjoys tasks that involve organising, accuracy, planning work or events, recording and bookkeeping, Managing finances and working independently.

Holland (2008) states that individuals of similar personality types working together in a job may create an atmosphere that fits and rewards their type. Holland’s theory consists of six basic types of work environment, which connect directly to the personality types. Holland (2008) emphasises that individuals who prefer to work in an environment similar to their personality type are more likely to be actualised and satisfied. This notion is fundamental as it reveals that Holland’s theory can be flexible, incorporating combination types.

According to Jones (2008), Holland’s theory takes a cognitive and a problem solving approach to career development. This model has been very essential in career counselling and career assessment. It has been employed through popular assessment tools such as the Self-Directed Search, Strong Interest Inventory.
Conversely, it is not without criticism, the most familiar being the prevalence of women to score in the three personality types (artistic, conventional and social). Holland explains that it is because society channels women into female-dominated occupations. With these findings it goes to show that gender and birth order are one of the imperative factors that may eventually influence career choices of individuals. The current study places more focus on these factors.

Therefore, the current study was influenced by the two theories, Adlerian Birth Order Theory and the Holland career\ character theory. The study was principally linked and based on the theories since it investigated both family birth order of students and specifically its impact on the career choices of students at the University of Zululand.

2.4. **Family birth order on the career choices**

Bohmer and Sitton (2003) conducted a study on the influence of family birth order and family size on notable American women’s selection of careers. A comparison of the number of siblings and birth order for 201 women profiled in American women revealed different patterns in the selection of jobs for various birth orders and family sizes. The results revealed that second borns chose careers in science more frequently than other birth orders, last borns selected careers in performing arts most often.

Bohmer’s and Sitton’s (2003) findings revealed that birth order and family size both seem to influence the choice of career for women. Middle children were more likely to choose careers in science than in the areas of social reform, performing arts or writing. A woman’s choice of non-normative occupation such as science may indicate a degree of rebelliousness which Adler identified as a characteristic of this birth position.
Konstam, Drainoni, Mitchell, Houser, Reddington and Eaton (2003) researched on the career choices and value orientations of individuals with developmentally disabled siblings and the influence of siblings throughout the life cycle; incidence of handicapped individuals' siblings in the helping profession based on Holland’s trait-factor theory of career choice. The results of this study showed no significant difference in career choice between siblings of individuals who had developmental disabilities and siblings of individuals without developmental disabilities. In the sibling group with developmental disabilities, 48% were represented in the helping professions and 40% of the sibling group without disabilities worked in the helping professions.

Therefore, the results suggest that the impact of having a sibling with developmental disability may not necessarily influence an individual’s career choice. The siblings of individuals with disabilities did not channel their sensitivity and tolerance characteristics into career choices that called on their refined helping skills to any degree than did siblings of the non-disabled.

Additionally, Qing Ndong (2016) investigated the factors influencing career choice among students. The study focused on students who were going through the career-decision making process at the University Utara Malaysia. Moreover, the results of regression analysis showed that the personal interests exerted great influence on the choice of career compared to the family influence and personality. Qing Ndong (2016) recommended that there must be further studies on this topic to investigate other important factors that influence student’s career choices. The current study was inspired by such recommendations.

Moreover, Zucker, Lee and Kim (2015) conducted a study on parental attachment, career decision self-efficacy and commitment to the career choice among Korean college students. Their study investigated the effects of parental attachment on
commitment to career choices. Their findings revealed that a better quality of mother and father attachment was associated with greater commitment to career choices and higher self-efficacy in career decision-making.

Research recommends that birth order has an insightful influence on personality development; however, there has been little research which seeks to investigate the effect of birth order on a person’s career choice. A number of psychologists, including Sulloway(1996) argue that firstborns are more likely to become managers because their position in the family trains them in managerial and leadership skills. In contrast, several economists such as Becker (2009) argue that firstborns are often successful in economics as a career because they receive more resources from their parents than other siblings.

Grinberg (2015) used the National Longitudinal Survey of 1979 and investigated which of these models best agreed with the data. The study revealed that firstborns are indeed more likely to choose managerial positions than last borns. Grinberg (2015) found that the effect of family size is strongest among lower income households, this supported Becker’s hypothesis.

A study conducted by Kniveton and Bromley (2004) investigated 348 young people aged 14-18 years in attempt to determine the influences and motivations on which students base their career choice. It was discovered that the greatest influence on their career choices was their parents, followed by their teachers. Kniverton and Bromley (2004) revealed that there were gender differences, with same-sex parental influence. It was discovered that for most respondents’ marriage was more important to females than to males and the overall motivation to work was found to involve money and the passion for the job.

The existing empirical evidence researched by Bertoni and Brunello (2016) about the effects of birth order revealed that wages do not distinguish between temporary and permanent effects. Using data from 11 European countries for males born between 1935 and 1956, they showed that first borns enjoy on average a 13.7% premium in their entry wage compared with last borns. This, however, is short lived and disappears 20 years after labour market entry. Bertoni and Brunelo (2016) also
discovered that although first borns start with a better job, partially because of their higher education, last borns quickly catch up by switching earlier and more frequently to better paying jobs. The authors argued that a key factor driving their findings was that last borns have lower risk aversion than firstborns.

Barclay (2016) studied birth order and college major in Sweden. It was discovered that first borns are more likely to apply to, and graduate from, medicine and engineering programs at university, while later-borns are more likely to study journalism and business programs, and to attend art school. It was also found that these birth order patterns were stronger in high SES families. These results indicate that early life experiences and parental investment shapes sibling differences in ability, preferences and ambitions even within the shared environment off the family.

Many studies have examined birth order from a gender perspective, but comparatively few have considered other factors such as biographical information, career choices and race. Even though most studies have focused on the overall influences, the results have revealed that most students would choose their careers based on the onset circumstances in their lives. However, not much research has been done specifically investigating the influence of family birth order on the career choices of students with specific findings.

2.5. Race on career choices

In the past decades there has been an increasing appreciation of the issues of race on career preferences and how it may affect learning and academic performance. However, not so many studies have been undertaken in most South African universities in Kwa-Zulu Natal province. Therefore, the current study investigated the influence of family birth order on the career choices of students at the University of Zululand. The study aimed to determine how factors such as race, gender and age might be an influence on their career decisions.
Khader and Al-Zoub (2008) studied the factors affecting medical students in formulating their specialisation preferences in Jordan using a cross-sectional questionnaire. A total of 440 students answered the questionnaire which covered demographic characteristics, specialty preferences and the factors. The results suggested that the most preferred specialty expressed by male students was surgery, followed by internal medicine and orthopaedics. Female students preferred obstetrics and gynaecology, followed by paediatrics and surgery. It was revealed that intellectual content of the specialty and the individual’s competencies were the most influential on their preference of specialty.

2.6. Family and race influence on career choices

Whiston and Keller (2008) conducted a study about the influences of the family origin on career development. Their study was based on developmental contextual perspective by Vondracek, Lemer and Schulenberg. While Whiston (2008) recommended that because individual are most likely to seek assistance with career decisions from family members; therefore it is essential that psychologists understand how families can have a direct influence and facilitate career development.

