THE CONTRIBUTION OF ASTROLOGY IN MOTIVATING LEARNERS TO AVOID DROPPING OUT OF SCHOOL IN EKURHULENI DISTRICT, GAUTENG PROVINCE

by

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DECLARATION

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THE CONTRIBUTION OF ASTROLOGY IN MOTIVATING LEARNERS TO AVOID DROPPING OUT OF SCHOOL IN EKURHULENI DISTRICT IN GAUTENG, PROVINCE

I declare that the above dissertation is my own work and that all the sources that I have used or

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I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.

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I am extremely grateful to God Almighty, who makes all things possible. I give Him the praise that is due to His name, as in Psalm 29:2 'Give unto the LORD the Glory due to His name; worship the LORD in the beauty of holiness.' May God continually be praised in His Holiness and Majesty.

DEDICATION

The research work is dedicated to my late father, Bernard Sahani Ngwila, my late mother Nombuyiselo Christina Ngwila, my late sister, and my late brother-in-law, Magaret Masondo and Veli Masondo, whose wishes for my academic success has become a reality. May their souls rest in peace. Also, to my daughter Anqobile Mvelase Ngwila, and her mother Sindiswa Mvelase.

Abstract

School dropout has become a national crisis in South Africa. Approximately 60% of first graders will ultimately drop out rather than complete Grade 12, when only 52% of the age-appropriate population remains enrolled. Several attempts have been made to reduce the escalating rate of learner dropout, yet the dropout rate continues to rise. The main question that the study was answering was: "how could astrological profiles contribute to motivating learners to avoid dropping out of schools in Ekurhuleni District in Gauteng province?" This study applied a qualitative research approach to determine the potential contribution that a popular craft could make to the motivation of learners to remain in school. Data collection techniques including questionnaires and interviews were used. The study was guided by Confirmation Bias theory. This study used purposive sampling to select respondents. A sample consisted of ten grade 11 learners, and ten teachers, selected from five schools. The population was 450 which is the total number of the grade 11 learners from where the sample of ten grade 11 learners were selected from five schools. A total number of 55 of teachers was the population that represent teachers from five selected schools which was used to sample ten teachers to participate as respondents to interviews in this research study. The 450 total population was made up of 90 learners from each of the five selected schools who were selected based on their respective curriculum streams which are the science stream, commercial stream and science stream.

The study found that astrological profiles could contribute to motivating learners to avoid dropout. From the findings, the researcher recommended that astrological personality profiles should be used at schools to assist learners to identify their strengths and weaknesses.

Keywords: Astrology profiles, Confirmation bias, Dropout, Learner motivation, Peer pressure, Personality profiles, Socio-economic factors.

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CHAPTER 1

ORIENTATION

1.1   Introduction and background

Education is one of the strongest predictors of health and wealth worldwide, with well-documented positive outcomes. Education is also one of the most important instruments that engage other institutions in human development in societies. Yet education continues to be negatively affected by an escalating rate of learner dropout. Attendance amongst learners aged above 14 is dropping gradually, especially after the obligatory school age (Hall, 2015:119). Weybright, Caldwell, Xie, Wegner & Smith (2017:1) demonstrate that youth education remained, and should remain a global priority. Learner dropout has resulted in severely higher psychological, physical, social and economic challenges that also heavily burden taxpayers. The negative culture of school dropout ravages many societies and countries, including South Africa (Hammond, 2007). The negative or default culture of dropping out and 'growing up' fast at the expense of education, continues to make detrimental impacts in the socio-economic, cultural and environmental spheres, as it also contributes to the high crime rate (De Witte, Cabus, Thyssen, Groobs, & Van der Brink, 2013).

A dropping out of school has become a nationwide challenge in South Africa. Weybright, (2017:1) founds that roughly 60% of graders ones will ultimately drop out, rather than reaching Grade 12, [when] only 52% of the age-appropriate population remain registered." Various authors, including Rumberger (2004), have drafted analytical frameworks to study dropout. Most authors differentiate between individual factors such as family, and institutional factors such as school and community (De Witte, 2013:7). However, this dual framework risks placing too much weight on one set of factors, while in practice all relevant factors are inseparably bound up with each other… [and] interrelate in uncountable ways (De Witte et al., 2013:8). Several attempts were made by government, the state, and the Department, to reduce the escalating rate of learner dropout (Hall, 2015), yet the dropout rate continues to rise.

1.2   Rationale of the study

School dropout is a countrywide crisis in many countries including South Africa. About 60% of first graders do not finish Grade 12. Only 40% of the children remain enrolled. This study aims to find cost-effective and practicable ways to reduce the number of learners leaving school before completing grade 12. The only factor remaining open to influence, is individual learner motivation, by way of career visualisation. The study examines the known mechanisms of motivation, including popularly understood personality profiles, in the context of secondary education. Lack of vision is among the causes of learner dropout in South African schools (Mathebula, 2023). Learner motivation is the key factor in school persistence or dropout (Spaul, 2015). Exposure to individualised personality assessments by way of one of many astrological automation programmes available, could contribute to activating self-visualisation, identity, and socialization. Astrological assessments enable people to picture their roles in society (Steven, 2012). Engagement with astrological assessments was found to impact positively on social moral values (Forrest, 2011) by way of engaging people in self-discovery, which is a key part of maturity (Mathebula, 2023). Popular psychology applications prompt personal identity differentiation and aspirations, which are closely allied to educational motivation.

1.3 Research questions

Main question:

- How can astrology contribute in motivating learners to avoid dropping out of schools in Ekurhuleni District, Gauteng province?

Sub-questions:

- What is the rate of learner dropout in South African schools?

- What are the causes that lead to learners dropping out of schools?

- Which attempts were made to reduce the learner dropout rate?

- How could learners be motivated to remain in school?

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- How could astrology assist in reducing dropout?

These research questions inform several goals and objectives of the study.

1.4 Aims and objectives of the study

The objectives of the study are:

- To determine the way in which astrology can contribute in motivating learners to avoid dropping out of schools in Ekurhuleni District, Gauteng province.
- To examine the rate of learner dropout in South African schools.
- To investigate the causes that lead to learners dropping out of schools
- To examine attempts to reduce the learner dropout rate.
- To determine the way in which learners can be motivated to remain in school.
- To determine the way in which astrology can assist in reducing learner dropout.

1.5 The Delimitations of the study:

Researchers agree that no scientific study is free of delimitations and limitations regarding data, interpretation or applications, and that the known delimitations and limitations should be made explicit (Grinnel, 2001: 424). Any attempt to hide shortcomings or failures would discredit the author. The delimitations of the study are based on the notions that the study focused on the emphases of context, assessments and interpretation that would focus only on educational persistence versus dropout. The other delimitation of the study is also based on the notion as part of its focus that its context, assessments and interpretation is also focused directly on relevant individual factors of aspirations, self-knowledge and motivations. The delimitation of the study is further based on the notion that positive developmental trends may emerge in the study to indicate challenges, solutions or methods that may serve the dire need for learners, parents, teachers or schools, to explore ways and means to activate learner motivation, and to prevent dropout. The other focus or the boundary of restriction of this study is that, it is based on the notion that astrology is a proxy for motivations and behaviour, reflecting social and peer factors as fate and individual as free will as cited by (Forrest, 2013) that could be applied to instil

a sense of motivation and a level of maturity that could enable people, whom is this study could be learners to make different positive choices and create different futures. Other focused restrictions of this study as part of its delimitations is that this study need not to test or theorise astrology, but only to use a simplistic aspect of a popular craft to enable individual learners to examine and define their given interests and attributes as a departure point, against their ideal imminent future as learners, students, professionals, or entrepreneur.

The other delimitation of the scope of the study, is that the data, methodology, and validity of astrology itself are not examined. However, these need not be examined, and need not be part of the scope, since automated astrological profiles are used only to prompt learners to visualise their potential careers, and to commit themselves to study their chosen subjects. This delimitation was directly confirmed in the literature on motivation, where the validity or otherwise of astrology is not examined in the context of educational motivation; and indirectly confirmed by the data, where no learner said that they wanted to study astrology itself, or practice astrology itself; and no teacher said that they wanted to teach astrology itself. Such a scope would also be impractical, and contra the curriculum, and contra the mandate of the Department, and contra job opportunities. The research question focuses on raising motivation to remain in school and to complete school subjects to grade 12.

The limitations of the study.

The limitations of this study are based on the notions that a state of potentiality can only deliberate on some aspects of the problem, in this case, individual challenges, opinions and motivations of a sample of grade 11 earners to complete schooling. Limitations may arise from the small sample, or reticence, or sampling techniques. This study could not be applied as an educational tool for predicting or prescribing learners "s choices between optional subjects. Zodiac signs do not strongly correlate with careers (Forrest, 2013), as early psychology data confirm (Kraft, 1985; Jung, 1950), but personalised profiles do correlate with personality tendencies. Another limitation that only the main features of participating learners could be covered in their profiles, without taking into account of any individual life factors. The context, assessments and interpretations would focus only on educational persistence versus dropout, and directly relevant individual factors of aspirations, self-knowledge, and motivations. The other limitation of this study is based on the notion that it could not test behaviour, or schools, the curriculum, teachers, interviews, astrology, impacts on learner behaviour, or the education

system. It is also important to indicate that of all the limitations that this study has stated above but yet trends may emerge in the study to indicate challenges, solutions or methods that may serve the dire need for learners, parents, teachers, or schools, to explore ways and means to inspire or activate learners sense of motivation and turn the tangle of dropout into an aspiration or prevent the existence of dropout in schools

The other limitation of this study is that the qualitative or descriptive research methodology that was applied in this study also lacks quantitative data. That is also confirmed by the factual scientific statements of some researchers cited as; Words are the only tools to communicate in a qualitative study (Strydom & Bezuidenhout, 2014: 188)

1.6   Description of the research design:

This study uses a qualitative research approach to determine the potential contribution that astrology could make to the motivation of learners to remain in school. The study uses descriptive phenomenology to explore factors that contribute to learners' dropping out of school before finishing grade 12. Purposive sampling was a method to select the participants. One decided to use qquestionnaires and interviews to collect data from the participant who were purposefully selected (Bell, 2010).

1.7   An explanation of concepts

Astrology: A body of collated experience of how planet positions at the time and place of birth, relate to trends in personality, motivation, and behaviour (Forrest, 2013). Astrology automation is the use of software algo-rhythms to cast and interpret horoscopes or 'hour-scopes' of the planets' celestial positions for a person's birth time and place. It is furthermore believed that the rising sign or ascendant on the horizontal plane, is accompanied by some text on the personal strengths associated with planetary positions and their relative spacing. That explains on how these supposed synchronicities are believed to interact with one another. Most people know only their sun sign, and the rudiments of two or three personality features that they may share with the popular stereotype of their sun sign. Most people are keenly interested in their horoscopes and personality assessments.

Learner behaviour: Regular or typical individual and social conduct, that impact the way in which young people learn. Behaviour could establish and reveal relationships between the elements of the self, others, and curriculum (Santiago, 2012).

Learner dropout: Early withdrawal from education without obtaining a minimal qualification (De Witte et al., 2013).

Learner motivation: General individual aspirations, directed at goals, involving identity, self-visualisation, and behaviours viewed as achieving such inspirations.

Learning context: The situation in which something is learned or understood, which could impact internalisation and application, including the quality of equipment, facilities, and teachers.

School context: The learning environment in which knowledge and skills are exchanged and understood, and impact on attitudes and values (Crick, Green, Barr, Shafi, Peng, Gu & Johansson, 2013). *Schooling:* Complex, dynamic organisations or systems that enable and influence learners' academic, affective, social and behavioural motivation and learniaang (Crick et al., 2013).

1.8   Chapters division: An outline of subsequent chapters

The subsequent chapters are as follows:

Chapter Two: Theoretical framework of confirmation bias.

Chapter Three: Literature review of studies of dropout, de-motivation, motivation and popular psychology applications.

Chapter Four: Which is based on the research design and methodology which is a research framework that include the research instruments, research techniques, research methods, research processes, research, data analysis, research ethics, summary, recommendations and conclusions.

Chapter Five: Which is based on data method of analysis through the application of six phases approach of Thematic analysis, and include data analysis, emerging themes and thematic analysis.

