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ABSTRACT

Introduction: South Africa's schooling programme has been divided into four phases: the first three phases being compulsory, and the last phase optional. In terms of completion of the optional phase of schooling, South Africa fares below average in relation to other middle-income countries, to the extent that school dropout has become a national crisis. School dropout has grave and enduring consequences, and further investigation appeared essential. An overview of the influential aspects associated with early school-leaving was consequently compiled to establish a greater understanding of the phenomenon.

Objectives: To provide a critical overview of the predictive risk factors associated with school dropout, highlighting the manner in which such factors affect early school-leaving and possibly interact with each other.

Method: A scoping review was employed as review design as it provided an effective method to comprehensively examine, clarify, and summarise the extent, range, and nature of dropout predictors.

Findings: From an initial 636 sources, 73 were ultimately selected for review. Seventeen primary themes concerning predictors of school dropout were extracted from the selected material, and categorised as personal, economic, social, and school factors. An overlap between the predictive factors was also established, and six further themes could be identified in this regard. Based on the above findings, relevant principles related to school dropout interventions were discussed.

Conclusion: It was clear from the overview provided that school dropout is a complex and multifaceted process, which involves the presence and interaction of multiple factors. A narrow theoretical model, with a single predictor emphasis, could subsequently not provide an adequate theoretical framework, and a bioecological approach was thus applied. It was also clear that school dropout interventions should be implemented broadly across various domains.

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PLAGIARISM DECLARATION

I, JURNÉ LE ROUX, declare herewith as follows:

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CHAPTER 1

INTRODUCTION

Introduction

In this chapter, background information is provided regarding the South African educational regime. The research problem is further discussed, and the research objectives and outline of the dissertation are provided.

1.1 Background

Under apartheid, a racially divided and divisive system existed, which, through deliberate discrimination, resulted in severe social and economic injustices and inequalities (Jonathan, 2001). As a result, the educational regime was not equal, and learners received separate and different forms of schooling based on prejudicial educational policies (Motala, 2011). Education for black learners was not compulsory, as it was for their white counterparts, and such students received minimal instruction in mathematics and science as a measure to compel them to remain part of the unskilled workforce (Donohue & Bornman, 2014).

Since the dawn of democracy in 1994, a great focus has been placed on the expansion and transformation of education in South Africa, and such reform remains a governmental priority (Boyes, Berg & Cluver, 2017; Harber & Mncube, 2011). This movement is based on the notion that education holds the power to remedy the former inequalities that persist to this day on an institutional and individual level, and produce more equal opportunities for all (Harber & Mncube, 2011; Jonathan, 2001). Education is further believed to foster a modern and responsible as well as a more democratic and peaceful society (Harber & Mncube, 2011).

In light of the new commitment to education for all, significant attempts have been made to provide a more equal, diverse, and flexible educational system (Boyes et al., 2017). South Africa has, *inter alia*, committed to certain goals for education access in accordance with global efforts to ensure quality education to children and youth, and has enshrined the right to basic and further education in the Constitution of the Republic of South Africa (Fleisch, Shindler & Perry, 2012; Meny-Gibert & Russell, 2010). The South African Schools Act 1996 (2011) further makes provision for education to be compulsory from the first school day of the year in which the learner reaches the age of seven until the last school day of the year in which the learner turns 15 – in principle, from Grade 1 to the end of Grade 9. South Africa's schooling programme has subsequently been divided into four phases, with the compulsory phases being the Foundation, Intermediate, and Senior Phases (South African Schools Act 1996: Regulations, 2017). The last phase, the Further Education and Training Phase, is optional (South African Schools Act 1996: Regulations, 2017).

1.2 Outline of research problem

As a result of the current legislative and regulatory framework, as referred to above, South Africa's school enrolment rates are high compared to other sub-Saharan African countries and on par with developed nations, and the country thus produces almost complete enrolment in primary and secondary schooling (Boyes et al., 2017; Murtin, 2013; Shindler & Fleisch, 2007). Further to this, dropout during the compulsory school years does not appear to be a significant challenge, and although the figure has been questioned, it seems to be limited to 3% of the school-going population (Dieltens & Meny-Gibert, 2012; Motala, Dieltens & Sayed, 2009).

Despite the favourable results concerning the compulsory school years, an increasing number of adolescents are facing a variety of adverse elements that threaten their school attainment

(Biddlecom, Gregory, Lloyd & Mensch, 2008). In terms of completion of the optional last phase of schooling, South Africa fares below average compared to other middle-income countries, to the extent that school dropout has become a national crisis (Carney et al., 2018; Grossen, Grobler & Lacante, 2017; Gustafsson, 2011). Between 50% and 60% of adolescents who have commenced Grade 1 in South Africa are statistically predicted not to complete Grade 12 (Carney et al., 2018; Department of Basic Education, 2016; Weybright, Caldwell, Xie, Wegner & Smith, 2017). Uys and Alant (2015), using the data sources of Statistics South Africa and the Department of Basic Education's Education Management Information Systems, argued that the school dropout figure is closer to 70%. A further observation has been made that the number of learners who leave school early is approximately three times larger than the portion of learners who do not pass Grade 12 (Brown, 2010). Dropout rates in South Africa peak in secondary school, particularly from Grade 10 onwards, and the optional phase of schooling thus appears to constitute a particularly vulnerable time in terms of school attainment (Boyes et al., 2017; Weybright et al., 2017).

Countries across the globe experience a problem with school non-completion, and although the school dropout rates in developed nations are more favourable than those in developing countries, it still remains a world-wide challenge (Townsend, Flisher & King, 2007). Timæus and Moultrie (2019) pointed out that those students who do not qualify for university admission based on their Grade 12 results are excluded from most forms of further education, as well as skilled jobs. The consequences for those learners who failed to obtain an upper secondary qualification – in South Africa the completion of Grade 12 – are thus even more dire and have widely been recognised to have far-reaching adverse implications (Townsend et al., 2007; Wegner, Flisher, Chikobvu, Lombard & King, 2008). Dropping out has only been associated with disadvantages, and most individuals who do not complete their schooling neither study

nor work after they leave school (Branson, Hofmeyr & Lam, 2014; Grossen et al., 2017). This phenomenon has further been associated with poorer mental and physical health; behavioural and social problems, such as substance use and involvement in crime; poor academic skills; and limited educational opportunities (Flisher & Chalton, 1995; Grant & Hallman, 2008; Lamb & Markussen, 2011; Wegner et al., 2008). The lack of educational attainment has also been linked to poverty and economic difficulties; a decreased ability to secure steady short- and long-term employment; as well as issues with equality and sustainability (Flisher & Chalton, 1995; Townsend et al., 2007; Wegner et al., 2008).

The issue of school dropout is consequently of great importance in light of its grave adverse consequences. It is also of specific importance in South Africa, as educational achievement could assist to remedy poverty and the social and economic inequalities that continue to exist, thus contributing to alleviating the persistent suffering caused by apartheid (Townsend et al., 2007).

It has been determined that structural access and school attendance alone do not guarantee school attainment (Motala, 2011). Further investigation is thus required to understand the phenomenon and the reasons attached to dropping out without completing Grade 12 (Flisher, Townsend, Chikobvu, Lombard & King, 2010). It is submitted that an overview of predictive factors would be a crucial starting point in curbing dropouts (Flisher et al., 2010; Weybright et al., 2017). Once such factors have been examined, the principles concerning appropriate interventions could be explored.

1.3 Research objectives

The objectives of this study are, firstly, to identify the general predictive risk factors associated with school dropout; secondly, to gain a greater understanding regarding these factors in terms of dropout; and thirdly, to identify possible associations between the stated factors.

1.4 Structure of dissertation

The chapters in this dissertation collectively focus on the subject matter of early school-leaving predictors and the possible management of the phenomenon. Chapter 2 provides an introductory review of pertinent aspects related to school dropout, which entails the relevant definition thereof, as well as a discussion regarding predictive risk factors and the theoretical approaches attached to dropout. The research methodology applied, as well as the subsequent findings, are discussed in Chapter 3. Chapter 4 consists of an overview and discussion of the relevant dropout predictors, as well as the manner in which they are interconnected. The results of the study are summarised in terms of a suitable theoretical framework in Chapter 5. Lastly, the aspect of intervention is considered, and the available information is evaluated in order to provide a conclusion in the final chapter.

CHAPTER 2

CONTEXTUALISATION

Introduction

Branson et al. (2014) determined that educational disadvantages expand over a child's school career to the extent that by the end of compulsory schooling, the challenges outweigh the advantages of remaining in school. When considering the phenomenon of early school-leaving, it is important to note that access to school is viewed as a far more wide-ranging concept than mere physical structural access and the ability to enter the school premises, and also includes the extent to which a learner can meaningfully participate and learn in school (Meny-Gibert & Russell, 2010; Motala et al., 2009; Motala, 2011). It thus follows that the existence of an opportunity to attend school is not sufficient to prevent dropout, as the nature and context of such an occurrence appear to be too pervasive and complex to account for such a simple evaluation (Motala et al., 2009; Motala, 2011).

In this chapter, the concept of early school-leaving is examined; the notion of (and possible predictive factors associated with) the decision to leave school prior to completing the optional phase of schooling is explored; and the primary theoretical approaches used to explain dropout are discussed.

2.1. Defining 'school dropout'

Ananga (2011) indicated that the concept of 'school dropout' or 'early school-leaving' is complex and difficult to describe. In the United States and Canada, the term 'dropout' is used in general to refer to "young people who leave school without gaining a high school diploma" (Lamb & Markussen, 2011, p. 4). Other nations, such as the United Kingdom, employ broader terms such as "not in education, employment, or training" (Lamb & Markussen, 2011, p. 4).

The United Nations Educational, Scientific, and Cultural Organisation (2009, p. 44) describes early school-leaving as referring to those pupils “enrolled in a given grade at a given school year who are no longer enrolled in the following school year”. The Organisation for Economic Cooperation and Development views a ‘dropout’ as a student “who leaves a specific level of the education system without first achieving the appropriate qualification” (Ananga, 2011, p. 375).

Locally, the Department of Education has defined school dropout as “leaving school before completing a given grade in a given school year” (Wegner et al., 2008, p. 2). The term ‘dropout’ has also been used to describe a “learner quitting school before the official exit grade level”, and as an individual of a certain age who is not enrolled in school and who has not completed high school (Brown, 2010, p. 54; Flisher & Chalton, 1995). In the context of South Africa, ‘dropouts’ could be more specifically defined as “secondary school learners who leave school before completing the school-leaving matriculation examination in Grade 12” (Mgwangqa & Lawrence, 2008, p. 16). This definition appears to be suitable for the purposes of this review.

Dropping out of school is not necessarily a continued action (Brown, 2010). Two main types of dropouts have been identified by Ananga (2011). The first type of school-leaving is temporary, where the possibility of returning to school still exists, and includes, for example, intermittent school attendances or a seasonal absence (Ananga, 2011). The second type is permanent dropout, referring to those learners with no intention to return to school and who have completely withdrawn from the educational system (Ananga, 2011). For the purposes of this review, a focus will be placed on the phenomenon of permanent dropout, as many of the learners who leave school before completing Grade 12 remain out of school (Brown, 2010).

2.2. Predictors of school dropout

Dropout predictors are indicators of the antecedents and risk factors that are predictive of dropping out of school, and constitute an array of proximal and distal factors (Franklin & Trouard, 2014; Obiakor, 2010). Knowledge is required to make the identification of such predictors possible – an important process, as the misidentification of predictors could mean that learners at risk of dropping out do not receive the necessary assistance (Bowers, Sprott & Taff, 2012; Franklin & Trouard, 2014). If dropout intervention programmes have been implemented at a school, inaccurate predictors could also result in the ineffective management of already limited public school resources, as the programmes would not be focusing on the correct determinants (Bowers et al., 2012). Establishing applicable and accurate dropout predictors is thus an important process in ensuring school attainment.

It appears that certain challenges exist when examining the phenomenon of school dropout and predictors in South Africa. Motala (2011) submitted that provincial and national data is to be examined with caution, as schools may not be providing absolutely accurate information in an attempt to protect their funding. Furthermore, as a result of limited data reliability, a paucity of information exists regarding local and regional variations (Motala, 2011). It would nonetheless be essential to obtain an overview of the predictive aspects which in general hinder educational attainment, as a thorough appreciation of early school-leaving would otherwise not be possible.

In South Africa a number of predictors of non-completion have been broadly identified. According to Crouch (2005), self-reported reasons for dropping out among the 16–18 age group, as calculated from the 2003 General Household Survey, included the following: a lack of finances to cover fees (42% of males and 41% of females); a lack of interest (17% of males and 7% of females); pregnancy (0% of males and 13% of females); family commitment

(0% of males and 10% of females); being compelled to enter the workforce (9% of males and 4% of females); illness (8% of males and 5% of females); poor academic performance (7% of males and 4% of females); distance to school (4% of males and 3% of females); and age (1% of males and 0% of females).

The 2018 General Household Survey, compiled by Statistics South Africa, yielded similar results among the 7–18 age group, with financial difficulty remaining the primary factor for school dropout (21.6% of males and 26.4% of females); followed by poor academic performance (23% of males and 22.2% of females); family commitments, which include pregnancy and child-rearing (0.2% of males and 14.4% of females); a lack of interest (11.8% of males and 3.9% of females); as well as working at home (4.6% of males and 2.6% of females). South African dropout predictors are discussed more fully below.

2.3 Theoretical framework

2.3.1 Theoretical approaches

Attempts have been made to theoretically explain and predict the occurrence of school non-completion. These theories, in general, relate to academic achievement, deviance, deviant affiliations, family socialisation, as well as structural strains (Battin-Pearson et al., 2000; Manona, 2015).

The academic mediation theory deems poor academic achievement, usually as assessed by standardised achievement tests or the grade point average, as the most salient and consistent predictor of high school dropout (Battin-Pearson et al., 2000; Kaplan, Peck & Kaplan, 1997). In this theory, other variables, such as deviance and associations, are only to be considered in terms of the manner in which they relate to academic competence (Battin-Pearson et al., 2000;

Kaplan et al., 1997). Academic performance thus mediates the possible influence of other factors related to early school-leaving (Battin-Pearson et al., 2000).

When deviance is considered, the problem-prone behaviour and general deviancy theory has consistently been supported in studies (Townsend et al., 2007). In terms of this theory, adolescents who participate in certain deviant behaviours are prone to be involved in a variety of other anti-social activities as well (Townsend et al., 2007). This is the result of non-conforming attitudes and values, as well as a desire for independence (Townsend et al., 2007). Deviance can be represented by specific anti-social behaviours or a general tendency towards norm-violating conduct (Newcomb et al., 2002). Specific anti-social behaviours can involve abandoning the role of learner, which involves truancy, early sexual involvement, and substance use, which have been identified as prominent problem behaviours (Townsend et al., 2007). It should nonetheless be considered that in this model, general deviance is seen as a stronger predictor of early school-leaving than a single aberrant act (Newcomb et al., 2002; Townsend et al., 2007).

It is accepted that peers and other social groups have great influence over the conduct and development of adolescents, and adverse behaviour related to early school-leaving could, as a result, be fostered by negative associations (Battin-Pearson et al., 2000). The social learning theory, as developed by Albert Bandura, postulates that individuals adopt the behaviours, values, and attitudes of others through a complex process of observational learning, identification, and imitation (Thyer & Myers, 1998). Consequently, connectedness and bonding are important elements to consider in examining dropout (Neser, 2007). Attachment theory, the social control theory, as well as the social development model also provide a useful framework when the notion of deviant affiliation is examined (Neser, 2007).

Attachment refers to the attentive quality and structure of the relational interaction between a care-giver and a child (Letourneua et al., 2015). Attachment is of extreme importance as it affects a child's future development and social adjustment, and forms the foundation for children to explore and acquire knowledge about their environments, form relationships later in life, self-regulate in terms of behaviour and emotion, and establish an identity (Lazarus & Kruger, 2004; Mash & Wolfe, 2010). In terms of the social control theory, particularly the social bonding theory of Travis Hirschi, bonding to a socialisation unit requires involvement in and commitment to the unit, affective relationships, and an acceptance of the unit's values (Catalano, Haggerty, Oesterle, Fleming & Hawkins, 2004). The social development model determines that bonding within a socialisation unit is formed through perceived opportunities for participation and interaction; actual involvement and the capacity for same; as well as the perceived rewards received from engaging with others (Catalano et al., 2004). It is thus clear from the above that the forming of attachment and social bonds could act as an informal and important instrument of controlling behaviour (Catalano et al., 2004). Such behaviour could either be pro-social or anti-social, depending on the value system of a socialising unit (Catalano et al., 2004). Should the object of connectedness thus adhere to favourable norms and attitudes, such as deeming education essential, positive behaviour will accordingly be promoted and deviant conduct will be limited, and vice versa (Catalano et al., 2004).

Family socialisation provides essential foundations for a child, and the trajectory to school dropout can consequently be traced back to early familial experiences (Battin-Pearson et al., 2000). Divorce, family stress, and parental style and control could all determine an adolescent's later ability to complete school (Battin-Pearson et al., 2000; Garnier, Stein & Jacobs, 1997). In this regard, the primary socialisation theory focuses on the bond between the learner, school, and family, and the poor family socialisation theory evaluates family background and

circumstances (Battin-Pearson et al., 2000; Manona, 2015; Townsend et al., 2007). It is important to note that when considering the influence of family structure on school achievement and attainment, it would not be sufficient to simply examine the family's household and marital characteristics (Garnier et al., 1997). The meaning attached to the circumstances of the family, the applicable cultural framework, as well as the life-style the family has sustained over time should also be considered (Garnier et al., 1997).

The structural strains theory, which examines the direct impact of demographics, has consistently been utilised to explain school dropout (Battin-Pearson et al., 2000; Newcomb et al., 2002; Townsend et al., 2007). In terms of early school-leaving, the main structural strain factors that have been identified are gender, ethnicity, and family socio-economic circumstances (Newcomb et al., 2002; Townsend et al., 2007). In this regard, possible mediating factors such as school and related influences, as well as individual characteristics, should be acknowledged and considered (Battin-Pearson et al., 2000; Manona, 2015).

Even though each of the above theoretical approaches provides unique insights into school dropout, an interrelationship between them has been observed (Manona, 2015). It was determined decades ago that single characteristics or occurrences are not sufficient to completely explain the notion of dropout (Tinto, 1975). It was therefore proposed that school non-completion should be understood as a longitudinal phenomenon, consisting of interactions between individual, academic, and social variables, which are mediated by the individual's experiences in such environments, and which result in the individual either persevering within the educational system or dropping out (Tinto, 1975).

A broader theoretical approach is consequently required to investigate school dropout. For the purposes of this review, Bronfenbrenner's bioecological theory of human development was deemed suitable to provide a holistic conceptual framework of the predictors of school non-completion.

