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Determinants of school dropout in the North West Province

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Abstract

School dropout is a severe problem in South Africa and quite pronounced in the North-West province. School dropout is associated with a number of adverse outcomes such as lower employment rate due to poor level of education; chronically high unemployment levels and poverty, low incomes, higher risks of mortality and poor health outcomes. This study explores the determinants of school dropout in the North West province.

The study used data from the Community Survey collected by Statistics South Africa in 2016 and this was coupled with Enrolment Rates and Dropout Rates data from 2012 and 2016 obtained from the Department of Education.

Firstly, the study determined school dropout trends by different grades between 2012 and 2016. At bivariate level, the analysis used the chi-square statistic to determine the association between school dropout status and different demographic and socio-economic variables while the binary logistic regression was used at multivariate level to control for the effects of variables.

The study found that school dropout rates differed significantly between the different school grades in the period between 2012 and 2016; highest among those enrolled for grade 10 and lowest among those in grade 12. Furthermore, the study revealed that, at individual level, school dropout rate was positively related with the age and significantly associated with sex, population group and religious belief of the individual. At household level, the study found that when both the father and mother were not part of the household the individual was significantly more likely to drop out of school while geographical type of residence was moderately associated with school dropout. While virtually all variables were significant at bivariate level, only age, sex, pregnancy status geographical place of residence and household level factors were significant at multivariate level ($p < 0.05$).

The study recommend that additional programs be designed for those at risk of dropping from school especially at grades grade 10 and grades lower than that. Also, special attention should be paid to those who are at advanced ages and are still in school. Lastly, financial assistance for learners from poor backgrounds should be maintained.

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Declaration

I, Buang Lucas Mmutle, hereby declare that this research entitled "Determinants of School Dropout in the North-West Province" is my own work and that all sources have been accurately reported and acknowledged, and that this document has not previously been submitted in any University or Higher Training Institution in order to obtain a similar qualification.



Acronyms and Abbreviations

CS	Community Survey
DoE	Department of Education
DR	Dropout Rates
ER	Enrolment Rates
KKK	Kenneth Kaunda
NMM	Ngaka Modiri Molema
NW	North-West
RSM	Ruth Segomutsi Mompati
SPSS	Statistical Package of Social Sciences
StatSA	Statistics of South Africa
UNESCO	United Education, Scientific and Cultural Organization

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Chapter 1: Introduction

1.1 Background of the Study

Education is widely recognised as an important component of upward social mobility and an indicator of human development in general and the well-being of children in particular. This importance is clearly demonstrated in the measurement of the Human Development Index (HDI) and the Sustainable Development Goals (SDGs) (Gillingham, 2012). Moreover, the importance of education is also noted by Reid (1999) by postulating that those who do not attend or have never attended school regularly for whatever reasons have limited lifetime opportunities, socially, professionally and economically.

A powerful case can be made for the expansion of education in developing countries on the grounds of growth, poverty reduction, equity, social cohesion and more (Rihani, 2008). Moreover, Elis's (2015) study shows that investing in education is beneficial to a community, both for individuals and for society as a whole. Education contributes to individual earnings and economic growth and it is associated with improved health, equity, and improved social conditions (Elis, 2015).

South Africa is among the countries in the world that have made it compulsory for every person to obtain at least a basic education at a specific age in their lifetime (Gillingham, 2012). This is enshrined in the South African School Act Section 3(1), that requires that "all children attend school from the age of 7 until the last day of the year in which such learner reaches the age of 18 or the 12th grade, whichever comes first" (The Constitution of the Republic of South Africa, 1996). Moreover, education is seen as one of the major socio-economic developments that enables the current and future population to sustain development in their country.

The Department of Social Development (1998) named education as one of the few major population issues that needs to be addressed as part of the overall socio-economic development strategy. Moreover, DoE (1998) further states that these population issues have been identified as limiting the attainment of sustainable development objectives. The South African government spends a lot of money on the education sector. However, the spending is inequitably distributed (Department of Social Development, 1998). School education is important. Even some of the minimum wage jobs seek a minimum of school education to employ a person Elis (2015). Scholars such as Elis (2015) postulate that in the current period, many people find it very difficult to find any job without some level of school education. Moreover, the DoE (1998) further states that children of school going age group are likely to be out of school if access to education is constrained by poverty or the family of the child is poor. Population group also plays a determining role in access to education. The population policy of South Africa states that African and Coloureds children are more likely to drop out of school than their white counterparts due to mitigating factors connected to historical inequities, specifically the poverty levels amongst these aforementioned population groups (DoE, 1998).

Even though South Africa invests heavily in education, the population policy has identified that the budget is inequitably distributed, where some areas get a very limited budget that is insufficient to cover all the children in schools (DoE, 1998). For example, an article by Mtshali (2013) identified that about 54% of the pupils across South Africa perennially had no text books at the end of the 1st term. In addition, in the NW province, an article by Montsho (2016) addressed the shortage of teachers, highlighting a mass resignation of teachers across various schools. The DoE therefore faces a real challenge in this respect. Montsho's article further states that the DoE is worried about new teachers (the recent education graduates) as most of them prefer working in urban based schools than in the rural areas. The geographical preferences of these new teachers essentially means that the distribution is skewed in favour of the urban schools to the peril of those situated in rural spaces. The fact that there is a shortage of text books and teachers in rural schools has a direct impact on the performance of children in rural schools. The direct consequence is lowered academic performance that gradually culminates in such children dropping out (Smith, 2003; Rumberger and Thomas 2000).

According to UNESCO (2016), dropouts are defined as those children of official school-going age who are not enrolled in school. Masitsa (2006) defines dropouts as children who leave school or higher education institutions without completing their academic programs. The highest dropout rates mostly occur among students of school going age population 14-18, specifically those in Grade 8-12.

School dropout is apparently influenced by demographic and socio-economic factors such as age, sex, place of residence, structure of a household, education system and others (Anicet, 2015). In addition, Mhele and Ayiga's (2013) findings in their study indicated that children of more educated parents are most likely to progress in education. On the contrary, the same study established that children who are most likely to dropout are those whose parents are less educated. According to Coetzee *et.al* (2002), learners from poor family backgrounds tend to drop out of school and become involved in committing crimes and taking drugs, especially the male population.

The consequences of dropping out of school are manifest in a wide range of negative outcomes which substantially limit a person's career opportunities and lower their future earning potential (Kim *et.al*, 2011). Learners who drop out of school normally earn less than those who have finished their study programmes. In addition, not finishing school does not only impact a student's future income, but studies by Anicet (2015) show that dropouts are more likely to participate in criminal activities, especially the male population. These spikes the level of crime and also puts some of the learners who are still in school and communities at risk of being victims.

Higher rates of school dropout are mostly found in the schools among the population aged 14-18. Furthermore, Coetzee *et.al* (2002) noted that peer pressure among teenagers (school age group) is higher compared to other age groups. In addition, scholars such as Mugisha (2006) have noted that children from

urban areas have higher opportunities of attending school than those residing in rural areas because of the differential service delivery in the geographical and spatial locations (urban and rural residence).

In South Africa, the expected age of a child who is enrolled in a school (grade 8-12) ranges from 14 to 18 years. This study explores the determinants of school dropout among the population aged 14-18 in the NW Province. In addition, this study identifies and highlights the possible reasons why learners drop out of school in the NW Province.