Whiston and Keller (2008) further detailed that family contextual factors are noted within four developmental levels such as children, adolescents, tertiary students/young adults and adults). Throughout life, family structure variables (parents’ occupations) and family process variables (support, warmth and autonomy) were found to influence a host of career constructs. However. The authors insisted that the concept in which families influence career development is complex and is affected many factors such as race, gender and age.
Kim, Ahn and Fouad (2015) conducted a study on the influence of family on Korean students’ occupational decisions. In their study, it was revealed that family influence is a key factor in career development and considerably more so in some cultures than others. The study also assessed the extent to which family plays a part in college students’ career choices within collectivistic cultures which revealed that these cultures may thus significantly contribute to the existing literature by offering varying perspectives on the relationships between familial influence, career preparation satisfaction, and life satisfaction.

Additionally, Slaten and Baskin (2014) examined the influence of peer and family belongingness on the career decision-making difficulties of young adults. The participants included four hundred and thirty six undergraduates. The researchers assumed that the racial background and family belongingness would each be indirectly associated with career decision making difficulties. The findings revealed that adequate directories supported the hypothesis. Family belongingness was significantly associated to any variable in the hypothesised model. Likewise, the findings of Kim, Ahn and Fouad (2015) revealed that family informational support, family expectations, family financial support, expectancy of outcome, career preparation behaviour, and career preparation satisfaction were each found to significantly relate to life satisfaction.

Conversely Schenkel, Yoo and Kim examined the impact of birth order and role identity among descendant CEO sons on family firm performance. The study extended the family firm performance literature by focusing on birth order differences among descendant CEOs. The data collected from a sample of Korean family firms yielded three insights. First, it was discovered that descendant birth order is directly associated with differences in the distribution of control through ownership, leadership(CEO), and that the incorporation of outside board participation and governance. Secondly, descendant birth order also moderates the relationship between outside block holdings and performance of the firm. The third revelation was that evidence was found suggesting that because of firm performance
differences, the first son descendant CEOs may find themselves more often replaced over time.

2.7. Gender influence on career choices

Saini (2015) stated that a survey conducted in Southern African schools of grade ten students revealed that a large number were not sure what careers they would like to choose, yet they are at a critical juncture where they need to choose which subjects to keep in grade eleven and which ones to give up. Therefore, it was discovered that the wrong choices are resulting in organizations losing billions every year, in attrition and re-training. However, the costs of choosing the wrong career are not limited to companies alone; young professionals go through demotivation and sometimes depression.

Additionally, Ramaswami, Dreher, Bretz and Wiethoff (2010) studied the interactive effects of gender and mentoring on career attainment. Also the moderating effects of biological gender on the relationships between mentoring and career attainment were explored among legal professionals. The results of their study indicated that make and female lawyers were equally likely to have senior male mentors. However, it was noted that senior male mentors were associated with higher career attainment only for female lawyers.

Bolat and Odaci (2016) investigated the relation between final year high school students’ career decision making self-efficacy and attachment styles. The results revealed that career decision making efficacy was significantly correlated with secure and fearful and attachment styles, that career decision making self-efficacy varied per gender roles. Subjects with masculine and feminine gender roles had greater career decision making self-efficacy than those with indeterminate roles, and those with androgynous roles had greater career decision making self-efficacy than those with masculine, feminine or indeterminate gender roles. This study has revealed and distinguished enough information that has assisted the current researcher to
determine the influence of gender on career choices of students at the University of Zululand.

Hyojung and Rojewski (2015) examined the influence of perceived social supports and career adaptability on job satisfaction of work bound adolescents four months after their transition from high school to work. The structural equation revealed that social supports indirectly influenced job satisfaction by enhancing adaptability. Both school support and family support were found to be correlated with each other, thus meaning individuals are cognitively consistent in their perceptions of environmental supports.

Hyojung and Rojewski (2015) likewise specified that gender difference occurred on all chosen variables but career planning, with women occupying greater levels than men. A significant gender difference was also discovered in the relationship between career adaptability and job satisfaction. Women were less likely influenced by career adaptability as opposed to men being more influenced.

Jome, Surething and Taylor (2005) explored the degree to which emotional and relationally oriented aspects of masculinity and gender non-traditional vocational interests predict the gender of employed men’s occupations. The results revealed that employment in more traditionally male-dominated occupations is related to more homophobic attitudes and less social interests. The findings imply that man’s interest in and comfort with interpersonal activities and interactions with homosexuals may have an impact and influence on their career choices.

The family may desire what they perceive as good or best for each member thereof, but this may impact an individual in a positive way if they can cope with it, but also negatively when such a person has other things in mind which they wish to do.
Greenwall (2002) states that most people have once or more experienced people in different service departments, who have come across as though they had never enjoyed or voluntarily chose their jobs. Furthermore, Mania (2013) suggests that undergraduates require guidance in order to make the right career choices. Such issues have inspired the present study to peruse what may be the causal factors of such common social issues.

At times one may be forced to take on certain careers just because they are the first born in the family. According to Alfred Adler’s original theory, a first born child may possess the authoritative, leadership or motherly traits. It is argued that one who is a first born child may feel a need to lead and be authoritative in the family which may lead them into choosing a career that may be convenient for them to be able to take care of their siblings, and to lead.

However this may affect an individual’s personal career aspirations just because of the psychological pressure the birth order or family constellation imposed on them. The literature reveals that a student may not focus on the family needs and so may adjust negatively towards the career. This sometimes leads to students’ waywardness, secret cult involvement, crime, poor academic performance, lack of passion in what they do, therefore affecting the service they are supposed to render in the society.

To prevent and avoid issues such as incompetence in the respective fields of work of the students after graduation, such research should be done in order for the university to implement policies that enhance and encourage the students' vocational career aspirations with less focus placed on other extrinsic influences such as money, family influence or parental influences. Therefore, the present study seeks to determine if the students’ family birth order has an influence on their career choices and how their family birth order influences the students’ career choices.
2.8. SUMMARY

This chapter began by looking at issues surrounding students’ career choices and the influence of family birth order on the career development in Southern African universities as well as academic institutions around the world. It has been indicated that there is a high rate of wrong career choices among students and in the workplace thereby costing companies and institutions billions of rand and most importantly, the economy of the country. Apart from the overwhelming effects on students’ lives, choosing the wrong career also affects the society and every member of the community in multiple ways. Furthermore, the chapter has focused on existing literature relating to some factors such as gender, family birth order, race and age which revealed that these factors influence the career choices of students around the world. The following chapter will present the methodology employed to conduct the study.
CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION
This chapter discusses the essential part of the research process. In this chapter the researcher sets out the research methodology that was used to achieve the objectives of the study. In discussing the research process, this chapter provides a brief background on what the study is about. Secondly the researcher describes the approach, procedure, methods and sampling used in the research. Moreover it describes the data collection method and analysis technique employed.

Each individual would know the right career for them and all the required elements would fall into place. Choosing a career can prove daunting. Anything from fear to lack of awareness can cause a detrimental curve on the path to a career decision. Moreover, some careers require attainment of specific levels and type of education. If the career an individual is honestly interested in requires advanced education, then it is advisable for them to start working immediately as the situation can create indecisiveness when choosing another career which they have no interest.