2.3.2 Principles of Bronfenbrenner's bioecological theory

In his 1979 seminal publication, 'Ecology of Human Development', Bronfenbrenner proposed that five systems underlie human development. These systems interact with each other to the extent that development is influenced by them (Bronfenbrenner, 1979). Said systems are the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem (Bronfenbrenner, 1979). The microsystem has been defined as "a pattern of activities, social roles, and interpersonal relations" – it is the immediate environment of the individual, which includes aspects such as family, peers, and school (Bronfenbrenner, 1994, p. 39). The mesosystem is viewed as a "system of microsystems" where connections between the settings, which are directly related to the individual, take place (Bronfenbrenner, 1994, p. 40). The exosystem entails the interaction between two or more settings, at least one of which does not contain the individual, but which nonetheless influences the person (Bronfenbrenner, 1994). The macrosystem is viewed as the "societal blueprint for a particular culture" and refers to the norms and values embedded in the broader systems (Bronfenbrenner, 1994, p. 40). Lastly, the chronosystem represents the changes which occur over time (Bronfenbrenner, 1994).

As with other influential theories, Bronfenbrenner continued to develop his theory (Tudge, Mokrova, Hatfield & Karnik, 2009). The importance of a reciprocal person-context relation, and not merely contextual factors, remained at the centre of his framework, which became

known as the bioecological model (Tudge et al., 2009). In this regard, a later focus was placed on the concept of processes, specifically proximal processes, as a key factor of human development, and this notion formed the foundation for Bronfenbrenner's process-person-context-time model, the essence of his bioecological theory (Guhn & Goelman, 2011; Tudge et al., 2009). The variables attached to this model do not only occur in one system, but across all systems, with the potential to have multiple effects on development (Guhn & Goelman, 2011).

The first aspect of the model, proximal processes, refers to the sustained forms of interaction between an individual (a human biopsychological organism) and the persons, objects, and symbols present in his/her environment (Guhn & Goelman, 2011; Tudge et al., 2009). Children having progressively more complex reciprocal interactions in their immediate or more remote environments allows them to learn to understand their worlds and their role in them, while attempting to fit in and effect change (Guhn & Goelman, 2011; Tudge et al., 2009).

The second element, the personal characteristics of a person (described as the demand, resource, and force characteristics) were emphasised by Bronfenbrenner (Guhn & Goelman, 2011; Tudge et al., 2009). It was proposed that the interactions of individuals with their environment may be influenced by personal stimuli such as age, gender, race, and appearance, known as demand characteristics, depending on the existing expectations attached to such aspects (Tudge et al., 2009). On the other hand, resource characteristics, or those aspects which are not readily identifiable and related to mental, emotional, social, and material resources, also play a role (Tudge et al., 2009). Force characteristics were also considered, referring to aspects such as intrinsic motivation, temperament, and resilience (Tudge et al., 2009).

In addition to the above, the contextual systems, as initially developed by Bronfenbrenner and referred to above, constitute the third variable of the model (Guhn & Goelman, 2011; Tudge et al., 2009). Lastly, the notion of time, specifically the chronosystem, forms the final aspect (Tudge et al., 2009). It was determined in this regard that developmental processes are sensitive to the specific events and experiences that occur at a specific time, in a certain order, and within a particular historical context (Guhn & Goelman, 2011; Tudge et al., 2009).

Conclusion

This chapter's explanation of school dropout, as well as the self-reported causal factors, statistical occurrences, and theories related to this behaviour, assist to obtain a general sense of the phenomenon and the elements that relate to it. Additional information would, however, be required to not only identify the most prevalent predictive factors, but also to obtain a greater understanding of the manner in which these factors contribute to the phenomenon of early school-leaving.

CHAPTER 3

RESEARCH METHODOLOGY AND FINDINGS

Introduction

The following discussion of the research methodology employed in this study provides details regarding the manner in which the review was performed (Green, Johnson & Adams, 2006). In this chapter, the nature, methodology, and related aspects of the specific review design are discussed, together with the results and ethical considerations of the study.

3.1 Research methodology

3.1.1 Review design and objectives

Scoping reviews provide a method to map and synthesise knowledge by utilising a variety of studies to provide a comprehensive summary, with the aim of informing practice and future direction (Arksey & O'Malley, 2005; Colquhoun et al., 2014). This type of review is becoming increasingly popular as there is a need to advance practice and research by consolidating the available data (Colquhoun et al., 2014). When considering early school-leaving, as indicated above, the accurate identification of learners at risk and the implementation of appropriate prevention or intervention programmes would not be possible in the absence of an overview of predictors related to dropout (Lehr, Hansen, Sinclair & Christenson, 2003; Townsend et al., 2007). The research objectives of this review are consequently to identify the predictive risk factors and the manner in which they are associated with early school-leaving, and to identify whether such factors act in isolation or interdependently.

In light of the above, a scoping review appeared to be the most appropriate review design as it provides an effective method to comprehensively examine, clarify, and summarise the extent, range, and nature of dropout predictors (Levac, Colquhoun & O'Brien, 2010). Another strength

of a scoping review in this regard is that it can incorporate a variety of study designs, and accommodate both published and grey literature (Levac et al., 2010).

3.1.2 Methodology of scoping reviews

It has been proposed that the methodological framework of Arksey and O'Malley, as enhanced by Levac, Colquhoun and O'Brien, be employed in conducting scoping reviews in order to generate uniformity (Colquhoun et al., 2014). This process, which was followed in this review, consists of several stages, namely identifying the research objective; identifying relevant studies; selecting the studies; charting the material; and lastly, summarising, integrating, and reporting the results (Arksey & O'Malley, 2005). The research objectives and purpose of this study were determined broadly but clearly in order to generate extensive data, and a variety of sources were identified by searching electronic databases and reference lists (Arksey & O'Malley, 2005; Levac et al., 2010). It is inevitable that this would yield a vast number of irrelevant studies, and these were removed using the selection criteria (Arksey & O'Malley, 2005). The process of charting entailed sifting and sorting through the data with the aim of establishing key issues and themes, which were then thematically synthesised and reported (Arksey & O'Malley, 2005).

3.1.3 Search strategy utilised

An electronic literature search for published articles was conducted using the central search index of the University of KwaZulu-Natal libraries, namely WorldCat Discovery, which consists of several databases. The field of social sciences and humanities is covered by seven databases, namely African Journals, JSTOR Life Sciences Collection, Philosopher's Index, Project Muse, ProQuest Psychology Journals, PsycINFO, as well as Taylor and Francis Journals. Other databases are also included in the index, concerning fields such as health

sciences (including Science Direct and BioMed Central, Life Sciences, and SpringerLink), and education (Academic Search Complete and Research Library).

Data was extracted by initially conducting a broad search using keywords individually and/or in different ways in conjunction with each other. Primary keywords were identified based on a preliminary search and a cursory reading of the subject matter (Green et al., 2006). The relevant keywords were the following: 'school', 'high school', 'education', 'dropout', 'non-completion', 'completion', 'attainment', 'predictors', 'prevention', and 'South Africa'. Based on the search results, a further, more specific, search was conducted using the following keywords in different combinations with the primary keywords: 'male', 'female', 'disengagement', 'substance', 'tobacco', 'boredom', 'poverty', 'performance', 'teenage pregnancy', and 'abuse'. In addition to the online searches, the reference lists of articles were scanned to identify further relevant publications. A hand search of the abstracts and/or tables of contents of the retrieved articles was subsequently conducted in order to determine the articles to be included in the review.

3.1.4 Selection criteria

The inclusion criteria listed below were employed in identifying the possible publications to be included in the review:

1. Studies that were conducted from 1994 until August 2019. The year 1994 was specifically selected as it marks the implementation of democracy in South Africa and consequently the commencement of significant educational reform (Boyes et al., 2017; Harber & Mncube, 2011).
2. Studies that were published in the English language.

3. Studies that directly and/or indirectly examined predictive factors of school dropout in South Africa.
4. Studies that directly and/or indirectly examined the optional phase of school, and thus not the compulsory school phases.
5. Studies that made use of either qualitative or quantitative research methods.
6. Studies and reviews that were published in peer-reviewed journals.
7. Reports, working papers, and/or legislation referenced in the peer-reviewed journals as per criterion 6 above.

In order to avoid excessive volumes of data, publications which did not comply with the criteria stated above as well as grey literature available on other database platforms, were excluded.

It is important to note that once documents complying with the selection criteria were identified, a further selection was not applied. This is because scoping reviews seek to present an overview of all the selected material, and consequently do not attempt to assess the quality or comment on the validity or reliability thereof (Arksey & O'Malley, 2005). It is maintained that methodological quality has nonetheless been ensured, as the studies and reviews selected (and those from which reports and working papers were identified) were peer-reviewed (Snilstveit, Oliver & Vojtkova, 2012).

3.1.5 Method of synthesis

The data was analysed using a qualitative thematic synthesis of both qualitative and quantitative research designs (Dixon-Woods, Agarwal, Jones, Young & Sutton, 2005; Levac et al., 2010). Three stages were involved in employing this method of synthesis, namely coding the research findings of the relevant study, report, or working paper; organising the codes in

descriptive themes; and generating analytical themes (Dixon-Woods et al., 2005; Levac et al., 2010; Thomas & Harden, 2008). Coding required the translation of concepts from one study to another, which formed the foundation of the synthesis, as well as a consistent review and adjustment, where necessary, of the codes (Thomas & Harden, 2008). The codes were subsequently examined and developed into descriptive themes (Levac et al., 2010; Thomas & Harden, 2008). In the last stage, analytical themes were generated as the synthesis moved beyond merely summarising the material involved, and comprehensively addressed the research objectives (Levac et al., 2010; Thomas & Harden, 2008).

3.2 Results

3.2.1 Screening results

The initial electronic searches described above yielded 611 documents, and the additional searches yielded a further 25 sources. Once 64 duplicate articles and 457 publications that fell outside of the selection framework were removed, the number of sources available for consideration was 115. Each article, report, working paper, and statute was perused in terms of the selection criteria, upon which a further 43 were excluded. Consequently, the final number of records regarding the predictors of school dropout that were included in this review was 72, of which 43 employed a quantitative and 27 a qualitative research design, and 2 dealt with statutory principles.

The selection process, as indicated above, has been illustrated below in terms of the PRIMSA flow diagram as extracted from Moher, Liberati, Tetzlaff and Altman (2009). The various phases of the selection process, with specific reference to the number of identified, included, and excluded records as well as the reason for exclusion, are depicted by the said diagram (Moher et al., 2009).

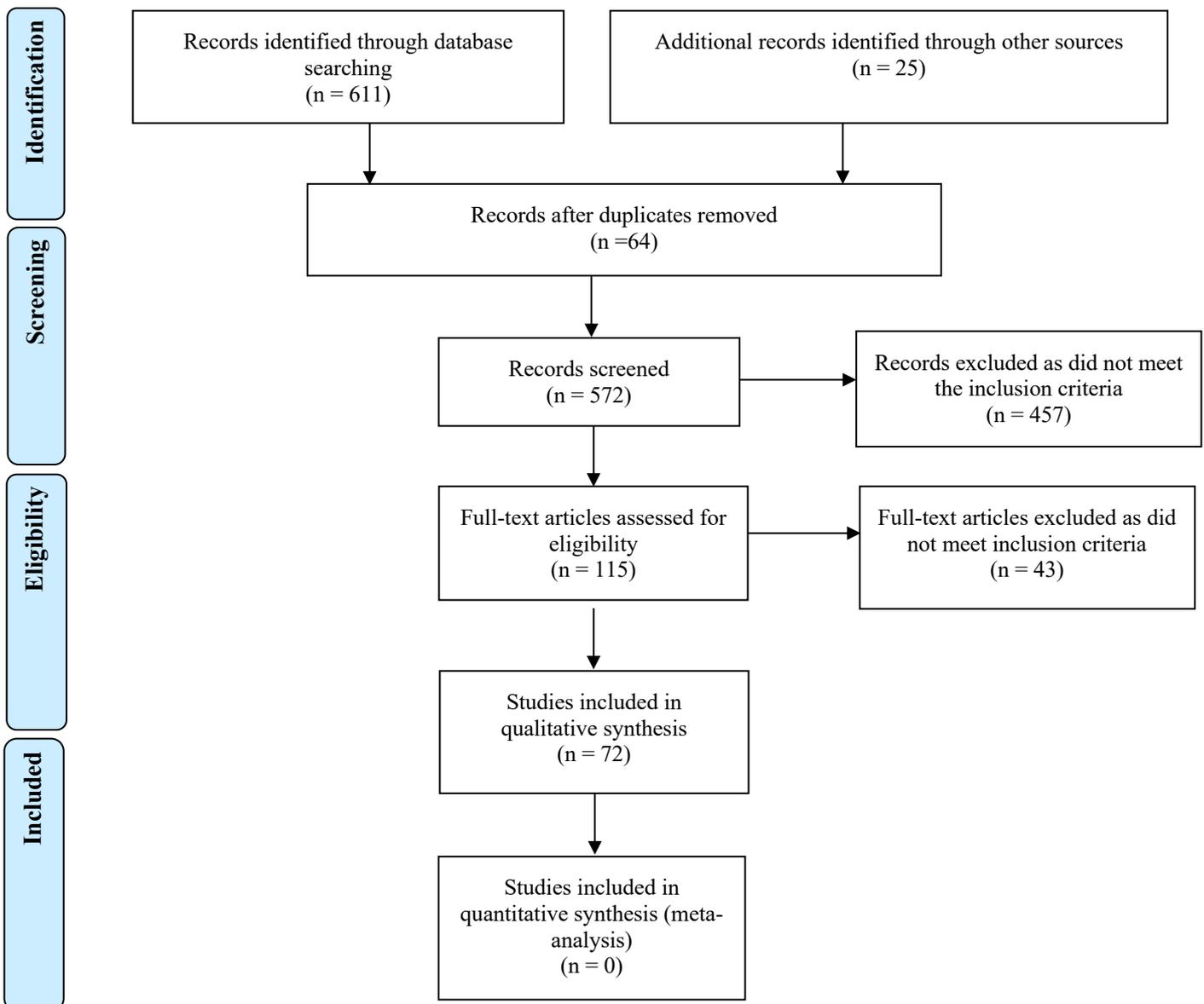


Figure 1

PRISMA flow diagram (Moher et al., 2009)

3.2.2 Data synthesis

3.2.2.1 Findings regarding themes

The 17 primary themes extracted from the selected material concerned primary predictors of school dropout, and were categorised according to the groupings established by Motala (2011),

indicated in the following chapter. These themes, together with an indication of the number of sources that directly and/or indirectly dealt with the relevant factors, are indicated below:

- Personal factors – individual characteristics (2 sources), age (6 sources), HIV (4 sources), lack of interest (8 sources), academic aspects (16 sources), absenteeism (3 sources), and substance use (9 sources);
- Economic factors – low socio-economic status (17 sources) and poorly resourced schools (18 sources);
- Social factors – female learners (22 sources) and male learners (8 sources) (gender vulnerabilities – 1 source), race (14 sources), and home environment (16 sources); and
- School factors – school connectedness (9 sources), school violence (6 sources); school management (6 sources); and government assistance and policies (3 sources).

The identified predictors could be illustrated as follows:

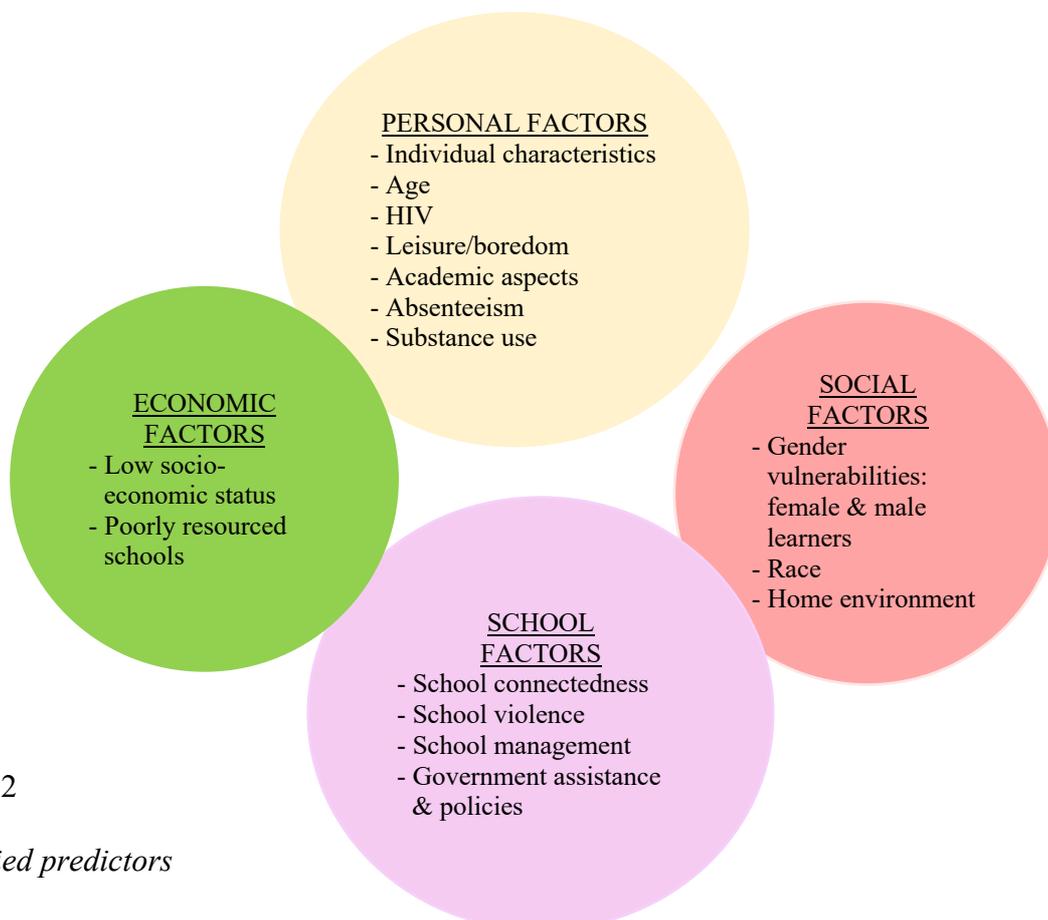


Figure 2

Identified predictors

3.2.2.2 Findings regarding overlap of themes

An overlap between the predictive factors was also established, and relevant factors could be gathered under six further themes. These themes are the following, listed together with the number of sources that directly and/or indirectly dealt with the relevant factors: factors associated respectively with poverty (18 sources), HIV (3 sources), substance use (12 sources), female learners (10 sources), home environment (5 sources), and violence (2 sources).