1.2 Problem statement

The dropout rate at public schools has been increasing with no sign of declining (Masitsa, 2006). School dropout is a common predicament in the world, and it seems to become more difficult as globalization increases. Masitsa (2006) and Sibanda (2004) outlined some of the problems that are commonly associated with school dropout. These problems are linked to chronically high unemployment levels, poverty increase, low earnings, higher risks of mortality and poor health outcomes. In addition, dropouts in the communities are likely to add to the number of people who are poor, which implies that the government has to continuously invest more in poverty reduction (RDP/GEAR) than investing in the infrastructural development of communities for sustained socio-economic development (Masitsa, 2006).

Using the cohort method, the Department of Basic Education estimated that in 2014, a total of 1 100 877 learners were enrolled for Grade 10, but only an estimated 610 178 students were in grade 12 in 2016 (Business-tech, January 2017). With South Africa having a national 44,6% dropout rate, the NW Province is above the average with a total 52,7%. This places the NW province as the second highest province after Northern Cape for dropout rate in South Africa (Business-Tech, 2017).

Like the rest of the country, dropout rates in the NW province vary by age. The older the child, the higher the probability of dropping out of school. Moreover, the General Household Survey (2015) shows that the age group with the highest dropping-out rate is 18 years, with 29.03%, and the lowest is age 14, with 2.37% dropout rate. With these statistics, it shows that the NW province may be facing bigger problems with the school dropouts. These will also lead to increasing crime rates, unemployment and other outcomes of not having education.

1.3 Rationale of the study

Understanding the reasons why students drop out of school is the key to appreciating the host of educational problems that assail the system. According to Rumberger (2011), there are push and pull factors that bear a direct impact on the school enrolment of a child. In most cases, the push factors are caused by the school system. Furthermore, push factors may be classified as lack of motivation from family and the society, repeated failure and poor performance that lead to learners dropping out of school. On the other hand, the pull factors exist outside the school system such as negative attitudes together with negative peer-pressure

towards education and school. The pull factors range from the family's economic status, family conflicts to bad peer pressure that may also lead to a child pulling out of the school system as a consequence of such factors.

The General Household Survey in 2015 highlighted some of the most significant reasons why students drop out of school. The table was derived from the GHS of 2015 and used the specified ages (14-18 years) and the area (NW) of this study for more specific use. One could argue that the South African government provides enough money to schools for free education, therefore, money cannot be a factor in the patterns and trends in school dropout. However, astonishing results from GHS 2015 show that 25.88% of the sample (NW Province, Age 14-18) in the survey were not attending school at the time of the enumeration because of lack of money. Moreover, 12.94% of the sample were not attending school because of poor academic performance (failure) and another 12.94% indicated that education was useless at the time of the enumeration. The lowest reason was physical disability, with just below 4%, followed by that the lowest number of respondents indicating that they were not accepted in any school.

1.4 Research Questions

Given the prevalence of absenteeism and the high dropout rate in South African schools, this challenge provided an interesting subject for investigation and analysis. In line with the aims and objectives of this study, the research questions addressed are:

- Is there a difference in the level of school dropout rates between people in different school grades?
- Does the individual factors such as the age and sex contribute to school dropout of a child?
- Is the dropout rates similar between the different geographical places of residence in North-West?
- Do the individual from the different types of household structure differ with regard to school dropout rates?
- How does the religious affiliation affect school dropout of a child?

1.5 Objectives

The main objective of this study is to identify and explore the socio-economic factors that contribute to school dropout rates in the North West province.

The specific objectives are set to:

- Establish if the level of school dropout rates differs between individuals enrolled in different school grades between 2012 and 2016.
- Assess whether individual level factors such as age and sex of a child are significantly associated with school dropout rates in North West Province.
- Examine if school dropout rates will differ between the different geographical place of residence .

- Determine if school dropout rates differ by different household structure of the household the individual is coming from.
- Compare the level of school dropout among people affiliated to different religions.

1.6 Hypotheses

This study aims to test the following hypotheses:

- School dropout rates is likely to be higher among those who were enrolled for higher school grades in the period between 2012 and 2016.
- The chances of a child dropping out of school increases as the age of a child increases
- Pupils in rural areas have higher chance of dropping out from school than pupils in urban areas.
- Individuals who come from single-headed households are more likely to drop out from school than those where both parents are present.
- A child who is raised by a single parent has a lower chance of attending school than a child who is raised by both parents
- Individuals who are affiliated to Christian religion are less likely to drop from school compared to those who are affiliated to other non-Christian religion.

1.7 Theoretical Framework

Over the past years, much has been written on school dropout in attempting to identify the possible ways that the government could use to reduce school dropout rates. A few theoretical perspectives have emerged to explain school dropout and its determinants. Among the theories, this study uses the Theory of Social Capital. The study uses this theory because of its ability to relate the interaction between different socio-economic factors and school dropout patterns. In addition, a study by Gewirtz *et.al* (2005) shows that there is a causal relationship between the families (household of a child) and the communities (surroundings of a child), the child's achievement at school and future economic prospects. In addition, the social capital theory provides a conceptual framework that shows the interaction between individual, household and community factors in explaining education and school dropout patterns (Furstenberg and Hughes, 1995).

1.7.1 Social Capital Theory

In recent years, social capital theory was mostly used as a sociological theory. Nowadays, the concept of social capital has been applied across disciplines to explain significant connections (Portes, 1998). In addition, Porstes (1998) further stats that the Social Capital Theory is derived from the theory of Human Capital which was initially developed by Loury (1980) to explain the variations in economic productivity

that could not be accounted for by technological developments and financial capital fluctuations. Shortly after the theory was developed, Pierre Bourdieu (1985) provided a systematic contemporary analysis of the social capital theory, which he defined as “the aggregate of the actual resources which are linked to the possession of durable networks of more or less institutionalized relationships of mutual acquaintance” (Portes, 1998).

Portes (1998) further states that a few years after the introduction of the concept, authors such as Glen Loury and James Coleman refined the same concept. The two authors looked at the concepts in an economic perspective. This study deploys the Social Capital theory of Coleman (1988), which was defined as a resource because it involves the expectation of mutuality and goes beyond any given individual to involve wider networks whose relationships are governed by a high degree of trust and shared values (Liou and Chang; 2008).

Social Capital Theory is apparently the most relevant to explain the relationship between school dropout and different social and economic factors within the social fabric. The theory was initially developed to explain the level of production in the economy that could not be explained by technological development. Coleman (1988) defines social capital as social networks and interaction among individuals in the community that facilitates educational attainment among individuals in a specific community. In this study, social capital is tackled from the individual, household and community level factors that are associated with schooling outcomes.

1.7.2 Individual factors

At the individual level, social capital is defined as resources that accrue to an individual, from social networks, due to individual attributes. Individual attributes such as one’s age and sex, for example, have different levels of social capital from the different social structures and such individuals are therefore more likely to differ in the probability of dropping out from school. Social capital is likely to differ with individual factors such as age and sex. For example, studies have shown that the level of parental support differs between males and females, and it might also differ as the age of the child increases (decreasing her or his dependence on parents and other members of the family and relying more on his or her peers).

Many studies suggest that individuals who have passed the typical age of a particular grade are more likely to leave school earlier than those who at an age that is consistent with the grade they are enrolled in (Mhele & Ayiga, 2013; Grant & Hallman, 2006). This might be the case because those whose ages are above the relevant age for that grade are stigmatized as unintelligent failures. As a result, they are less likely to get the much needed support from teachers and other learners with whom they are studying. Notably, older

students are more likely to be “pulled away” from school by other competing events such as work, marriage or pregnancy in case of girls.

Although there has been an increase in the number of girls in schools, some studies suggest females may still not be receiving the necessary social support due to the belief that providing such a facility yield singular benefits only to the family that she is married to, and not the one that raised her (Nalwanda et al., 2010). As such, girls are less likely to get strong social support, especially from the family, in their endeavor to get education, and are therefore more likely to drop out of school.