Chapter Six: Which include the summary of the findings recommendations and conclusion.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 Introduction

This chapter examines the Confirmation Bias theory of behaviour, from its origin to its mechanisms, and present a rationale for its potential role in motivating learners to complete school education. The chapter also examines the elements of motivation, and criticisms of Confirmation Bias theory, and engage with implications of the theory for preventing school dropout. Then follows the theoretical framework of Confirmation Bias theory, and an argument for how personalised astrology assessments could be used as motivation for identity, career, and school study.

2.2 The origin of Confirmation Bias theory

Confirmation bias was well-known to ancient Greek philosophers (Decision Lab., 2023). The classical historian Thucydides noted that people 'entrust to careless hope' what they wish to be true. By the same token people also use reason (rationalisation), to avoid what they do not wish to be true. This inborn behaviour was first labelled as Confirmation Bias by cognitive psychologist Peter Wason (1960). He confirmed that people tend to seek information that endorses their prevailing beliefs. He conducted a number of experiments to reveal some innate cognitive biases. Confirmation Bias is innate or inbuilt in animal and human behaviour as wishful thinking (Hahn & Harris, 2014), and is thus closely aligned to motivation. Acting on expectations of desired outcomes, is sustained by the general advantage it gives individuals and groups in adaptation (Mercier & Sperber, 2017), and perhaps even a factor in evolution (Peters, 2020). People create their own reality partly to motivate themselves and partly to influence people and social structures, so that they eventually match their perceptions and beliefs (Peters, 2020).

In *his Rule Discovery Test*, Wason conducted an experiment in which contributors were asked to find a rule that applied to a series of three numbers. They were told the numbers 2, 4, 6, satisfied this rule.

2.3 Confirmation Bias theory

Simkus (2023) considers *Confirmation Bias* as a tendency to process information by watching for, or justifying, what is consistent with one's existing beliefs. In addition, Segal (2021) also found the tendency to view information that supports a person's presumptions by interpreting evidence to confirm one's existing beliefs, while rejecting or ignoring any conflicting information. This biased approach to self-image and decision making is largely unintentional. People ignore information that is inconsistent with their beliefs (Casad & Luebering, 2023). People are likely to process information in ways to support their own advantages, particularly on issues that are highly important or relevant to their self-image.

Confirmation Bias theory is a strong factor in behaviour. Myers & DeWall (2015:357) confirmed that people tend to explore for information that backs their principles, and distort that which contradict their beliefs. Hahn & Harris (2014) provide four types of reasoning involved in universal behavioural patterns:

- *hypothesis-determined* information-seeking and interpretation;

- Failures to pursue fabrication and thus avoiding testability in conditional reasoning;

- *resistance* to change principles or opinions already formed; and

- *Over-confidence* of strengthening of own views (Ball, 2017; Lilienfeld, 2017).

School dropout or persistence could result from such reasoning. Learners could leave school due to wrong information, or more usually due to sustaining a negative self-image, and by resisting any change to their self-image.

2.4 The rationale of Confirmation Bias theory for this study

Casad & Luebering (2023) maintain that Confirmation Bias is an actual way for individuals to process information. People are continuously faced with information and cannot possibly take the time to carefully process or evaluate each piece of data to form an unbiased conclusion. Cold reality is seldom attractive. Decision making and information processing is biased by our tendency to limit any interpretation to the perspective of our own viewpoint. People process information to protect themselves from harm or criticism, as part of the defence mechanisms that Freud had first formulated. It is possible for individuals to rely on

natural and automatic behaviours that keep them out of harm and direct them towards any advantage to fulfilling their selfish needs and aspirations.

Confirmation bias thus may lead people to hold strongly to false beliefs or, and to give more weight to information that supports their beliefs, than may be warranted by any evidence to the contrary. People become overconfident in their own beliefs, because they accumulate any 'evidence' to support them, while in reality they overlook or ignore most evidence refuting their beliefs. People do not want to question their beliefs or confidence. These factors may lead to risky decisions, and to overlook warnings, hazards, and risks. Thus, Confirmation Bias could expose individuals or social groups to unexpected, high-impact, or Black Swan events, which in retrospect appear to be inevitable and foreseeable (Casad & Luebering, 2023).

One of the uses of Confirmation Bias is to help people to sort efficiently through large amounts of daily information (Segal, 2021). Peters (2020) noted that Confirmation Bias is generally encouraged in cooperative environments, such as home, school, and work. Teachers who express high expectations, get better results from learners (Jussim, 2017). But learners first have to accept the expectations imposed on them, for this bias to have a positive effect. Learners who see themselves as failing, are likely to continue to fail. Most learners tend to accept positive expectations (Talaifar & Swann, 2017), if they expect to live up to a vision of success. If a parent or teacher believed that a learner had a certain trait, and verbalised that expectation, and the learner acted on this trait, and friends seemed to confirm that trait, then a circle of positive Confirmation Bias arises. Groups tend to act together to sustain their group bias. Peters (2020) notes that Confirmation Bias enables a social ripple effect… making trait ascriptions to match reality. Since this process is in ultra-social… Confirmation Bias is [socially] adaptive too. By helping subjects make social reality to match their beliefs… it serves the subject and the group by producing effects that assist them in learning, and increases social conformity and predictability."

In any psychological, career aptitude, or astrological personality assessment, people tend to seek confirmation of what they already believe, and to adopt aspirations that align with their self-mage. Knowledge of a horoscope, influences how people recall experiences (Munro & Munro, 2000). A personality profile or assessment raises personal awareness of certain traits, strengths, weaknesses or opportunities. It

was important for one to adopt Confirmation Bias since people believing in astrology look out for experience that match their developing identity. People are more likely to remember behaviour consistent with this description [in the personality profile] (Allum, 2011). Talaifar & Swann (2017) found that selective information processing for is especially strong when related to self-concepts. This is the area where astrological personality assessments operate, explaining why the craft was successful long before psychology, and remains popular, even 80 years after the popularisation of psychology, and the success of many psychology applications, such as Behaviour-Based Safety and team-building applications.

Clobert, Van Cappellen, Bourdon & Cohen (2016) demonstrated that positive astrological personality profiles cast ambiguous events in a more favourable light, and improved cognitive performance such as learning and creativity. Motivation is stronger among people who say they believe in astrology. Religious motivation also works by Confirmation Bias (Mathebula, 2020).

2.5 Implications of Confirmation Bias theory for school dropout

Confirmation bias and peer pressure together play the strongest roles in behaviour, but both could be positive or negative (Talaifar & Swann, 2017:3) Some learners become peer leaders by instinctively using negative confirmation to build their gangs (Marais-Steinman & Herman, 1997). Gangsterism is acknowledged in South African history, including Griekwa, Koranna, and Amatola polity groups, wherein criminal bonding overruled cultural and racial differences (King, 2017). Current bad peer pressure finds support in the worldwide culture of corruption, drugs, and dramatisations of criminality in movies and TV dramas. 'Divide and Kill' culture is measurable by defence budgets, news headlines, and war game addiction (Gervasi et al 2017; Funeralwise, 2019). Positive peer pressure that supports career aspirations and education should be stronger than bad peer pressure, but leadership from politicians, business, most peers, and parents are lacking (Kamper, 2008; Wills, 2015). Inspiring teachers are isolated and demoralised in 'bad' schools. Fortunately, astrologers and astrology automation software are morally oriented to activate positive aspirations.

2.6   Criticisms of Confirmation Bias theory

Klayman & Ha (1987) argue that the Wason test experiments did not demonstrate a bias in favour of confirmation, but instead a tendency to make tests consistent with the individual's working hypothesis. They termed this the *positive test strategy*, a kind of experiential or reasoning that is flawed, but easy to figure. They further used Bayesian probability and Information theory as a standard of hypothesis-testing, rather than the testability norm used by Wason. Each answer to a question offers a different amount of information, which depends on the person's prior beliefs. Any form of bias could avoid objectively and influence behaviour negatively.

However, there is overwhelming evidence that people seek positive information that paint their already favoured solutions in a good light; and that casts opposing solutions in a negative light; and that people miss important information that they choose not to focus on. Motivation to complete schooling is more important to learners, and to society, than trying to cultivate scientific self-analysis methods in learners.

Novaes (2018) noted that encouraging Confirmation Bias could have negative effects, such as self-centredness, egotism, or bullying. Our constant search for self-confirmation should be balanced by reality-matching, which is aligned to morality and maturity, and equally innate or inbuilt in social structures. Confirmation Bias gives way to reality-matching where people distrust others (Mayo, 2014), for example in science, where hostile reception is expected. However, some measure of self-centredness is part of healthy behaviour, and of motivation in Western culture, and in some eastern cultures such as Japan. The leading study of bullying, conducted in South Africa, found that some people are born manipulators, who use a variety of social mechanisms to gain personal power (Marais-Steinman & Herman, 1997). Such people build a hierarchical 'den' of supporters to find personal information, scare opponents, like hyena clans do. Self-centered behaviour is highly effective in maintaining confidence in beliefs, even when there is insufficient evidence or external motivation to support them. People want to influence and 'mold' other people and social structures, so that they gradually fit their own beliefs. However, negative peer pressure is already a strong negative motivational factor in schools, as demonstrated by the rise of gangsterism, teenage pregnancies, and dropout. Any attempt to introduce positive motivational factors, could counter-balance negativity, and potentially replace negativity.

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Cook & Artino (2016) advised educators and researchers to test whether to apply motivational interventions to all learners, or only to those with specific motivational characteristics. Self-motivation is typical of business, corporate, and popular culture, where astrology is instinctively understood and tolerated. Faith-based schools tend to consider careers as divinely inspired, and astrology may be discouraged there, while other forms of motivation may be sought. However, South African state schools, and most private schools, are secular, thus the kind of applied psychology methods used in the business and corporate world are appropriate. Further, faith-based motivation could be highly divisive in a culturally mixed society, while secular cultural crafts are not divisive.

2.7 Astrological assessment analyses as positive career vision and Confirmation Bias

Most people are keenly interested in their astrological horoscopes, and in any individualized personality assessments. How, and why they work, is beyond the popular and scientific grasp, yet most people recognise the craft as valid. They do not care how or why it works. Forrest (2013) found that individual behaviour is not cast in stone by 'planets' or by society. If people are motivated to succeed, they tend to make relevant choices to create a better future. Astrology was, and remains, an essential part of the culture of all civilisations, and was until relatively recently the main application for astronomy. The functions of astrology are partly taken over by psychometric tests and aptitude tests, which are intended to be neutral, and not intended to be motivating. "In recent centuries, astrology has experienced a revival, again becoming widely popular… to obtain guidance" (Allum, 2011). People generally believe that "there is a time and tide in the affairs of men", as in the proverb that Shakespeare cited. Part of this popularity is due to the perceived accuracy of horoscope interpretations, and to the motivating and elevating effect of finding confirmations of individuality. This study need not test or theorise the various crafts within astrology, only the use of personality assessments as motivation to visualise a career, and thus to remain in school. Could individualised astrological personality assessments enable learners to visualise some of their interests in terms of a career? Charting a course between current reality and ideal vision, is a classic Behaviour-based Safety (BBS) process (Geller, 2016). Behaviour-based Safety (BBS) could be a classic Behaviour-based Safety recipe for education practitioners to follow to enable learners to visualise and motivate their future, and thus inevitably to remain in school.

Astrological personality assessment (analyses) may be used to motivate learners to prepare for a career, and thus to remain in school (Steven & Jeffery, 2000). Hammond (2007:1) maintains that researchers agree that no single factor accurately predicts who is at risk of dropping out. Dropout could not be understood as a single decision or event, but as a process of disengagement after cumulative, multi-dimensional convergence of factors (Branson, 2013; De Witte, 2013; Dockery, (undated); Hammond, 2007; Sabates, 2010). By the same token,). Behaviour-based Safety (BBS) researchers agree that there is no single metric that indicates organisational culture strength, or individual behaviour, but that a cluster of values, resources and intentions, pro-actively enable or activate behaviour (Geller, 2016). This process is labelled 'culture change' if it becomes entrenched (Mathebula, 2020). Thus, they measure 'leading indicators' of behaviour by measuring intangible motivations and aspirations. Reactive metrics reveal only incidents, or the net result, too late to manage or remedy. Activated individual values and cultural metrics reveal resilience and predict results.