The overlap of themes could be illustrated as follows:

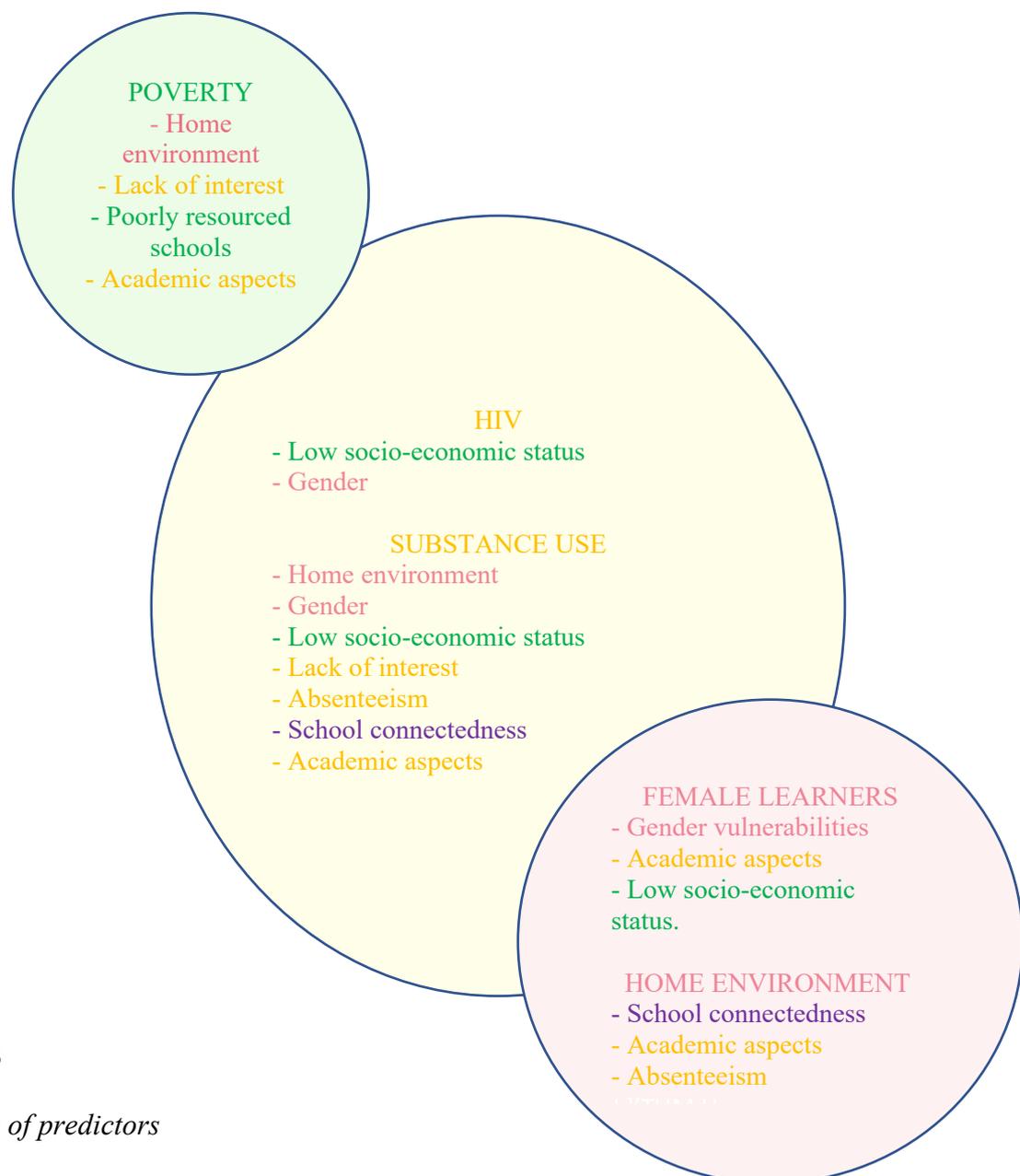


Figure 3

Overlap of predictors

3.2.2.3 Description of included data

The articles, reports, and working papers that were selected and incorporated are provided below. It is submitted that the identified themes are not to be weighted by the frequency with which the themes were reported, but rather their explanatory value, as even themes with a low reporting frequency were significantly linked to school dropout (Dixon-Woods et al., 2005).

Table 1

Description of included data

	AUTHOR & YEAR	RESEARCH DESIGN	AIM OF STUDY & SAMPLE	KEY FINDING/S	RELATED THEME/S
1.	Anderson et al., 2001	Quantitative	To examine the consequences of early childbearing in South Africa in relation to educational outcomes and mortality. National Household Survey and other surveys.	It was determined that teen childbearing results in markedly more adverse educational consequences.	Academic aspects Race Home environment Factors associated with poverty
2.	Ardington et al., 2015	Quantitative	To evaluate the impact of grade repetition on the progression through high school in South Africa. Africa Centre Demographic Surveillance Area; KwaZulu-Natal (KZN) & 2001-2012 waves of the Household Socio-Economic Surveys.	Associations between academic performance, household income, quality of schooling, and grade progression were identified within the framework of stochastic principles. Racial differences were also noted.	Female learners Race Factors associated with female learners
3.	Bhana et al., 2010	Qualitative	To examine the response of educators towards pregnant learners. Semi-structured interviews; 8 secondary schools; KZN & Western Cape (WC); 79 participants.	Teacher were not deemed to provide uniform responses towards pregnant learners. The importance of teacher support was confirmed.	Female learners
4.	Boyes et al., 2014	Quantitative	To examine the psychological sequelae of bullying as well as age and gender differences in this regard. Community-based survey; WC & Mpumalanga (MP); 3 515 participants aged 10-17.	A bi-directional relationship between bullying and mental health outcomes, as well as gender differences, were observed.	School violence
5.	Boyes et al., 2017	Quantitative	To assess the association between poverty, gender, and school dropout amongst adolescents in South Africa. Community-based survey; WC & MP; 3 515 participants aged 10-17.	Poverty, as a predictor of school dropout, was confirmed. Certain gender differences were noted.	Low socio-economic status Poorly resourced schools Gender vulnerabilities Factors associated with poverty

Description of included data (continued)

6.	Branson & Lam., 2010	Quantitative	To investigate key issues related to grade progression throughout primary and secondary school. Waves 1, National Income Dynamics Study; participants in Grades 1-12.	It was determined that several factors such as grade repetition, quality of schooling, household income, race, and age are related to educational outcomes.	Home environment
7.	Branson et al., 2014	Quantitative	To report and examine the high rates of grade repetition in South Africa. Waves 1 & 2, National Income Dynamics Study; 7 300 households; participants in Grades 1-12.	Lagging academically behind was confirmed as a predictor of school dropout.	Age Academic aspects Absenteeism Poorly resourced schools Female learners Race Home environment Factors associated with poverty
8.	Burton, 2008	Quantitative	To consider key points and appropriate interventions in terms of a framework of reported violence in South Africa. National Schools Violence Study; participants were 12 794 school learners.	Based on the available information, interventions which involved various stakeholders were proposed.	School violence Factors associated with violence
9.	Carney et al., 2018	Quantitative	To facilitate an intervention aimed at reducing risk factors amongst female adolescents. Community-based cluster randomised trial; 8 communities; WC; 100 participants aged 16-21.	It was determined that a need for HIV prevention interventions exists amongst adolescents in South Africa.	Low socio-economic status Female learners
10.	Chigona & Chetty, 2008	Qualitative	To examine the support received by pregnant female learners to continue with schooling. Individual interviews; 5 secondary schools; WC; participants were 10 adolescents & 4 principals.	Teen mothers experienced challenges in completing schooling given a lack of support.	Female learners Factors associated with female learners
11.	Department of Basic Education, 2011	Qualitative	To explore the dropout rate and retention strategies in South Africa. South African educational policy and statistics.	Various factors, such as grade retention and financial difficulties, contribute to school dropout.	Academic aspects
12.	Desai et al., 2019	Quantitative	To study the relationship between school dropout and tobacco use. Self-administered questionnaire; 4 provinces, Gauteng (GP), KZN, MP & WC; participants aged 13-20.	Although tobacco use was not deemed to be directly related to school dropout, increased rates of smoking were observed amongst learners who left school.	Substance use Low socio-economic status Female learners Male learners Factors associated with HIV Factors associated with substance use Factors associated with female learners
13.	De Vries et al., 2014	Quantitative	To investigate the gender differences in attitudes towards forced sex and reporting amongst high school learners. Randomised controlled trial; KZN; 764 participants with an average age of 15.51.	Male learners, compared to female learners, were noted to be more sexually active and favourable in their beliefs regarding forced sex.	Female learners

Description of included data (continued)

14.	Dieltens & Meny-Gibert, 2012	Qualitative	To obtain a greater understanding of poverty in relation to school dropout in South Africa. Barriers to Education Study & National Household Survey & secondary data.	Poverty was confirmed as a predictor of school dropout, and the manner in which same contributes to the phenomenon was considered more broadly.	Low socio-economic status
15.	Donohue & Bornman, 2014	Qualitative	To explore the barriers that hinder the implementation of educational policy. Educational policies and statistics & secondary data.	Lack of clarity in terms of policy as well as other issues were identified as implementation constraints.	Poorly resourced schools
16.	Fleisch & Shindler, 2009	Quantitative	To study relevant patterns in school completion and grade progression. Birth-to-Twenty Child Cohort, GP; 2 093 participants.	High repetition rates amongst male learners from certain socio-economic communities were identified.	Academic aspects Male learners
17.	Flisher et al., 2010	Quantitative	To explore the association between substance use and school dropout amongst adolescent learners in South Africa. Structured questionnaire; WC; 548 participants aged 13-19.	A number of factors were associated with school dropout, including certain substance use, grade repetition, lower socio-economic status, as well as absenteeism.	Age HIV Absenteeism Substance use Low socio-economic status Male learners Race Factors associated with HIV Factors associated with substance use
18.	Fotso et al., 2018	Quantitative	To assess the impact of HIV in terms of educational outcomes amongst adolescents. Waves 1-4, National Income Dynamics Study; 8 835 participants aged 10-19.	It was noted that the academic progression of HIV-positive adolescents was adversely affected by the infection.	HIV
19.	Gauteng Department of Education, 2012	Qualitative	To explore the factors associated with school dropout amongst learners in Grades 10 and 11. Questionnaire & interviews; 15 652 participants in Grades 10-12, 138 learners who dropped out, & 73 school staff members; 30 schools; GP.	Grade repetition, which is exacerbated in Grade 10, was confirmed as a predictor of school dropout. It was also determined that certain learners feel compelled to leave school involuntarily.	Age Academic aspects Low socio-economic status Poorly resourced schools Home environment School management
20.	Grant & Hallman, 2008	Quantitative	To investigate the association between teenage pregnancy and educational outcomes. Transitions to Adulthood in the Context of Aids in South Africa Survey; KZN.	School dropout amongst schoolgirl mothers were deemed to be mediated by factors such as previous absences from school, grade progression, and the responsibility of caring for the child.	Female learners Factors associated with female learners
21.	Grobler et al., 2014	Quantitative	To determine whether learner motivation act as a predictor of school dropout. 9 secondary schools; Free State (FS); 1 355 participants in Grade 11.	Learner motivation, positive attitudes, and relatively low educational anxiety were deemed to be associated to a lesser degree with school dropout.	Individual characteristics
22.	Grossen et al., 2017	Quantitative	To explore the relationship between age, career maturity, and years retained in school. Secondary school; FS; 327 participants in Grades 11-12.	It was determined that learner performance is to be strengthened from the Foundation Phase already, and that appropriate interventions are to be provided accordingly.	Academic aspects Race

Description of included data (continued)

23.	Gustafsson, 2011	Qualitative	To examine the reported patterns regarding school dropout, academic performance, grade repetition, and preparedness for post-school transitioning. South African and international household and education datasets.	Inadequate educational quality, inappropriate subject choices, financial constraints, and teenage pregnancies have been associated with school dropout.	Academic aspects Low socio-economic status Female learners Factors associated with poverty
24.	Harber & Mncube, 2011	Qualitative	To investigate the relationship between education, society, and social, economic, and political development. South African educational policy and statistics.	The possible contribution of education on development as well as simultaneously social inequality and unfavourable attitudes, were observed.	Poorly resourced schools Female learners Race Government assistance & policies
25.	Heaton et al., 2014	Quantitative	To study the influence of family, the availability or lack of resources, race, and school quality on educational outcomes. 2002-2011 waves, General Household Survey; participants aged 7-18.	The immense importance of family structure, particularly when considered in terms of race, was noted in relation to educational outcomes.	Poorly resourced schools Race Home environment Factors associated with poverty
26.	Inglis & Lewis, 2013	Qualitative	To explore the experiences of adolescent learners at risk of dropping out of school. High-risk community; WC; 8 participants who were at-risk adolescent learners.	Several factors were observed to be associated with dropout, including unfavourable home circumstances and family issues.	Individual characteristics Lack of interest Low socio-economic status Home environment School connectedness Factors associated with substance use Factors associated with home environment
27.	Kyei & Nemaorani, 2014	Quantitative	To investigate the high failure rate which has persisted in certain high schools in South Africa. Questionnaire & interviews; 4 high schools; Limpopo (LP); 716 participants in Grade 10.	It was determined that various factors, including socio-economic status, age, gender, nature and location of the school, as well as competence in English influenced academic performance.	Low socio-economic status Poorly resourced schools
28.	Legotlo et al., 2002	Quantitative	To examine the causes of poor academic performance during Grade 12. 4 schools in a rural province; 64 participants including principals, teachers, students, and their parents & 3 222 participants in Grades 10-12.	A number of reasons for poor performance were identified, including limited resources and issues regarding discipline, parenting, and policies.	Lack of interest Academic aspects Poorly resourced schools Home environment School management Government assistance & policies
29.	Mahlomaholo, 2011	Qualitative	To examine the gender differences and reasons for dropping out of school amongst learners who have left school. Structured focus group interviews; North West (NW); 10 829 participants who left school before completing Grade 12.	The significance of gender, specifically with regard to female learners and school dropout was noted, which demand sustainable educational environments regarding female learners.	Female learners

Description of included data (continued)

30.	Manona, 2015	Qualitative	To determine factors associated with school dropout. Group interviews; 2 schools; Eastern Cape (EC); 80 participants in Grades 10-12.	It was observed that individual characteristics as well as social challenges were associated with school dropout.	Substance use Low socio-economic status Female learners
31.	Marteletto et al., 2008	Quantitative	To examine the association between school progression, sexual activity, and teenage pregnancy. Waves 1-4 Cape Area Panel Study; WC; participants aged 14-22.	A link between age, sexual debut, academic performance, and school dropout was identified.	Factors associated with female learners
32.	Matlala, 2017	Quantitative	To present a model in aid of providing social support for pregnant learners in secondary schools in South Africa. Africa Centre Demographic Surveillance Area & 2011 and 2012 Household Socio-Economic Survey; KZN; participants aged 11-20.	The facilitation of collaborative social support was deemed to empower pregnant learners despite challenges experienced.	Female learners
33.	Mgwangqa & Lawrence, 2008	Qualitative	To investigate school dropout during secondary school. Individual & group interviews; 2 secondary schools; EC; 20 participants aged 14-24 & additional participants.	It was determined that poverty, the nature of school environments, and HIV were associated with school dropout.	Lack of interest Low socio-economic status Poorly resourced schools Home environment School connectedness Factors associated with substance use
34.	Mitchell et al., 2015	Quantitative	To evaluate the association between early life factors and grade repetition. Early life intervention; KZN; participants aged 7-11.	Issues related to school readiness and HIV were identified as significant.	Academic aspects Male learners Home environment
35.	Motala, 2011	Qualitative	To explore relevant policies concerning access to schooling. South African educational policy and statistics.	Despite available access to schooling, it was noted that equal opportunities and access to quality education, are not guaranteed in South Africa.	Age HIV Lack of interest Academic aspects Low socio-economic status Female learners Race Home environment School violence
36.	Motala et al., 2009	Quantitative	To examine the policy context and patterns of school access in South Africa. School District Analysis; GP & EC.	The impact of grade repetition and increased age was deemed to be associated with school dropout.	Age Academic aspects Poorly resourced schools Male learners Race Factors associated with poverty Factors associated with HIV
37.	Munje & Maarman, 2017	Qualitative	To investigate the lack of resources on educational performance. Questionnaire, focus group interview & observations; 3 schools in WC; 75 participants consisting of learners, teachers & principals.	The lack of resources or the ability to utilise resources in ensuring favourable learner outcomes was noted amongst poor school communities.	Low socio-economic status Poorly resourced schools Home environment School connectedness School management Factors associated with poverty
38.	Murtin, 2013	Qualitative	To identify areas of improvement in terms of education in South Africa. Educational policy, surveys, and statistics.	Various issues were identified regarding, inter alia, the lack of resources, infrastructure, educators, and administration and management.	Academic aspects Poorly resourced schools School management

Description of included data (continued)

39.	Neser, 2007	Quantitative	To assess the aspects of school connectedness within the framework of bullying. Questionnaire; 9 primary & 8 secondary schools; GP; participants in Grades 6-11.	An association between peer victimisation and subsequent reduced connectedness was observed.	Home environment School connectedness School violence
40.	Ngqela & Lewis, 2012	Qualitative	To examine the experience of violence amongst adolescent learners. Individual & focus group interviews; 1 high school; WC; 13 participants in Grades 10-11.	It was determined that school violence is multifaceted with unique contextual elements.	Female learners Home environment School violence Factors associated with poverty Factors associated with home environment
41.	Nkani & Bhana, 2016	Qualitative	To explore the views of and challenges experienced by young mothers in terms of completing school. Semi-structured interviews; KZN; 25 adolescent participants.	Despite the value attached to school, schoolgirl mothers' options were deemed to be limited by a lack of contraceptive knowledge as well as gender inequalities.	Female learners Factors associated with female learners
42.	Nortje, 2017	Qualitative	To investigate the impact of poverty in South Africa on education. Educational policy, surveys, and statistics; secondary data.	Several key factors directly associated with poverty and education, including resources, infrastructure, and the abilities of educators, were identified.	Low socio-economic status Poorly resourced schools School management
43.	Onya & Flisher, 2008	Quantitative	To report the prevalence rates of specific forms of substance use amongst adolescent learners. Self-report questionnaire; 20 high schools; LP; 80 participants in Grade 9 and Grade 11.	Regarding all substances, male learners presented with greater use than female learners.	Male learners
44.	Pettifor et al., 2008	Quantitative	To identify the risk factors for women between the ages of 15 and 24 in terms of contracting HIV. 2003 Nationally Representative Household Survey; 11 904 participants between ages 15-24.	It was observed that young women who did not complete their schooling were at a greater risk of contracting HIV.	HIV Low socio-economic status Female learners
45.	Phasha, 2010	Qualitative	To examine the presence of educational resilience amongst sexually abused black females. Explorative interviews; RSA; 22 participants aged 16-23.	The impact of the legacy of apartheid and issues regarding resources and teachers on educational outcomes were noted.	Home environment
46.	Pienaar & McKay, 2014	Quantitative	To consider the aspects of location, socio-economic status, and funding inequalities in relation to Grade 12 completion. Gauteng Department of Education Data; 561 high schools; GP.	The aspects of race, geographical location, resources, and number of teachers were deemed to be associated with school dropout.	Poorly resourced schools
47.	Pieterse, 2014	Quantitative	To examine the effect of child maltreatment in relation to educational outcomes. Cape Area Panel Study; WC; 4 747 participants aged 14-22.	Adverse educational outcomes, specifically relating to numeracy and school dropout, have been observed amongst children who are maltreated.	Home environment