1.7.3 Household level factors

Different studies have found that family background plays a determining role in influencing schooling outcomes (Kaufman, 2000; Crowder and Teachman, 2004). Family background is one of the factors identified by Coleman (1988) as critical in the formation and accrual of social capital. The effects of family background come in three forms which are financial capital, human capital, and social capital. Financial capital represents the amount of material resources in the family that could be deployed in the advancement of education for children in a family. As such, the theory argues that children from well-to-do families have a better advantage of schooling compared to those who come from poor families. Human capital, on the other hand, depends on the level of education attained by parents; but most importantly, it is influenced by the physical presence of the both parents, their knowledge and the extent to which they (parents) interact with their children on educational matters. However, “structural deficiency” occurs when one or both parents are not physically available within the family because children are unable to access the social capital even if the parents were in position to do so. Furthermore, the number of siblings in the household influences the level of social capital. An increased number of children in the household dilutes and scuppers the concentration of capital as children have to compete for the attention of the parents to the detriment of their education.

1.7.4 Community level factors

The social capital can also be found in community institutions outside the family such as church and other community structures, including the place of residence. The assumption here is that the level of social capital is likely to differ according these structures.

Different studies conducted in Nigeria and another one in UK and USA found that that people who are affiliated to Christian churches are less likely to drop out of school than those affiliated to Muslim religion (Kazeem et al., 2010; Byfield, 2008). Byfield found that this happens when the church has a strong pro-education culture which encourages young people to focus on education from a young age and also to

impart in them behaviours which are consistent with schooling such as staying away from drugs and other substances that might have a negative impact on their schooling.

Schooling outcomes can also be influenced by the place of residence due to different factors including the aspirations or expectations that become manifest as a result of different levels of social capital in the place. Problems that are positively associated with school dropout such as low motivation and dodging classes are often more prevalent in one area than the other and thus leading to differentials in school dropout between the spatial locations.

1.7.5 The Social Capital Theory and Education

The theory of social capital that was developed by Coleman has a significant influence on education. For example, Coleman's studies looked at the performance and the rates of school dropout among black children in American schools by investigating different socio-economic factors that influence education, or school dropout, of a child (Liou and Chang; 2008). Moreover, Liou and Chang (2008) also highlight the relationship between education of a child and race and gender, and lastly stated that the parent's status has a significant influence on school attendance of a child. This shows the relevance of this theory in this current study, because the Theory of Social Capital is able to conceptualize the relationship between school attendance of a child and various socio-economic factors such as age, sex, race, structure of a household and others (Liou and Chang, 2008). Scholars such as Mhele and Ayiga (2013) used the theory of Social Capital in education. They postulated that in education, social capital can take the interactions between the child and school, child and parent, school and parent, and child and child. According to Coleman (1988), social capital also includes values and norms in which compliance with expected and accepted values is rewarded while non-compliance is disapproved. Young mothers are more likely to drop out of school than female students who have never had children or ever been pregnant

Chapter 2: Literature Review

2.1 Introduction

According to the Constitution of the Republic of South Africa, Section 3(1) and Section 29(1), “basic education is compulsory for all persons to attend school from the first day of the year in which a child reaches the age of 7 until the last day of the year which they reach the age of 18 or the end of grade 12 in obtaining their basic education.”

School dropout has been a problem in the country as well as the provinces for many years (Pallister: 1969; Taylor *et.al*, 2008). Furthermore, there are many reasons that are given for the increasing rate of school dropout but the most common one is parent’s low opinion of what education may offer to their children (Taylor *et.al*, 2008). Recently in South Africa, a high rate of graduate unemployment has become one of the major problems faced by the government and this could contribute additional reasons on why parents do not see the necessity of education. The belief is that a higher education immediately leads to a secure job prospect. When such a belief becomes questioned by the high unemployment rate amongst graduates, then the entire trust collapses and people are likely to get sceptical. Therefore the belief that education improves the life of a human being by offering better employment opportunities is set for re-evaluation and re-orientation.

School dropout is a continuously growing predicament among teachers, parents, members of the educational system and pupils themselves as well as the society at large (Gaetano, 1968). These problems can be viewed in many different ways which may cause contradictions among people involved in the education systems and the society. Furthermore, socio-economic and the demographic factors that commonly affect school attendance in South Africa is therefore briefly discussed. Scholars such as Bush, (2005); Reid, (1999); and Taylor *et. al*, (2008) have found the factors which may lead to pupils dropping out of school are place of residence, family structure and its influence, age, sex and gender composition, teenage pregnancy, education, health and discipline.

Using the National Income Dynamics Study (NIDS) data for 2008, Branson and colleagues (2013) showed in their study that dropout rates were higher among the Grade 10 and Grade 11 students compared to other school grades. On the other hand, Lam and colleagues (2011) showed that the male population of students is more likely to drop out of school than the female component. With the current development in the work fields, education has a critical importance as a primary factor in allowing every person entry (Wilson and Tanner-Scanner, 2013). However, dropping out of school before completing the school undermines the opportunities of getting in the labour force, and is associated with adverse personal and social consequences (Wilson and Tanner-Scanner, 2013).

One unchanging factor contributing to the dropout rate is the socio-economic background. Since the National Centre for Education Statistics first started tracking different groups of high school students in the late

1960s, the socio-economic status of each pupil has impacted the graduation rate (Anicet, 2015). Moreover, Anicet (2015) further explains that students from low-income families are 2.4 times more likely to drop out than middle-income children, and over 10 times more likely than high-income peers to drop out. Moreover, household income is not the only disadvantage many dropouts have, though. Students with learning or physical disabilities drop out at a rate of 36 percent (Anicet, 2015). Some behaviours that are often characteristic in dropouts include being retained from advancing a grade level with peers, relocating during the high school years and the general feeling of being left out or alienated by peers or adults at the school.

Since corporal-punishment has been abolished in South African schools, suspension is one of the most widely used disciplinary practices in schools (Lee *et al.* 2011). In addition, Lee and colleagues postulated that black students are more likely to be suspended than white students. They further said that school suspensions are consistently associated with negative academic outcomes, for individual students, including the greater risk of dropping out of school.

2.2 School Dropout by Place of Residence

Different studies have indicated that school dropout rates tend to differ by place of residence whereby learners in rural areas have higher dropout rates than the ones in the urban areas (Galloway, 1985; Kim *et al.*, 2011). School dropout rates often differ between geographical areas. Richie (1995) found out that many school-going children may choose to drop out of school because they find it difficult to keep pace with the regularly changing systems of basic education. Richie also interviewed some of the pupils from urban areas where there are middle class people, who submitted that they see no necessity for basic education because it does not help them in their future careers, looking at the increasing rate of unemployment amongst graduate students in South Africa. This exterminates all hope that children might have when they perceive the myth of higher education with ever-increasing scepticism in South Africa as a whole.

Rumberger and Thomas's (2000) study has shown that the variation in school dropout and turnover rate could be attributed to differences in the background characteristics of students. In addition, the authors further established that the characteristics of the school (depending on the area where the school is) may also influence dropout rates. In most cases, schools in rural areas have limited resources, and a school may have limited classrooms and teachers with a large number of learners. The absence of creative, spacious learning spaces and the high teacher-learner ratios all militate against meaningful educational experiences. An article by Chen (2015) listed some major challenges currently facing most rural public schools. Among those stated by Chen, some of the challenges are as follows:

- i. **Classroom size** - the DoE in South Africa determined the teacher-learner ratio to be 30 learners to 1 teacher (DoE, 2009). However, many schools in rural areas face these challenges where

more than 65 children are in one classroom. Moreover, Chen (2015) reported that most teachers agree that they cannot effectively teach every student in a classroom, if the class size exceeds 30 students. This leads to a significant drop in the performance of most students and ultimately forcing students to drop out of school. According to Smith (2003) and Rumberger and Thomas (2000), failing a class (which affects learner-confidence) has an impact on school dropout of a child.