Career attainment for most individuals, is a lifetime course of engaging the work world through choosing among employment opportunities available to them. An individual undertaking the process is influenced by many factors, such as their personal aptitude, family background, educational attainment and the context in which they live. (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001)

Volkhonsky (2015) identified and investigated a number of global issues around career choice. Volkhonsky (2015) quantified that about 50-80% of the time people make a career decision, they often choose wrongly. This refers to the individuals who make this choice consciously and deliberately. Volkhonsky (2015) further states that if social conditioning alternates for conscious choice, and people automatically fall into a career path, then the estimation is somewhere in the 95-99% range.
The main turning point in students’ lives involves the career choice that they make during their high school years. Often, the career choices and career decisions are perceived by family and community as the start to workplace readiness. However, the decisions and choices play a major part in establishing a career path that offers and closes opportunities (Bluestein, Phillips, Jobin-Davis, Finkelberg, & Roarke, 1997).

3.2 RESEARCH APPROACHES

There are two approaches to research, namely the qualitative and the quantitative approaches (Bryman, 2006). Qualitative research is based on holistic approach, interpretative and aims to understand reality and meaning. The outcome of qualitative research is descriptive data, as understanding is the researcher’s main concern (Fouche & Delport, 2005).

Conversely, quantitative research aims to measure the social world objectively, to test hypothesis and to control and predict human behaviour (Fouche & Delport, 2005). Furthermore, it refers to the numerical representation to describe and explain the phenomenon that such presentations and observations reflect (Berg, 2007).

The study employed both quantitative and qualitative method of data collection and analysis. A quantitative approach was employed to quantify factors such as biographical data (gender, race, age and course) of participants and its influence on the students’ career choices. A qualitative approach was also used as the study was directed at understanding the influence of family birth order on the career choices of students as well as how their position in the family have influenced their choice of careers. This method was chosen, using semi-structured interviews lasting up to thirty minutes. Through this in depth qualitative investigation of students’ career choices and family birth order, thirty participants were recruited.
3.2.1. TYPE OF RESEARCH

The type of research depends on the purpose of the research and the practical application, thereof (Gall & Borg, 2003). The motivation for the research would determine whether it is basic or applied research.

According to Neuman and Wiegand (2000), applied research is the scientific planning of prompt change in a difficult situation with focus on a problem in practise. Applied research is designed to solve practical problems of modern world rather than to acquire knowledge (Neuman & Wiegand, 2000). Therefore, the current study took the form of applied research since the main concern was to determine the influence of family birth order and other factors on the career choices of students at the University of Zululand. The findings will be valuable in improving the career development and career counselling as one of the students services in the university.

3.3 RESEARCH METHODOLOGY

There are a number of research methods that are employed in qualitative approach to research. The current study employed a qualitative case study method. This method was used in an attempt to understand the viewpoints and responses of the participants. According to Maxwell (2012) a case study relies on multiple forms of data in order to build an in depth case, this allowed the researcher to develop categories and themes based on the data collected.

Thomas (2011) states that case studies are analyses of events, persons, decisions, periods, projects, policies, or other systems that are studied holistically by one or more methods. A case study method is also used to narrow down a very broad field of research into one easily researchable topic.

While they will not answer questions completely, the participants will give some indications and allow further elaboration. The case study research design is also useful for testing whether scientific theories and models actually work in reality (Thomas, 2011)
3.3.1 Description and selection of participants

The participants were recruited from the University of Zululand’s main campus. The recruitment was done through lecturers, students and word of mouth. Participants were of any age but to meet the requirements of being registered students in the university. Thirty participants from the Department of Educational Psychology and Special Education at third year level in the university were recruited to participate in the interviews. Each participant was a representative of the field in attempt to represent the career choice.

3.2.1 Description of procedures

All participants were required upon arrival at the Department of Educational Psychology and Special Education to read and sign an informed consent. Participants were required to produce a student registration card as a proof that they meet the inclusion criteria. Participants were asked to enter the interview room individually for confidentiality reasons, and because interviews were conducted individually, the interviewer observed and took notes during the interviews. The interview session for each participant was a maximum of thirty minutes so as to ensure that the participants answered and fully responded to the interview questions satisfactorily. After each interview session, the researcher ensured that all recordings and notes about the participants were saved and kept in confidentiality. All the recordings were saved and stored using the researcher’s personal computer drive and kept in a private file.

3.2.2 Target population

Meanwhile the goal of qualitative research is enriching the understanding of experience, it is necessary to select fertile exemplars of the experience of the study. Such selections are sought out and purposeful. The main concerned is not about how data were gathered or from how many sources, but whether the data are sufficiently rich to bring clarity and refinement to understanding an experience. Thirty participants were selected using a convenience sampling method. According to Struwing and Stead (2011) a convenience sample is chosen on the basis of availability, and participants are selected because they are accessible and articulate.
The population was identified as the community of the University of Zululand students. This population was chosen because it was an available population with a distinct culture of learning as university students. The sample matched the University of Zululand’s international student profile with black students being the dominant group.

### 3.2.3 Sampling method

The study employed a convenient sampling method. It has been mentioned in the previous section of this chapter that a convenient sample is chosen purely on the basis of availability. Participants are chosen because they are accessible and articulate Struwing and Stead (2011), of which the present study students were the convenient sample. This type of sampling technique is useful for obtaining subjects in studies like the present study.

The participants were drawn from the student body of the University of Zululand, mainly in the Faculty of Education. The participant selection criteria were as follows: participants were registered undergraduate and post-graduate students at the University of Zululand who had studied at the university for at least one semester of the year. There was an assumption that students experience career decision complications in the first semester at institutions of higher learning (Martin, 2015). Career decision making is a continuous process and challenges may disappear during the students’ stay at the university and some may be worse than before.

The researcher presumed that after a semester as a student at the university, one would have adapted to and accepted the career they have chosen. After the first semester the students are most likely to be familiar with the university academic culture, the nature of the field of study. The students are also most likely to have adapted to the university environment both socio-culturally and psychologically. The study examined the students’ career choices by drawing on their past and present career decision experiences through their own experiences, with a special focus on their opinions towards the influence of their birth order and its influence on their career choices.
3.2.4 Data collection technique

This study employed in-depth semi-structured interviews to identify the factors mainly which are most relevant with regards to family birth order and career choices of students who are enrolled at the University of Zululand. The semi-structured interview questions involved participants’ personal profiles, their reflections, views and perceptions of the factors that contribute to their career decisions they had experienced at the university.

The current study used the semi-structured and structured interviews to address aim number one and a self-administered questionnaire. The interviewer adapts and generates questions the interview progresses (Struwing & Stead, 2011). Semi-structured interviews have pre-determined questions that are presented to all interviewees systematically and consistently.

The interviews enable the interviewer to investigate and deviate from these questions (Struwig & Stread, 2011). One on one interviews were conducted. The study also used a self-administered questionnaire to obtain the students’ characteristics such as gender, race, age and choice of career in order to determine their influence on the career choices of students at the University of Zululand.

It was necessary to use qualitative interviews to enable the researcher to tap into rich textual meanings of the students’ responses. Moreover, the interview questions also addressed the factors related to poor career choices of students and the influence that these factors have on the students’ career paths. It is important to examine data from more than one source as a way to triangulate qualitative data. Using multi-method data collection, insights obtained from individual sources can be used to compliment and enrich overall research (Cohen, Manion &Morrison, 2013).