Description of included data (continued)

48.	Pillay, 2018	Qualitative	To explore pregnancy, motherhood, and education amongst young mothers. Open-ended interviews; urban area in GP; 30 participants aged 18-30.	Several issues, such as policy, poverty, childcare difficulties, discrimination, and unemployment, were deemed to be related to school dropout.	Female learners Factors associated with female learners
49.	Rawatlal & Petersen, 2012	Qualitative	To study the aspect of school connectedness in South Africa. 7 semi-structured interviews & 4 focus groups; secondary school; KZN; teachers and managers & participants in Grade 10.	Factors, such as school management and interpersonal aspects, were identified as barriers to school connectedness.	School connectedness School management Government assistance & policies Factors associated with home environment
50.	Romero et al., 2018	Quantitative	To determine whether supportive parenting could act as a protective factor against issues associated with school delay. Interviews; 40 socio-economically disadvantaged communities; EC; 552 participants aged 10-18.	Supportive parenting deemed to mediate exposure to violence and school delay.	Poorly resourced schools Home environment Factors associated with poverty
51.	Romero et al., 2019	Quantitative	To determine whether teacher support could act as a protective factors against exposure to violence and socio-economic disadvantage. Interviews; Sinovuyo Teen Study; EC; 503 participants aged 10-18.	It was observed that support from educators was associated with lower school delay, however, it was not noted regarding exposure to different forms of violence.	School connectedness Factors associated with poverty
52.	Sawyer-Kurian et al., 2011	Qualitative	To obtain a greater understanding of risks associated with school dropout amongst female adolescents. Group discussions; 2 township communities; WC; 37 participants aged 13-17.	The prevalence of violence and risky sexual behaviours was observed, and racial differences regarding substance use were noted.	Academic aspects Low socio-economic status Female learners Race School connectedness Factors associated with poverty Factors associated with substance use Factors associated with female learners Factors associated with home environment
53.	Sedibe, 2011	Qualitative	To examine the equality of access to education in South Africa. Interviews; 3 secondary schools; NW; 250 participants in Grade 12 and their teachers.	Inequality was deemed to continue to exist regarding access to resources, which adversely affected education.	Poorly resourced schools
54.	Shindler & Fleisch, 2007	Quantitative	To investigate the extent to which access to schooling has been implemented. 2001 Annual School Survey, 2001 Snap Survey, & 2001 National Census.	Variation between provinces has been determined in terms of patterns of access to school.	Academic aspects Male learners
55.	South African Schools Act, 2011	Not applicable	To constitute a uniform system regarding key educational aspects. Statutory principles.	Not applicable.	Low socio-economic status

Description of included data (continued)

56.	South African Schools Act: Regulations, 2017	Not applicable	To govern various aspects related to the national curriculum. Statutory regulations.	Not applicable.	Academic aspects
57.	Spaull, 2013	Quantitative	To explore education in South Africa within the framework of the legacy of apartheid, race, and resources. Southern and Eastern African Consortium for monitoring Educational Quality Surveys.	An overview regarding the polarity which exists concerning the South African school system and the consequences of same was provided.	Poorly resourced schools Race
58.	Statistics South Africa, 2017	Quantitative	To investigate the phenomenon of poverty in South Africa. Household expenditure surveys.	Various aspects regarding national, individual, and household poverty were considered.	Female learners Race
59.	Timæs & Moultrie, 2019	Quantitative	To assess the association between teenage childbearing and school completion. National income Dynamics Study; participants aged 15-18.	It was observed that previous academic difficulty was related to school dropout in teen mothers.	Poorly resourced schools Female learners Factors associated with female learners
60.	Townsend et al., 2007	Qualitative	To investigate the association between substance use and school dropout. Secondary data.	Substance use, as a consistent predictor of school dropout, was confirmed.	Substance use Factors associated with poverty Factors associated with substance use
61.	Townsend et al., 2008	Quantitative	To report the rates of bullying and investigate the association between such conduct and school dropout. Self-report questionnaire; 39 secondary schools; WC; 1 470 participants in Grade 8.	Female learners who were perpetrators and victims of bullying were determined to be at risk of dropping out of school.	School violence
62.	Tshitangano & Tosin, 2016	Quantitative	To determine the rates of substance use amongst secondary school learners. Self-administered questionnaire; 10 secondary schools; LP; participants aged 14-18.	Despite low prevalence rates, observations regarding age and gender were made in terms of substance use.	Substance use Male learners Factors associated with substance use
63.	Umra, 2017	Quantitative	To examine the perspectives of adolescent learners regarding substance use. Questionnaire; 1 secondary school; KZN; 176 participants aged 13-17.	The importance of educator support was confirmed, and a relationship between stress management, substance use, and the environment was identified.	Substance use School connectedness Factors associated with substance use Factors associated with home environment
64.	Uys & Alant, 2015	Quantitative	To determine repetition and dropout rates in South Africa. General Household Surveys, Education Management Information Systems, & DBE yearly reports; participants between Grade 1 and Grade 12.	It was proposed that more accurate rates were provided using a new procedure.	Academic aspects

Description of included data (continued)

65.	Walker, 2012	Quantitative	To explore the adverse effects of early marriage on the health, education, and economic status of young females.	A relationship between early marriage, poverty, and high population rates was noted.	Female learners
			National Demographic and Health Surveys.		
66.	Walton et al., 2016	Qualitative	To examine the relationship between educator support and substance use.	It was determined that educators employ certain skills and strengths to foster favourable relationships with learners, in terms of which their personal well-being was essential.	Substance use School connectedness Factors associated with poverty
			Interviews & group discussion; 1 community; WC; 16 educators.		
67.	Wegner, 2011	Qualitative	To assess leisure boredom and risk behaviour amongst South African adolescents.	Leisure boredom was shown to have an adverse occupational impact.	Lack of interest Factors associated with poverty Factors associated with substance use
			Group discussions; 1 community; EC; 32 participants aged 15-20.		
68.	Wegner et al., 2008	Quantitative	To determine whether an association exists between leisure boredom and school dropout.	Leisure boredom, as a significant predictor of school dropout, was confirmed.	Lack of interest Race Factors associated with poverty Factors associated with substance use
			Self-report questionnaire; 303 participants in Grade 8.		
69.	Weideman et al., 2007	Qualitative	To assess the aspect of absenteeism in terms of the South African schooling system.	It was noted that various grounds prompted learner absenteeism, and that frequent absences were deemed to be problematic.	Absenteeism
			Questionnaires & interviews; principals & school governing body representative; 30 schools, South Africa.		
70.	Weybright et al., 2014	Quantitative	To investigate the association between the absence of leisure opportunities, substance use, and parenting styles amongst adolescents.	Healthy leisure involvement can mediate substance use and other risk behaviours.	Substance use Factors associated with poverty Factors associated with substance use
			Surveys; Healthwise South Africa trial; 19 schools; participants in Grades 8-11.		
71.	Weybright et al., 2015	Quantitative	To examine the association between leisure boredom and substance use amongst adolescents in South Africa.	It was determined that boredom and substance use, as well as other risk behaviours, are related.	Lack of interest Substance use Race Factors associated with poverty Factors associated with substance use Factors associated with violence
			Bi-annual surveys; 1 community; WC; 2 580 participants aged 12-19.		
72.	Weybright et al., 2017	Quantitative	To explore school dropout in terms of substance use and leisure activities.	Tobacco use and poor intrinsic motivation were, inter alia, associated with school dropout.	Age Lack of interest Factors associated with poverty
			Surveys; 1 community; WC; Healthwise South African trial; 601 participants aged 12-17.		

3.3. Ethical considerations

Bias was avoided in poor data extraction or data review, as the specific inclusion criteria determined which articles were ultimately selected (Green et al., 2006). An indication was also provided of the type of study discussed in the publications, as well as the theme/s to which they applied, in order to provide transparency concerning the manner in which the synthesis was compiled (Snilstveit et al., 2012).

Conclusion

In this chapter, the various aspects of the research methodology were discussed, and the subsequent findings were identified. In the next chapter, the relevant resulting themes are explored and discussed in order to provide an overview of school dropout predictors.

CHAPTER 4

OVERVIEW OF DROPOUT PREDICTORS

Introduction

Motala (2011) submits that the factors that possibly lead to school non-completion mostly fall under four categories. These groupings include personal factors (such as health and intrinsic motivation); economic factors (which include the direct and indirect expenses related to school); social factors (such as household and familial aspects, and gender); and school factors (including performance of educators and discrimination, for example) (Motala, 2011). The key predictors related to school non-completion in South Africa that were identified in the literature corresponded with the stated categories, and are accordingly discussed below. In addition, the complexity attached to early school-leaving is explored, specifically in light of the manner in which these factors are interconnected.

4.1. Personal factors

In this category, the personal dropout factors, thus aspects which are directly related and attached to the individual, are discussed (Motala, 2011). Seven personal predictors have been identified from the literature, namely individual characteristics, age, HIV, lack of interest, academic aspects, absenteeism, and substance use.

4.1.1 Individual characteristics

Learners are affected differently by their experiences and the systems involved in their lives (Inglis & Lewis, 2013). Individual factors, such as aggression, anxiety, affective difficulties, initiative, or a poor self-concept or sense of agency, could place a learner at risk for early school-leaving during the optional school phase (Inglis & Lewis, 2013). Furthermore, a lack of motivation and intrinsic goals, such as personal growth, competence, meaningful

relationships, and societal contributions, are associated with unsuccessful school attainment, as this impacts on the learner's attitude and academic and school engagement (Grobler, Knight, Lens & Lacante, 2014; Inglis & Lewis, 2013).

4.1.2 Age

Age is an important variable, whether the increased age of a learner is due to late entry, grade repetition, or absenteeism from school for a significant period (Flisher et al., 2010; Gauteng Department of Education, 2012; Motala, 2011). Being an older learner could create a vulnerability regarding dropout, as such learners may feel alienated by their younger classmates and thus less affiliated to school (Flisher et al., 2010). Learners who are older than the average age when they enter Grade 2 are already at risk of dropping out of school (Motala et al., 2009). Furthermore, the older student, particularly the learner who is two years older than the recommended age for the relevant grade, is not only more likely to leave school early, but also less likely to return to school once attendance has ceased (Branson et al., 2014; Flisher et al., 2010; Weybright et al., 2017).

4.1.3 HIV

A significant link exists between being HIV-positive and school non-completion, particularly among female learners (Pettifor et al., 2008). The psychological development of children and adolescents tends to be adversely affected by the human immunodeficiency virus, which appears to explain the more limited grade progression and school attainment among HIV-positive adolescents (Fotso, Banjo & Akinyemi, 2018).

In South Africa, the number of households affected by HIV/Aids and the number of children who have lost one or both parents are growing (Motala, 2011). The stigmatisation associated with HIV/Aids may compel a learner to remain absent from school rather than experience humiliation and exclusion (Flisher et al., 2010). The HIV pandemic affects older adolescents to a greater extent than younger children, an aspect which is educationally important, as it could exacerbate the risk applicable around the post-compulsory school period (Motala, 2011). The issue of HIV/Aids in South Africa also affects the supply of education, as teachers are also affected by the pandemic (Motala, 2011).

4.1.4 Lack of interest

School may be perceived as boring, especially when certain subjects or educators are disliked, the relevance of subjects is not apparent, or when students either feel under-stimulated or overwhelmed by subject content and demands (Wegner et al., 2008). Learners can also feel demotivated and disconnected from school as a result of the inadequate educational and school resources available to them, low educator commitment, unprofessional behaviour exhibited by teachers, as well as the lack of job opportunities and low unemployment rates that exist even among educated individuals (Legotlo et al., 2002). The value learners are attaching to education is consequently declining as they deem it of no use or value, and this lack of interest constitutes an important factor in school dropout (Legotlo et al., 2002; Motala, 2011).

In addition to the above, the participation in activities is also to be considered, as constructive leisure can constitute a valuable opportunity to effect healthy youth development, allowing for an experience of freedom, a sense of competence, skill-building, and intrinsic motivation – all factors that contribute to school attainment (Weybright et al., 2017; Wegner, 2011). Learners who are involved in extracurricular activities are thus less likely to drop out of school than their

non-participating counterparts (Inglis & Lewis, 2013). On the other hand, leisure boredom, which is a complex construct, may be experienced in any situation that is familiar, repetitive, and trivial (Weybright, Caldwell, Ram, Smith & Wegner, 2015). In South Africa, adolescents have limited recreational opportunities, despite a great amount of leisure time being available (Weybright, et al., 2015).

This aspect is of importance in the educational realm, as learners who are not academically competent may lose interest in school when no cultural, artistic, athletic, or computer activities are available at their educational facility to motivate them to continue attending school (Mgwangqa & Lawrence, 2008). Furthermore, when out-of-school activities are deemed to be boring, it is likely that school will consequently also be perceived as such, and learners are likely to begin disengaging from school (Wegner et al., 2008). Consequently, when elevated levels of boredom are experienced by adolescents regarding leisure or other elements of their lives, there is a greater risk that their education will be adversely affected, as well as that they will drop out (Wegner et al., 2008; Wegner, 2011).

4.1.5 Academic aspects

Children with learning disabilities that could be the cause of their slow academic progress are not adequately supported (Motala, 2011). Learners who have dropped out of school are further deemed to be less accomplished in reading and writing English (Branson et al., 2014). This aspect is of significance, as the medium of instruction in many less-resourced schools is changed from the child's home language to English when the child reaches Grade 5 (Shindler & Fleisch, 2007).

The South African Schools Act: Regulations (2017), as indicated above, divide the national curriculum provided between Grade R and Grade 12 into four phases. In terms of said act, a learner may only repeat a grade once per school phase; thus, a maximum of four times within the twelve years of schooling (Fleisch & Shindler, 2009). Certain learners, who have for all intents and purposes failed, are consequently promoted to the following grade without actually mastering the basic skills and knowledge attached to the relevant grade (Legotlo et al., 2002; Motala et al., 2009). Being behind at school and poor academic performance have consistently been identified as some of the strongest predictors of school non-completion (Branson et al., 2014). An inability to manage the academic demands of a specific grade not only leads to the perception that the following grade would be even more challenging and unattainable, but also leaves the learner ill-prepared for the next academic year (Sawyer-Kurian, Browne, Carney, Petersen & Wechsberg, 2011). This issue is exacerbated by the observation that the majority of learners who are lagging behind are not sufficiently assisted by their school to ensure school completion (Branson et al., 2014).

Grade repetition, especially if a learner has been retained more than once or in Grade 1, has been strongly linked to school dropout, and is deemed to be a significant predictor of non-completion (Branson et al., 2014; Grossen et al., 2017; Mitchell et al., 2015; Motala et al., 2009). In South Africa, national repetition rates have been higher than the average for developing and developed countries (Department of Basic Education, 2011). Compared to the lower grades, grade repetition is particularly prevalent in Grades 10 and 11 – thus, subsequent to the compulsory schooling phase (Grossen et al., 2017; South African Schools Act: Regulations, 2017; Uys & Alant, 2015). This is likely due to the application of an increased standard given the upcoming matric examinations, as well as the challenges being experienced by teachers in adequately assisting those learners who passed earlier grades without truly

grasping the relevant curriculum (Department of Basic Education, 2011; Gustafsson, 2011). Repetition could be further explained by the possibility that schools attempt to ensure favourable Grade 12 pass rates, and thus rather retain learners in the preceding grades, as those results are not announced publicly (Department of Basic Education, 2011; Murtin, 2013). In this regard, learners have also experienced that schools place undue pressure on them to drop out should it appear improbable that they are to pass Grade 12 (Gauteng Department of Education, 2012).

Once learners have been retained, they perform more poorly compared to peers completing the grade for the first time, despite the additional opportunity to engage with the learning material (Grossen et al., 2017). It thus appears that learners who have failed in the past will perform less well in school (Anderson, Case & Lam, 2001). Furthermore, the greater the delay in grade progression, the poorer the academic performance, which in itself is associated with school dropout, as stated above (Grossen et al., 2017).

4.1.6 Absenteeism

Several factors could contribute to absenteeism and truancy, as indicated in the discussion of the literature. These include HIV, a lack of interest in school or certain subjects, substance use, poverty, limited school connectedness, poor academic performance, pregnancy, as well as school violence (Weideman, Goga, Lopez, Mayet & Macun, 2007). Irrespective of the root of the problem, poor school attendance has been associated with dropout, and absenteeism and truancy constitute a significant predictor of dropout (Branson et al., 2014; Flisher et al., 2010).

4.1.7 Substance use

Substance use has been associated with a number of adverse consequences including poorer physical health, mental challenges and disorders, risk behaviour as well as unemployment and poverty (Tshitangano & Tosin, 2016). In South Africa, substance use is of particular concern as at least 15% of the population suffers from problematic drug use, a figure which is double the world norm (Tshitangano & Tosin, 2016). Although approximately a fifth of learners already experiment with substances in primary school, various studies have determined that most substance users commence during adolescence – a stage when learners enter high school (Townsend et al., 2007; Tshitangano & Tosin, 2016; Umra, 2017; Walton, Avenant & Van Schalkwyk, 2016). South African adolescents commence earlier and transition faster through substances than their US counterparts, and high prevalence rates in the use of substances have consequently been observed among adolescents across the country (Weybright, Caldwell, Ram, Smith & Jacobs, 2014; Townsend et al., 2007; Tshitangano & Tosin, 2016).

The extent of adolescent substance use is educationally important, as studies have consistently determined a relationship between the use of substances, academic challenges, truancy, and early school-leaving (Flisher et al., 2010; Tshitangano & Tosin, 2016; Weybright et al., 2015). It is thus not surprising that the use of cannabis and illicit drugs has been associated with at-risk learners who are experiencing academic difficulties, and specifically with early school-leaving (Manona, 2015; Townsend et al., 2007). The situation is exacerbated by the observation that certain educators tend to be in the company of substance users, and consequently do not discipline such learners (Manona, 2015).