- ii. **Poverty**- students who are living at or below the poverty datum line tend to have the highest dropout rates (Chen, 2015). Moreover, Chen also states that students who donot get enough food or sleep are less likely to perform at their full academic potential. North West province has many rural areas, where most people are living at or below the poverty level. Therefore, poverty may also be a factor that increases the level of dropout in the province.

2.3 Family Structure and its Influence

Different kinds of families such as single-parent, two-parents, or foster-parent families encounter different kinds of problems that prevent them from sending their children to school. Harte (1994) argues that the relationship within a family is important and has a significant effect on school dropout of a child in a more positive way. For example, children coming from a family where the head of the household is an alcohol or drug abuser, or a case where a father abuses the mother or vice-versa, or a family with low and unstable income are more likely to drop out of school. If a family is not supportive to a child and their school work, chances are higher that such a child may drop out. Historically, the parents of absentees have been observed to be less accepting and less consistent or defective in their discipline (Hersov, 1960). A study by Riche (1995:6) reveals that in most cases, “children who tend to drop out, not attend school or never attended school are those with no parents and are therefore fostered.”

In addition, Zimmerman (2003) found that children who stay in foster-care are more likely to drop out of school than those children who stay with their biological parents. On the other hand, Anderson (2005) found that South African children living with their biological parents have more money invested in them and have better schooling outcomes than the ones living with foster parents. Children of more educated parents are most likely to progress in education, and on the contrary, children who are most likely to dropout are the ones whose parents are less educated (Mhele and Ayiga’s, 2013). Additionally, studies by Sibanda (2004) found that children living with foster parents or relatives are more likely to drop out of school than those staying with biological parents. According to Chen (2015), family factors also play a very important role in a teacher’s ability to teach students. In addition to that, Chen’s study demonstrated that principals and teachers agree that what is going on at home has a significant impact a student’s propensity to learn.

A study by Sibanda (2004) postulated that divorce, single parents, poverty, violence within the household and many other issues are all challenges a student brings to school every day. Chen's (2015) article articulates that while some teachers and administrators try to work with children in less than ideal family environments, they can only do so much, especially when parents are often not willing to partner with schools in materially providing for the children. Moreover, when a family is not willing to help the school in instilling acceptable norms and values amongst their children, the performance of a child is negatively affected, which ultimately causes a child to fail, resulting in such a child dropping out of school (Rumberger & Thomas 2000; Smith 2003 and Chen 2015). For example, divorced single parents, poverty, violence and many other household issues are all challenges a student brings to school on a daily basis (Chen, 2015 and Sibanda 2004).

Another factor that may be considered is that of a family that follows traditional ways, where they believe that girls do not have to go to school or get basic education but must wait for a man to marry them. Some cultures believe that the wealth of a family will flow to the next generation without the help of education or attending schools.

2.4 Age, Sex and Gender Composition

Age (depending on which grade a person is enrolled in) and sex of the learner are also significant factors affecting school attendance (Fleish *et al*, 2007). For example, Hunt (2008) suggests that in some societies the main leadership roles in public life are taken by men, which could potentially restrict the aspirations of girls; marriage of girls happens at a younger age than boys, limiting the likelihood of continued schooling; and labour market practices can influence male and female dropout differently. Hunt (2008) also indicates that many households prefer to educate boys over girls, with girls' education often deemed less important and dropout consequently more likely. On the other hand, Lam and colleagues (2011) postulated that the male population is more likely to drop out of school than the female population.

Scholars such as Collins *et al*, (2000) suggested some ideas on the differences between the educational priorities between males and females:

Boys on the one hand have displayed poorer performance. Those boys who are in the middle and lower range across the board are disadvantaged in terms of their capacity to take on a full range of subjects, higher education and career choices. This may also mean that they miss out on the development of skills and knowledge which would enrich their post-school experiences. They also have reduced capacity for continuous learning and maintaining employment through their lives.

The early departure from school of some boys may mean they are less employable than boys who stay longer at school. However, on average it does not necessarily mean they are less employable than the girls who stay on longer at school. In particular, boys who leave early are better able to access full-time work

and further training on leaving school than are girls who leave early, due to the wider range of employment options available to boys in the lower skill occupations.

The fact that girls in general have a higher order of literacy skills does not give them better labour market outcomes than boys. This is possibly due to the segmented nature of the labour market in South Africa.

Scholars such as Smith (2003) and Lam *et.al* (2011) postulate that age has a significant impact on school attendance of a child. Lam and colleagues study show that the older a child remains in school, the more the probability of dropping out of school. In addition, scholars such as Govender (2016) show that many pupils dropped out of school after having failed a few years. This may be because the failing students lose most of their confidence in school as they are growing up, and they contemplate that are not going anywhere with their school work, but failing. In addition, when a child fails at grade nine, it is almost a certain route to leaving the system before matric (Govender. 2016)

2.5 Religion and School Dropout

There are different perceptions on how religious participation affects school attendance of a child. It has been argued that religious affiliation has an important impact on school attendance of a child. According to Peterson (1992), religious institutions indirectly make an investment in children and other congregants like schools, families and communities. Moreover, religion can also facilitate the accumulation of human capital skills that promote school readiness (Gardner, 2004). Furthermore, Gardner (2004) also contended that association with others through a religious organization often facilitates contacts and networking with individuals of similar or different socio-economic status, depending on the characteristics of the congregation. A study conducted by Smith (2003) shows that most adolescents who attend different religious formations benefit from building relationships with adults, and participating in an organization on a similar basis as adults. The interaction of school-going children and adults in churches may benefit where adults motivate the children on the importance of education. Furthermore, studies by Gardner (2004) have identified that school going children who are active in church are thought to have an edge over other students because they are able to build confidence and effectively work with others. In addition, Smith's (2003) studies show that churches (just like communities, families and schools) are able to enhance the confidence of a person in many ways.

2.6 Ever Given Birth

Most girls who become mothers before completing high school consider education to be very important, but they may not be able to succeed academically if the support they need to complete their studies is insufficient (Chigona and Chetty, 2008). "As in many developing countries, teenage pregnancy is one of the major impediments to the educational success of girls in sub-Saharan Africa" (Swainson *et al*, 1998: 11). In South Africa, studies have shown that by the age of 18, more than 30% of teenage girls have given birth at least once (Mahy and Gupta, 2002). And a study by Mokgalabone (1999) maintains that pregnancy and becoming school-aged parents is one of the most serious causes of school disruption, where most pupils start with their adolescent stages at the levels. Grant and Hallman (2006) suggested that, in most cases, the birth of a baby may lead to teenage mothers dropping out of school because of their personal pride and the associated chores of taking care of the baby.

However, studies by Kaufman *et al*, (2001) have revealed that some teenage mothers can go back to school to complete their studies but these would have more challenges to face than when she was with her age group. "Most factors depend on the girls' ability to manage social and academic challenges and finances associated with mothering and schooling simultaneously" (Kaufman *et al*, 2001: 5), and some factors may lie in the ability of the girl's family to support the teenaged mother with their educational background and financial constraints.