Amunuzzaman (2009) describes an interview as a systematic method in which a person enters deeply into the life of a stranger to bring out needed information or data for research purposes. In the current study the participants were informed about
the purpose of the interview and there was mutual agreement and understanding of the process.

Participants were purposefully selected to gather their underlying feelings and thoughts on whether their family birth order had an influence on their career choices. A total number of 30 interviews were conducted over the period of study. The researcher ensured that the questions were formulated in a manner that encouraged participants to share their experiences or observations about the research topic and how this was impacting on their training and their lives in general.

Initially, participants were asked background questions about their biographical characteristics such as, age, gender, race and their course as well as the nature of the subjects they completed before entering university. They were also asked about what they had imagined about studying at the university, their initial career choices and their reflections about what they ended up choosing to pursue.

They were also asked what they had imagined about studying at the university, their initial career choices and their reflections about what they ended up choosing to pursue. Throughout this initial section of the interview, the researcher built a rapport with the participants; this was done to put them at ease before posing more probing questions about their career development and career decision making experiences. Hence, the research was guided by a set of open ended questions.

**3.2.5 Advantages of interview method**

According to Struwing and Stead (2007) a successful interview should start with non-threatening questions to allow the respondent to loosen up. After the initial items, more pressing or feeling questions are to be asked. A similar pattern was followed in the current study. The researcher was certainly aware of the disadvantages attributed to the interview as a tool of data collection; therefore the researcher effort was made to overcome the flaws. Consequently, interruption of communication flow between participants and the interviewer was reduced.

**3.3 DATA ANALYSIS TECHNIQUE**
The study employed content analysis technique to analyse qualitative data. Struwing (2011) elaborates that the content analysis technique refers to the gathering and analysis of textual content. The researcher attended to common themes and patterns from different interviewees. Content analysis applies the classification of the many words into considerably fewer categories. SSPS (Statistical Package for the Social Sciences) was employed to analyse quantitative data (students’ biographical characteristics).

A constant comparison approach to analysing data was followed in this study. As data are collected, they are read and re-read and through a process of inductive reasoning the researcher identifies emergent themes (Johnson, 2008). The current study also employed a similar procedure.

### 3.3.1 Reflection on the quality and trustworthiness of analysis

In qualitative research examination of trustworthiness is crucial to ensure reliability. Seale (1999) stated that while establishing good quality through validity and reliability in qualitative research “trustworthiness of the research lies at the heart of issues discussed as validity and reliability” (p. 266). The study recognised that the emerging model of factors that contribute to career attainment was applicable to the experiences with regards to choosing a career. Trustworthiness can be assured in form consistency, stability and repeatability of the participants’ and the researcher’s ability to collect and record information accurately. Therefore the researcher maintained integrity, stability and consistency through the process of collecting and recording data from the respondents and quality has been maintained through a transparent analytic procedure.

### 3.3.2 Biographical information of the participants
The sample involved both females and males representing undergraduate students of the University of Zululand. The choice of study (degree) was important because it was where the research was based on. It was also significant because researcher bases and speculations were always likely to occur. Most of the students were from the rural areas, while others were from urban areas.

It was also noteworthy because researcher biases and assumptions were always likely to occur. Some of the students were from rural areas, while others were from urban areas.

Kumar (2003) described an urban area as a location characterised by high human population with many built environment features as opposed to the areas surrounding it. Urban areas may be towns, conurbations and cities but the term is not usually extended to rural areas. In the current study an urban area refers to any place located around a city, town like township, suburb. And conversely a rural areas refers to any place away from the cities and adapted the country life. The participants’ ages range from 19 years to 34 years old.

3.4 TIMING OF THE STUDY

The study was undertaken during the first term of the year, which is when students have recently registered and have chosen their degree of study. The researcher considered this the suitable time for conducting interviews to students because almost all students were still relaxed, there was no pressure and examinations fever and they had not yet modified to other fields of study.
3.5 ETHICAL CONSIDERATIONS

Ethics are a set of moral beliefs that deal with crucial or first principles that offer rules and behavioural expectations about appropriate conduct (Hiles, 2007). Additionally, ethics provide a researcher with guidance to moral conduct and to avoid scientific misconduct. Therefore, the ethical considerations and guidelines directed this study. Permission was granted by the University of Zululand Ethics Committee of higher degrees. The researcher was granted access to the facilities and for using students as participants of the study. The participants individually signed informed consents and the researcher ensured that the participants were not deceived or misled.

Debriefing was made available to them, in such a way that if they felt the need to raise their concerns that came up during the interview processes, they may do so. The researcher explained to the participants that they were not forced to take part in the study and they were assured the right to withdraw anytime during the interviews, because participation was voluntary. Moreover, confidentiality was certain at all times.

The researcher was considered to be competent and qualified, having a postgraduate experience in psychology, and was considered familiar with the theories and concepts in the field. The researcher's experience was noted; therefore the researcher did not go further than the qualifications allowed. The supervisor of the research also had comprehensive research expertise to ensure that the researcher undertook ethically sound research.

The documents and data relating to this study were saved on a hard drive by the researcher, and will be kept for a minimum of 5 years from commencement of the study. Documents were stored for archival purposes.
3.6 SUMMARY

This chapter described the research methodology, including population, data collection, data analysis, sampling design, instruments as well as strategies used to ensure the reliability, validity and ethical standards. It also dealt with biographical information of participants. The type of research and the methodology was elaborated. The next chapter will present information on data analysis and the discussion of findings.
CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

4.1 INTRODUCTION
The previous chapter presented a complete account of the research design and methodology. This chapter is concerned with the detailed field work of the study. The aim of this chapter is to present and provide analysis of data. This chapter discusses the data analysis and findings from 30 questionnaires and interviews completed by the third year Educational Psychology students at the University of Zululand during the year 2016. The purpose of this study was to determine the influence of family birth order on the career choices of students at the university.

Questionnaires were given to students aged between 20 to 34 years. The participants signed the consent form indicating their willingness to participate in the study; they completed the questionnaire and interviews. The researcher ensured that all questionnaires were kept anonymously. A total of thirty participants completed questionnaires and interviews at the department of Educational Psychology.

The data from the questionnaire was analysed by a statistician. The SPSS Statistics 24 program was used for analysing the quantitative data. The findings are discussed according to the sections of the questionnaire. The four sections of the questionnaire were:

- Section A: Personal (biographical) characteristics
- Section B: Career preferences before tertiary
- Section C: Some factors influencing career choice (birth order, parents, passion, and siblings)
- Section D: Two interview questions (open-ended)

Themes and qualitative method of analysis were used to analyse section D.
4.1. BIOGRAPHICAL CHARACTERISTICS

This part of the questionnaire covered the respondents’ age, race, degree and gender. Although not dominant to the study, the biographical data assisted in contextualising the findings and the formulation of appropriate recommendations to enable students to choose the suitable career choices in future. Participants’ ages

The participants were required to mention how old they were at the previous birthdays. The table below shows the participants’ ages.