This study attempts to test a model for individual motivation of learners, by prompting personalised career visions. Astrology assessments prompt and enable anyone to contextualise and challenge deterministic factors, and to use free will in shaping their experiences (Forrest, 2013). In South African schools, such a process could prompt personal challenges against the default culture as outlined above. Motivation in a school context requires learners to amicably resist peer pressure by adopting perseverance and determination (Duckworth, 2016). The required strength of determination could be sustained by identifying with personality strengths, cast in terms of inborn or 'gifted' talents (Mann & Wilson, 2010). Personality assessment identification could activate and sustain individual attributes, interests, aspirations, hopes, dreams, capabilities, abilities, strengths, knowledge of weaknesses and threats, grasping of opportunities, acceptance of some aspects of fate, and accepting the responsibility of free will (Forrest & Steven, 2016). This paradigm was already familiar to Classical Greek culture that used intricately structured myths and systems of logic in their literature, institutions and education, cast in the mold of heroic deeds such as the Hercules myth cycle. Greece re-inspired the Renaissance (Orrock, 2010) and the modern education systems, including some recent African examples such as the Zimbabwean education system.

2.8 Conclusion

Reading positive astrological personality assessments, measurably improved learning and creativity (Clobert et al., 2016). Motivation is stronger among people who generally believe in astrology. Positive motivation is required to balance out multiple negative push and pull factors in the education system, the country, the economy, the world, society, culture and peer groups that magnify and sustain one another.

The only factor that remains practically open to change, is individual learner motivation. One of the few viable mechanisms of individual motivation is personal contact between teachers or other role models, and learners. This study proposes to use automated individualised astrological assessments as a neutral or 'third party' vehicle, directly bearing the engaging themes of personal skills and identity, to initiate personal vision, to serve as a catalyst for personal contact with role models, and to sustain personal self-image and aspirations in learners.

Theories of motivation converge on the known psychological mechanisms of behaviour. Confirmation Bias theory offers a predictive model for positive or negative behaviour. Lack of positive self-attribution, vision, or expectations, would allow the current default of negative self-attribution of criminality and failure to dominate in schools. The criticism that Confirmation Bias theory could magnify selfish behaviour, actually supports the theory.

The implications of this theory for school dropout, include the dire need to use psychology, or applied /popular psychology, against the instinctive use of psychological manipulation by gangster leaders, who temporarily thrive on the vicious circle of dropout and crime.

The long history of motivational studies, and the success of applied psychology in business and industry workplaces, such as behaviour-based applications (as noted in the Literature review chapter), could be seen as a history of criticism against Education science, for failing to apply ready-made tools to managing school culture. Conversely, the long history of school dropout studies, and detailed knowledge of the vicious circle of negative factors, add to the criticism of all education role players at every level. Since astrology assessments operate by Confirmation Bias motivation, this craft is a ready-made intervention to raise positive motivation and prevent dropout.

CHAPTER 3

LITERATURE REVIEW

3.1 Introduction

The intention of this chapter is to review studies relevant to learner school dropout, schooling motivation, career visualisation, and the uses of personality assessments and astrological assessments analyses. To address the aims set in chapter one, this chapter examines the South African school dropout rate, dropout causal factors, various attempts to reduce the dropout rate, motivational factors, and motivational methods in the context of secondary schooling. Hammond, Linton, Smink & Drew (2007) found that dropout could not be understood as a single event, but as the result of a long process of rising disconnection, of many dimensions and factors converging over time (De Witte, 2013; Sabates, Akyeampong, Westbrook, & Hunt, 2010).

3.2   The escalating rate of learner dropout in South African schools

Learner dropout in Gauteng province in South Africa continues to rise, and seems unmanageable, having detrimental effects on the education system and society (Zero Dropout Campaign, 2020). Section 3(i) in the South African Schools Act (24 of 1996) provides that all children must attend school from the seventh year until they turn 15, or have completed grade 9, whichever comes first. In compulsory education from grades 1-9, South Africa's rate of attendance is over 95%, very high by global standards (Branson, Hofmeyr & Lam, 2013:12; Fleisch, 2009:41; Sabates, 2010:2). National entry-level school attendance rates have developed by 3% since 2002. By 2013, the massive majority of children of school-going age (97%), were in an educational facility (Hall, 2015:119). However, schooling persistence drops of in high school due to dropout.

The South African Department of Basic Education [DBE] (2011) reports an increase in dropout across grades from grade 9, including a loss of 6.5% of learners in grade 9, and 11.5% in grade 10, and 11.8% in grade 11. The DBE estimated that 50% of all learners left school by the end of grade 12. Only 40% completed the grade 12 exams, and only 12% were qualified to continue to higher education (Lamb & Markussen, 2011). The BDE noted that schools tended to hold back low-scoring learners to repeat grades, aiming to raise matriculation

marks. In grades 10, 11, and 12, there were 52% repeaters. By grade 12 there were 9% who had repeated three or more grades. Yet grade repetition was not effective, since academic gains from retention tend to disappear some years later (Hickman, Bartholomew, Mathwig, & Heinrich, 2008:4). Amended regulations now provide that learners may only be retained once in grades 10 to 12 (DBE, 2012:16). One of the unintended consequences of this rule, is that automatic grade passes place learners in grades they are not prepared for, causing poor results, and adding to dropout (Jimerson, Anderson, & Whipple, 2002:443).

Weybright (2017:1) founds that about 60% of grades 8 to 11 learners that are over 14 years old, would eventually drop out, rather than reaching grade 12. Only 52% of learners aged 19 and 20 usually remain registered. Researchers such as Rumberger (2004) have drafted analytical frameworks that typically try to isolate individual factors such as family or community, from institutional factors such as school or curriculum. De Witte (2013:7) and Sabates (2010) distinguish between systemic causes of dropout, individual or social causes. However, De Witte (2013) noted that any simplistic distinction between factors, may unfairly isolate a set of factors, while in practice many sets of factors are intimately bound up with each other. Thus, it should be clear the roles of community and peers in dropout should not be isolated from any other of the typical categories of dropout factors. This study should therefore not look to manage any specific social, economic, institutional, or curriculum factors.

3.3   Causes of learner dropout

3.3.1 Dropout factors

Learner dropout is a recognised problem in many countries. The literature, particularly in the USA, explores community-related factors such as poor neighbourhoods, limited social amenities, run-down housing, rentals, and high crime rate (De Witte, 2013). In addition, Hammond (2007) noted that peers may have positive or negative influences. Some peers motivate high achievers, while some motivate learners to get rich quick in wrongdoing, drugs and violence. The pull factors (crime, drugs and violence) seem as instant opportunities for making income. This apparent status is strong, especially in poor households where the costs of schooling are relatively high (Rumberger, 2004). The push factor of social discrimination and prejudice is also strong, especially on learners in minority groups or underprivileged societies.

Some single events, such as a learner's family moving, may contribute to dropout, yet even then dropout is a multifaceted and gradual process, suggesting a pattern of development may be involved. Ananga (2011) categorised dropout into two main groups: *temporary* and *permanent*. He found evidence of two different patterns or procedures of leaving school. *Periodic dropout* is characterised by sporadic absence of a few months at a time. *Event dropouts* involved family, school, or life events, such as pregnancy, that caused longer absence. Some of these learners eventually returned to school, but some did not. Those who are involved in *permanent dropouts* have no intention of returning to school. Some felt lost after dropping out and kept open the possibility of returning to school if something in their context would change. Others left school because they saw no value in their studies, or in the qualification, or opted for vocational training.

3.3.2 Push and pull factors

Dropout motivational factors situated inside the educational system, could be labeled as 'push' factors, and factors situated in the broader economy and society could be labeled 'pull' factors. Push factors include negative experiences and frustrations at school. Pull factors include enticements such as jobs and family. Factors in personality and self-motivation could be considered either push or pull, or 'fall-out' factors (Jacob, Zoreh, & Lynne, 2013). There may be no practicable remedies for systemic or socio-economic dropout factors, but individual motivational factors may 'fall outside', or rise above, the immovable weight of the known push and pull factors.

In South Africa, with its colonial and Apartheid legacy of separate development; labour migration; Bantu education; family and social displacement; spatial injustice; and extreme inequalities even after democracy in 1994 (Bond, 2005), broader community-related factors of school dropout are particularly deep, and have become inseparably linked to individual, daily and school-related factors. Moses, Van der Berg, & Rich (2017) demonstrate in detail how the structure of South Africa's economy maintains poverty along racial and spatial lines, where black South Africans living in former Homelands remaining poorest, while Black and Coloured communities in townships remain marginalised. In addition, Spaull (2015) states that most Black and Coloured South Africans are trapped in a spatial and structural position in which access to quality education is nearly impossible, perpetuating poverty and preventing upward mobility.

Dieltiens & Meny-Gibert (2012) argued that absolute poverty played several roles in school dropout, via factors such as lack of uniforms, transport, and/or stationery, even when school fees were contributed by the state. Yet poverty alone does not clarify why so many learners leave school early. South Africans have high attendance rate in primary and early secondary schooling, with poor rural provinces having the highest ratio of learners in school. Dieltiens & Meny-Gibert (2012) found that poverty may account for why poor learners commence school late, and repeat some grades, yet they also found that relative poverty and daily lifestyle offer much more undoubted explanations for why learners leave school early. Other researchers found that disparities between learners [make them] more vulnerable to dropout. In poor families, female learners may be forced to be consistently absent, or even to drop out, due to lack of access to sanitary pads during menstrual cycles (Tegegne & Sisay, 2014).

Some family dynamics area among the pull factors in school dropout. These include families with low social and economic status, especially those with limited capital or socially marginalised (De Witte, 2013:10). Such families struggle to keep their children in school, despite government child support grants and free school fees. According to Fleisch (2009:43-44), 65% of out-of-school children may be entitled for social grants, but their parents, grandparents or heads of households do not have the means to access them. Families that stay far from the school and cannot afford transport, uniforms, stationery, and other costs of schooling contribute more to the dropout rate (Branson, 2013:17; Dieltiens & Meny-Gibert, 2012; Sabates, 2010:12).

Some families cannot access social grants due to family disarticulation, the labour migration and Apartheid spatial and economic planning (Moses, 2017; Hammond, 2017:31). Inability to afford basic resources due to poverty, has been suggested to play a major role in delayed school entry and higher repetition rates (Dieltiens & Meny-Gibert, 2012). One of the most important predictors of school dropout, if not the strongest (De Witte, 2013:8) is grade retention. Entwistle, Alexander & Steffel-Olson (2004; 2005) demonstrate that poverty raise dropout risk. South African schools widely use delayed school commencement and grade repeats to keep weaker learners from affecting their Matric results (Branson, 2013:4). Learners who are behind their age, are likely to drop out of school, then learners who are on track (ibid:19).

Pull and push factors interact in complex ways. The most obvious 'push' factor is the poor quality of foundational, basic and secondary education accessible to the majority (Gustafsson, 2011; Moses, 2017). The majority of learners in South Africa are in families of low socio-economic status. These learners attend schools which perform poorly and offer poor quality education (Spaull, 2015:37). Learners may be sensitive to, and aware of, whether the quality of their education is on par with leading schools or not.

Another major factor that contribute to the poor quality education is class sizes. Large classes make teaching more difficult even for good and committed teachers (Gustafsson, 2011:42). To make matters worse, some schools lack resources such as desks, chairs, and textbooks (ibid:41; De Witte, 2013:12). Spaull, (2013:39) maintains that research shows that teachers lack the basic curriculum content knowledge and pedagogical skills to teach their subjects. Under-resourced schools also tend to have more learners and it is difficult to manage in such circumstances. The situations also pose challenges to school management teams who may not have the skills or resources required to put the situation under control. The school management teams may be frustrated in their attempts to activate a positive and productive school atmosphere (Wills, 2015).