Furthermore, the DoE has estimated a large number of learners who became pregnant in 2007 to be around 49 636, excluding the ones who obtained an illegal abortion (DoE, 2010). In addition, KwaZulu-Natal has the highest proportion of pregnant pupils, which can be counted as 14 246 (almost 29%) of the total female pupils (DoE, 2010). Looking at the past statistics on teenage pregnancy, the rate of teenage pregnancy was lower than the current and recent years; this may be blamed on the current education systems whereby children are taught about sexual intercourse at an early age as compared to past years. Indeed, there are exceptional cases where a child is raped. However, Morrell *et al*, (2012) suggests that it may be that in most cases, the girls who fall pregnant at high schools are often impregnated by working men. This situation is common in girls with a poor family background or a family with unstable socio-economic conditions from whence such girl children seek economic means to sustain themselves at the risk of getting pregnant.

2.7 Education System and Health

The South African government has invested a lot of money and infrastructure in education throughout the years since democracy. In addition, prior to 1994, the South Africa education system was characterised by inequality of provision, resourcing, access and quality. Since the democratic elections, redressing the legacy of fiscal inequalities, infrastructure backlogs and unequal outcomes in education has been a priority for the

government (Taylor *et al.* 2008). In South Africa, everyone has the right to basic education, and the right to further their education (the Constitution of The Republic of South Africa 1996), and as the SDGs, one of the eight goals was to achieve universal primary education by 2015 (Todaro and Smith. 2011). Furthermore, the statistics of the DoE show that school attendance has been increasing since 1994.

Most authors like Pridmore (2007) launched studies which looked at the health of children, but there have only been a few which directly tackled issues connected with health and dropping out of school. In fact, Pridmore (2007:18) further suggests that the long-term effects of health status of younger children and their implications for school enrolment, drop out and achievement are 'less well understood.' Furthermore, Hunt (2008) believes that health problems are often linked to other factors and in particular, poverty, which is mostly found in rural areas because of limited access to healthcare centres. The other factor that may be considered is that health issues, such as under-nutrition, is related to late enrolment which, in turn, is often associated with high dropout (Hunt. 2008). Furthermore, Glewwe and Jacoby (1995) investigated how the health of a child affects the age at which children first enrolled in school, and their findings were that parents and guardians do not think their children are ready for schooling at the age that was proposed by the DoE.

Chapter 3: Research Methodology

3.1 Introduction

The previous chapter focused on review of relevant literature regarding school dropout and its determinants. This chapter presents the methodology used in the study which includes the study design, sample of the study and the methods of analysis.

The study adopted a triangulation where three datasets were used for the analysis. Moreover, triangulation allows the study to gain a broader insight into the rates of school dropout in the nation and in the NW Province in particular. According to Ziyane *et.al* (2001) triangulation involves the collection of data from multiple data sources with the intent of obtaining diverse views of the studied phenomenon with the purpose of enhancing validity of the study.

This study used the Community Surveys (CS) 2016 obtained from Statistics South Africa's website, and the Enrolment Rates (ER) and Dropout Rates (DR) from 2012-2016 that were obtained on request from the Department of Education (DoE) North West (NW) Province.

Moreover, the CS is used in the study as the main data, which was subsequently used to establish the univariate, the bivariate and the multivariate levels of analyses. The ER and the DR data sets were used to illustrate the trends in dropout rates by the selected grades between 2012 and 2016.

3.2 Data sources

3.2.1 Community Survey 2016

This study used the data obtained from the 2016 CS which is found on the StatSA website. The CS is conducted every 10 years, normally 5 years after census in the periods between the population censuses. CS 2016 is based on a single-stage sample design whereby all eligible Census 2011 Enumeration Areas (EAs) were included in the initial frame and a selection of dwelling units within the eligible EAs was taken based on the sample design. One or more segments were selected based on the required EA sample size. The dwelling units were then sampled from the selected segments(s) using the systematic sampling technique, and this resulted in a two-stage design for the EAs in the informal settlements (CS 2016)

North West is one of the nine provinces in South Africa, with a total population of 3 748 436. Moreover, the total sample taken in the CS 2016 was 247 946. In addition, the CS data set was filtered for the purpose of this study which led to the study using a total sample of 22 160 of the school going age groups in the North West Province

The survey was specifically designed to measure multiple aspects of living conditions of the South African households, as well as the quality of service delivery in a number of key service sectors. The CS therefore covers six broad areas, namely: Education, Health and Social development, Housing, Household access to service and Facilities, Food and Agriculture. However, this study only examined one specific area, which is Education.

3.2.2 Enrolment Rate and Dropout Rate

The study also adopted the ER and the DR data to enhance the validity and reliability of the findings of the study. The ER and the DR data is available on request from the DoE. The ER and the DR are collected every year by every school in the NW province and then handed over to the DoE. Moreover, the DoE combines the data to provide a mega-data that provides a clear view about the processes that are happening in school around the province. Every year, each school has a register, which records all the learners in the school, and all the events such as Enrolment rates, Dropout rates, Pass rates and more. The data is used for statistical purposes, and it is additionally submitted to the DoE for further statistical purposes.

Furthermore, this study focuses on a 5-year period (from 2012-2016) for data (ER and DR) collected by the DoE. This enabled the study to derive and project the trends of dropout of the past 5 years in the province. Between 2012 and 2016, the NW province enrolled a total of 1 308 183 learners in schools. Furthermore, 262 212 of these learners enrolled in schools in 2012, and 245 133, 262 944, 269 952 and 267 942 enrolled in schools in 2013, 2014, 2015 and 2016 respectively.

3.3 Study Design

The study is a quantitative approach which focuses on a cross-sectional type of research which collected material from 2016 CS, the ER and the DR. Quantitative research has been proven capable and effective in collecting measurable data necessary for developing quantitative indicators (Melville, 2001).

3.4 Sampling

3.4.1 Community Survey 2016

The sample design for Community Survey 2016 was a stratified single stage sample design. At the enumeration area level, all in-scope areas were included in the sample and a sample of dwelling units was taken within each enumeration area. The enumeration area frame was based on Census 2011 information. The updated dwelling unit frame was constructed by the Geography team using the geo-referenced spatial system (StatsSA 2016). The last CS was conducted in 2016. Stats SA visited approximately 1.3 million households across the country (Stats SA, 2016).

This study uses data which was conducted by the CS 2016. However, the available data was filtered in this study for analysis. As such, the geographical area used in the study is the NW province and the population taken for the study was aged 14-18 for the analysis.

3.4.2 Enrolment rate and Dropout rate

The Enrolment Rates and the Dropout Rates are data collected every year by different schools in the form of a yearly school register. The schools therefore provide the information to the DoE, from which the DoE creates a mega-data base that provides information about all the schools within the province. For the purpose of the study, data was filtered to schools at the Grade 8-12 levels.

3.5 Methods of analysis

Firstly, the analysis used Enrolment and Dropout data sets to calculate the percentage of those who dropped out from school using the total number of individuals who have enrolled in different school grades between 2012 and 2016.

Furthermore, the chi-square statistic was used at the bivariate level to determine whether school dropout was significantly associated with different socio-economic factors. At a multivariate level, binary logistic regression was used to establish the odds of dropping from school, given that other variables were held constant.

3.6 Variable description

Dependent variable

The dependent variable in this study is school dropout of a child. To measure this variable, the participants whose ages were within school-going ages were asked if they were currently enrolled in an educational institution. The response was coded 1 if the respondent answered “yes” and 0 as “No”.

Independent variables

Age - in the CS (2016), the respondents were asked the age in completed years, where the expected answer is the age of the respondent. Age is a continuous variable where the ages 14, 15, 16, 17 and 18 participated in the study.