The use of tobacco and alcohol is to be included in the consideration of the effects of substance use, as South African adolescents follow a pattern of initiation that commences with the use of

tobacco and/or alcohol, followed by cannabis, inhalants, and other illicit drugs (Flisher et al., 2010). Furthermore, even though it is essential to consider the accompanying variables of parental care, absenteeism from school, and peer associations, an association between school dropout and alcohol has been identified (Flisher et al., 2010; Townsend et al., 2007).

Tobacco use is prevalent among school dropouts and also constitutes a significant and consistent predictor of school non-completion – the only variable to remain as such across all racial groups and not influenced by other variables (Desai, Mercken, Ruiters, Schepers & Reddy, 2019; Flisher et al., 2010). Those at risk of dropping out of school have been found to be more likely to use tobacco, to commence earlier, and to be heavier smokers than their non-dropout and low-risk peers (Flisher et al., 2010; Townsend et al., 2007). Individuals who complete high school are also more likely to discontinue their tobacco use than learners who dropped out, which places the latter group at a greater risk for tobacco-related morbidity and mortality (Desai et al., 2019; Flisher et al., 2010).

4.2 Economic factors

Two predictive factors related to the economic category were identified. These are the low socio-economic status of a learner, as well as the limited resources available to certain schools.

4.2.1 Low socio-economic status

Lower socio-economic status has consistently and directly been associated with poorer educational outcomes, and all aspects of poverty significantly contribute to school non-completion (Boyes et al., 2017; Kyei & Nemaorani, 2014). These aspects are physical poverty (for example, unfavourable living conditions; financial challenges related to the monetary demands of schooling such as school fees, as well as the broader access costs such as transport,

school uniforms, books, and stationary); social factors (unemployment of care-giver, lack of support); and psychological considerations (feelings of distress and disempowerment) (Carney et al., 2018; Desai et al., 2019; Dieltens & Meny-Gibert, 2012; Mgwangqa & Lawrence, 2008; Motala, 2011; Munje & Maarman, 2017; Sawyer-Kurian et al., 2011).

In terms of physical poverty, learners from lower social classes, who have fewer possessions, are deemed more likely to leave school than their peers with a higher social status (Flisher et al., 2010). In households where the parent/s is/are unemployed, or the grandparent, as primary care-giver, is only receiving a pension, learners may also be required to leave school in order to contribute to the household income (Mgwangqa & Lawrence, 2008).

Concerning basic educational costs, no learner in South Africa may be refused access to a public school based on the inability to pay school fees, and the Department of Education has implemented a number of policies to address this wide-spread challenge (Dieltens & Meny-Gibert, 2012; South African Schools Act, 2011). Physical poverty was nonetheless still deemed to be a primary factor for learners being out of school (Boyes et al., 2017; Flisher et al., 2010; Pettifor, 2008). This appears to be related to the fact that the impact of poverty on educational attainment is particularly related to the lack of affordability of broader indirect costs attached to schooling, especially given the already limited financial recourses of families of low socio-economic status (Gauteng Department of Education, 2012; Gustafsson, 2011; Motala, 2011). One such expense, as indicated above, would be transport to school. In the absence of funds to secure transport, learners may be required to walk the sometimes great distance between the school and their community, which not only places their school attendance at the mercy of favourable weather, but also exposes them to other risk factors such as sexual abuse (Manona, 2015). It has also been determined that certain schools do not accommodate these learners and

are not understanding regarding this issue (Manona, 2015). Another challenge is that certain poor families are not able to provide learners with school uniforms or stationery, which could affect their continued school attendance and attainment (Manona, 2015).

The situation is seemingly exacerbated by the fact the 22% of children who are entitled to a child support grant are not receiving such assistance (Motala, 2011). Despite appropriate interventions, it has further been determined that 7% of South African children are always or often hungry, a state of affairs which would naturally impede their ability to concentrate and learn in school (Gauteng Department of Education, 2012; Manona, 2015; Motala, 2011; Nortje, 2017). Furthermore, despite the legal and policy principles referred to above, punitive steps are reportedly frequently implemented against students who are unable to pay school fees and/or related access costs (Dieltens & Meny-Gibert, 2012). These measures include withholding a report card, preventing students from writing their examinations, refusing to provide students with textbooks or desks, barring them from attending or singling them out in class, or threatening expulsion (Dieltens & Meny-Gibert, 2012; Mgwangqa & Lawrence, 2008). Given the general existing burden of poverty, these additional pressures add to a learner's incentive to leave school early (Dieltens & Meny-Gibert, 2012).

On a social level, learners from low socio-economic circumstances are also often marginalised and ultimately socially excluded, especially in a mixed socio-economic environment (Dieltens & Meny-Gibert, 2012; Motala, 2011). The further psychological impact of poverty has been observed, as certain learners from low-income households reported that they felt inadequate, ashamed, and acutely aware of their poverty in relation to higher-income students, especially in the absence of community and familial support (Dieltens & Meny-Gibert, 2012; Inglis & Lewis, 2013). These learners could also feel overwhelmed by feelings of embarrassment and

humiliation to such an extent that they become unable to focus on their studies and rather drop out of school (Mgwangqa & Lawrence, 2008).

4.2.2 Poorly resourced schools

Poverty plays a role in the educational opportunities available to learners (Branson et al., 2014). Apartheid laws determined geographical residential areas, and consequently school enrolment, based on race (Pienaar & McKay, 2014). Former African schools, in contrast with former white schools, generally lacked resources, management, and qualified and/or sufficient teachers – an inequality which continues to persist to this day (Pienaar & McKay, 2014). Upon the introduction of democracy, learners were permitted to register at any public school; however, this still required resources and the ability to move to another school catchment zone (Pienaar & McKay, 2014). Consequently, even though quality education is at present no longer directly attached to race, it is in principle only accessible to those with a higher socio-economic status, and learners from relatively low socio-economic neighbourhoods are likely to attend poor-quality schools (Branson et al., 2014; Pienaar & McKay, 2014). Extensive competition to be enrolled at certain high-quality schools also occurs, and due to limited capacity, learners are at times required to return to low-quality schools (Motala et al., 2009).

The Department of Education has significantly increased the expenditure per student since the dawn of democracy and has additionally been providing low-income schools with an increased government subsidy in order to attempt to remedy certain of the educational inequities (Donohue & Bornman, 2014; Kyei & Nemaorani, 2014; Murtin, 2013). Notwithstanding this, resources appear to be insufficient and an increase in government funds regarding secondary education would be required in order to meet international standards (Murtin, 2013).

Furthermore, substantial quality and quantity issues, which directly affect school attainment, are still being experienced in poorly resourced schools as a result of the previous educational regime (Donohue & Bornman, 2014; Kyei & Nemaorani, 2014; Murtin, 2013). These challenges include high teacher-learner ratios and a subsequent inability to maintain discipline in the classroom, as well as teacher incompetence, which all lead to poor matriculation rates (Kyei & Nemaorani, 2014; Legotlo et al., 2002; Murtin, 2013; Pienaar & McKay, 2014). An insufficient number of teachers are employed, and educators are frequently under-trained and ill-prepared for lessons (Munje & Maarman, 2017; Nortje, 2017). Teacher absenteeism is also a significant issue, and educators in previously disadvantaged schools teach approximately half of the teaching hours recorded in wealthier schools (Heaton, Amoateng & Dufur, 2014). A lack of teaching aids and learning material, including text- and workbooks as well as computers and libraries, which are instrumental in conducting research as required by the current curriculum, has been observed (Kyei & Nemaorani, 2014; Manona, 2015; Mgwangqa & Lawrence, 2008; Murtin, 2013). The infrastructure and facilities in certain of these schools are also of such poor condition that they are not conducive to adequate learning (Mgwangqa & Lawrence, 2008; Sedibe, 2011). The dilapidated state of certain schools includes broken windows, a lack of electricity, unhygienic water sources or no water supply at all, the unavailability of proper toilets, and the absence of fencing (Sedibe, 2011; Murtin, 2013). As a result of these numerous unfavourable circumstances, learners from socio-economically disadvantaged schools perform poorly on numeracy and literacy tests and their general performance continues to decline, which in the long term also leads to school dropout (Boyes et al., 2017; Munje & Maarman, 2017; Romero, Hall, Cluver & Meinck, 2018; Spaul, 2013).

Certain schools supplement their public funding by collecting or increasing school fees (Harber & Mncube, 2011; Heaton et al., 2014). This perpetuates and exacerbates the divide between

well- and poorly resourced schools, as schools serving wealthier communities are easily able to collect such levies, adding to their already favourable standard of education and facilities (Harber & Mncube, 2011; Murtin, 2013). In contrast, increased fees adversely affect learners of a lower socio-economic status, as poorer families may need to choose between school-related fees and other necessities (Branson et al., 2014; Heaton et al., 2014; Pienaar & McKay, 2014). Furthermore, schools in poorer communities may not even be able to demand additional funds, and schools where fees are waived would have to rely exclusively on limited public resources (Harber & Mncube, 2011; Murtin, 2013). Either way, children from lower-income households remain compelled to attend low-quality schools (Motala et al., 2009).

Despite education being a governmental priority and the public expenditure that has been allocated in this regard, the quality of the school system in South Africa has thus remained inadequate, and only limited advances have been made in implementing greater, more equitable results (Timæus & Moultrie, 2019). It is thus not surprising that an appreciation for teaching and learning in previously disadvantaged schools is waning, given the inequality in the availability of resources (Sedibe, 2011). The extent of the disparity in resources in schools has created a class-differentiated education regime, and led to the notion that two different school systems, in fact, exist in South Africa: namely, the 25% of schools that are privileged and wealthy, and the remaining 75% poorest schools (Gauteng Department of Education, 2012; Heaton et al., 2014; Spaul, 2013). This is of particular importance, as significantly higher dropout rates have been observed among previously disadvantaged schools compared to wealthier schools (Grobler et al. 2014).

4.3 Social factors

Four predictors associated with the social context have been identified from the literature. In this regard, certain dropout challenges exist among female and male learners respectively. The race and household environments of learners also play a role in school attainment.

4.3.1 Gender vulnerabilities

Conflicting findings have been reported regarding whether male or female learners are most affected by challenges impeding their ability to stay in school (Boyes et al., 2017). Nevertheless, both groups experience gender-specific difficulties in terms of school attainment.

4.3.1.1 Female learners

Mahlomaholo (2011) submitted that the notions of equality and social transformation for women are central to the current legislative and policy framework. Notwithstanding this focus, covert challenges continue to exist due to negative cultural norms that deem girls to be “the weaker and the fairer sex” (Mahlomaholo, 2011, p. 337). Female adolescents thus face certain gender-specific challenges, which naturally impede the female learner’s ability to remain in school (Carney et al., 2018; Sawyer-Kurian et al., 2011).

Female, rather than male, adolescents are required to care for younger siblings and ailing parents or care-givers, and can also be assigned extensive household duties that interfere with their study time (Carney et al., 2018; Desai et al., 2019; Grant & Hallman, 2008; Mahlomaholo, 2011; Pettifor et al., 2008; Sawyer-Kurian et al., 2011). Although South Africa has a relatively low percentage of women entering into marriage before the age of 18, the concern remains that such adolescents are required to leave school to attend to their marital duties (Walker, 2012).

Female teenagers are also, in accordance with national occurrence and gender inequality, exposed to gender-based violence and cultural disempowerment based on, for example, unfavourable views held by males regarding forced sexual intercourse and gender roles (Carney et al., 2018; Desai et al., 2019; De Vries et al., 2014; Grant & Hallman, 2008; Sawyer-Kurian et al., 2011). It thus appears that the social context in South Africa condones and allows physical and sexual violence against young women (Bhana, Morrell, Shefer & Ngabaza, 2010; Harber & Mncube, 2011). In this regard, female learners in school often experience rape, assault, and harassment not only by their male classmates, but also by their teachers and principals (Harber & Mncube, 2011; Motala, 2011; Ngqela & Lewis, 2012). Consensual or non-consensual relationships between female adolescents and educators, which contribute to such teenagers leaving school, also continue to exist despite a legal basis for dismissal in such circumstances (Sawyer-Kurian et al., 2011). Furthermore, the above incidents are frequently not reported to the relevant authorities out of fear for victimisation and the possibility that the female learner will be requested to leave school (Harber & Mncube, 2011).

Concerning sexual involvement, female adolescents of school-going age have sexual intercourse on average by the age of 17 and have more unprotected sexual intercourse than their male counterparts, while 10% have engaged in transactional sex (Sawyer-Kurian et al., 2011). Not only do these circumstances increase the risk of teenage pregnancy, but females among the ages of 15 to 19 are also 2.5 times more likely to contract HIV than males in that age bracket (Mahlomaholo, 2011; Pettifor et al., 2008; Sawyer-Kurian et al., 2011). These adolescents are further particularly vulnerable during pregnancy, as the risk of contracting HIV increases significantly during the gestation period (Ardington, Menendez & Mutevedzi, 2015).

In terms of transitioning into adulthood in South Africa, females between 15 and 24 form the highest unemployed group, while labour market incentives to complete school are not high and are even declining for these females (Grant & Hallman, 2008). As a result, female adolescents feel less motivated to ensure they complete school and avoid pregnancy (Grant & Hallman, 2008). Nationally, the percentage of adolescents giving birth remains high, with birth rates increasing significantly as minors approach majority, with about 20% of females giving birth at least once by the age of 18 (Ardington et al., 2015; Pillay, 2018; Statistics South Africa, 2017). Educationally, the prevalence of teenage pregnancy and childbearing is of importance, as it is directly related to early school-leaving in female learners and is considered to be one of the primary reasons for school dropout (Branson et al., 2014; Grant & Hallman, 2008; Gustafsson, 2011; Manona, 2015; Pettifor et al., 2008). It is important to note the gender inequality that exists in this regard, as the majority of the consequences and responsibilities seems to befall the mother and her family, and not the father of the child (Bhana et al., 2010).

Certain of the reasons for the early school-leaving of young mothers are related to the periods of absenteeism, accruing academic deficits, and grade repetition associated with pregnancy; the difficulties related to balancing child-care and academic demands; as well as the lack of support they are receiving at home, at school, and from their community (Ardington et al., 2015; Bhana et al., 2010; Chigona & Chetty, 2008; Pillay, 2018). Despite the statutory right of pregnant female learners to remain in school and progressive policies in this regard, their implementation remains inconsistent and differs between schools (Matlala, 2017; Nkani & Bhana, 2016; Timæus & Moultrie, 2019). As a result, certain female learners have directly or indirectly been excluded by their schools by either being expelled or prevented from returning to school in the year in which they gave birth (Matlala, 2017; Timæus & Moultrie, 2019). A lack of training provided to educators to equip them with the necessary skills to adequately

support pregnant learners has also been observed (Bhana et al., 2010; Chigona & Chetty, 2008; Pillay, 2018). Furthermore, continued education and eventual attainment are threatened by the stigma and discrimination these female learners have to face as a result of their pregnancy (Chigona & Chetty, 2008; Pillay, 2018).

4.3.1.2 Male learners

Certain gender-specific challenges have been observed that contribute to male learners failing to complete school. Male learners, to a greater extent than female learners, appear to be affected by household monetary constraints, as they are more likely to be required to secure an income and contribute to the family and household expenses, which could necessitate them leaving school early (Flisher et al., 2010).

In terms of substance use, it has been determined that male adolescents have increased prevalence rates, compared to female learners, and that their substance use also increases with each grade (Desai et al., 2019; Onya & Flisher, 2008; Tshitangano & Tosin, 2016). The income that male adolescents are required to secure, as stated above, has been cited as a possible reason for the above (Desai et al., 2019). Tobacco use is also tolerated in certain communities among male learners, whereas use by female adolescents would be condemned (Onya & Flisher, 2008; Tshitangano & Tosin, 2016). Consequently, tobacco use is increased – almost twice as much – among male learners who left school compared to their female counterparts, and is sustained (Desai et al., 2019; Flisher et al., 2010). Male learners are consequently at greater risk of substance use compared to female learners (Onya & Flisher, 2008; Tshitangano & Tosin, 2016).

Shindler and Fleisch (2007) submitted that male learners are not dropping out at a higher rate compared to their female counterparts, but are progressing through school in a more problematic manner, and could thus statistically be located in lower grades. This is possibly the result of boys leaving school for a year or two in the lower grades to a greater extent than their female classmates (Shindler & Fleisch, 2007). Further, even though grade repetition is a problem among both male and female learners, boys have been observed to have a higher repetition rate than their female counterparts (Fleisch & Shindler, 2009; Mitchell et al., 2015). Possible reasons for this gender disparity could include weaker reading abilities than measured among girls, the later maturing of boys, as well as a tendency of male learners to be more defiant and to lack positive attitudes towards school (Fleisch & Shindler, 2009). A pattern has been observed that once male learners fail Grade 12, they do not return to school (Motala et al., 2009).

4.3.2 Race

Certain inequalities continue to exist in South Africa, as indicated above (Flisher et al., 2010; Heaton et al., 2014). Black female adolescents have been found to be eight times more likely to contract HIV than females of other racial groups, and higher pregnancy rates have been observed among these teenagers compared to the national average (Ardington et al., 2015; Sawyer-Kurian et al., 2011). Certain learners residing with neither of their biological parents have been deemed to progress at a slower pace through grades, which is significant, as a third of black students are reportedly residing with a grandparent or an older adult receiving a government pension (Anderson et al., 2001).

In addition, the observation has been made that the black population group has consistently had higher proportions of people living below the lower-bound poverty line in comparison to the

national poverty rate (Statistics South Africa, 2017). As a result, increased levels of leisure boredom have been observed among black adolescents, who on average have less access to recreational opportunities (Wegner et al., 2008; Weybright et al., 2015). Dire financial circumstances leading to the inability to cover school fees, uniforms, school lunch, and related expenses have further particularly been observed among black learners (Sawyer-Kurian et al., 2011). Compared to other races, it is mostly black students who are generally unable to attend better quality schools due to monetary and geographical constraints (Spaull, 2013). Denial of admission to school based on race may be unlawful in the new democratic dispensation, but the result may nonetheless be the same given the high fees attached to school-related expenses (Harber & Mncube, 2011). Save for a portion of wealthier students, most black students are consequently left with no other option than to attend historically disadvantaged schools (Grossen et al., 2017). The quality of the education provided in these schools was, as indicated above, immensely poor during apartheid, and remained dysfunctional to a great extent despite the implementation of democracy (Motala, 2011; Heaton et al., 2014). These schools are still characterised by factors such as large, overcrowded class groups, poor facilities and resources, under-qualified or even unqualified teachers, and limited access to services such as career guidance and remedial assistance (Grossen et al., 2017; Heaton et al., 2014; Spaull, 2013).

In instances where black learners are financially capable of attending well-resourced schools, the extent to which these students are accepted in such schools is limited, and the prevailing culture serves to exclude them (Motala, 2011). Racial attitudes, discrimination, and violence thus continue to exist, and black learners are too often merely tolerated rather than viewed as legitimate school learners (Harber & Mncube, 2011). Educators also do not necessarily remedy the situation and fail to integrate themselves or to address racial issues (Harber & Mncube, 2011).