3.3.3 Peer pressure

According to Dizon-Luna, 2013:85; Lee & Miu-Ling (2003:107), peer pressure can be a significant factor in dropout. Learners who were on the verge of dropping out, were found to have had friends who were already dropouts. This indicate that deviant peers cluster together to confirm one another's views. Conversely, Lagana (2004:213) found that school-loving peers motivated each other to stay in school. The need to fit into a peer group may cause stress and anxiety. Smyth and Hattam (2001:410), Valerie & Burkam (2003:363), French & Conrad (2001:227), Hale (2004:3), and Barclay & Doll (2001:366), found that learners who are rejected by peers at school do not socialise and do not get involved in school-based social activities. They cited isolation and poor relationships as causes of dropout. Conversely, Mukama (2005:46) maintained that learners who believe in teachers rather than peers, remain in school. Peer pressure was one of the factors that influenced young people to drop out of school in Botswana (Makwinja-Morara, 2007, cited in Munsaka, 2009:66); and in the Great Accra region in Ghana; and in South Africa.

3.3.4   Teenage pregnancy

The high level of teenage pregnancy is one of the pull factors identified by many authors. The state child support grant, if considered in isolation of other factors, was too small to motivate learners to become pregnant (Ngubane & Maharaj, 2018). Some people considered child grand as something that is fueling the high levels of childbearing among young women in South Africa. Such people found that the child grant was known to be too small to cover the cost of raising a child. Teenage mothers have been extensively studied in terms of the Millennium Development Goals, since it is closely linked to dropout among girls (UNICEF, 2007:2; Almeida, Aquino, & de Barros, 2006:1400; Chen, 2008:8). Pregnant learners normally experience complications that result in absenteeism followed by dropout (Chalasani, Kelly, Mensch, & Soler-Hampejsek, 2012). Mothers are less likely to return to school than learners who drop out for other reasons.

A study by Achoka, Judith, Sarah, Njeru, Frida and Muthoni (2012:887) revealed that girls left school due to pregnancy and stigmatisation and discrimination by teachers, parents, schoolmates and society. There is a strong link between teenage pregnancy and dropout as a result of the stigma, lack of family support and particularly if the pregnant teenager is isolated by peers. Mpanza (2012:14) notes that some educators stigmatised pregnant learners and believed that they should leave school. The poor physical health of teenage mothers after giving birth makes them stay at home (Sodi, 2009:21). According to Makundi (2010:8) and Bangser (2010:3), pregnancy was one of the major reasons for school dropout among teenage girls in Mtwara region or Tanzania. In Kenya, the high dropout rate among girls, especially in upper primary and secondary levels was due to teenage pregnancy. Pregnancy was also the leading cause of girls dropping out in the Central African Republic, Mozambique, South Africa (Eloundou-Enyegue, 2004:511), and Botswana (Molosiwa & Moswela, 2012:270).

According to UNICEF (2008:21), South Africa has a 74% dropout rate among pregnant girls between the ages of 14 and 19. Martelelo, Lam & Ranchood (2008:10) and Dekezela-Tsomo (2012:81) reveal that women in South Africa are likely to drop out of school during pregnancy. In addition, Grant and Hallman (2006:9) disclose that girl teenagers withdraw from school as soon as their pregnant becomes visible or as soon as they realise that they are expecting. Karra and Lee (2012:1) found that most teenage mothers in the Western Cape do not complete high school. Dropping out of school is associated with parenthood among boys as well

as girls. Social Surveys Africa (2010:1) found that caregivers identified pregnancy as the main reason for dropout among girls. The financial situation of teenage mothers determines whether they would continue with schooling (Willan, 2013:37). According to Meekers & Ahmed (1999:196), girls are discriminated against at home by parents who prefer to support education for boys. According to Macleod and Tracey (2009: iii), between 33% to 50% of pregnant learners consider returning to school after giving birth. Martelelo, Lam, & Ranchood (2008:1) found that only half of pregnant Black woman return to school in the year after giving birth.

3.3.5 Lack of positive study experience

When youth lack positive leisure experiences, or are bored, negative outcomes are likely. Leisure, like study, also requires some level of skills and motivation. Optimal Arousal Theory (1980s) linked leisure time boredom to risk behavior, such as substance abuse and teenage sex. This link is confirmed in qualitative studies (Wegner, 2011), cross-sectional studies (Wegner & Flisher, 2009), and longitudinal studies, which found leisure to be a crucial developmental context for adolescents (Larson, 2000; Verma & Larson, 2003). Leisure may serve as a protective factor, shielding career visions against temporary disappointments. Leisure remains one of the under-researched topics in school dropout in South Africa. Engagement in healthy leisure may protect adolescents from deviant behavior and may increase adolescents' self-esteem, academic performance, peer-group affiliation, and school engagement (Eccles & Barber, 2000; Stone & Hunt, 2003). Thus, leisure activities support several factors that raise motivation for schooling. However, sports and extra-mural programmes require facilities, equipment, and managerial capacity, which the South African education system seems to have in short supply. Further, the literature is not unanimous on how organised leisure may motivate study, or prevent dropout. Academic and sporting performance may be symptoms of the same factors, and not key factors themselves, and probably not open to any practicable management intervention.

3.3.6 Family background

The beliefs, visions and motivations of teachers, family members, and learners themselves, about their capabilities and abilities, are far-reaching. Learners aged 4-18 in poor backgrounds are greatly under-represented in sporting, extra-curricular, or other enrichment programs (Lee, Matthews & Olszewski-Kubilius, 2008; Worrell, 2007). Teachers tend to recommend learners who are good readers, with good

comprehension skills, memory, and vocabulary. Learners from uneducated homes remain disadvantaged (Hernández-Torrano, Prieto, Ferrándiz, Bermejo & Sáinz, 2013; Siegle, Moore, Mann & Wilson, 2010). Card & Giuliano (2013:23) suggested that there is a lot of talent that people are missing. Colombia University's Project Synergy programme worked with parents and teachers to identify ways of recognising high-ability learners from disadvantaged backgrounds in alternative ways. Yet owing to the time and labour required for identification, the practicality of such processes in a typical school setting could be questioned, and more so in South Africa.

When learners fail to self-actualise (Reis & McCoach, 2000), their attendance drops and their risk of dropout rises (UNESCO, 2011). Where teachers supported learners in the classroom environment, they improved their academic and social outcomes, including eventual employment (Baker, Grant, & Morlock, 2008; O'Connor, Dearing, & Collins, 2011). When activities and opportunities arise at school, and peers (learners themselves) are involved in nomination, then socialisation and motivation improve. However, peer recommendations and teacher suggestions show a significant correlation, suggesting that learners and teachers have similar preconceived ideas of capabilities and ability (Kaya, 2013), and that already motivated learners attract nomination. This study explores motivation as one of the core factors that could overcome the cluster of factors linked to socio-economic odds.

3.3.7 Parental involvement raises motivation

A study by Nojaja (2009:6) suggests that positive parent involvement and partnership with schools, were a requirement for effective schooling. Thus, failure and dropout were more likely where parents were less involved in education. Hale (2004:3) found that parents of dropouts are more likely to view school negatively, to have minimal involvement with schooling, and to place little value on school attendance and achievement. Motivation is to some extent pre-determined by parents. Another study confirmed that dropout is associated with parents' negative values and attitudes towards education, and also an important factor in shaping whether or not their children would attend school (Reginah & Stella, 2010:367). The key role of motivation in education was confirmed by the USA National Education Association (NEA, 2008), in their finding that parent-family-community three-way involvement is a key to managing a dropout crisis. The NEA also found that strong school-family-community partnerships foster higher educational aspirations, and more motivated learners. Motivation is also known to be closely related to communication, thus motivation is not a purely

personal or 'silent' dynamic. Stone (2006:518) found that communication between parents, learners and the school, reduced dropout.

Mathebula (2023) demonstrates strong links between vision, motivation, and persistent behaviours that lead to success at school. Learners and parents are keenly aware of the high unemployment rate, partly due to globally endemic corruption, and the shrinking emigration opportunities due to several global refugee crises. Shrinking local and global opportunities add to the de-motivations of the past, from systematic murder, coercion and exploitation of the Colonial era, to systematic oppression of the Apartheid era, to systematic corruption of the Democratic era, culminating in outright State Capture in the Zuma decade. Among the casualties of these socio-economic challenges, are learner vision, motivation, and peer motivation. South African township undergraduates revealed correlations between hope and motivation (Maree, Maree, & Collins, 2008). The literature is not yet clear on how learners visualise their careers, and how career vision may be linked to learner self-image, and to school subjects. This gap in the literature indicates part of the task of the present study.

3.3.8 Substance abuse

Studies on substance abuse revealed that most learners using drugs, are at risk of dropping out of school (Kogan, Luo, Brody, & Murry, 2005:36; Rumberger & Sun, 2008:1). The USA National Survey on Drug Use and Health (2003:1) reported that in 2002, about 3.2-million Americans aged 18-24 were considered dropouts due to substance abuse. Abuse and dropout rates differ by ethnicity. McCaffrey, Pacula, Han, & Elleckson (2010) found that substance abuse damages memory, inspiration and results, all being factors leading to dropout. Drugs in adolescents could impair cognitive development and comprehension (McCluskey et al., 2002:933). Wegner (2011:21) postulated that substance abuse in South Africa led to school dropout. The Medical Research Council Research Brief (2009:1) found a strong association between drinking and school dropout, and low academic aspiration in Cape Town. Townsend, Flisher, & King (2007:295), and Townsend et al. (2010:238) found a consistent relationship between dropout and substance abuse. Parry & Phiddemann (2012:2) revealed that abuse of methamphetamine or 'meth' by high school learners in Cape Town led to absenteeism and dropout. Townsend, Flisher, Chikobvu, Lombard, & King (2008:22) confirm that dropouts tended to abuse alcohol and illegal substances, compared to peers still at school. Du Pont, Caldeira, Du Pont,

Vincent, Shea, & Arria (2013:19) note evidence that drug users were three times more likely to drop out than non-users.

3.3.9 Socio-economic factors

In developing countries, poorer learners are systematically disadvantaged in personal development, skills, and education (Kamper & Mampuru, 2007; Kamper, 2008). Among the main reasons for this disadvantage is in poor parents having limited time, resources and skills to share with their children (Robinson, Lanzi, Weinberg, Ramey, & Ramey, 2002). A longitudinal study in the USA confirmed this dynamic among children in kindergarten to grade 3 (Aikens & Barbarin, 2008). Poverty also detracts from motivation. A study in Zimbabwe among learners of poor families aged 9-12 showed that personal beliefs about capabilities influence motivation and learning (Gwirayi & Shumba, 2007).

Poor learners believe they are unable to achieve good grades. A study in nine provinces in South Africa among 4,409 youth aged 12-22, showed that marginalised groups lacked confidence in achieving their objectives and goals (Leoschut, 2009). Poor girls rate themselves more motivated than boys, perhaps due to the need to assert their position in a traditionally male dominated society (Furnham & Akande, 2004). In primary and secondary school teachers are demotivated and have abandoned their educational responsibilities (Chireshe & Shumba, 2011; Dixon, Humble, & Counihan, 2015; Dixon, 2012).

Irrespective of innate capabilities, all learners seem to need a long and intensive process of encouragement and training to attain competent levels of capability. Many socio-economic and cultural factors translate into negative visions and de-motivations, with detrimental effects on learning and teaching. Tertiary student protests set negative examples of entitlement, mob rule, violence, blame game, and cultural revolution for supposed egalitarianism. Learners understand the implications of these developments in practical terms, as reducing their chances of succeeding in education, and in the formal economy.