**Table 1**

<table>
<thead>
<tr>
<th>AGE</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 years</td>
<td>2</td>
<td>6.67</td>
</tr>
<tr>
<td>20 years</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>22-25 years</td>
<td>8</td>
<td>26.66</td>
</tr>
<tr>
<td>26-34 years</td>
<td>5</td>
<td>16.67</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Age distribution table*

The participants’ ages ranged from 19 to 34 years, with the majority being 20 years as 15 (50%) participants were at this age.

4.1.1 Race

Of the 30 participants, only one was Coloured and 29 were Black. Hence only black university student were well represented. Therefore, the results of the research may not be generalizable to the students of all racial groups in the University of Zululand.

4.1.2 Home language

Of the participants, 30 (94.39%) were Zulu-speaking. Therefore, only Zulu-speaking students were well represented in the sample, this means that the research findings might not be generalizable to the students with other home languages other than Zulu.
These results correlate with the fact that almost all the participants were Black and were Zulu-speaking, probably because the university is located in an area where Zulu is predominantly spoken by about 70% of the residents. The implication of this finding is that career education and knowledge about career choices should be conveyed in Zulu to reach the majority of students at the University of Zululand.

4.1.1. Course or Degree

Of the 30 participants (94.56%) were from the department of Educational Psychology at the university. However, participants were required to write down if there was a degree they had enrolled in before joining the department. Of the 30 participants, 5.65 % revealed they had enrolled in other degrees before enrolment in their current department.

Table 2 displays that over 56.66% of 30 participants were first borns enrolled in the department of Educational Psychology and in pursuit of a career in the field of Education. These results agree with the Adlerian concept on Family Birth Order, that most of the times first borns may pursue careers that are more authoritative and those that require leadership roles as the first born is naturally an authoritative personality in the family. These careers may be along the fields of education, clergy, law and many other executive positions in companies.

4.1.2. Participants position in the family

Table 2. Position in the family (birth order)

<table>
<thead>
<tr>
<th>BIRTH ORDER</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>First born</td>
<td>17</td>
<td>56.66</td>
</tr>
<tr>
<td>Middle child</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Last born</td>
<td>2</td>
<td>6.67</td>
</tr>
<tr>
<td>Only child</td>
<td>2</td>
<td>6.67</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 4.1 indicates that 38.18% of participants reported that they had preferred careers in Education before enrolment at the university (tertiary). The results suggest
that most students in the Faculty of Education at the University of Zululand had always wanted to pursue careers in Education even before they enrolled at the university. Secondly, 23.63% of participants revealed that they preferred careers in the Medical/Health Sciences field. Such results indicate that even though most participants were enrolled in the Education Faculty studying degrees in education, careers in medicine and health sciences were initially their first preference.

4.2. SECTION B: CAREER PREFERENCES BEFORE TERTIARY

Figure 4.1 presents that 28.57% of the participants stated that their choice of career was influenced by their gender. The second highest percentage of 25.14% of participants revealed that they strongly agree that gender had considerable influence in their career choices. The lowest percentage of 12.57% disagreed that their gender had an influence in their career choices.

The participants were asked whether their career choices were influenced by some of the factors such as Passion, Gender, Parents, their family Birth Order, siblings and salary. The larger percentage; 39.53% admitted that they had chosen their careers out of passion.
18.60% of the respondents revealed that their parents had an influence in making a career decision. Of interest to the current study, only 11.63% of the participants revealed that their family birth order had an influence in their choice of career.

Figure 4.2 Gender had influence on career choices

Though not central to the current study like family birth order, determining some other factors such as parents, siblings, passion, gender and salary is significant to explore the possibility of providing the participants with other options to explain their career path and its influences. Figure 4.3 shows that 39.53% of participants revealed that their career choice was influenced by passion. Secondly, 18.60% indicated that their parents had a bigger influence on their career choices. However 13.95% of participants revealed that their career choices were influenced by salary as well as gender type. Additionally 11.63% stated that their position in the family had an influence in their career choices and at least 2.33% of the participants indicated that their siblings had an influence in their career choices.
4.5 Choice of influence

Table 3 shows that 63.3% of the participants agree that birth order in the family had an influence on their career choices, whilst only 36.7% stated that birth order had no effect on their career choices. Substantial to the current study, the results reveal that indeed family birth order may possibly have a noteworthy influence or impact on the career choices of the students at the University of Zululand.
4.2.1. Was your career choice influenced by your family birth order?

Table 3

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Valid percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>11</td>
<td>36.7</td>
<td>36.7</td>
<td>36.7</td>
</tr>
<tr>
<td>Yes</td>
<td>19</td>
<td>63.3</td>
<td>63.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The evidence provided in table 3 is, however not consistent to the participants’ responses in figure 4.2 (choice of influence) section, particularly when it refers to the position in the family as well as siblings. There is a significant discrepancy between the participants’ responses in table 3 and figure 4.2. This means that the participants’ career choices may have not been necessarily influenced by the two emergent factors but other more specific factors such as: gender, passion, family trace and birth order.
4.3. **SECTION D**

4.3.1. **Qualitative data**

In this section, the responses from each participant are presented below together with the themes that emerged from the responses.

Each participant’s responses are presented below and the themes that emerged from the responses were identified in this section.

4.3.2. **Interview questions**

This section looked at common themes that were extracted from participants in respect of their views and experiences on the influence of family birth order on their career choices at the University of Zululand. The identified themes from the stories of the participants were discussed in detail in relation to the literature already presented. Many themes overlap but for the sake of the study they will be discussed separately.

**Question 1**

Have you always wanted to pursue your current career or not? Explain.

**Question 2**

Do you think your position (birth order) in the family had an influence in your career? Explain.

4.3.2. **Responses from participants**

The themes of similar responses were arranged together and these made four themes. The sub-themes were formulated under each theme. The table bellow depicts the themes and sub-themes that emerged from the analytic process.
**Table 4**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth order</td>
<td>• Being the eldest child of the family</td>
</tr>
<tr>
<td></td>
<td>• Being the only child in the family</td>
</tr>
<tr>
<td></td>
<td>• Being the youngest at home</td>
</tr>
<tr>
<td>Gender</td>
<td>• Feminine jobs</td>
</tr>
<tr>
<td></td>
<td>• Masculine jobs</td>
</tr>
<tr>
<td>Job opportunities</td>
<td>• Easy to find a job</td>
</tr>
<tr>
<td></td>
<td>• High job market</td>
</tr>
<tr>
<td>Passion</td>
<td>• Choosing the career out of love</td>
</tr>
<tr>
<td></td>
<td>• Have always wanted education. It was a dream job</td>
</tr>
<tr>
<td></td>
<td>• It was a calling or vocation</td>
</tr>
</tbody>
</table>

**Table 5**

4.3.3. *Emergent themes and percentage of participants who cited the themes*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Number of participants who cited this theme</th>
<th>Percentage of participants who cited this theme (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth order</td>
<td>11</td>
<td>36.66</td>
</tr>
<tr>
<td>Gender</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Job opportunities</td>
<td>7</td>
<td>23.33</td>
</tr>
<tr>
<td>Passion</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>
When the participants were asked if their position in the family (family birth order) had an influence on their career choices they mentioned a few other factors that were then presented into common themes.