Gender - the participants were asked if male or female.

Population group - the participants were asked how they would describe themselves in terms of population group. Moreover, the expected response was the African, White, Coloured and Asian/Indian. For the purpose of these study, the Asian/Indian group was merged with the Coloured because of very low number of participants.

Religious Belief - respondents were asked which religious group they were affiliated to. The study used Christian; Traditional, Non-believer and Other (Islam, Hinduism, Buddhism, Judaism etc). For the research purpose, “others” was created because of the low number of people who were affiliated in the religion included in the “others” religious belief category.

Geographical Type - the study merged the ‘tribal/traditional areas’ and the ‘farm areas’ which were from the initial data set to create the category rural area. The study therefore constructed two categories with the urban and the rural areas for ultimate analysis.

Districts - the 4 different districts in the NW province namely, Bojanala, Ngaka-Modiri Molema, Dr Ruth-Segomotsi and Dr Kenneth Kaunda district municipalities.

Structure of a household

Father/mother part of household: Participants were asked if their fathers/mothers were part of household. To measure this variable, the respondents were asked if either of their parents (mother/father) were part of household. The response was coded 1 if the respondent answered “yes” and 0 for “no” and otherwise.

Father/Mother alive: Participants were asked if their fathers/mothers were still alive. To measure this variable, the respondents were asked if either of their parents (mother/father) were still alive. The response was coded 1 if the respondent answered “yes”, 0 for “no” and for “unspecified”. The children who did not specify are among the children who may have been staying with older persons who are not their biological parent, and not knowing their parents. This may be due to a single parent who does not have any form of contact with the father/mother of the child such as a case of rape. Moreover, this study classified these children as fostered children. Even if these children do not live with their parents, there are some people within the family such as the grandmother/uncles and others taking care of such children.

3.7 Limitations of the study

Among the listed socio-economic factors that affect school dropout, literature has identified other factors that are not included in this study. For example, Li and colleagues (2013) confirmed that the level of education of a mother is inversely proportional to school dropout of a child. In addition, migration by

parents has an impact on the dropping out of a child. For example, Lee and Park (2010) established that migration reduces the enrolment of a child.

There are limitations that were identified in this study. The most obvious limitation found in the study is the data sets used in the study. In the Community Survey, there are a few variables such as migration and income/educational attainment of parent which are not able to measure the dropout of a child. Even though this study is a triangulation study set, the data sets used in the study can be linked in some way. For example, the Community Survey is done across the country, which includes the NW province, and on the other hand, the DR and the ER were obtained from the NW DoE. The data may be linked because the sample in the CS 2016 is among the data within the DR and ER. Unlike the Health and Demographic Surveillance System, the CS and other surveys use difference sampling every time when the project starts, which may lead to possible complications as the population is not the same population taken in the previous studies.

4. Chapter 4: Findings

4.1 Introduction

Chapter 4 presents the results showing the distribution of variables in the study followed by the analysis of trends in school dropout between 2012 and 2016. The next section used chi-square to determine whether school dropout rate significantly differed between different socioeconomic variables and in the last section, multivariate analysis was used to determine factors significantly associated with school dropout after controlling for the effect of other socio-economic factors.

4.2 Distribution of variables in the study

Table 4.2.1 shows the frequency of the population distribution of the 22 160 participants from the Community Survey. The results indicated that 12.7% of these participants were not enrolled in school at the time of the enumeration. The age distribution was ranged from the lowest of 18.9% in age 17 to 21.1% among the youngest. Nearly 7% of the girls had ever given birth at the time of the enumeration. Furthermore, sex distribution showed male participants contributing 50.2% of the total study population. The results suggest that the province was mostly populated by Blacks where a total of 95.8% of the participants were Africans/Blacks. In addition, 93.1% of the participants were Christians and the least number (0.8%) belonged to Traditional religion. There were more participants from rural areas contributing 57.7% of the study participants. Bojanala district recorded a total of 37.5% of the participants whereas Ngaka Modiri Molema, Dr. Ruth S Mompoti and Dr. Kenneth Kaunda recorded 28%, 16.7% and 17.8% respectively. In the household structure, a significant majority (70.8%) indicated that the father was not present in the household but only 38% of the cases reported that the mother was not present. Moreover, 72.0% of the participants and 83.9% of the participants indicated respectively that father and mother were alive. However, 10.6% of the participants did not know if their fathers were alive, and only 0.8% of the participants did not know if their mothers were alive or not.

Table 4.2.1: Distribution of Variables in the study

Variables	Frequency	Percentage%
<u>School Attendance</u>		
Yes	19348	87.3
No	2812	12.7
<u>Age</u>		
14	4485	20.2
15	4668	21.1
16	4615	20.8
17	4186	18.9
18	4206	19.0
<u>Ever gave Birth?</u>		
Yes	736	6.7

No	10289	93.3
----	-------	------

Gender

Male	11135	50.2
------	-------	------

Female	11025	49.8
--------	-------	------

Population group

African/Black	21224	95.8
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White	509	2.3
-------	-----	-----

Asian/Coloureds	427	1.9
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Religious Belief

Christian	20632	93.1
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Traditional	183	.8
-------------	-----	----

Nonbeliever	911	4.1
-------------	-----	-----

Other	434	2.0
-------	-----	-----

Geographical type

Urban	9371	42.3
-------	------	------

Rural	12789	57.7
-------	-------	------

Districts/Municipalities

Bojanala	8309	37.5
----------	------	------

N. M. M	6211	28.0
---------	------	------

Dr R.S.M	3702	16.7
----------	------	------

Dr K. K	3938	17.8
---------	------	------

STRUCTURE OF HOUSEHOLD

Father part of household

Yes	6463	29.2
-----	------	------

No	15697	70.8
----	-------	------

Mother Part of Household

Yes	13693	61.8
-----	-------	------

No	8467	38.2
----	------	------

Biological father alive

Yes	15945	72.0
-----	-------	------

No	3869	17.5
----	------	------

Unspecified	2346	10.6
-------------	------	------

Biological Mother alive

Yes	18583	83.9
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No	3395	15.3
----	------	------