3.4   Previous attempts at reducing the learner dropout rate

Attempts to slow down the learner dropout rate include many pieces of legislation such as Guidelines in the RSA Constitution; Children's Act, 38 of 2005; Schools Act, 84 of 1996; National Youth Policy 2015-2020; White

Paper on Education, number 5 of 2001; White Paper on Special Needs, 2008; National Policy for Prevention and Management of Learner Pregnancy, 2007; and National School Nutrition Programme, since 2010. The supreme law of the RSA, the Constitution, protects children and youth rights. Section 29 of the Constitution focuses on the right to basic education, adult, and further education. The state must take reasonable measures to make education accessible (Branson, 2013; Fleisch, 2000). The Children's Act gives effect to certain Constitutional rights, including education. Parental should give consideration to a child's wishes in any decision that would impact on their education, bearing in mind their age, maturity, and stage of development (Mnguni, 2014; Sabates, 2010; Hall, 2010). The Schools Act makes education compulsory from grade 1-9. Section 3(6) 5 provides for investigation into parents or any person who prevents a learner from going to school, punishable by a fine or imprisonment of up to six months. Section 5(3a) provides that no learner may be denied admission to a public school based on poverty. An expelled learner subject to compulsory attendance must be placed elsewhere in a public school (Hall, 2015). The National Youth Policy for 2015-2020 addressed "high dropout rates and inadequate skills development" as the second-most important challenge. Poor results in primary school are seen as a cause for weakened participation in secondary school. Improving literacy and numeracy levels at primary level was identified as one of the key interventions to improve participation in education (Fleisch, 2009; Sabates, 2010). The White Paper on Education, number 5 (2001), addresses Early Childhood Development (ECD), and number 6 addresses Special Needs Education (SNE). The ECD policy aimed to alleviate the cycle of poverty by providing access to education programmes from birth to the age of nine. This policy should reverse the effects of early deprivation, and maximise the development of learner potential. The SNE policy aims to retain learners with disabilities, since the curriculum and education system as a whole have failed to respond to the diverse needs of the learner population. The failure could be said to extend to general dropout, 'push-out', and grade failures (Fleisch, 2009; Sabates, 2010). The White Paper on Special Needs, 2008 advocates a single, inclusive education system, integrating special needs and support services throughout the system.

Government guidelines for prevention and management of social violence and harassment in public schools (2008) aimed to support schools and school communities against sexual harassment and gender violence. Government aimed to create a "safe, caring and enabling" teaching environment, recognising sexual harassment and gender violence as causing serious emotional damage, including a general atmosphere of fear and aggression in the school environment. The need for these guidelines indicates the presence of a cult of gender violence that downgrades females and morality, and probably play a role in dropout of girls

(Sabates, 2010). State officials and authors like Mnguni (2014), Sabates (2010), and Hall (2015), note the RSA National Policy for Prevention and Management of Learner Pregnancy of 2007, aimed at reducing and managing stigma and discrimination, including retention and re-enrolment of affected learners. This policy was updated a decade later in 2017, and confirmed by Basic Education minister Angie Motshekga in 2020.

In terms of the National School Nutrition Programme, 9.2-million primary school learners were fed to encourage attendance (Government Newsroom, 2017). Despite tender corruption, the strategy was effective in improving nutrition and attendance, while attendance in grades not receiving food aid continued to drop.

3.5   Motivating learners to remain in school

Steers & Porter (2003:5) states that the term *motivation* is derived from the Latin verb movere, 'to set in motion'. Pass, Tuovinen, & Darabi (2001) defined motivation as an element that determines success and lowers dropout rate among learners. Motivation thus energies and guides behaviour towards reaching particular goals. According to Mamwenda (2002), motivation is a concept used to explain the way a person or an organism behaves. A commercial or corporate definition of motivation is influencing someone to achieve a goal that the administrator wants him or her to achieve (Gerber, 2000). Motivation is partly based at individual level, including factors of gender, race, skills, and aspirations; and at track record level including grade and exam scores; and at family level including 'pecking order' (Ananga, 2011), and at social level including relative economic and cultural status. A national household survey of 4,498 households, and focus groups with learners, parents, and educators, isolated four main reasons why learners left school (Leoschut, 2009). These reasons include household poverty versus cost of education, or access costs; teenage pregnancy; lack of interest or motivation in schooling; previously failing a grade or being currently behind in schoolwork.

Motivational factors are as complex and interwoven as socio-economic factors are. Motivation in its simplest form is driven by awareness of an unsatisfied need (Rosen, 2005). Rosen also found human behavior to be motivated by a cycle of factors, that differ in ever learner. Behaviour is not coincidental, but born out of a state of mind, and directed towards achieving a series of goals, or success cycle. Smit & Cronje (2002) isolated three interdependent elements in the motivation cycle:

Need: An imbalance caused by a lack of something. *Motivation, or driving force*: People act to fulfill their needs. The general motivation for education is to get a qualification.

Goal: People set a cycle of goals based on their needs and motivations. After a qualification, people aim to raise their skills, get a job, earn a living, raise their skills level.

There are two general sources of motivation: *intrinsic* and *extrinsic* (Child, 2001, cited in Mamwenda, 2002). Intrinsic motivation drives behaviour towards certain goals and visions, crucial in education for sustaining learning efforts. Intrinsic goals and visions feed off experience, such as role models in real life, or during visits to workplaces, or on television. External motivation usually results from feedback by the education system, such as recognition, praise, test marks, grades, and certificates (Mamwenda, 2002). Both sources of motivation result in habits. Teachers and parents play big roles in extrinsic motivation. One of the most important tasks of an educator is to motivate learners, thus teachers should have knowledge and skills in motivation.

According to Prinsloo (2008), there are three main theories of motivation. These theories include *Maslow's hierarchy of needs*, *Goal theory,* and *Reinforcement theory*.

- *Maslow's hierarchy of needs:* Maslow found some needs to be more basic and immediate than others, to be fulfilled before any higher or longer-term needs could be felt or fulfilled. When people feel secure against potential immediate threats, they could visualise and act on their individual and social needs. People's need for love, friendship, acceptance and understanding by others are social needs (Gerber, 2000). Social needs are followed by the need for self-esteem. Learners must feel safe and accepted at school and at home, before they could develop identity and maturity. Learners who lack any of the basic needs, cannot learn. Educators must accept learners as individual persons.

- *Goal theory:* This is based on the work of a seventeenth-century philosopher John Locke. The basic premise is that people's goals play important roles in determining behaviour (Waxler, 2005). People strive to achieve goals in order to satisfy their emotions and desires, by way of consistent responses and behaviours (Prinsloo, 2008).

- *Reinforcement theory* posits that behaviour with pleasant results usually repeated, while behaviour with unpleasant results is usually not repeated (Smit, 2007). This theory rests on behaviour selection

or behaviour modification, as a systematic attempt to manage the behaviour of people by manipulating or introducing pleasant and unpleasant consequences. Learners are rewarded as they get closer to the desired behaviour (Waxler, 2005).

3.6   The contribution that astrological assessments could make to motivation

Astrology could be defined as a body of collated experience of how planet positions at the time and place of birth, run parallel to trends in personality, motivation, and behaviour (Forrest, 2013). Astrology automation is the use of software algo-rhythms to cast and interpret horoscopes or 'hour-scopes' of the planets' celestial positions at a person's birth time and place, with the rising sign or ascendant on the horizontal plane, accompanied by some text on the personal strengths associated with each planet's position, and their relative spacing in the celestial circle or earth's daily rotation equator, and how these supposed 'influences' are believed to interact with one another. Most people know only their sun sign, and the rudiments of two or three personality features that they may share with the popular stereotype of their sun sign. People are keenly interested in any personality profiles, but more interested in the positive tone of astrology, and less interested in the neutral tone of psychometric test results.

Astrological assessments directly engage with visions, motivations, and behaviours, by reflecting social and peer factors as a kind of 'fate', and individual factors as a kind of 'free will' (Forrest, 2013). Forrest revealed his physical, causal paradigm by ascribing astrological correspondences to 'strong physical influences from the planets'. However, this general esoteric view is contradicted by physical science that cannot isolate such 'strong influences', and by Jung's rejection of such 'flimsy veils' after he had studied data on careers versus birth times. The philosophical concept of archetype, as explored by Plato and others, support Jung's (1950) proposal of synchronicity as an a-causal manifestation of qualities and events as apparently meaningful connections. Synchronicity offers a better explanation of correspondences between time, place, social factors, behaviour tendencies, and individual outcomes. Archetype is beyond the popular grasp, since astrology practitioners, clients, and the general public care only whether they recognise their own personality analysis as valid. They do not care why, or how astrology works. In this respect, astrology resembles nuclear physics, where technologists and engineers transmute matter and energy for use in industry and commerce, even while the theoretical basis of the very nature of matter and energy remains unresolved, and apparently

illogical as stated in the Copenhagen resolution (1930) and the Standard model of sub-atomic particles and forces (1927). Einstein (1930) dismissed Niels Bohr's explanation of coupled photons as 'spooky action at a distance', yet modern physics validates Bohr's model. There is still no complete theory of how matter and energy transform and share space and time. Atomic energy engineers such as Glen Seaborg recognised the validity of technology despite the lack of accepted theory, with the label 'shut up and calculate' (1930s). This practical approach also applies to psychology and popular psychology. All people dream of archetypal characters, emblems, and situations, relevant to their state of mental health and maturity, enabling psychologists to diagnose and treat patients, despite the lack of a generally accepted theory of why, how and even where archetype and psyche may work or be situated.

Some scientists, and some entire sciences, ignore and look down upon cultural crafts, including art, ritual, icons, and myth, yet all people instinctively use crafts. Forrest (2013) also reveals his paradigm of individual and cultural behaviour as 'evolutionary', while individual collective behaviour have long been known to be highly predictable and universal (Zipf 1949). Despite Forrest's unscientific 'common sense' application of one aspect of biology to the humanities, he concludes that individual behaviour is not cast in stone by 'planets' or by society. If people were motivated to mature, they could make different choices and create different futures (Forrest, 2013). Mann (2006) also demonstrated that individual behaviour runs parallel to the celestial 'clock'.

3.6.1 Astrological personality assessments and motivation

This study need not test or theorise astrology itself. The aim is only to use a simplistic aspect of a popular craft, to enable individual learners to visualise examine and define where their interests, strengths, and weaknesses may lead in education. If a personality profile could prompt a life vision, it could contribute to school retention, and thus to qualifications and even to businesses. Charting a course between current reality and ideal vision, is a classic Behaviour-based Safety (BBS) process (Geller, 2016; Mathebula, 2023). Most employees who participate in BBS programmes, are not even consciously aware that the core of the process is formulating a vision. The use of popular astrological profiles, as expounded by Steven & Jeffery (2000), may transform a vicious cycle of dropout factors, into a process of aspiration factors.

(Hammond, 2007:1) agreed with other researchers that there is no single factor that predicts who is at risk of dropping out. The process of disengagement is a cumulative, multi-dimensional convergence of factors (Branson, 2013; De Witte, 2013; Dockery, (undated); Hammond, 2007; Sabates, 2010). Behaviour-based Safety(BBS) researchers (Geller, 2016; Mathebula, 2020) likewise agree that no single metric could indicate organisational maturity or workplace culture strength, but that a cluster of values, resources and intentions, enable and activate positive behaviour. If the desired behaviour becomes entrenched, it is labelled behaviour 'change'. Behaviour-based Safety (BBS) managers measure many 'leading indicators' of behaviour to reveal the motivations and aspirations among an organisation's members. Reactive health and safety metrics could reveal only the numbers of incidents, as the net result of failures of visions, management, and behaviour, too late to manage.

This study tests a model for individual learner motivation, by using astrological personality assessments to prompt visions of success, which inevitably require remaining in school and gaining further qualifications. According to Forrest (2013), an astrological profile prompts people to challenge deterministic factors, and to use free will in shaping their experiences. In South African schools, this process could prompt personal or silent determination to succeed against the odds of the default school culture as outlined above. Motivation in a school context requires learners to amicably resist peer pressure, by adopting perseverance and determination (Duckworth, 2016). The required determination could be prompted by identifying with personal profile strengths, cast in terms of inborn or 'gifted' talents (Mann, 2006), and by awareness and acceptance of some personal weaknesses. Personality assessment identification could activate and sustain individual Behaviour-based Safety attributes Behaviour-based Safety, interests, aspirations, hopes, dreams, capabilities, abilities, strengths, knowledge of weaknesses and threats, grasping of opportunities, acceptance of some aspects of fate, and of accepting the responsibility of free will (Forrest & Steven, 2016). This paradigm of maturity was familiar to classical Greek culture, that used intricately structured myths and systems of logic in their institutions, literature, and education, cast in the mold of heroic deeds such as Hercules. Greece had re-inspired the Renaissance (Orrock, 2010) and modern education systems, including some African examples such as the Zimbabwean education system

3.7 Conclusion

The literature paints a stark picture of the escalating rate of learner dropout, and the negative culture in South African schools. Multiple push and pull factors in the world economy, ecology, the country, the education system, society, national culture, and peer groups combine, and sustain one another, despite various attempts to stem the tide. The only factor open to change is individual learner motivation. One of the few viable mechanisms of motivation is Behaviour-based Safety to prompt personal visualisations of future careers and identity, at an age when learners actively seek for identity. This study proposes to use automated individual astrological assessments Behaviour-based Safety as a neutral or 'third party' vehicle, bearing the engaging themes of personal skills and identity, to initiate personal visions, and to sustain motivations to complete schooling.