Unfavourable grade progression, which commences in the earlier grades already, is considered to be a primary issue among black learners (Anderson et al., 2001; Motala et al., 2009). In 2010, such students were deemed to be six times more likely to repeat a grade (Branson et al., 2014). The extent to which black learners repeat grades, compared to their peers of other races, leaves them educationally two years behind when they reach the age of 18 (Heaton et al., 2014). This discrepancy appears to be linked to the under-par education that most black learners continue to receive (Branson et al., 2014). Although progress has been made to ensure the equal allocation of government funding, equal access to quality schooling is still lagging behind, and as a result, not only does the repetition of grades remain high among black learners, but also the dropout rates (Harber & Mncube, 2011).

4.3.3 Home environment

A number of factors concerning the home environment have been identified when considering unfavourable school performance in learners. A link has been observed between children with less-educated parents (particularly the mother) and grade repetition and eventual dropout, with the children of better-educated parents being less likely to fail grades (Branson & Lam, 2010; Branson et al., 2014; Heaton et al., 2014; Mitchell et al., 2015). This is related to the probability that more educated parents could be in a better position or more motivated to assist their children with their homework and support them in their learning (Anderson et al., 2001; Gauteng Department of Education, 2012; Motala, 2011). Another possibility is that such parents are able to generate a greater income than less-educated parents and thus able to secure enrolment in better-quality schools (Anderson et al., 2001; Branson et al., 2014). In addition, poorer parental involvement has been observed among less-educated parents, as the parent's abilities and availability in this regard could be more limited (Munje & Maarman, 2017; Neser, 2007).

Deficiencies in parental involvement concerning the education of the learner, supportive and caring familial relationships, and exposure to educational activities at home have been observed to unfavourably contribute to school performance and attainment (Legotlo et al., 2002; Inglis & Lewis, 2013; Munje & Maarman, 2017). Outright discouragement or negative parental attitudes towards school and the importance of education – based on, *inter alia*, personal views, household needs, alarming youth unemployment rates, or frustration experienced by parents in covering the monetary expenses related to school – can also leave learners despondent to such an extent that they rather leave school (Mgwangqa & Lawrence, 2008).

Dysfunctional home environments, characterised by a variety of possible factors, such as sibling rivalry, conflict, divorce or separation disputes, parental substance use and subsequent embarrassing behaviour, neglect, or absent parents, can place learners at risk of leaving school early (Inglis & Lewis, 2013; Mgwangqa & Lawrence, 2008). Childhood maltreatment and exposure to violence further inhibit education and significantly increase the probability of eventual school dropout (Ngqela & Lewis, 2012; Pieterse, 2014). Physical abuse particularly increases the risk of non-completion, and the extent of such abuse determines the level of the relevant risk (Pieterse, 2014). Other variables that influence educational attainment include the duration and frequency of the abuse, the co-occurrence of other forms of abuse, and the age of the victim (Phasha, 2010; Romero et al., 2018). In this regard, it has been determined that frequent, multiple forms of abuse resulted in lower IQ scores (Phasha, 2010). Adolescents are in general also affected to a greater extent by abuse, compared to younger children, as they possess more maturity, knowledge, and awareness to appreciate the wrongfulness of the acts being perpetrated against them (Phasha, 2010). This creates an additional risk of dropout during the optional phase (Phasha, 2010).

4.4 School factors

Four predictive factors related to the category of school are applicable to dropout. These aspects are related to school connectedness and violence as well as the management of the institution, and the assistance and policies effected by government.

4.4.1 School connectedness

School attachment, which is the extent to which a learner feels content, integrated, and liked, plays an important role in terms of the learner feeling connected to school, and the factors of school environment and a connectedness to school should be considered in predicting non-completion (Neser, 2007). Schools can create a community to which a learner can belong; promote learning; foster educational motivation; enhance academic, social, and emotional competence; create an experience of safety; and provide social support and engagement within school (Neser, 2007; Umra, 2017; Walton et al. 2016). Learners in such an environment are protected against mental and emotional difficulties, and assisted in forming self-esteem, problem-solving skills, positive experiences, and pro-social conduct, which all contribute to school completion (Rawatlal & Petersen, 2012; Romero, Hall & Cluver, 2019; Umra, 2017; Walton et al., 2016). It is thus clear that a favourable school environment and educational relatedness are essential in the process of school attainment (Neser, 2007).

Constructive relationships with supportive educators constitute a crucial requirement for establishing a positive school environment and connectedness, as such bonds have been found to improve academic outcomes and create a feeling of acceptance, trust, respect, and assertiveness in learners (Inglis & Lewis, 2013; Munje & Maarman, 2017; Romero et al., 2019; Umra, 2017). In addition, the educator-learner relationship is important, as certain learners are only exposed to reliable role-models – who are modelling respect, values, and acceptable

conduct – at school (Inglis & Lewis, 2013). Contrary to favourable bonds, negative teacher-learner relationships may have adverse consequences and increase the possibility of school dropout (Inglis & Lewis, 2013). Humiliation at the hands of teachers, such as inappropriate punishment, teasing of or gossiping about learners, or being annoyed when assistance is requested, has specifically been observed as a factor contributing to early school-leaving (Mgwangqa & Lawrence, 2008).

It would consequently be vital for educators to display a positive attitude, warmth, open communication, a willingness to assist, and active involvement (Umra, 2017; Walton et al., 2016). A study that confirmed this, however, also determined that in South Africa, the conduct of certain teachers not only entails an absence of involvement and ineffective forms of discipline, but unprofessional and unfavourable behaviour such as shouting and corporal punishment (Munje & Maarman, 2017; Sawyer-Kurian et al., 2011). On the other hand, educators face emotional challenges within the educational environment due to unfavourable behaviour by learners, as well as the pressure to fulfil multiple roles in attending to the well-being of the learner, which also constrains relationships with learners (Walton et al., 2016).

4.4.2 School violence

Effective teaching and learning could only occur in an environment that is safe and secure (Neser, 2007). Schools hold the power to counter violent behaviour, which is frequently a consequence of the general dysfunction prevalent within the larger community attached to the school, by providing appropriate interventions (Ngqela & Lewis, 2012). Notwithstanding, violence has become characteristic of a number of schools in South Africa, and learners continue to be exposed to such unfavourable conditions within the school system (Ngqela & Lewis, 2012). Such violence includes physical acts, for example, robbery, assault, sexual

assault, and rape, as well as non-physical acts such as threats (Burton, 2008). Learners are also regularly abused by their teachers, as corporal punishment continues to prevail despite a legal prohibition in this regard (Burton, 2008; Ngqela & Lewis, 2012).

A specific factor that adversely influences school attachment and safety is peer victimisation (Neser, 2007). Bullying has been defined as mainly unprovoked, repeated, adverse physical and/or psychological actions, usually characterised by an imbalance in power between the parties involved (Boyes, Bowes, Cluver, Ward & Badcock, 2014; Motala, 2011; Townsend, Flisher, Chikobvu, Lombard & King, 2008). Peer victimisation in South African high schools is prevalent and has been reported to affect on average 41% of learners on a national level (Boyes et al., 2014; Ngqela & Lewis, 2012; Townsend et al., 2008).

When learners are exposed to violence at school, it results in an array of consequences, including fear, stress, and a diminished self-esteem (Ngqela & Lewis, 2012). It also leads to an increase in truancy, poorer concentration, and a weaker ability to focus on schoolwork (Burton, 2008; Ngqela & Lewis, 2012). Bullying in particular can result in psychological distress, suicidal ideation, and conditions such as depression, anxiety, and eating disorders; psychosomatic symptoms; poorer school adjustment and engagement; and inadequate academic performance (Boyes et al, 2014; Neser, 2007; Townsend et al., 2008). School violence and bullying thus directly impact on a student's education and augments the risk of early school-leaving (Boyes et al, 2014; Burton, 2008; Ngqela & Lewis, 2012; Townsend et al., 2008).

4.4.3 School management

Inadequate management in schools has grave consequences, as it is the responsibility of management to translate available school resources into favourable learner outcomes, foster favourable school dynamics, and ensure educational quality (Munje & Maarman, 2017; Murtin, 2013). Problematic organisational issues thus contribute to poor school performance and attainment (Legotlo et al., 2002). In South Africa, learners' academic outcomes are particularly being affected by a lack of supervision of the teaching staff by principals; the inconsistent application of disciplinary measures; an absence of deputies and support staff which contribute to continual rule changes; and limited communication between managers, educators, and students in order to create meaningful access to education (Legotlo et al., 2002; Nortje, 2017; Rawatlal & Petersen, 2012). School managers have also been accused of being authoritarian, lacking in understanding regarding the circumstances of learners, and failing to consult with parents and learners (Gauteng Department of Education, 2012; Rawatlal & Petersen, 2012). Even though government funding and assistance is provided to certain South African schools, the long-term successful impact of such resources on learner performance has not been observed (Munje & Maarman, 2017).

4.4.4 Government assistance and policies

It has been determined that inadequate school policies contribute to poor school performance and thus possibly to eventual school non-completion (Legotlo et al., 2002). In this regard, a lack of pre-determined responsibilities and functions for the principal, and the lack of creation or implementation of clear instructional programme policies both contribute to an instability in schools (Legotlo et al., 2002). This situation is exacerbated by the fact that national and provincial policies have frequently been unclear, difficult to interpret and implement, and poorly communicated (Legotlo et al., 2002; Rawatlal & Petersen, 2012). The above

inadequacies are important, given that once organisational dysfunction has been reached and the authority structures are no longer effective in schools, uncontained anxiety and aggression become prevalent, and the focus shifts from the work and providing a service to office politics and social considerations (Harber & Mncube, 2011). School performance is also negatively affected by the absence of professional support, which is meant to be provided by the district subject advisors (Legotlo et al., 2002).

A further issue, as conveyed by school managers in a study by Rawatlal and Petersen (2012), is that policies do not make provision for the diversity attached to certain South African schools, and are compiled as if schools are homogeneous. The primary school model being applied also appears to be authoritarian rather than democratic (Harber & Mncube, 2011). This results in a general top-down form of communication, where government officials and educators, to the exclusion of learners, determine the academic and general learning environment (Harber & Mncube, 2011; Rawatlal & Petersen, 2012).

4.5 Holistic view of predictors

The factors that place learners at risk and predict school dropout, as discussed above, have all individually been associated with school non-completion. Learners who have dropped out of school are, however, not a homogenous group (Biddlecom et al., 2008; Townsend et al., 2007). Adolescence is also a challenging life stage that involves a number of transitions and changes, which should be examined collectively (Inglis & Lewis, 2013). The personal factors contributing to school-leaving could not be separated from the difficulties attached to relevant social systems and other barriers related to school attainment (Biddlecom et al., 2008; Inglis & Lewis, 2013; Manona, 2015). The different factors contributing to early school-leaving are thus interconnected (Townsend et al., 2007).

This does not seem surprising, considering that the phenomenon of school dropout is complex and multifaceted, and school-leaving in general is preceded by a variety of unfavourable experiences (Desai et al., 2019; Flisher et al., 2010; Motala et al., 2009). Early school-leaving is therefore in general not deemed to be the consequence of an isolated occurrence or a single risk factor, but seen as a gradual, compounded, non-linear process that occurs over a period of time (Ananga, 2011; Flisher et al., 2010; Pillay, 2018; Weybright et al., 2017). The ultimate reason that an individual's school non-completion is attributed to may thus only convey the final event that resulted in dropout, and not be reflective of the intricacies attached to a more long-term process applicable in this regard (Branson et al., 2014). It is thus important to consider the manner in which the interdependent variables contributing to eventual school dropout overlap and influence each other, as well as the manner in which these factors are lived and experienced by the learners themselves (Legotlo et al., 2002; Townsend et al., 2007).

4.5.1 Factors associated with poverty

Poverty and the home environment are linked, as low socio-economic circumstances have specifically been associated with larger families, and these increase the risk for school dropout, as sufficient resources may not be available for every child (Boyes et al., 2017). Sibship size and support could nonetheless mediate this adverse consequence of poverty, as children living in large households were in other studies found to be more likely to complete school (Heaton et al., 2014).

A link has been identified between poverty and leisure boredom in terms of the combined impact of these factors on school dropout (Wegner, 2011). A lack of recreational opportunities, which include structured leisure activities, after-school sport and extracurricular activities, and safe facilities in good condition, exacerbate the experience of boredom among school learners

(Sawyer-Kurian et al., 2011; Wegner et al., 2008; Wegner, 2011). An absence of these opportunities has been observed in many poorer schools in South Africa, which creates a greater vulnerability among poor learners (Wegner et al., 2008). Poorer communities are also unable to provide stimulating recreational environments (Weybright et al., 2015). Poverty thus in general limits opportunities for meaningful and sustained involvement in leisure activities (Wegner, 2011). Other unfavourable variables, such as household poverty and the requirement to care for younger siblings and/or ailing parents, also do not allow adolescents the opportunity and time to engage in healthy leisure activities (Weybright et al., 2014). The existence of leisure boredom is significant, as it could lead to the adolescent fostering a negative attitude regarding school, paying insufficient attention to school work, being defiant towards authority figures, or refusing to participate – factors which all contribute to school disengagement and eventual school non-completion (Wegner et al., 2008; Weybright et al., 2017).

In order to seek better educational quality, certain children do not attend their closest school but travel to a more appropriate school, a situation which adds to the physical burden of poverty (Gustafsson, 2011). In light of the adverse consequences of poverty and the sub-standard education available to poor children, learners from low socio-economic households in general progress at a slower rate and display unfavourable academic outcomes such as poor academic performance and grade repetition (Boyes et al., 2017; Motala et al., 2009). A strong link thus exists between socio-economic circumstances, quality of education, and falling behind in school (Anderson et al., 2001; Branson et al., 2014). In this regard, only 8% of Grade 11 learners in the wealthiest schools have been required to repeat a grade, compared to the 30% of their counterparts in the poorest schools (Romero et al., 2018). A link has further been observed between school violence and poorly resourced schools (Ngqela & Lewis, 2012).

Risk variables such as the school context and unfavourable school environments could, as indicated above, have an adverse impact on the learner (Munje & Maarman, 2017; Romero et al., 2019). A positive educator–learner relationship could, however, serve as a protective factor against numerous risk factors, including the negative consequences attached to poverty, school delay, and eventual dropout (Munje & Maarman, 2017; Romero et al., 2019; Townsend et al., 2007; Walton et al., 2016). This is attributed to the observation that educators do not attend merely to the academic challenges of learners, but also to their emotional and social needs (Munje & Maarman, 2017; Romero et al., 2019; Walton et al., 2016).

4.5.2 Factors associated with HIV

The association between a low socio-economic status and dropout, as referred to above, could be compounded by the demands attached to the HIV pandemic experienced in this country, as it could increase poverty conditions and result in school-related funds rather being used for health expenses (Flisher et al., 2010). Issues concerning HIV specifically are also related to gender, as female and male learners could be required to drop out of school to take over the family responsibilities in households affected by HIV, and respectively care for a sick caregiver and financially contribute to the household income (Desai et al., 2019; Flisher et al., 2010). It would be crucial in this regard for support to be provided by extended families and communities to children who have been affected by HIV/Aids (Motala, 2011).

4.5.3 Factors associated with substance use

A specific link has been identified between trauma, such as that experienced within the home environment, and alcohol use (Umra, 2017). Regarding tobacco use, a significant triangular interaction has been observed between gender, the lack of finances to complete school, and the relevant area, and it has been specifically observed that girls in rural areas smoke more

cigarettes when a lack of school-related finances exist, compared to urban female learners (Desai et al., 2019). Tobacco use could also be a consequence of depression or another psychopathology (Flisher et al., 2010).

A number of additional factors which contribute to the onset of substance use have been identified. In general, adolescents are vulnerable due to their social and neurodevelopmental transitions as well as their curiosity for experimentation (Umra, 2017). Leisure boredom has been associated with risk behaviours and particularly substance use, which is employed in an attempt to alleviate the experience of monotony (Wegner et al., 2008; Wegner, 2011; Weybright et al., 2014; Weybright et al., 2015). Substance use, including its severity and onset, is further mediated by a family and parental history of substance use as well as family stress and conflict (Inglis & Lewis, 2013; Sawyer-Kurian et al., 2011; Townsend et al., 2007; Tshitangano & Tosin, 2016). Poor connectedness to school and a lack of interest in schooling foster anti-social bonds and deviant conduct, which in turn predisposes the individual to the probability of commencing with the use of substances, and leads to the continuation of anti-social practices (Flisher et al., 2010; Umra, 2017). The impact of peer pressure on learners in encouraging anti-social behaviour also ought to be considered (Mgwangqa & Lawrence, 2008). Furthermore, when a learner is facing familial or school challenges, it becomes even more attractive to yield to peer pressure and follow peers into substance use (Inglis & Lewis, 2013; Mgwangqa & Lawrence, 2008).

The absence of family sanctions, parental disapproval of drug use, and parental supervision is instrumental in the commencement of adolescent substance use (Inglis & Lewis, 2013; Sawyer-Kurian et al., 2011; Townsend et al., 2007; Tshitangano & Tosin, 2016; Umra, 2017). Conversely, perceived parental over-control can lead to substance use, as continual excessive

control interferes with the development of autonomy, problem-solving skills, and the management of stressful experiences, which are all involved in avoiding substances (Weybright et al., 2014). Exposure to violence and unstable home environments, including adverse parenting styles, poor parent-child relationships, and family disruption, have further been found to lead to maladaptive coping mechanisms, such as substance use, which in itself could lead to further defiant or risky behaviour in order to maintain such habit (Sawyer-Kurian et al., 2011; Umra, 2017).

The early use of “gateway” and “softer” drugs usually leads to the later use of “harder”, illicit drugs; for example, commencing with beer or wine and then moving progressively to “hard liquor”, tobacco, cannabis, and illicit drugs (Umra, 2017, p. 98). This aspect is further mediated by the attitude of the community towards ‘softer’ substances and the use of tobacco (Flisher et al., 2010; Umra, 2017).

In terms of the consequences of substance use, such use could lead to certain medical issues, hindered development, as well as general delinquency and aggressive and oppositional conduct (Flisher et al., 2010; Inglis & Lewis, 2013; Weybright et al., 2015). These consequences are educationally important as they could result in disciplinary steps being taken against the learner, grade repetitions, repeated school absences, and a weakened connectedness with and interest in school, which naturally all impact on school completion (Flisher et al., 2010; Inglis & Lewis, 2013; Weybright et al., 2015). A significant link has also been identified between substance use and sexual engagement of both females and males, which includes risky sexual behaviour such as multiple sexual partners and transactional and unprotected sex, which ultimately increases the risk of contracting HIV and pregnancy (Sawyer-Kurian et al., 2011).