Unspecified	183	.8
-------------	-----	----

TOTAL	22160	100
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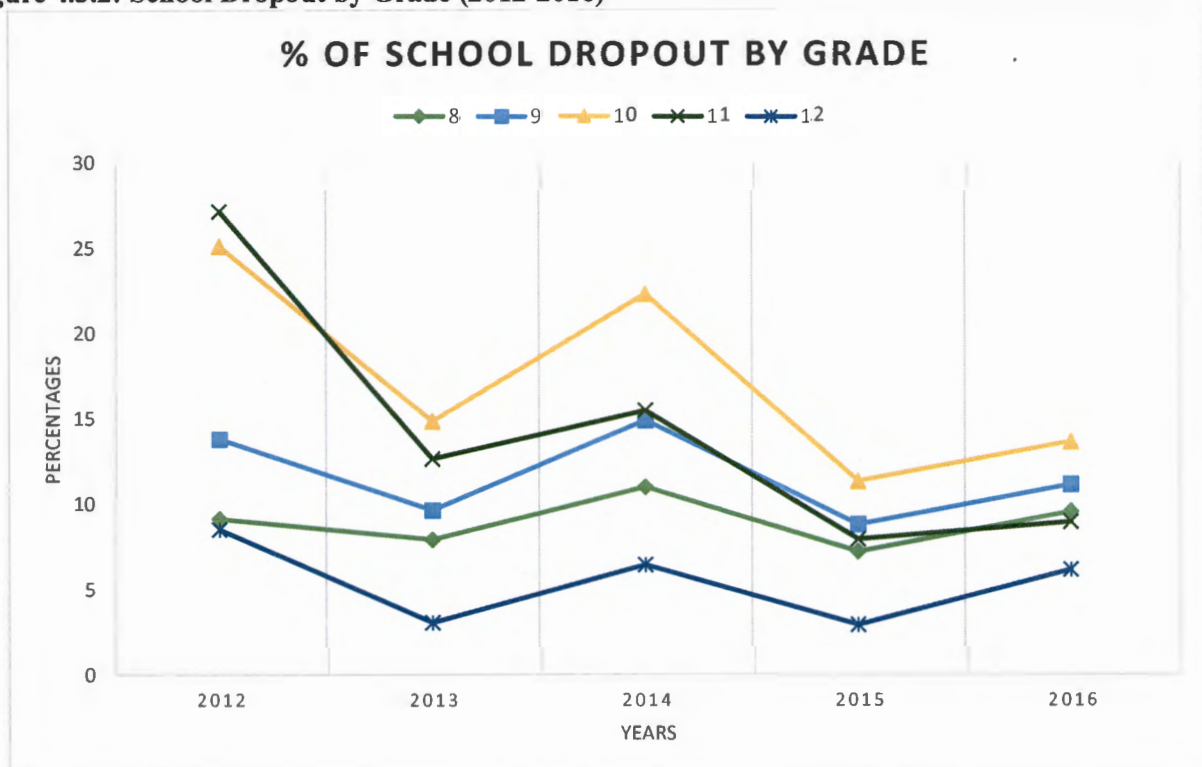
4.3 Trends in school dropout rate

Using data from Department of Education which looks at the enrolment and dropout rates (ER and DR), Figure 4.3.1 presents trends in school dropout rates in different secondary school-grades between 2012 and 2016 in the Province.

Figure 4.1 showed that, in general, school dropout rates declined in this period, albeit with fluctuations between the periods. The rate was highest in 2012 with average rate of 17.4%, but decreased in 2013 to 10.34%; increasing again in 2014 to 15.12% and in 2015 and 2016 the trend decreased to 8.18% and 10.32% respectively.

Notably, rates of school dropout were always highest among those enrolled in grades 10 and 11; lowest among those in grade 12 followed by the lower grades which are grade 8 and 9. For example, those who were enrolled in grade 10 had dropout rate of 25.12%, 15% and 22% in 2012, 2013 and 2014 respectively which later declined to 11% and 13% in the next two years. In comparison, the rates in grade 12 were 8.5%, 3.9% and 6.5% in the first three years and decreasing to 3%, 6% in 2014 and 2015 respectively.

Figure 4.3.2: School Dropout by Grade (2012-2016)



4.4 School dropout rates by different social and economic variables

Table 4.4.1 presents the percentage distribution of school dropout according different socio-economic variables. In addition, the chi-square was used to determine if the relationship between a dependent variable and each independent variable was statistically significant.

The results in the table indicated that secondary school dropout rate increased with the age of the respondents. For example, while only 3.9% of the 14-year-old dropped out of school, almost 30% of those who were 18 years had dropped out and the differences were statistically significant at $p=0.000$. Moreover, among the females who had ever given birth, 59.5% were not attending school while only 10% of those who never gave birth had dropped out and these differences were statistically significant ($p=0.000$). Furthermore, females had a slightly higher dropout rate with 13.3% of them dropping out of school compared to 12.1% for males ($p=0.010$). Within the population groups, the results showed that dropout was highest among Asians and Coloureds with dropout rate of 15% and the rate was lowest among Whites with only 10% dropping out ($p=0.000$).

School dropout rate was also significantly different among the different religious groups. It was lowest among the Christians at 12.1% followed by the Traditional belief sector at 13.1% and the non-believers and “Other” had the highest dropout rate of 20.0% and 22.6% respectively and the results were moderately significant. On the other hand, results indicated that 13% of rural dwellers were not in school compared to 12.2% of their urban counterparts. In this case, the results were moderately significant ($p=0.041$). On the other hand, dropout rates were not statistically significant between the different districts in the Province.

Looking at the household structure, the results indicated that 10.6% of the children whose fathers were part of the household and at 13.6% of the children whose fathers were not part of the household were not attending school. On the other hand, 11.1% of the children whose mothers were part of the household and 15.2% of the children whose mothers were not part of the household were not attending school and the results were significant in all the two cases ($p=0.000$).

Furthermore, school dropout rate was highest when one of the parents was not alive; 15.8% among those whose fathers were not alive and 14.8% when the mother was not alive. Furthermore, 12.2% of the children whose mothers were alive, and 14.8% of children whose mothers were not alive had dropped from school. The structure of a household is shown to be statistically significant at $p=0.000$.

Table 4.4.1: Bivariate Analysis Showing the Relationship between School Dropout and Socio-Economic Factors

Variables	School Attendance		Chi-Square test
Age	YES	NO	
14	96.1	3.9	.000
15	94.6	5.4	
16	90.8	9.2	
17	82.7	17.3	
18	70.5	29.5	
Gender			
Male	87.9	12.1	
Female	86.7	13.3	
Population group			
African/Black	87.3	12.7	.043
White	89.8	10.2	
Asians/coloureds	84.3	15.7	
Religious Belief			
Christians	87.9	12.1	.000
Traditional	86.9	13.1	
Nonbelievers	77.4	22.6	
Other	80.0	20.0	
Geographical type			
Urban	87.8	12.2	.041
Rural	86.9	13.1	
Districts/Municipalities			
Bojanala	80.6	19.4	.051
N.M.M	83.1	16.9	
Dr R.S.M	81.4	18.2	
Dr K.K	83.4	16.6	
STRUCTURE OF A HOUSEHOLD			
Father part of household			
Yes	89.4	10.6	.000
No	86.4	13.6	
Mother Part of Household			
Yes	88.9	11.1	.000
No	84.8	15.2	
Biological father alive			
Yes	88.2	11.8	.000
No	84.2	15.8	
Unspecified	86.2	13.8	
Biological Mother alive			
Yes	87.8	12.2	.000
No	85.2	14.8	
Unspecified	73.1	26.9	

P Value (0.01=*: 0.005=: 0.000=***)**

4.5 Multivariate analysis for school dropout

The following section presents the results of logistic regression showing the odds ratios of dropping out of school by different socio-economic factors. The results in Table 4.5.1 show that factors such as age, having given birth and sex of the individual and household structures were significantly associated with school dropout.

Compared to those who were 18 years, those who were 14, 15 and 16 years had the odd ratios of dropping out from school reduced by 91%, 87% and 76% respectively while those who were 17 years were 50.7% less likely to drop out. In addition, the odds ratio shows that a girl who had given birth was 47% more likely to drop out of school than when she had never given birth.

The results further indicated that males were 16.3% less likely to drop out of school than the females. Moreover, Whites and the African groups were 38.5% and 31% less likely to dropout than Coloureds and the Asians. However, in this case, the results were only moderately significant ($p=0.010$).

Among the religious groups, Christians were the only group that has been shown to be statistically significant ($p=0.000$) and they were 43.1% less likely to have dropped out of school. Moreover, the non-believers were 10.8% more likely to have dropped out of school than those of the other religious groups. Furthermore, those people that believe in the traditional religion are 28.9% less likely to drop out of school

Children who were residing in the urban areas were 2.3% less likely to drop out of school compared to those in rural areas. However, the results were not statistically significant. Although the results indicated that all the three districts had higher dropout rates when compared to Kenneth Kaunda, Ruth Mompati district was the only district that was significantly different from Kenneth Kaunda district where the odds of dropping out was 25.4% more.