CHAPTER 4:

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

A research design details the framework of a study, including research instruments, circumstances, and methods of data collection (McMillan & Schumacher, 2014). The research approach has to align the instruments and sampling methods with the aims. This study aims to reveal factors of motivation to remain in school versus dropping out, and to find ways of adding to the motivation to remain in school.

A particular phenomenon should be chosen to illustrate features or processes of interest to a particular study (Nieuwenhuis, 2015). The qualitative or descriptive research methodology, despite its limitation, delimitation, barriers of ethics, limited sample, and time plan, enabled purposeful sampling, data collection, analysis, conclusions, and recommendations. The following sections discuss the research approaches and descriptive phenomenology used.

4.2 Qualitative research approach

This study applied a qualitative research approach to determine the potential contribution that astrology could make to the motivation of learners to remain in school. Qualitative research is particularly well suited to uncover factors that make learners leave school earlier (Katz, 2015:108). The focus was to discover, understand, explore, clarify, and explain situations, feelings, perceptions, attitudes, values, beliefs and experiences of the sample selected. The data in a qualitative study is collected in the form of words (Strydom & Bezuidenhout, 2014:188). This study collected descriptive data to respond to the research questions. Quantitative research was not the main data source in this study, since it uses mainly numbers to communicate meanings. Qualitative data was relevant to answering the research question: What contribution could astrological personality assessments analyses make to the motivation of learners to remain in school?

4.3   Research methodology

This study uses descriptive phenomenology to explore the factors impacting on learners, that could lead them to remain, or to drop out of school before finishing grade 12. Descriptive phenomenology attempts to understand everyday life experiences of participants in their own words (Bell, 2010:161). This methodology is particularly relevant to gathering detailed and nuanced data in the real-life context of the problem being studied (Mathebula, 2020).

4.4   Population and sampling

This study used purposive sampling to select the participants. Ames, Glenton, & Lewin (2019) note that the purposive sampling as typical of qualitative research, in which information-rich participants are selected. Purposive sampling enables detailed knowledge about a specific phenomenon among a small, defined population (McCombes, 2019). Purposive sampling is also known as judgement sampling, since researchers select a sample that is relevant to the purposes of the research (McCombes, 2019). The sample consisted of ten grade 11 learners, and ten teachers from five schools. There were two learners in each of the five schools, a boy and a girl to ensure gender equity. There were two teachers in each of the five schools. The schools have a rate of learner dropout. The ten learners were all in grade 11, since that is the grade where learners are already aware of dropout and have some exposure to peers dropping out, and may already be thinking about their future careers.

4.5   Data collection techniques

Questionnaires and interviews overcome inconveniences that may occur due to unforeseen circumstances (Bell, 2010).

4.5.1 Questionnaires

The questions were semi-structured, to enable respondents to answer directly, and also to volunteer some responses from their own perspective, adding depth to the data. Mathebula (2020) notes that respondents proposing solutions to the relevant problems from their perspective, as one of the justifications for semi-structured questions. This method is labelled 'action research'. In-depth results obtained in a localised

setting, such as Ekurhuleni District, may be more widely applicable (Mathebula, 2020). The questionnaires (see Appendix A) were sent to learners by email or Whatsapp to complete and return. The questions were aimed at revealing challenges, solutions, and motivational factors that learners and teachers experienced, including curricula, classrooms, career information, and school conditions. The questions explored how respondents made sense of learners and teachers learning environment and experiences. The study was interested mainly in schooling challenges, solutions, and motivations, and the impact of astrological personality assessments on the motivation of the learners.

4.5.2   Interviews

Interviews is a research technique that enables probing and clarification of responses. Respondents should have sufficient opportunity to express their unique perspectives of the phenomenon under discussion (Bell, 2010:161). In action research, respondents also offer solutions from their own perspective (Mathebula, 2020). The interviews started with a set of semi-structured questions (see Appendix B) that allowed in-depth responses. In addition to the set questions, the researcher used probing questions to gain more clarification.

4.6   Data collection process

4.6.1   Data collection through questionnaires

As indicated in previous section, ten grade 11 learners were selected to participate in this study. Each learner received and completed two questionnaires, one before reading their astrological personality assessments, and one after reading it. They completed the questionnaires and read their personality assessments individually. Learners in grade 11 were considered to be mature enough to write down their career motivations, visualisations, and school perseverance observations and challenges, and to offer solutions to preventing dropout, and to respond to their own astrological personality assessments. Since they still had more than a year of schooling to complete, their responses were directly relevant to factors of motivation and de-motivation to complete schooling.

The personality assessments were generated by a consultant using an automated astrological personality *assessment* programme, thus eliminating all bias. These assessments were emailed to the learners by the

teachers, with a memo that the content was anonymous, and was to be read only by the learner. The teachers and the researcher did not read the assessments. The learners received their second questionnaire a week after reading their personality assessments. The second questionnaire went to the same learners, with seven different questions. The questionnaires to learners are given in Appendix A.

4.6.2   *Data collection through interviews*

It was indicated in the previous section that some data was collected from teachers through the interviews. The interviews with the ten teachers were planned for 45 minutes each, but some were longer, depending on the extent of the responses. The teachers verified most, and contradicted some of the responses, on an anonymous basis. The teachers also elaborated on issues about their own working conditions, and their efforts to raise motivation among their learners to remain in school. The semi-structured and open-ended questions posed to teachers are given in Appendix B. The teachers remained focused on the relevant issues during the interviews. The researcher made notes during the interviews. Each teacher made brief assessments of what the references to certain people and situations mean, in their school context. The researcher assessed the data, and called back some teachers to expand or clarify some aspects.

4.7   Data analysis method

Inductive thematic analysis method was used to analyse the data collected. Inductive thematic analysis is a systematic is a flexible approach to analyse qualitative data. It is system that is offering insight into patterns of meaning, or themes that emerge from a dataset (Braun & Clarke, 2019). Thematic analysis requires rigour between the questions and the data instruments, and reveals that rigour in the analysis.

The six-phase approach to thematic analysis (Braun & Clarke, 2019) requires coding concepts in relatively small datasets by keywords, which reveal main themes, sub-themes, and their interconnections:

Phase 1: Familiarisation with the data. Note potentially shared experiences, assumptions, options, norms and values that may be relevant to the research question.

Phase 2: Generating keywords. Relevant words are used to isolate and tags factors that may answer the research questions. The researcher separated responses into themes by way of core meanings, placing a keyword at the start of each phrase or sentence, then using the 'Sort' function to group identical keywords together, then moving similar keywords together. The keywords remained identical or similar to the terms that the respondents themselves used. Thus, thematic analysis was confirmed to remain true to the research approach of descriptive phenomenology, where the respondents' perceptions become the subject. The common error of coding data by way of keywords taken from the questions, was avoided by using keywords offered by the respondents themselves.

Phase 3: Searching for themes or patterns emerging from the data. Themes revealed themselves by way of related meanings among groups keywords. The researcher moved related groups of responses together to enable analysis. Braun & Clarke (2019) advise to "identify areas of similarity and overlap between codes [keywords], to identify broad issues around which codes cluster… [in a] meaningful pattern." The researcher explored different options to combine the codes into themes relevant to the research questions. This phase reveals relationships between themes that may reveal an overall answer. Miscellaneous themes are recognised in thematic analysis, but did not emerge from this study. Nearly all the data was coded by keywords, and all the keywords formed part of coherent themes. The themes did not all support one single response, confirming the consensus in the literature review that the problem of dropout has several facets, and requires several interventions.

Phase 4: Reviewing themes against collated extracts from the data. The researcher checked that the emerging themes were relevant to the keywords, and that their meaning covered the clusters of keywords. The themes were supported by sufficient keywords, sufficiently distinctive, and all directly relevant to the research question.

Phase 5: Defining and naming themes. The researcher summed up the essence of each theme in a few sentences, as reported under Results, and under Recommendations. Themes should each have a singular focus; and be related, but not overlap; and address a research question. Several relationships between the themes emerged. This phase interpreted the data in the context of the research questions,

Phase 6: Producing the report, based on the themes that emerged. Braun & Clarke (2019) recognise that Phases 5 and 6 overlap. They advise that the report should be clear, yet complex, and embedded in the field of the research question. The quality of the report is enabled by rigorous alignment between the research questions, questionnaires, interviews, responses, keywords, themes, findings, and recommendations.

These six phases were followed to turn description into identification (Braun & Clarke, 2019). The phenomenon of motivation to remain in school, versus demotivation to drop out of school, could now be clearly understood in the current context in Ekurhuleni District. The data revealed themes and concepts directly relevant to learner self-perception, identity, society, peer pressures, potential remedies, and motivations.

The researcher verified the responses of learners against comments by teachers in the same schools, and against one another, including the local context of opinions, perceptions, emotions and motivations of the respondents. The written data was collated directly, not tampered with or influenced by the teachers or the researcher. The respondents stated causes of learner dropout; their socio-economic and educational environment; their personal and social identity or self-concept; aspirations and motivations to study and remain in school to get Matric; their challenges in this regard; their opinions on why many learners drop out; and their proposed solutions.

The research report translated popular terms into scientific terminology, familiar to the fields of education, applied psychology, managerial science, and social anthropology, thus enabling comparison to other behavioural studies in the human sciences.

4.8 Conclusions

This chapter described and discussed the research methodology, including research design, research technique, data collection, data analysis, and legitimacy of isolating findings. The use of confidential questionnaires, and exposure to confidential, positive, astrological personality profiles, were explored as an instrument of identity visualization, and motivation to complete schooling, as minimum prerequisites for a career. Positive results from this research method, raise the potential to extend the process of questionnaires

and astrological personality assessment, to contribute to activating positive organisational cultures in schools, by engaging and energising learners, parents, teachers, and peers, in a quest to overcome the rising challenges inherent in the declining economy, social ills, crime cults, dwindling motivation, and dwindling skills levels.

CHAPTER 5

DATA ANALYSIS

5. 1   INTRODUCTION

This chapter provides data analyses, discussions, conclusions and recommendations. The method selected to analyse the data is thematic analysis, by way of the six-phase approach (Braun & Clarke, 2019). Thematic analysis is a method for systematically identifying, organising, and offering insight into patterns of meaning, or themes, across a dataset. Thus, it is able to identify what is common to the way a topic is understood, and of making sense of those commonalities. Patterns of meaning that emerged were relevant to the research questions. Thematic analysis revealed rigour between the questions, the research instruments, and the findings. The six-phase approach of thematic analysis (Braun & Clarke, 2019) tags concepts in relatively small datasets, by key-words. These keywords then reveal themes and their interconnections, enabling conclusions and recommendations.

The questions were semi-structured, to enable respondents to answer and to volunteer some of their own perspective, adding depth to the data. Mathebula (2020) noted obtaining propose solutions from respondents, as one of the justifications for narrative, in-depth questions. In-depth local results may be more widely applicable (Mathebula, 2020). The questionnaires (see Appendix A) were sent to learners by email or by WhatsApp to complete and return. The questions were aimed at revealing challenges, solutions, and motivational factors that learners and teachers experienced regarding curricula, classrooms, and school conditions. The questions explored how participants made sense of their social environment and experiences. The study is interested only in their schooling challenges, solutions, and motivations, and the impact of the profiles on the motivation of the learners (Munro & Munro, 2000; Steven & Jeffery, 2000; Mann & Wilson, 2010; Allum, 2011; Clobert, Van Cappellen, Bourdon & Cohen, 2016; Forrest & Steven, 2016; Talaifar & Swann, 2017).