4.5.4 Factors associated with female learners

Teenage pregnancy, in a cyclical manner, is both caused by and results in social, economic, and gender disadvantages and inequalities (Timæus & Moultrie, 2019). A social culture of violence and victimisation towards female adolescents limits their ability to negotiate safe sex or to refuse sexual intercourse in general (Sawyer-Kurian et al., 2011). This is important as a link has been identified between early sexual initiation and school dropout, and the younger the mother and inevitably the shorter the period of education, the greater the likelihood that she would not return to school after she has given birth (Ardington et al., 2015; Marteleto, Lam & Ranchhod, 2008; Timæus & Moultrie, 2019). Furthermore, in rural and probably poorer areas, greater numbers of teen pregnancies have been observed compared to urban societies (Ardington et al., 2015; Desai et al., 2019). Conversely, once female learners have become pregnant and given birth, they were less likely to return to school if they were residing in urban areas, possibly as more employment opportunities are available to students in such communities (Timæus & Moultrie, 2019).

Teenage pregnancy adversely affects school attainment in female learners; however, prior lower enrolment, school connectedness, and grade attainment have also been observed among these adolescents (Grant & Hallman, 2008; Marteleto et al., 2008). Female learners who have failed a grade before becoming pregnant were almost twice as likely to leave school once they have given birth compared to those learners who have not repeated a grade before (Grant & Hallman, 2008). In addition to unsuccessful past grade attainment, poorer numeracy and literacy skills were associated with learners who became sexually active at an earlier age than their counterparts (Marteleto et al., 2008). In light of the above, it is clear that female learners who fall pregnant were probably already experiencing educational difficulties prior to their pregnancy, thus lacking the motivation to avoid pregnancy that female students who are doing

well in school have (Grant & Hallman, 2008; Marteleto et al., 2008; Timæus & Moultrie, 2019).

It is also important to consider the manner in which poverty and financial constraints play a role in teenage pregnancy (Grant & Hallman, 2008; Pillay, 2018; Timæus & Moultrie, 2019). For example, learners from communities with low socio-economic status are likely to receive a poorer-quality education, which adversely influences educational attainment, and in turn predisposes female students to a greater risk of falling pregnant (Timæus & Moultrie, 2019). Also, such learners are experiencing a greater risk of becoming sexually involved with older males, which naturally maintains a pattern of vulnerability (Timæus & Moultrie, 2019). Once the child is born, the responsibility of caring for the infant mostly befalls the mother's family, as stated above, which creates a further financial burden, exacerbating the existing impact of poverty (Nkani & Bhana, 2016). Poorer families may also not be financially able to obtain care-giving assistance, and the young mother is frequently required to carry out such duties, at the expense of her education (Chigona & Chetty, 2008). This consequence is mediated by familial characteristics and support, as an increased probability exists that a female learner will return to school and continue with her education if another person was available and willing to act as her child's primary care-giver (Grant & Hallman, 2008).

4.5.5 Factors associated with home environment

A number of factors could contribute to challenging family relationships, such as the violation of trust, sibling rivalry, substance use, as well as financial difficulties (Inglis & Lewis, 2013). Strained familial bonds, in turn, could give rise to a diminished ability to concentrate and attend to schoolwork, as well as absenteeism from school, which increase the risk of school dropout (Inglis & Lewis, 2013). Familial demands could also lead to an inability to attend to

schoolwork, leading to school disengagement, which on its own is related to dropout (Sawyer-Kurian et al., 2011).

The family further plays an essential role in the deterrence or promotion of defiant and violent adolescent behaviour, as modelling forms a crucial part of learning and the family primarily shapes children's attitudes and values (Ngqela & Lewis, 2012; Umra, 2017). Absent parents also contribute to children feeling unaccepted and disconnected from adults, which in turn leads to learners being defiant at school towards the teachers (Rawatlal & Petersen, 2012). A lack of discipline at home further leads to learners rebelling against disciplinary measures implemented at school and attempting to take revenge against the teacher (Rawatlal & Petersen, 2012). Poor family management, a lack of parental supervision, as well as poor parent-child bonds and disconnectedness thus all contribute to a range of risky adolescent behaviour, which influences the adolescent at school and affects their school attainment (Umra, 2017).

4.5.6 Factors associated with violence

A common vulnerability to victimisation exists among learners, and their exposure to violence in a variety of spheres has been observed (Burton, 2008). As such, more than a third of learners who have been exposed to violence at home also experience violence at school (Burton, 2008). Furthermore, a link has been observed between inactivity and the perpetration of violence, a disconcerting factor given the lack of positive recreational activities referred to above (Burton, 2008; Weybright et al., 2015).

Conclusion

In this chapter, a number of factors that could be considered predictors of early school-leaving, as identified by the relevant literature, have been examined. An established overlap between the factors associated with dropout has also been discussed, and the manner in which these aspects could respectively influence and/or be influenced by each other has been illustrated.

CHAPTER 5

SUMMARY

Introduction

In this chapter, the influential factors in school dropout are discussed within Bronfenbrenner's bioecological theoretical framework to deepen our understanding of the intricate process of non-completion. Predictors of school dropout have been identified and discussed in the previous chapter. In light of the complex nature of non-completion and its predictors, it appears self-evident that a single theory with a limited focus may not be adequate to fully explain the dropout process and its causes (Battin-Pearson et al., 2000). School dropout should also not be framed in such a manner that the student is being blamed for their circumstances (Townsend et al., 2007). It thus appears that the most suitable theoretical framework to explain the early school-leaving process would be an integrative model, which considers multiple influences contextually and holistically (Battin-Pearson et al., 2000). It is submitted, as previously indicated, that the bioecological theory of human development, as developed by Urie Bronfenbrenner, would be suitable in this regard.

5.1 Application of Bronfenbrenner's bioecological theory

Bronfenbrenner's bioecological theory provides an important theoretical foundation for the study of early school-leaving (Fortin, Marcotte, Diallo, Potvin & Royer, 2013). Bronfenbrenner's process-person-context-time framework, as discussed in an earlier chapter, correlates with the predictive factors associated with school dropout, identified in accordance with the first research objective of this review. Furthermore, in terms of this theory, the learner with his/her own resources, as a system, is placed at the centre of all personal experiences and interactions with other systems (Fortin et al., 2013). This principle resembles the development of the child, which is multidimensional, and allows for a greater understanding, as per the

second and third research objective, of not only the individual risk factors but also the associations identified between them (Fortin et al., 2013).

In applying Bronfenbrenner's process-person-context-time model to the phenomenon of school dropout, as discussed, it is clear in terms of the first variable, that the proximal processes – thus the continued interactions between the learner and family, peers, school, and society – are of great importance. It is through such interactions that adolescents can, *inter alia*, find connectedness, motivation, and support regarding their education, and form healthy attitudes towards pro-social behaviour. Alternatively, the opposite could be fostered. Concerning the second element, demand characteristics such as age, HIV-status, gender, and race were clearly identified as influential dropout factors. The impact of resource characteristics was also established in early school-leaving. More specifically, mental resources, including academic competence and experiences; social resources, referring to the familial and household environment of learners; as well as material resources, relating to low socio-economic status and poorly resourced schools, were all significantly linked to dropout. Regarding force characteristics, the literature indicated that the intrinsic characteristics of learners, such as advanced or poor motivation and self-regulation and -concept, could respectively serve as a protective or contributory factor in school dropout. In terms of the third aspect of context, discussed more fully below, the predictors of dropout could be understood in terms of the remaining contextual systems, namely the microsystem, the mesosystem, the exosystem, and the macrosystem. Lastly, the notion of time, the chronosystem ought not to be underestimated, as it adds to the complexity related to non-completion. School dropout has been deemed to be a process, and a variety of risk factors have the ability to influence the trajectory of dropout, depending on the specific point in time at which such variables occur.

In examining the contextual factors more closely, it is clear that several predictors of early school-leaving have been identified that are directly related to the immediate environment of the learner. These factors constitute the microsystem, and the learner is placed at the centre of this system. The microsystems could be illustrated as follows:

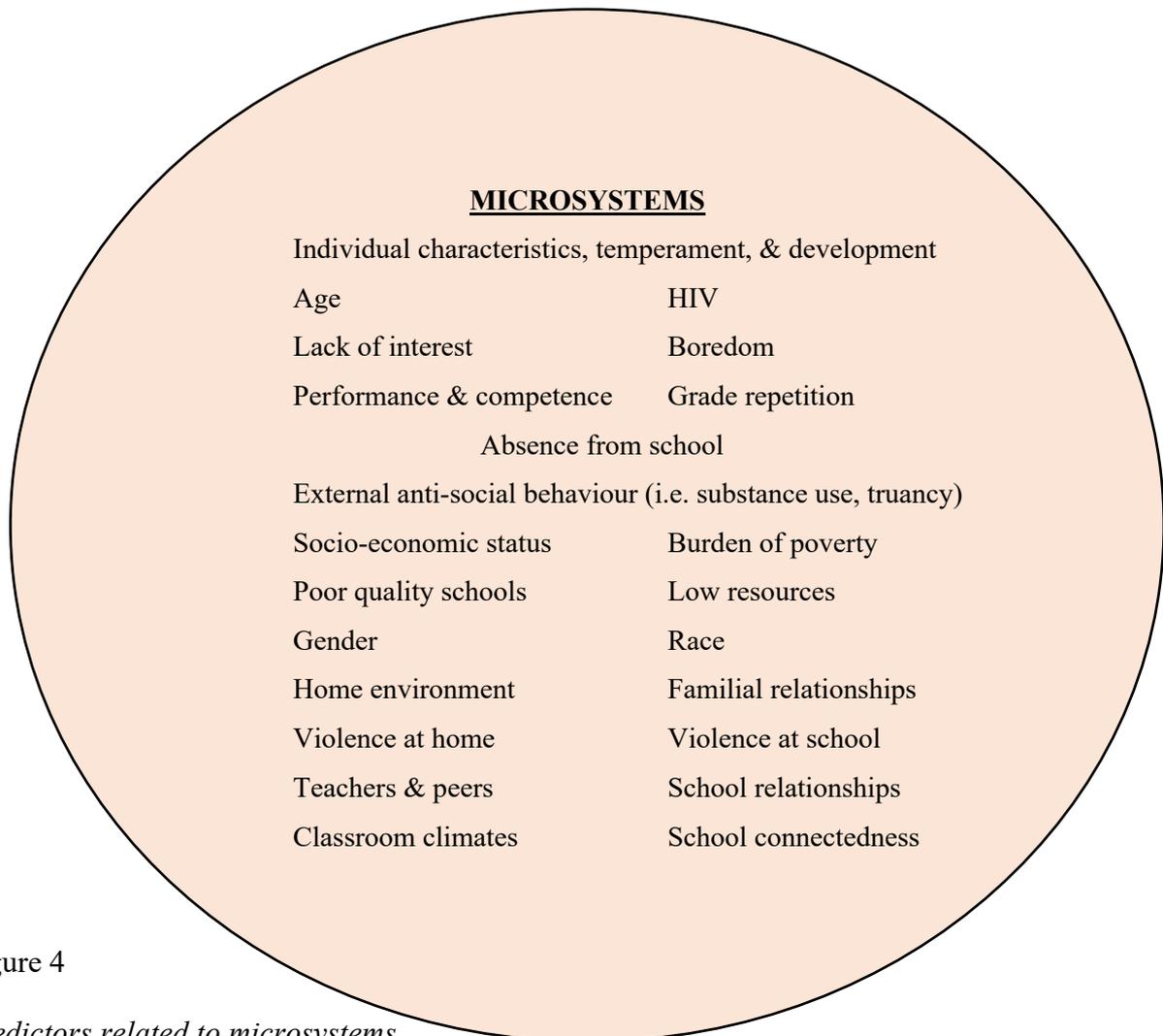


Figure 4

Predictors related to microsystems

The factors attached to the microsystem are in themselves closely associated with the process of school dropout. Nonetheless, as discussed previously, an overlap exists between the predictors of dropout. A great number of connections and interactions, as illustrated below, have thus been observed among the stated microsystems, forming the mesosystem. It should be noted that the list below is not exhaustive and that other combinations of influences are also possible.



Figure 5

*Predictors**related to mesosystem*

In terms of the predictors of school dropout, several interactions between settings that are not directly related to the learner have further been identified. Such interactions form the exosystem and could be illustrated as follows:

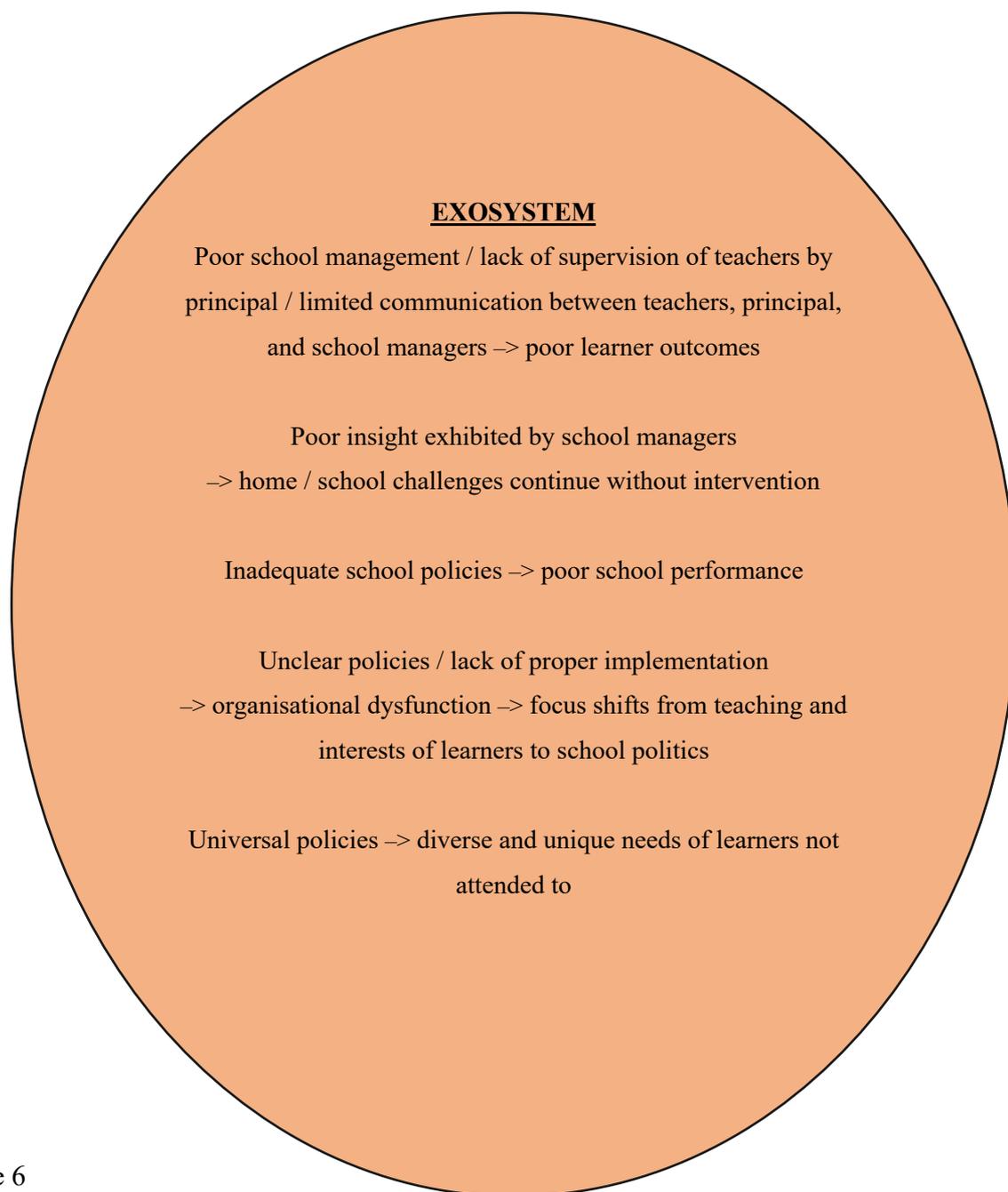


Figure 6

Predictors related to exosystem

Lastly, certain societal and cultural aspects that influence school dropout have been established.

These aspects are known as the macrosystem and could be illustrated as follows:



Figure 7

Predictors related to macrosystem

Conclusion

In this chapter, Bronfenbrenner's bioecological model was employed to conceptualise the process and predictors of school dropout. It is clear from the relevant discussion that all the variables of processes, person, contextual systems, and time contribute, on their own and through interaction with each other, to the eventual consequence of school dropout.

CHAPTER 6

RECOMMENDATIONS AND CONCLUSION

Introduction

In this final chapter, certain principles of intervention that relate to the identified predictive risk factors are discussed below. The limitations of this study are considered, and concluding remarks are also provided.

6.1 Interventions

In light of the adverse consequences of school dropout, government constitutionally remains responsible for making the final phase of school accessible and attainable (Motala, 2011). Given the overview of influential factors associated with school dropout, as discussed in a previous chapter, it is important to examine possible measures to reduce school dropout rates. Intervention measures can be categorised as either preventative (preventing or reducing an incident) or as therapeutic (having the goal to address, treat, or mitigate the effect of an occurrence) (Smith, Morrow & Ross, 2015). In planning and execution, it would naturally be important to determine the exact nature of an intended programme (Smith et al., 2015). For the purposes of this review, however, the term ‘intervention’ is used to refer to both preventative and therapeutic interventions. Principles related to addressing the identified predictors of school dropout, which are to inform intervention measures, are discussed below.

6.1.1 General aspects

In general, intervention programmes are aimed at creating a safe and supportive environment; providing structured extra-mural activities in a consistent manner; conveying information regarding mental health and other pertinent issues; building skills; increasing available counselling opportunities; and ensuring referrals to suitable stakeholders (Burton, 2008;

Rawatlal & Petersen, 2012). Most psychosocial measures in South African schools have focused on treatment, with mental health and prevention programmes attempting to enhance individual coping skills concerning single issues such as substance use or HIV (Rawatlal & Petersen, 2012). Individually oriented approaches have, however, only had limited success (Rawatlal & Petersen, 2012). The World Health Organisation recognised decades ago that a link exists between the health and well-being of adolescents, and the quality of their social environments (Rawatlal & Petersen, 2012). With this being the case, as with the theoretical framework, a broad ecological approach would be required to consider and incorporate contextual demands within a specific social environment, while focusing on the development of the whole school, with support by structures in the greater community (Mahlomaholo, 2011; Rawatlal & Petersen, 2012).