The findings reveal that the most common theme from the participants’ responses on question 1 and 2 was family birth order with 36.33% of participants choosing that response. The next most important theme was Gender (30%). Passion was mentioned by 10% of participants. 10% of the participants mentioned that their career choice was influenced by the mere fact that it had always been their dream job while the outlier of participants mentioned that their choice of career can be traced back from past generations of their families (Family Trace). The other participants indicated that job opportunities (23.33%) were the most influential when choosing a career.

Comparable to the results of this study, Herren (2011) discovered that guardians and parents were the most influential people on students when choosing to major in an agricultural field. Conversely, Wildman and Torres (2002) discovered that that family and friends were moderately influential when choosing a major. Family birth order was important in this study. There are many factors that influence students’ academic careers; however birth order was the one factor that had more influence on students in the current study. To conclude, the results revealed that there is a noteworthy relationship between the students’ characteristics such as age, gender, race and their career choices.

4.4. DISCUSSION OF THE RESULTS (THEMES)

4.4.1 Emergent participants’ themes

The themes from participants’ responses were identified. In this section common themes will be identified in respect of the influence of family birth order on the career
choices of students. Also content analysis will be used to discuss the themes. The researcher will as well analyse the identified themes in relation to the presented literature.

4.4.1. Birth order

The literature reviewed did give some indication that an individual’s birth order can play a role in the type of careers that will interest them as adults. According to Leong (2015) it may be convenient for career counsellors to pay attention to family birth order of their clients. Leong further claims that only children may have more analytical and cognitive interests, while younger children may be more artistic and oriented to the outdoors. Leong (2015) recommended that the differences in the study were between the younger children and only children. Because first borns start out as only children, but later give up that position, it is difficult to classify them. The length of time a first-born child as the only child may cause the difference in their personality. About thirty seven percent of the participants mentioned that their family birth order had an influence in their career choices.

“Yes, because I am the second born and I am the only one who is living with my parents. My older sister is married. So, my duty is to finish high school level and study Education because it creates a lot of opportunities. I will be able to go back home and take care of my parents.”

Romeo (1994) stated that factors such as self-esteem, fear of failure and sibling rivalry were all concepts to a child’s birth order, thus they may have an influence on a child’s career choice later in life. One of the participants said that:

“Yes, in my family I am the only one who got the opportunity to enrol at the university level. So my siblings and parents encouraged me to take this career because it is going to be helpful to them as I am the middle child.”

For a family to meet the basic requirements for members in it, the birth order and family characteristics play a part in the occupation, type of job and career interests.
“Yes. Birth order has influenced my career choice. I have realized that as a first-born I have to represent a good achievement and a prestige career so that we live a happy life and afford most things for me and my siblings”

The participants believed that their position in the family had an impact on their career choices. In that sense they were motivated and influenced by their birth order in selecting careers at tertiary level.

Another view from one of the participants regarding family birth order was that:

“Yes, because I am the only child in my family, I have to look after my parents as they are getting closer to retirement each day. I have to support them because I am the only person they can trust and depend on.”

The participant believed that being the only child they had to choose a career that would be easy to pursue in order for them to easily get a job and eventually take care of their parents. In support of this statement (Carl, 2016) concluded that since the only-children are the sole focus of parental attention and validation, they are more often raised to feel positively special. They are typically encouraged and supported by the family to develop themselves, therefore they usually want to achieve highly for their own sake and also to live up to their parent’s high expectations (Carl, 2016)

4.4.2. Gender

The literature review on gender and science, Mau (2003) discovered that women were significantly less likely to persist in engineering and science careers. Additionally, Brotman and Moor (2008) reported that young women’s attitudes toward science are less positive as compared to young men’s or declined more with age. Thirty percent (30%) of participants mentioned that their gender had an influence on their career choices.

“I have always wanted to be a pilot but my parents told me to study education, since my mother is the breadwinner and that if I study education I won’t be at risk because being a pilot is normally done by males”
In their study Moss-Racusin and Dovidio (2012) that focused on students who were randomly assigned either a male or female name for a laboratory manager position. The male applicants were rated as significantly more competent and hireable than the (identical) female applicant. These participants also chose a higher starting salary and were offered more career orientation and mentoring to the male applicant.

“No, I did not see myself as an Educator. I wanted to do a B com Accounting degree but due to my parents’ wishes, they enforced me do an education stream or any degree that involved women. “I wanted to do anything in science stream or any job that involves men but I was not accepted, but I will try to develop a career in education,”

Another response from one of the participants:

“No, I did not want to be an educator, I wanted to be a soldier but I was not accepted in the army and my parents did not approve of it because they thought it is a career for males only.”

4.4.3. Job opportunities

This theme included participants who had chosen their careers because they believed it offered job opportunities. These participants mentioned that they had chosen careers in teaching (education) because it supported their family life and offered them satisfaction including taking care of their children. Thus, teaching afforded them the means to get a job anywhere in the country as close as possible to their families and it allowed them the opportunity to meet their career aspirations without sacrificing their family life.

“It is a career that is easier to find a space in the job market and is satisfying and suits family situation”

Other participants indicated they had other career plans other than a career in teaching. Their desire to find a job immediately and move forward to the desired or what they perceived as their vocational careers was captured in these responses;
"I want to find a job immediately after graduating, I know with teaching it will be easier, and as soon as I am able to stand on my own, I will move on to other careers, I will outgrow it. I can't be a teacher for life"

For other participants, simply keeping their options and clarifying that they had decided to do a career in teaching was because of the perceived vast job opportunities which were more essential to them than depending on teaching as a career for life. The following quotations exposed their commitment only to the short term and the reasons why:

"I am not sure if I want to teach, it will all depend if I get a job soon after graduation, if I don't then I will further my studies or study a new degree."

Teaching is not for me, I did it because my sister told me it was easier to find a job, so I did it so I can also assist her, so that we will take care of our parents and siblings. But when I am done, I will go back to university and pursue my dream career"

This theme also consisted of a group of participants who viewed teaching as a "Stepping stone" towards their desired careers such as performing arts, media studies, law, health sciences and economics. Other participants noticed that they needed exposure and change in their lives and as a result did not want to be “stuck” in a career that from their viewpoint was in short of “flexibility”. One participant said:

"I chose teaching because I need a job immediately, but I don’t see myself doing this in 40 years, so I will not be a teacher for life"

"It is quite easier to find a job in teaching and a lot harder to find a job in performing arts, so I will continue teaching but as soon as I find a job in arts, I will definitely go for it"

It was not unanticipated that participants who in future were looking for careers in the field of entertainment. Some were also looking to secure a reliable income while trying to launch them in the industry.
4.4.4. Passion

The participants planned to devote their career in teaching, and their open-ended responses explained significant reasons for their choice of careers. One of the frequently mentioned reasons for choosing their career choices was passion which was for them interesting, varied and satisfying. Another associated theme though not mentioned in the table was “Dream ambition”, a calling and something they were destined to do”

Their zeal for the intrinsic rewards (passion) of their career choice was capture in their comments:

“I love teaching students”, “I have always loved my current career choice It’s my calling”, and “I am passionate about teaching and know I can be beneficial to students”.