Telephonic interviews are forms of research technique that enable probing and clarification of responses, to afford participants sufficient opportunity to express their unique struggles (Bell, 2010: 161), and to offer

solutions from their perspectives. The researcher interviewed the identified teachers by telephone, which also avoided breaking any Covid-19 pandemic protocols. The interviews started with a set of semi-structured questions (see Appendix B) that allowed in-depth responses. In addition to the set questions, the researcher also used more questions to get more clarification of data. The telephonic interviews lasted about 45 minutes each, but some were longer, depending on the extend of the response. The teachers verified or contradicted some of the responses, on an anonymous basis. The teachers also elaborated on issues about their own working conditions, and their efforts to raise motivation among their learners to remain in school.

The questionnaire and interviews reflected learners' and teachers' views of the causes of, and proposed solutions to, absenteeism, dropout, career motivation, learner's personal astrological assessments, the rate of dropout in schools, teaching, school management, and government issues. The questionnaire also reflects learners' views of career motivation and the uses of their own personal astrological assessment. Each theme is reported by way of verbatim responses, then converted into statistical results, and then a discussion of how the results answer the research questions.

The data collected from teachers and learners, indicated six themes: (1) Knowledge and understanding of astrology; (2) Rate of learner dropout (3) The causes of learner dropout; (4) Attempts to reduce the learner dropout rate; (5) Astrology as an aspect of motivation; (6) The contribution of astrology to the reduction of learner's tendency of dropping out of schools. Themes emerging from the results indicated five clear and practicable recommendations on what schools, the Department, and government could do to raise learners' motivations to remain in school, and complete their Matric. The strongest result which supports the recommendation is that, schools could use confirmation bias, via the readily available popular application of personalised astrology assessments, to raise the career aspirations and motivations of individual learners. The study is interested only in their schooling challenges, solutions, and motivations, and the impact of assessments on the motivation of the learners (Munro & Munro, 2000; Steven & Jeffery, 2000; Mann & Wilson, 2010; Allum, 2011; Clobert, Van Cappellen, Bourdon & Cohen, 2016; Forrest & Steven, 2016; Talaifar & Swann, 2017).

5.2 METHOD OF DATA ANALYSIS

As indicated in the introduction, thematic data analysis method was used to analyse data. This method consists of six phases:

Phase 1: Familiarisation with the data, while making notes of potentially shared experiences, assumptions, options, norms and values that may be relevant to the research question.

Phase 2: Generating initial codes or 'tag' labels, as elements that may answer the research questions. The researcher separated responses into themes by way of core meanings, placing a code at the start of each sentence, then used the 'Sort' function to group or collate the tags together. The codes remained identical or close to the terms that the respondents used. Thus, the thematic analysis remained true to the approach of descriptive phenomenology. The common error of coding data by concepts used in the questions, was avoided by using concepts from the response

Phase 3: Searching for themes or patterns emerging from the data. Themes revealed themselves by way of related meanings among groups of codes. The researcher moved related groups of responses together to enable analysis. Braun & Clarke (2019) advise to "identify areas of similarity and overlap between codes, to identify broad issues around which codes cluster… [in a] meaningful pattern." The researcher explored different ways to combine the codes into themes relevant to the research questions. This phase also involves relationships between themes that may reveal an overall answer. The themes are distinctive, yet also work together. Miscellaneous themes are recognised in thematic analysis but were not required in this study. Nearly all the data was coded, and all the codes formed part of themes. The themes did not all support one single response, confirming the consensus in the literature review that the problem of dropout has several facets, and requires several interventions.

Phase 4: Reviewing themes against the collated extracts of data. The researcher checked that themes were relevant to the codes, and that their meaning covered the clusters of codes. The themes are supported by sufficient codes, and are distinctive, and relevant to the research questions.

Phase 5: Defining and naming themes. The researcher summed up the essence of each theme in a few sentences (as reported under Results, and under Recommendations). Themes should have a singular focus; be related but not overlap; and address a research question. Thematic analysis enabled the researcher to report relationships between the themes. The authors recognise that Phases 5 and 6 overlap. This phase interpreted the data in the context of the research questions, resulting in clear analysis, and enabling clear recommendations that were drawn from across the whole analysis.

Phase 6: Producing the report, based on the thematic analysis. As the authors advise, the report is convincing and clear, yet complex, and embedded in the field of education persistence versus dropout. The researcher avoided repetition and paraphrasing. The quality of the report is enabled by rigorous alignment between the research questions, questionnaires, interviews, responses, codes, themes, and findings.

These six phases were followed to turn description into identification (Braun & Clarke, 2019), whereby the phenomenon of dropout could be clearly understood. The researcher verified the responses of learners against comments by teachers in the same schools, against one another, including the local context of opinions, perceptions, emotions and motivations of the respondents. The written data was collated directly, not tampered with or influenced by the researcher. The respondents stated their knowledge and understanding of astrology as a motivating aspect in education that could assist in making learners to complete their grade 12 studies. In qualitative research, the valued interest is in the depth of meaning communicated by participants on how they make sense of their social environment and circumstances, relevant to the research questions. This study attempted to reveal the perceived causes of dropout, and the possible relationship between learner self-identity, society, career, curriculum, and motivations. Thus, the study sample was relevant in terms of place, time, causes, and effects, in this case, challenges versus motivations to complete schooling.

5.3   DATA ANALYSIS

The findings were categorized into six themes. The six themes were understanding of astrology; rate of learner dropout; the causes of learner dropout; attempts to reduce the learner dropout; astrology as a motivating aspect in education; the contribution of astrology in the reduction of learners drop out of schools

and the additional theme of subject choice and career guidance. To avoid revealing the real names of participants, the researcher used the pseudo-names to ensure confidentiality. The learners were labelled as Learners (L1) to learner (L8). Teachers on the other hand, were labelled as *Teachers* (T1) to *Teacher* (T8).

Theme 1: Knowledge and understanding of astrology

According to the literature, astrology is a body of collated experience of how planet positions at the time and place of birth, relate to trends in personality, motivation and behavior (Forrest, 2013). Acquiring knowledge and understanding of astrology usually improves cognitive performance such as learning and creativity which are closely allied to educational motivation (Colbert Van Cappellen, Bourdon & Cohen, 2016).

The first question in the learner questionnaire wanted to find out if learners understand astrology. Information was quoted from what learners wrote. In some cases, the language used by learners was not always correct but no corrections were made since one wanted to quote what they really said. Since the researcher could not use the real names of learners who completed questionnaires, codes such as Learner 1 (L1) to Learner 8 (L8) were used. The next are the quotation extracted from the questionnaire. Each quotation includes the code of the learner.

"My understanding of astrology is that I expect a good form of motivation and also expect to discover my strengths and weaknesses or threats, expect warnings on how to deal with life. I also expect to find suggestions for my goals, interests, dreams, or career options; or a career choice. Again I expect to find explanations of my personal behaviour". L1

, "If we can be allowed to be guided by astrology as a guidance we will be able to learn and gain knowledge to understand ourselves, in our talents and gifts that will help us to be encouraged and be motivated to be in school and complete our studies'' L4

''To gain knowledge and understanding of astrology that can make us to become motivated to discover, our personalities as different learners to encourage and motivate us to become focus to our studies all the time''
L4

''I am now able to know about myself, the natural talent that I did not know before, and this will help me to guide me in choosing the school subjects that I will perform well and pass' 'careers that we will take when we complete our studies.' L5

'By gaining knowledge and understanding astrology for me it has motivate me to be brave, patient and be focus in my studies and for my career future plans when I complete my studies, that I think it will also instill a sense of self-assurance or bravery in life.'' L7

The same question was posed to teachers during the interviews. Like in the case of learners, teachers were assign codes such as T1 to T8. The next are quotes and the code of teacher who presented it.

"… this is the studying how the movement and position of stars and planets can influence humans and the world around them" T1

"… if there could be a possible offering of astrology as career guidance to our learners in schools, it can help us, as teachers to can understand our learners 'personalities, traits, natural talent and gifts talents even on how to can teach them on their different subjects.'' T2

"… astrology is all about the understanding of one self, and can be used as a method to make predictions about one's life and the world at large" T3

"… the study of the movements and relative positions of spiritual bodies interpreted as having an influence on human affairs and the natural world. T4

"… *type of prediction that involves the foretelling of human events through the observation and interpretation of the stars, the Sun, the Moon, and the planets".* T5

"Astrology is a method of predicting events based on the planets and the stars". T6

"… the study that assumes and attempts to interpret the influence of the heavenly bodies on human affairs". T7

" … I think it is important to always try to raise high expectations for our learners and motivate them to discover and accept their personalities, and also to accept their state of weaknesses and threats so as to can amicably deal with challenges they are facing from their different socio-economic backgrounds.'' T8

Responses on the first question indicated that learners do not understand astrology or they did not understand the question. Instead of explaining what astrology is, they provided the contribution it can make in human life, for example "discover strengths and weaknesses … warnings on how to deal with life **(**L1); learn and gain knowledge to understand themselves … realise talents and gifts that will help them to complete their studies (L4); as well as knowing themselves and their natural talent (L5).

The teachers considered astrology as something where people use stars and planets to predict event in human life. It is all about the understanding of oneself. It is considered as a method to make predictions about people's life and the world at large. The analysis of human events through the observation and interpretation of the stars, the Sun, the Moon, and the planets

Interpret the influence of the heavenly bodies on human affairs.

Theme 2: Rate of learner dropout

The literature has indicated that learner dropout in South Africa continues to rise and it seems unmanageable with detrimental effects on the education system and society (Zero Dropout Campaign, 2020). The South African Schools Act, 24 of 1996, Section 3(i), provides that all children must attend school from the first day of the year in which they turn seven, until the last day of the year in which they turn fifteen, or completed grade 9, whichever comes first.

In responding to the question that one wanted to find out about the rate of learner dropout in South Africa, learner participants gave their responses that could assist to come up with solutions to learner dropout. Since the researcher could not use the real names of learners who were quoted from what they wrote in questionnaires, codes such as L1 to L8 were used.

"The rate of learners leaving school is becoming high" L2

"… although I am not sure of the numbers, many learners are dropping out of the school … various reasons were given for this to happen" L3

"some of my friends have left school. I tried to convenience them … without success … some showed lack of motivation" L5

"… there are learners who are leaving schools but I am not sure whether the rate is high or low"

"… five learners left school in our class this year … most of them did not show interest because they were not attending classes regularly …'' L6

" .. not doing their homework result in clashes with teachers … something that make them to quit schooling"

L8

In responding to the question that one wanted to find out about the rate of learner dropout in South Africa, teachers participants gave their responses that could assist to come up with solutions to learner dropout. Since the researcher could not use the real names of teachers who were interviewed, codes such as T1 to T8 were used.

In my class I usually have a very high rate of absenteeism which is so disturbing as this may lead to drop out of school. In some cases, one is forced to repeat lessons and if I don't have that opportunity of repeating, such learner do miss and will not enjoy schooling. This can in turn increase the rate of school dropout" T2

"… in our schools we do experience a high rate of learner dropout when the year is towards the middle, especially around the winter season; and these are the most known periods of the academic year in which we usually experience a high and steadily dropping out of learners from school." T2

"In my class I usually have a very high rate of absenteeism which is so disturbing a lot when I have to start lesson preparation and also for teaching preparation in all my teaching learning areas''T3

"I foresee an increasing rate of absenteeism, which I am afraid that it may lead to a high rate of dropout''
And as absenteeism rate continues to increase especially in my class then there will be a high rate of dropout, hence currently the rate of dropout is at around 55%'' T4

"… the rate of absenteeism is at about 30%. As it varies in deferent seasonal periods, in a year and that in itself it does cause these learners to drop out of school'' T4

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'With my class it about 55% and varies, depending on how my learners are affected by their specific socio-economic challenges from their respective families as some learner end up dropping out from school'' T5

'… the rate of absenteeism is at about 30%. As it varies in deferent seasonal periods, in a year and that in itself it does cause these learners to drop out of school'' T6

"… in our schools we do experience an extremely high rate of percentage of learner dropout when the year is towards the middle of May month around the winter season; and these are the most known monthly periods of the academic year in which we usually experience a high and steadily dropping out of learners from school." T8

*'I foresee an increasing rate of absenteeism, which I am afraid that it may lead to a high rate of dropout''
And as absenteeism rate continues to increase especially in my class then there will be a high rate of dropout, hence currently the rate of dropout is at around 55%'* T7

The remarks made by learners indicate that the rate of learners leaving school is high and disturbing. Some learners indicated that although she is not sure of the numbers, many learners are dropping out of the school and various reasons were given for this to happen. Some learners indicated that it was not easy for them to convince them not to leave school. Lack of motivation is one of the reason given.