In line with this principle, a national, universal implementation of interventions is not likely to succeed given the great variety in levels of resources and functioning among South African schools (Burton, 2008). Idiosyncratic factors such as the availability of resources and support structures, subsequent implementation capacity, as well as the needs and priorities of the particular school and learners have to be considered when developing a suitable intervention programme (Burton, 2008).

6.1.2 Principles of intervention

Dropout interventions should encompass the learner, family, school, and community (Christenson & Thurlow, 2004). In addition to the above, given the stated duty of government, the roles of state assistance and policies should also be examined in addressing non-completion. It is recommended that the principles relating intervention discussed in the following sections be considered in addressing school dropout.

6.1.2.1 Learner

It would be beneficial to present learning-centred interventions and health awareness programmes to learners (Manona, 2015). These programmes would focus on the risks attached to unsafe sexual conduct, such as sexually transmitted infections and HIV and Aids in particular (Chigona & Chetty, 2008; Manona, 2015). Other aspects concerning gender and relationship dynamics, reproductive health, teenage pregnancy, and the immense challenges attached to child-rearing, particularly during adolescence, are also to be included (Chigona & Chetty, 2008; Manona, 2015; Nkani & Bhana, 2016). Together with being encouraged to abstain from sexual activities, it is suggested that learners be educated about contraceptives, particularly access thereto, the skills to negotiate their use, and the correct manner of such use (De Vries et al., 2014; Manona, 2015; Nkani & Bhana, 2016). Workshops providing information regarding substances, as well as related topics, such as education and violence, have been deemed useful in reducing substance use (Carney et al., 2018). In addition to the above, suggested interventions are to incorporate a focus on life skills, anger management, effective communication, and conflict resolution, in order to address problematic behaviour in general (Carney et al., 2018; Wegner & Flisher, 2009).

In addressing the issue of motivation, interventions should focus on intrinsic goals rather than extrinsic gain (Grobler et al., 2014). Future intrinsic goals, including self-growth, competence, and societal contribution, foster autonomy, whereas emphasising the possibility of external factors, such as wealth and power, only creates controlled motivation, which has been adversely linked to school attainment (Grobler et al., 2014). Learners should thus be intrinsically motivated in order to experience less anxiety and a more positive attitude towards their learning and schooling (Grobler et al., 2014).

In order to improve academic performance, it would be important to provide career development interventions, such as career counselling, to learners from a young age (Grossen et al., 2017). In guiding learners by identifying their interests and strengths, their academic performance could be enhanced (Grossen et al., 2017). Such interventions would also assist learners to make appropriate decisions regarding academic, vocational, and technical schooling, which could lead to decreased dropout rates in general (Grossen et al., 2017). It would furthermore be important for counselling services to be available to learners in order to attend to any dropout-related challenges the learner may be experiencing (Rawatlal & Petersen, 2012; Tshitangano & Tosin, 2016).

The importance of peer groups must be considered when assisting adolescents, as they spend extensive periods with peers in accordance with their development phase (Romero et al., 2018). Intervention measures thus have to focus on obtaining the support and endorsement of peer groups in order to effect favourable change (Romero et al., 2018).

6.1.2.2 Family

Parents play an important role in motivating learners regarding their education, as appropriate support and encouragement can lead to favourable academic performance and competence despite the presence of other adversities (Grobler et al., 2014; Inglis & Lewis, 2013). Parents also play an essential part in curbing substance use and unfavourable behaviour, as negative views and disapproval of these can foster health-enhancing conduct and counter the effect of factors encouraging substance use and anti-social conduct (Tshitangano & Tosin, 2016; Umra, 2017; Weybright et al., 2014). In general, despite exposure to frequent violence, parents could act as a protective factor in terms of learners' possible school delay, as parental acceptance and responsiveness in this regard are linked to favourable educational outcomes (Romero et al.,

2018). It is thus important for parents, irrespective of the circumstances, to employ positive parenting and be consistent in their discipline measures, without being overprotective (Romero et al., 2018).

In light of the above, psycho-education, counselling, and other forms of interventions directed towards parents would thus be of extreme importance to allow them to adequately support and assist their children (Chigona & Chetty, 2008; Tshitangano & Tosin, 2016). In order to alleviate the burden of poverty, parents and care-givers who are unemployed must have access to and be encouraged to attend Adult Basic Education and Training programmes, and be assisted in completing or furthering their education (Mahlomaholo, 2011).

6.1.2.3 School

It would be essential for all schools to timeously identify possible risk factors of school dropout in order for such challenges to be effectively addressed (Mahlomaholo, 2011). Teachers should receive continuous training in this regard to remain up to date with policies and intervention methods, and schools have to maintain open communication with various stakeholders to be able to appropriately refer a child at risk (Manona, 2015; Munje & Maarman, 2017). Engagement between schools and stakeholders is also required to develop measures that are both appropriate for the specific environment as well as logistically viable (Munje & Maarman, 2017).

Adolescents can develop a greater sense of autonomy, competence, and connectedness through leisure motivation, which in turn not only allows for the participation in healthy activities, but also transfers to academic motivation and an increase in favourable school outcomes (Weybright et al., 2018). Given the association between leisure boredom and other dropout risk

factors, schools have a responsibility to create an environment where boredom is addressed and appropriate activities are presented (Wegner et al., 2008; Weybright et al., 2014). Interventions should further focus on leisure and motivation awareness to foster recreational interests and the skill to negotiate leisure constraints, as well as to enhance the exploration of and involvement in sport and recreational activities, both during and after school (Wegner et al., 2008; Wegner & Flisher, 2009). The implementation of these strategies would especially be important in schools where after-school activities do not exist or are limited, such as is the case in many poorly resourced schools (Wegner et al., 2008).

Presenting activities at school could also assist in addressing the issue of absenteeism (Weideman et al., 2007). Other measures in this regard could include acknowledging good attendance, and conversely applying sanctions; exercising proper communication with parents; and instituting feeding schemes at school (Weideman et al., 2007). In order to curb teacher absenteeism, sufficient monitoring methods would be essential, and sanctions, such as proportional wage cuts, ought to be implemented with greater consistency (Murtin, 2013).

In order to address grade repetition, support groups could be established at schools to ensure that at-risk learners do not fall further behind (Murtin, 2013). Schools also have to encourage learners to read English books and magazines, listen to English programmes, and to participate in English debates and discussions, in order to improve their proficiency in the language (Kyei & Nemaorani, 2014). It would also be prudent to expose learners to English from Grade 1 already, rather than merely abruptly changing the language of instruction a few years later (Murtin, 2013).

In order to ensure that pregnant learners are able to optimally continue with their schooling, Chigona and Chetty (2008) proposed that schools provide separate classes or that the Department of Education introduces separate schools for such learners. This arrangement would provide pregnant learners with support and remove them from classes where stigmatisation is prevalent, while ensuring that they are receiving on-par education (Chigona & Chetty, 2008).

School principals ought to request specific assistance regarding transport for learners who are required to travel long distances to and from school, in order to increase school attendance and decrease their exposure to risk factors such as sexual abuse (Manona, 2015). The school should also notify the Department of Education about learners living in poverty in order for school nutrition programmes to be instituted (Manona, 2015). In addition to attending to the burden of physical poverty, it would be essential to implement measures that are focused on the social and psychological impact of poverty on learners, as poor students are continually excluded and marginalised (Dieltens & Meny-Gibert, 2012). Possible interventions could include drafting human rights policies, and also actively instilling an equitable and human rights-based culture within the school (Dieltens & Meny-Gibert, 2012). The challenges in this regard are, however, complex, and an immediate or short-term solution would consequently not be possible (Dieltens & Meny-Gibert, 2012).

Concerning the issue of violence, schools could intervene by ensuring that the premises are logistically secure and safe, and that teachers are present at all times in the classroom and recreational areas to provide adequate supervision (Burton, 2008). Educators should also receive training concerning alternatives to corporal punishment (Burton, 2008).

In general, forums should be created at school where adolescents at risk could obtain information, support, and assistance regarding the difficulties they are experiencing (Burton, 2008; Tshitangano & Tosin, 2016). Principals and school managers are also to monitor teacher–learner interactions to ensure that the neglect of duties, unfavourable or unprofessional behaviour, or ill-treatment are appropriately and promptly stopped, that the educators involved are held accountable, and that the issues are addressed in terms of the South African Schools Act and other relevant regulations (Burton, 2008; Manona, 2015).

It is recommended that all educators complete a certain number of hours of professional development training and activities per annum, in accordance with international standards, to ensure an acceptable standard of education (Murtin, 2013). All appointed teachers should also be adequately qualified as prescribed in the policies of the Department of Education to assist learners with confidence and expertise (Mahlomaholo, 2011, Nortje, 2017). Regarding poorly resourced schools, it has been recommended that the government should subsidise such schools to enable them to appoint educators with a thorough understanding of their subject material (Nortje, 2017). Wealthier and private schools could also be approached to provide workshops to new teachers to ensure subject competence and to provide guidelines in teaching a variety of learners with different needs and temperaments (Nortje, 2017). In addition, a sufficient number of teachers should also be employed in order to monitor learners, maintain effective classroom discipline, and prevent undue absences from school (Mahlomaholo, 2011). In general, educators' administrative duties should be reduced to create greater teaching opportunities and attention to learners (Department of Basic Education, 2011).

It is recommended that an awareness be created among schools regarding the protective role that positive learning environments can fulfil, despite other challenges which learners might be

facing (Grobler et al., 2014; Inglis & Lewis, 2013). Educators should also be informed regarding the crucial role that positive relationships play in creating school connectedness and in mediating other predictors of dropout, and accordingly be encouraged to be more attentive and involved with their students (Inglis & Lewis, 2013; Manona, 2015; Munje & Maarman, 2017). In order for educators to form caring, warm, and encouraging bonds with their learners, they must in turn be supported, as per the existing educational policies, and the challenges which they are facing are not be negated (Inglis & Lewis, 2013; Manona, 2015).

It remains the duty of the school managers to ensure that funds are used responsibly and transparently in order to produce quality learning and teaching (Manona, 2015). Interventions can be put in place to equip school managers with the necessary abilities to maximise available school resources and optimise school functioning, regardless of the circumstances (Munje & Maarman, 2017). School principals ought further to be appointed based on a selective examination process, complete a tertiary advanced educational programme, and be offered competitive wages in order to attract highly competent candidates (Murtin, 2013).

6.1.2.4 Community

Learners are greatly influenced by environmental, cultural, and societal factors, and consequently communities could play an important role in establishing healthy attitudes towards education and the importance of school attainment (Weybright et al., 2018). Academic motivation, as well as healthy leisure activities and encouragement, could also be provided by the community (Weybright et al., 2018). The community is further to be encouraged to assist by donating textbooks, stationery, and other learning materials to schools, and in general to support their local school to alleviate its needs (Nortje, 2017).

Clear and total disapproval of the use of all substances, particularly with regard to male adolescents, could play an important role in limiting substance use and its effect on dropout (Tshitangano & Tosin, 2016; Weybright et al., 2014). It would be prudent, with the assistance of social services, to establish child-care facilities within the relevant community to allow an adolescent parent to return to school, and not automatically be required to care for the infant on a full-time basis (Chigona & Chetty, 2008). Social support could further serve as a protective factor against violence, including bullying, and opinion leaders could greatly assist in addressing unfavourable views regarding woman and girls, as well as female-directed violence (De Vries et al., 2014; Romero et al., 2018). The community as a whole should be included in interventions attempting to address gender-based attitudes, as such attitudes are collectively accepted and perpetuated (De Vries et al., 2014).

In light of the above, not only should psycho-education be provided to communities to create an awareness regarding the influence and impact they could have on the prevention of school dropout, but the co-operation of the community concerning interventions would also be greatly beneficial (Weybright et al., 2018).

6.1.2.5 Policy and government assistance

Despite the statutory principles relating to the age of school entry, over-age enrolment continues to exist and could be alleviated by creating sufficient awareness in this regard (Motala, 2011). As a proper early foundation can ensure greater school outcomes and attainment, the quality and attendance of early childhood education and pre-schooling ought to be increased in terms of the existing policy goals (Department of Basic Education, 2011). The government should ensure that proper policies and funding are in place in this regard, and

also ensure that learners with learning difficulties are timeously identified and provided with the assistance and attention they require to improve their performance (Motala, 2011).

Policies regarding mandatory drug testing at schools should be considered as such measures have served as a deterrent regarding substance use (Carney et al., 2018). The availability of substances is closely related to their subsequent use by adolescents (Tshitangano & Tosin, 2016). A co-operative relationship between the South African Police Services and schools would thus be essential in limiting access to alcohol and drugs in and around the school premises (Burton, 2008). Local government also has an important role to play in ensuring safe public spaces in proximity to schools, and in promoting the relationship between stakeholders (Burton, 2008). This is in line with the Prevention and Treatment for Substance Abuse Act 2008, which demands the involvement of various national sectors to implement prevention and intervention programmes (Tshitangano & Tosin, 2016).

The patterns of inequalities which exist in South Africa's apparent dual education system must inform any intervention measure attempting to alleviate the burden of poverty (Spaull, 2013). A number of policies have been instituted over the years to address the relevant inadequacies; however, implementation has been hindered by, *inter alia*, inherited historical backlogs, growing inflation, and the allocation of fewer resources to poorer provinces (Motala, 2011). Nonetheless, in order to improve school attainment, it would be crucial to eradicate poverty in families and communities (Mahlomaholo, 2011). Consequently, social and economic policies ought to be accurately implemented to ensure that children from low socio-economic households have equal access and educational opportunities (Kyei & Nemaorani, 2014). The focus should also be placed on poorly resourced schools when distributing and possibly expanding resources (Motala, 2011). In addressing the effect of poverty, measures should be

implemented to ensure that all eligible children are duly awarded a social welfare grant, seeing as the children who are indeed receiving such assistance are more likely to remain in school (Pettifor et al., 2008). Government should assist with school-related expenses, such as sponsoring school uniforms and other materials of learning (Kyei & Nemaorani, 2014; Pettifor et al., 2008). South Africa could also consider implementing the international measure of conditional cash transfers to poor families, in exchange for effecting continued school enrolment and attendance (Pettifor et al., 2008).

Government should provide better facilities to poorly resourced schools that meet the standards of basic social services, such as running water and sanitation, as well as the requirements for adequate learning, which include libraries and proper classrooms (Kyei & Nemaorani, 2014; Nortje, 2017). Improving infrastructure would not only contribute to school attainment, but it would also allow for more learners to be accommodated, resulting in smaller classes and alleviating the burden of over-enrolment during the earlier grades (Heaton et al., 2014; Motala, 2011). Infrastructure funding does not have to be a permanent intervention, but could be seen as a temporary stepping stone to attend to the necessary (Nortje, 2017).

Government, and particularly the Department of Education, should employ district offices to become increasingly involved in, and provide assistance to, particularly poorly resourced schools regarding their daily management, specifically in managing their allocated budgets where the capacity to do so is limited (Motala, 2011; Munje & Maarman, 2017). Furthermore, the department should replace their universal policy approach, and apply more tailor-made solutions when allocating resources, considering the school's specific needs, challenges, and contexts (Munje & Maarman, 2017). An appropriate allocation of resources also demands that provision is made for inflation in order to avoid implementation difficulties (Munje &

Maarman, 2017). Lastly, once policies have been implemented, monitoring the appropriate and effective use of resources would be required to secure favourable student outcomes (Motala, 2011; Munje & Maarman, 2017).

6.2 Limitations of the study

The following limitations exist in terms of this review:

- Only a limited number of grey literature sources was selected. These sources were identified through perusing the reference lists of already selected publications; however, an additional search was not undertaken given the excessive availability of material in this regard.
- As the objective of the study was to identify broad general predictive factors of school dropout, it does not make provision for specific differences that could be applicable between regions, districts, and even individual schools.
- Although certain predictive factors could be more prevalent than others, the specific and/or statistical prevalence of each factor was not determined in this study, as the subject matter was qualitatively examined.
- The manner in which the relevant risk elements are interconnected has been illustrated; however, this study covers a limited number of such connections, as the possible combination of variables would be extensive.

Conclusion

In this study, the phenomenon of school dropout in South Africa, defined as leaving school without completing Grade 12, has been examined. Presently, more than half of the learners previously enrolled in school drop out during the optional last three years of secondary school. This has lasting and destructive consequences for these individuals, who have to navigate an

already challenging after-school environment, as they are deprived of a number of further opportunities and exposed to even greater challenges. It also has a significant impact on the country, as it hinders the growth of the economy and society as a whole. There is consequently a sense of urgency attached to understanding and addressing the phenomenon of school dropout.

It has been determined that single events, in general, do not account for the drastic consequence of dropping out of school. Early school-leaving is thus not seen as an isolated occurrence but rather as a complicated process that occurs over time. Given the complexity attached to dropout, it is clear that one cannot fully comprehend this phenomenon without a broad understanding of the multiple predictive aspects that underlie early school-leaving. In this regard, the studies examining this issue in South Africa in general only focused on a limited number of dropout risk factors at a time, as is clear from the provided table of included publications. Although it is naturally important to examine the impact of certain predictors more closely, an overall view of the issue is consequently not readily apparent from the relevant literature. Furthermore, any attempt to successfully address an expansive problem such as school dropout could not be successful without extensive knowledge of the subject matter. It was consequently imperative to investigate and collate an overview of the predictors associated with dropout, which this review provides.

For the purposes of this study, it appeared appropriate to employ a scoping review as research methodology, as it allowed for the compilation of a comprehensive summary which could accordingly inform future decisions. A number of predictive factors related to early school-leaving were identified. It was also determined, in accordance with the nature of school dropout, that multiple risk factors overlap and engage in numerous ways. With this being the

case, a broad bioecological approach was applied to theoretically conceptualise the accumulation of various challenges, which occur and interact among several systems, and ultimately result in early school-leaving.

Lastly, given the pervasive and extensive pattern of school dropout, it is clear that interventions should be applied across several domains in order to successfully address the challenges that learners experience in different environments. In this regard, it is important to emphasise that school dropout is not a distant problem, but an issue which requires the attention and assistance of every member of society. It thus demands a collective effort to assist learners in avoiding the inevitable and severe disadvantages attached to early school-leaving, and to secure their best interests, which are, as determined in our Constitution, of paramount importance.

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APPENDIX

CONFIRMATION OF EXEMPTION FROM ETHICS REVIEW



Miss Jurne Le Roux (218064751)
School Of Applied Human Sc
Howard College

Dear Miss Jurne Le Roux,

Protocol reference number: 00003740
Project title: Predictors of school dropout in South Africa: An overview

Exemption from Ethics Review

In response to your application received on 3 September 2019, your school has indicated that the protocol has been granted **EXEMPTION FROM ETHICS REVIEW**.

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.

In case you have further queries, please quote the above reference number.

PLEASE NOTE:

Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,

Prof Johannes John-Langba
Academic Leader Research
School Of Applied Human Sc

Academic Leader : Research and Higher Degrees
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