4.5. SUMMARY
This chapter offered a thorough discussion on the findings of the study. The chapter also discussed all data analysis and interpretation with reference to the literature review. The objective of the study was to determine the influence of family birth order on the career choices of students and determine whether there is a relationship between the students’ biographical characteristics such as age, gender, race and their career choices. The main results of the research were summarised in each section The researcher was able to determine from the findings the influence of family birth order on the career choices of students. It can be concluded that the study produced positive results. The next final chapter concludes the study, will discuss its limitations and make recommendations for practice and further research.
CHAPTER FIVE

LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS

5.1 INTRODUCTION
The previous chapter gave details about the field work of the study. Data collected were presented, analysed and interpreted. The researcher, in this chapter concludes the data collected on the influence of family birth order on the career choices of students and on the basis of literature referred. The researcher correspondingly provides the implications from the findings of the study, its limitations and recommendations.

5.1. DISCUSSION OF THE RESULTS
The study was designed to determine the influence of family birth order on the career choices of students. The findings of the study are deduced in the light of the quantitative and qualitative data obtained. The intention of the study was to answer the following questions:

i. To what extent does family birth order influence the students’ career choices at the University of Zululand?

ii. Is there a relationship between students’ characteristics such as age, gender, race and their career choices?

5.2. THE OBJECTIVES OF THE STUDY WERE:

i. To establish the extent to which family birth order influences students’ career choices.

ii. To determine whether there is a relationship between the students’ biographical characteristics such as age, gender, race and their career choices.
5.2.1. Findings with regard to the first aim

Family birth order of students has an influence on their career choices. Some participants believed that had they been born before or after their original birth order in the family, they would have chosen a different career. Others believed their birth order position had somehow pressured them to choose different career from what they had always wanted to do.

“I have always wanted to be a psychologist, but I had to opt for teaching because I had to finish and work hard to help my younger siblings since I am the eldest child at home”

“My birth position in the family affected my career choice, because my parents told me to study a degree that will be easier to find a job so that I can take care of them and my younger sister”

Other participants mentioned that even though their birth order was that of a youngest child in the family, they somehow felt the pressure that is said to be expected by the first born in the family; hence they chose careers that were typically assumed by the first-borns.

“I am the last-born in my family, but I had to choose a career that was going to get a good job so I can assist my parents and my older siblings, my family is big and since I am the first one to enrol in the university”

Such admissions imply that indeed the participants’ family birth order had an influence on the career choices they had made. The Adlerian theory illuminates that birth positioning changes the strict dynamics of birth order as well. If there is a gap of six or more years between siblings, each child may be treated as an only child or as a first born. The theory further states that at times if there is a huge gap between groups of children in a big family, each group may be treated as a distinct birth order family. With these ideas it is safe to argue that since the participant mentioned that they are from a large family and that they felt they had to assume the role of the eldest sibling in the family, this proved that at times the assumed birth order of a
person may influence their career choices because of the gap and the family dynamics.

The findings also revealed that some participants chose their careers because their siblings had followed the same career paths and so they felt it was better to pursue similar career path as their siblings. One of the participants answered:

“I did Education because my parents, my older sister and brother are also teachers, I in fact wanted to do Medicine, but I knew if I did education my siblings would help me with the schoolwork and practice, no one has done medicine at home, so I didn’t “

These findings were supported by Filiz (2016) that parents pass on their genes, set an example for older siblings and give advice to either aim for or steer clear of their own lines of work. Filiz (2016) claims that in the end, the children end up in the same job and choose the same occupation, which may be the reason why some families may be known to be the family of a certain career. In the current study the participant had idealistically wanted to pursue a career in medical science, but due to the influence of their family and birth order they opted to follow the same career path as their family. With these findings it was safe to assume that sometimes the family birth order of an individual may have a greater influence to their career choices. To conclude, it is clear that individuals within a family are proportionally more likely to eventually also choose the same occupation, and this is particularly true of siblings and twins.

Even though the findings from the study revealed that some of the participants’ career choices were influenced by other emergent factors such as gender, family trace and race other than birth order, it would be interesting to determine to what extent their family birth order had influenced their career choices.

Furthermore, White, Campbell and Stewart (1995) in their findings revealed that a relationship between psychological birth order and lifestyle seemed to be more valid than actual birth order and lifestyle. Usually those children that identify themselves as psychological first borns tend to be drawn toward business majors or accounting and finance (White, Campbell & Stewart, 1995). To support such findings, in this study it emerged that some participants had psychologically assumed the first born
positions within the family and therefore chose the careers that were said to be generally for first borns. One of the participants mentioned that:

“I have always wanted to do accounting because I wanted to be a CA, but I had “to go for a career in education because my older sister is disabled, I am the second born in the family”

Such statements illuminate the assumption that first borns are usually the ones to choose careers in business and accounting or even mathematics. However, like this participant, under certain conditions, they may be forced to choose a different career than what is generally expected for their birth order position.

In the study it was also discovered that the family needs and circumstances may engulf an individual to an extent that they may end up choosing a different career than what they idealistically wanted to pursue. One participant revealed that:

“I am a first born, I come from a struggling family, I had to go for teaching because it’s much easier to complete and find a job so that I can help my family and put my sick parents on medical aid and help with food and shelter at home, but I wanted to be an astronaut, that is why I will teach physics and maths”

Even though such findings may deviate from what is assumed by the theory on birth order, and the assumption that first borns are more likely to choose prestige and authoritative careers, this does not significantly change the explanation that at times factors such as financial status, family circumstances as well as health may impact a person’s perception about a career choice, which may cause a radical change on their career path.

In conclusion, with both the qualitative and quantitative evidence, the findings revealed that there is a relationship between the family birth order of the students and their occupation choices. There is statistically significant evidence regarding the association between birth order and choice of careers, supported by the comprehensive qualitative evidence of the study.
5.2.2. Findings with regard to the second aim

5.2.2.1. The relationship between the students’ age and their career choices.

In educational career development, where approaches like person-environment dominate, where by knowledge about an individual and their environment form part of the guidance. According to Petrone (2015) younger workers usually change or choose careers for different reasons than the older workers, some of which are spontaneous. Petrone (2015) further stated that older workers tend to care less about career progression than the younger workers, most likely because the younger workers are much earlier into their career than older workers.

In this study the findings revealed were similar to Petrone’s (2015) findings. The students’ ages had an impact on their career choices. It was discovered that some students had chosen their careers because of their age. The older students mentioned that since their age was not on their side, they had to choose careers that were most convenient to them and their family needs. Whereas the younger students revealed that even if they had initially chosen the not so ideal careers, they felt they still had a fair chance to rethink and pursue what they had always wanted to do. These findings are supported by some of the statements like this:

Anonymous, a student from the faculty of education aged 34 years stated:

“I have always wanted to be a doctor or a physician, but I did not get a chance at an early age to go and study at a university so now I have so many responsibilities and I am quite older than my classmates, so I had to do education just to go back home and work for my family.”

In contrast to the statement made by Anonymous, a much younger student (20 years) from the same faculty and level of education affirmed that:

“I wanted to be a Charted Accountant but I had to do something before that and help at home, so when I’m done with that I can always go back to varsity and do Bcom, I’m still young”
The findings of this study also revealed that only 6.67% of the students were 19 years of age, followed by 16, 67% of students aged between 26 to 34 years, as well as 26, 66% aged between 22 to 25 years and lastly, the highest percentage of 50% aged 20 years. These findings were confirmed further using the qualitative approach of open-ended questions. When asked if they thought their age was one of the factors that might have had an impact on their career choices, the students revealed that their age did play a significant role on their career choices, that if it was not for their age they would have chosen their seemingly “dream careers”.