When considering the effects of household structure, the results indicated that the presence of both father and mother reduced the odds of dropping of school, however, only the mother's presence was statistically different. Moreover, of those children whose fathers were alive at the time of the enumeration, 5.8% were more likely to drop out of school, and of those whose father were not alive were 25.8% more likely to drop out compared to those children that do not know if their fathers were alive or not or being fostered. In addition, both father alive, and not alive are statistically significant at $p=0.01$ (father alive) and $P=0.005$ (father not alive). On the other hand, those children whose mothers were alive were 49.2% less likely to drop out of school compared to those children who did not know whether their mothers were alive or not and is statistically significant at $p=0.000$. In addition, children whose mothers were not alive were 52.9%

less likely to drop out of school compared to those children who did not know whether their mothers were alive or not, and statistically significant at $p=0.000$.

In summary, the results indicate that increasing age of the participants, having given birth, being female, residing in Ruth Mompoti district and belonging to the Coloureds and Asian population was significantly associated with elevated odds ratio for dropping out of school.

Table 4.5.1: Multi-Variate Analysis Showing the Odds Ratios by School Dropout and Different Socio-Economic Factors

Variables	School dropout (%)			
	<u>Odds Ratios</u>	<u>SE</u>	<u>Confidence Interval (95%)</u>	
Age			Lower B	Upper B
14	0.099***	0.085	0.084	0.117
15	0.137***	0.074	0.119	0.159
16	0.242***	0.062	0.214	0.273
17	0.493***	0.054	0.444	0.548
18	®			
Gender				
Male	0.837***	0.043	0.770	0.910
Female	®			
Population group				
African/Black	0.690*	0.145	0.519	0.918
White	0.615*	0.208	0.410	0.925
Asians/Coloureds	®			
Religious Belief				
Christian	0.569***	0.130	0.441	0.734
Traditional	0.711	0.264	0.424	1.194
Nonbeliever	1.108	0.154	0.819	1.497
Other	®			
Geographical type				
Urban	0.977**	0.050	0.886	1.077
Rural	®			
Districts/Municipalities				
Bojanala	1.140	0.069	0.995	1.306
N.M.M	1.106	0.074	0.956	1.279
Dr R.S.M	1.254**	0.078	1.076	1.463
Dr K. K	®			
STRUCTURE OF A HOUSEHOLD				
Father part of household				
Yes	0.904	0.056	0.810	1.010
No	®			
Mother Part of Household				

Yes	0.805***	0.053	0.725	0.894
No	®			
Biological father alive				
Yes	1.058*	0.074	0.915	1.223
No	1.258***	0.080	1.076	1.471
Unspecified	®			
Biological Mother alive				
Yes	0.508***	0.188	0.351	0.734
No	0.471***	0.188	0.325	0.681
Unspecified	®			
TOTAL		22160		

P value= 0.000=***; 0.005 = **; 0.010 = *

5. Chapter 5: Discussion and recommendation

5.1 Introduction

Higher level of education has positive benefits for individual persons and for sustainable social and economic developments within and between different countries. However, there are many factors that impede the continued schooling of different people, especially in developing countries. The purpose of this study was to assess the levels and trends of school dropout in the North West Province, and to determine social, demographic and economic factors that are associated with school dropout. This section therefore presents the discussion on issues related to school dropout in the last chapter.

While the general school enrolment rate in South Africa is normally above 90%, the findings in this study indicated that 12% of the people in the ages 14-18 in the province were not enrolled during the time of data collection. However, the results further indicated that school dropout rate has been declining between 2012 and 2016 in the North Province even though there was indication that the dropout rate differed significantly among the different grades; highest among those enrolled in Grade 10 and 11, but lowest in grade 8, 9 and 12. A similar study in North West province also found that majority of those who drop out of school do so in grade 10 (Emekako & Ward, 2017). Similarly, a report in the Beeld newspaper (2014.01.10) indicated that most pupils had vanished from the education system between Grades 10 and 12 in the North West and Free State provinces. The reason advanced for this is that, because of the pressure put on schools to improve Grade 12 pass rates, school principals usually force the weaker learners to drop from school at these grades in order to remain with those who are likely to perform academically better in Grade 12.

Furthermore, the results indicated that dropout rates were significantly and negatively associated with age of the individuals in the study. One possible reason for this is because as the age of the individual increases, the student is likely to be faced with life demands which compete with schooling. These include among others increased risk of marriage, job-seeking to take care of the younger siblings or other members of the family, family-formation and many others.

Sex was also significantly associated with school dropout with more females than males more likely to stay away from school. Studies show that many households prefer to educate boys over girls because girls' education is often deemed less important than that of boys, hence higher dropout rate among girls (Hunt (2008). In addition, a study by Collins et al., (2000) argued that boys who leave early are better able to access full-time work and further training on leaving school than are girls who leave early due to the wider range of employment options available to boys in the lower skill occupations.

Supporting the findings of other studies conducted in the province (Emekako & Ward, 2017; Mhele & Ayiga, 2013) this study established that those who have ever given birth were more likely to drop out of school than those who have never given birth. Other scholars elsewhere such as Mokgalabone (1996); Grant and Hallman (2006) and Chigona and Chetty (2008) reached similar findings showing that teenage pregnancy affects schooling in a negative way. Current evidence suggest that some young mothers would prefer looking after their children after giving birth, and some may even lose confidence and end up not re-enrolling school (Smith, 2003).

After controlling for other socio-economic factors, the odds of dropping out were significantly higher in Ruth Mompati district. This district is one of the largest districts in the province and consists mainly of poor rural areas and with more than 30% of the population under the age of 15. In contrast, Kenneth Kaunda district which is made up of more urban areas had the lowest rate of dropping from school. One can conclude that the difference in the level of socio-economic development in these districts was an important in explaining the differences in school dropout rate.

The findings in the study support the Social Capital theory which postulates that household structure could exert a direct impact on school enrolment of the children in those households. The study showed that when a mother is part of the household school dropout decreased significantly compared to when the mother is not present. However, the presence of the father did not affect schooling in a significant way. Furthermore, the results showed that when both biological parents were alive, school dropout rate was significantly reduced. The finding here is supported by studies from elsewhere (Harte, 1994; Anderson, 2005). This is because almost all biological parents will invest more on their children's education. As indicated in the Social Capital theory, the presence of both parents increases the access to human capital because children can readily access the help with matters related to education. Also, this can ensure the presence of financial capital which is crucial for continued schooling of the children.

5.2 Conclusion and recommendations

Given the findings discussed in the previous chapter, the study makes the following conclusions:

- School dropout rates have been decreasing between 2012 and 2016, although there were fluctuations over time and more important dropout rates have been highest in grades before grade 12, and mostly grade 11.
- Individual factors were critical for school dropout rates in the province; the rate increased with the age of the individual respondent and girls were more likely to dropout than boys.
- The study also affirmed social capital in the household is significantly associated with schooling outcomes.

Given the findings reached and identified above, the study makes the following recommendations:

- In view of the higher level of school dropout among learners doing Grade 10 and 11, the study recommends that additional programs be developed to help the learners to cope at this level.
- Given the higher level of dropout among school-going children in relatively older ages, it is recommended that policy-makers design programs that would cater for people who are at advanced age and especially pregnant women. Furthermore, it is recommended that the school policy that allows young mothers to go back to school be maintained.
- Learners coming from the households where one of the parents is absent are at increased risk of dropping out of school. The study recommends that there should be assistance through financial aid or support grants for these learners to enable them to continue with school.

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