Though not central to the study, the researcher felt that the age does play a significant part in career selection and in this regard on the career choices of students. However, age alone does not primarily affect the career choices, but significantly the environment affects the career choice with age being one of the secondary factors. With such revelations it is safe to conclude that age as one of the selected biographical characteristics of students does have a noteworthy relationship with the career choices of students.

5.3.1.2 The relationship between students’ gender and their career choices

The previous chapter provided a descriptive statistics for the females and males in the sample in which there was a complete data for each analysis. It was not surprising that there was a huge gap between the number of males who chose specific careers that were traditionally believed to be for males such as Engineering, Science, Law and Accounting. Convincingly, the highest number of participants strongly agreed that their gender had an influence on their career choices.

5.3.1.2 The relationship between students’ race and their career choices.

Even when family background and personality qualities of the students and their education were taken into consideration, it was noted that the biographical characteristics such as race are significantly important to consider as one of the many factors that influenced the students’ career choices. Social cognitive career theory Lent, Brown and Hackett (1994) highlights cognitive-person variables that allow people to influence their career development and decision making. Though the theory has produced a firm stream of practical applications and analysis, relatively
little of this work has investigated factors such as race in relation to career choices of students already enrolled in the university.

The theory basically implies that an individual's social background, their cognizance in terms of their career development and other variables such as ethnicity or race can play a significant part in their career development. In this study the findings revealed that there seems to be a substantial relationship between the students' racial characteristic and their career choices. Even though the majority of participants in the sample were black as the university is populated and dominated by black students, it was surprising to learn that most participants felt that their racial background had a chief influence on their career choices. The sample was dominated by over 90% of black participants and only less than 10% of other races. One participant mentioned that:

“I wanted to be meteorologist, but it would have been nice because I would have been the first in the community or even one of the few in the province, so since I was told it was not a career for blacks and not all universities offer it, I had to choose other options”

The other participant said:

“if you are black some careers are just not for you, because even if you study it, you will be oppressed to find a job for it, other races are not flattered by that, so that is why I chose a career that is well-known to be black dominated and stopped dreaming about being an astronaut.”

Such statements give clear expressions that were unapologetically made by the participants from the qualitative data. The findings revealed that most participants felt their race had an influence on their career choices and that they still felt that if they were a different race, more opportunities were going to be offered to them to choose the careers they wanted. To support this in their findings, Fouad and Byars-Winston
(2005) assumed that race and ethnicity did not appear to curtail the career aspirations that people have, but, something emerges between the time that those aspirations occur and the time that individuals enter an occupation, reason being that ethnic or racial minorities are proportionately represented across career fields in the labour market.

Additionally, Astin (1984) developed a socio-psychological theory of career choice that is composed of both cultural-environmental (gender role socialisation and the structure of opportunity) and psychological (work motivation and work experience) factors. This perspective believes that perceptions of the structure of job opportunity plays a crucial role in an individual’s career aspirations and choice. Furthermore, Turner and Turner (1995) and Griffith (1980) argued that different career opportunity structure exists for all people.

These theories are valid enough to support the statements by the participants in the study who felt that their racial or cultural characteristics have a significant role in their career choices. However, these concepts have not been integrated into traditional theories of career choice and development, namely Holland’s Theory of Personalities in Work Environment or the Theory of Work Adjustment (Dawis, 1996), leading Leong and Brown (1995) to test the cultural validity of many predominant career theories. This evidence however does warrant a conclusion that there is a significant relationship between the students’ racial background and career choices.

5.3. LIMITATIONS

While this study has succeeded in its objectives, there were a few limitations in achieving the set objectives.

The study was limited to the University of Zululand only, which is one of the eighteen public universities in South Africa, excluding eight universities of technology. If at least other universities in the province were involved in the study, it would have released the data collection to a wider range of other students' opinions from different tribes and social class.
• Gender was also noted as a limitation because there were more female participants than male participants. Therefore, future research should consider gender balance to get more accurate opinions and perceptions.

• The study was not intentionally prejudiced in terms of race or ethnicity. It was discovered that most students at the University of Zululand are predominantly black and that is why the majority of participants were black and native Zulus; so this represented as another limitation.

• The study was based only in the KwaDlangezwa area at the University of Zululand in the North Coast of Kwa-Zulu Natal province, therefore, that would limit other students’ opinions on the issue of family birth order and career choices in other districts and other provinces where the nature of career choices and family birth order may differ.

• The number of participants was thirty and they all participated satisfactorily. However, the participants belonged to one faculty out of four faculties in the university. Therefore, future research may include other faculties to balance the opinions and views of students from different faculties in the university.
5.4. RECOMMENDATIONS

The study has achieved its objectives, and the researcher presents the following recommendations on the career development and career counselling of students at the university.

- Parents should not dictate their children’s career path, especially the first born to pursue certain careers that they think are well-suited for their child. They should allow their children, regardless of their birth order, to make their own career choices.
- Parents and the entire school system should not put too much prominence on the high end careers on their learners, but as an alternative consider that no two learners are the same and that they can excel in different fields that may not be necessarily white collar.
- It is essential that students are encouraged to become more self-directed in their careers. It is also recommended to allow students to make their own choices about what they want to pursue.
- The distinctive birth order traits of the students entering the university should be highlighted for the purposes of matching the career choices they are defined into. The family birth order tree should be included in the university application forms.
- Concrete experiences in the companies or institutions and projects can be used at school to encourage reflection among students and aid them to gain an orientation with regards to their career aspirations (Kemple & Snipes, 2000). This can be attained in the form scholarships or internship programmes.
- Students' racial background and career choices are significantly related, whereas gender and age are each as notably associated to their family backgrounds (Shelley & Correll, 2001). To compensate for these results on career choices with respect to or biographical characteristics, features of career learning environment with similar effect might be applied.
- Even the personality makeup of the students and their education must be taken into consideration. In this study it was noted that the biographical
characteristics such as race are significantly important to consider as one of the factors of influence on the students’ career choices.

- The government’s advanced educational loan board should allow all students without partiality so that the financial and educational strain experienced by students can be minimised, by offering equal opportunity to all.
- The career counselling centres should be established as early as primary school to the university with adequate resources for career guidance.
- Researching more about how different races, ethnic groups and countries socialize their children and their family dynamics from these settings would provide more information on development and personality, intelligence and career choices.

5.5. CONCLUSIONS

This chapter has discussed the findings of the study, it also acknowledged and provided opportunities for further studies. Inspite of the limitations, the study has managed to determine the influence of family birth order on the career choices of students at the University of Zululand and the relationship between some biographical characteristics of students and their career choices.

In this study it was noted that there is a need for career development and counselling for students at the university. Parents, teachers and lecturers need to work collaboratively in helping students make their career choices. All stakeholders involved have to be responsible for any factors that might disturb the students in choosing their careers, work together to minimize the jeopardizing factors and consider the other factors of greater influence such as birth order, gender and race.
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