In addition to what learners said, teachers also agree that the rate of school livers is increasing. Teachers indicate that this action of leaving school prematurely start with absenteeism. They indicated that learners are absenting them themselves because they are attracted by substances that they end abusing. There those who believe that absenteeism can be as a results of some specific socio-economic challenges from their respective families.

- The rate of learners leaving school is becoming unacceptably high. This study recommends that efforts be taken to reduce the rate of school dropout. The initiatives should be taken by school management teams, as well as national and provincial departments of educations. The main reason for this recommendation is that learners who drop out of school may become dangerous to the society. Unemployable as they would be, they would still need financial stability. Crime maybe an option to them.

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"In my class I usually have a very high rate of absenteeism which is so disturbing a lot when I have to start lesson preparation and also for teaching preparation in all my teaching learning areas''T3

"I foresee an increasing rate of absenteeism, which I am afraid that it may lead to a high rate of dropout'' And as absenteeism rate continues to increase especially in my class then there will be a high rate of dropout, hence currently the rate of dropout is at around 55%'' T4

"… the rate of absenteeism is at about 30%. As it varies in deferent seasonal periods, in a year and that in itself it does cause these learners to drop out of school'' T4

'… the rate of absenteeism is at about 30%. As it varies in deferent seasonal periods, in a year and that in itself it does cause these learners to drop out of school'' T6

'I foresee an increasing rate of absenteeism, which I am afraid that it may lead to a high rate of dropout'' And as absenteeism rate continues to increase especially in my class then there will be a high rate of dropout, hence currently the rate of dropout is at around 55%' T7

Theme 3: The causes of learners dropping out of the school

The literature provided community-related factors such as, the push and the pull factors that causes learner dropout (De Witte, 2013). In addition, Hammond, (2007) noted crime, drugs and violence as some of the

causes of school dropout. The economic status of families has been seen as another cause of learners leaving schooling.

Responding to the question that one wanted to know about the causes of dropout, learners provided their important views and ideas are captured in the quotes below. However, not all learners' responses are recorded to avoid repetition.

"… There are also many groups of gangsters at school that are not good and that treat other learners bad. This really disturb us in our studies at school …" L1,

" … bullies treating other learners badly that they end up leaving school, and some of us became the victims although we resisted leaving school. There are gangsters at school that causes violence … there are those who influence others to smoke and do drugs" L6.

"leaving school is caused by the bad social –life style and poor economic life conditions are from learners families. … parents are not working and only get pension money.". L7

"There is no discipline at school /home; we also mix with bad friends; and we are always not motivated to be serious with our studies… L8

In addition to what learners said, teachers responded to the question on the causes of learner dropout. Some of the important quotes are included below.

'It must be noted that most parents of these learners some are single parents, and some learners are left by their parents to look after their siblings at tender age, and the families depends on government social grants which is not enough at all'' T1

"It is important to note that existing unfavourable social life-economic /unemployment conditions, whereby most of our learners' parents are not working, and have financial problems at home, which make it difficult for them to provide socio-economic and educational needs for their children". That in itself it causes our learners to drop out of schools'' T2

"I think there is also a need to have feeding scheme in our secondary schools so that; since we also have learners whose parents cannot afford to provide them with money to buy food during break time in schools. That will also be able to assist some parents who are unemployed and cannot afford to provide money for their children to buy food to can buy food at school. This is because, the scarcity of food and the shortage of textbooks may also cause learners to drop out of schools. T2

"… it is caused by the socio-economic, cultural challenges that they are faced with from their respective family background. It is also their views that they hold, views of absenteeism as being caused by challenges that they meet as they are also experiencing from their homes.'' T3

''Our learners performances are also affected by many destructive things that take place in schools, such as bullying; groups of gangsters in schools among learners causing victimisation, violence; may cause learners to drop out of schools.'' T3

"… It is important to note that ineffective teaching; and teachers' unfavorable working conditions in schools coupled with teachers absenting themselves in schools, and a culture of temporary employing teachers will continue to causes learners and teachers to be always discouraged due to the repeatedly culture of changing teachers in every months within the academic year." T3

''The shortage of textbooks and again the unprofessional behavior of some teachers towards learners may negatively affect learners in their performance, which may also cause learners to drop out of schools.'' T3:

"It is surely true that the dropping out of learners from school is also closely linked or related to socio-economic status of families from where our learners are coming from. Such unfavorable socio-economic, environmental also have physical and psychological challenges to these learners which ultimately causes them to drop out from school." T4

"Safety in schools is no longer guaranteed, criminality is high; no writing of homework by learners; no food at school; fear of Covid-19 infection; attitudes to school and careers; Alcohol and drug abuse at school by learners and a lack of discipline and non-observance of code of conduct in schools by learners." T8

'The culture of non-compliance to the codes of conduct that is prevailing in schools and the ill-discipline attitudes that are displayed by learners such as, not writing homework and their indulgence in alcohol and drug abuse, and formation of their rival groups of gangsters in school, also has a contributory negative impact that causes absenteeism in schools" T5

It is important for this study to determine the causes of learners dropping out of the school.

The literature provided community-related factors such as, the push and the pull, crime, drugs and violence as some of the causes of school dropout. The economic status of families has been regarded as other cause of making learners to leave schooling. Learners who are on the receiving end in this case echoed socio-economic factors such as divorce, unemployment, financial status. Learners indicated that some of the fellow learners leave school as a results of lack of discipline and gangsters at school

In addition to what learners cited, teachers also provided hungers in high schools since feeding scheme is currently for primary schools. Many learners, especially who end up leaving school are non-compliance to

the school codes of conduct. The socio-economic and cultural challenges were also repeated by teachers. Due to bullying and gangsterism, safety in schools is no longer guaranteed, criminality is high

Theme 4: Attempts to reduce the learner dropout rate

According to Harris (2009) attempts were taken through Expanded Learning Opportunities to reduce dropout rates. The expanded learning opportunities was attempts made out traditional school day to reducing dropout rates. It is important to have an in-school supports to keep students from falling behind and ultimately dropping out (Harris, 2009). The attempts to slow down the learner dropout rate further include the guidelines that were provided by The South African Constitution, Children's Act, 38 of 2005, School Act, National Youth Policy 2015-2020, White Paper on Education number 5 (2001), White Paper on Special Needs, 2008, National Policy for Prevention and Management of Learner Pregnancy, 2007 and National School Nutrition Programme, since 2010.

In responding to the question on attempts that were made to reduce learner dropout rate, learners provided valuable information. The ideas are captured in the following quotes:

"… there are attempts to encourage us to continue schooling. However, such attempts did not work due to issues including hunger. If there can be food for us who are not having money to buy food to eat at school during lunch time we will always be at school" L1

In our school they provide us during lunch time and we are provided with a school uniform and also books for those who don't have'' L3

"Despite the promise of support to reduce dropout rates, challenges arise in using the programs. The challenges include Schools and communities lack the capacity to identify and target students at risk of dropping out … at-risk youth often lack access to such support that takes part outside the school and are

difficult to engage when programs are available … states too often fail to ensure that expanded learning opportunities are effective and focused on dropout prevention" L4

"How can one claim that there are sufficient efforts to prevent us from leaving schools where there is no longer extramural activities which we are able to take part after studying … able to relax our minds and train our physical bodies for the healthy body, and mind and soul." L6

"… not enough is done to reduce the issue under discussion. Issues such as extramural activities could keep us busy and enjoy being at school …" L8

The next quotes are teacher responses to the question that has to do with attempts made to reduce the learner dropout rate in South Africa.

'… I think the school management and school governing bodies have missed the opportunity creating a conducive learning and teaching environment…'' T3

'In previous years, schools used educational trips, motivational speakers, career guidance facilitators to motivate learners to remain in schools…'' T2

, "… introduced to play indigenous games and various sporting activities which create the conducive socialising and safety learning environment which is also a culture that was also practiced by some previous schools to motivate learners to remain in schools" T3

"With us in our school there are educational trips, travel to tertiary institutions to learn more about the careers that they would like to follow when completing their Matric. This is how our school is able to motivate learners to remain in school and as part of the attempts to reduce learner dropout rate" T5

The main aim of this study is to reduce learners who are dropping out of school before reaching grade 12. It is important to note the suggestions given by learners as most affected people. Learners considers a school as a boring environment which is focusing in what is taking place in class. They indicated that extramural activities that used to keep them at school is no longer given a priority. The learners further demonstrated that they are not given food like what is taking place in lower classes.

Teachers also said that educational excursion and visiting tertiary institutions to learn more about the careers can serve as a motivation. The introduction of activities such as play indigenous games and various sporting activities which create the conducive socialising and safety learning environment. The school management and school governing bodies have missed the opportunity of creating a conducive learning and teaching environment

Theme 5: The contribution of astrology in the education of learners

According to The Times of India (2016), since the ancient times, astrology has been well-known as an effective means of education and has helped many learners to mollify the planets so that they can overcome the hurdles and difficulties in their academic life. To indicate that learners, do value astrology in their academic life, responded in the following manner to the question on how astrology can contribute to their studies:

"…there are many ways in which astrology can motivate us throughout our academic life … it allows us to expand our minds, to think outside the box, and to explore different views about ourselves and the world we live in" L1

"…I was told that Astrologers can make interpretations based on the positions of the planets and stars in the sky and their relationship with human behavior … all this is done by studying the planets and stars … engaging them in a …" L2

"Astrology can motivate us as learners to become aware of our qualities … So it is clear that through astrology we can understand our natural gifted talents, strengths, weaknesses, threats and opportunities." L5

"… we can now be able to develop a positive tendency towards our studies as we will be motivated to have a strong trust and belief in our astrology analyses which are relevant and positive" L8

Responding from teachers to the question on how astrology could contribute to the reduction of a learners' tendency of dropping out of school include the following:

"… astrology helped me to understand myself. In fact, I had a tremendously difficulties with my studies … astrology helped me out of that dark hole. I revisited my birth chart and did a few predictions … helped me clarify a lot of personal obstructions. … that astrological information allowed me to rectify some issues, which dragged me back on my academic work. T1

"Astrology helps students understand who they are, why they behave as they do, and aids them in getting on the right track so they may complete their studies". T2

"… education astrology can also predict how much success one will be able to attain in one's chosen field …" T3

"… social interaction and maintaining relationships for students are as important as meeting academic goals. astrology can be extremely helpful and revealing in a student's life. Equipped with vital information such as time, place, and date of birth – a student can get a deeper insight into his or her relationships". T4

"…*students are grappling with issues of helplessness, despair, or depression. astrology helps students gather a feeling of more control and self-empowerment …"* T5

"… astrology is not new to human beings. It has been practiced for centuries … is one of the most ancient and widely used forms of prediction. It is another way of viewing at the world and ourselves in order to gain a better understanding of our lives and our surroundings …" T8

In their responses, learners indicated that astrology can motivate them throughout their academic life. They further demonstrated that it can assist them to expand their minds so that they able to think outside the box and to explore different views about themselves and the world we live in. the learner confessed that astrology has the ability to lead to self-discovery because through it they can become aware of their inherent qualities. The astrology develops in them a positive tendency towards their studies as they would be motivated to have a strong trust and belief in our astrology analyses

In addition to what learners advanced, teachers demonstrate that astrology could assist learners to be aware of themselves. Astrology helps students in their personal and academic lives. It further engages them in a self-discovery process of motivation. Teachers also consider astrology as a possible career guidance tool that can assist in the reduction of learners' tendency to drop out of schools. It could assist learners to achieve their needs which are care, pride, discipline, skills, dreams and goals. Astrology can motivate learners to become aware of their personalities. So it is clear that through astrology learners can understand their natural gifted talents, strengths, weaknesses, threats and opportunities. Like adults, learners can use astrology to promote their social interaction and maintaining relationships to avoid helplessness, despair, or depression. Through astrology, learners can further have control and self-empowerment that could lead successful academic life. Through it, learners can further predict how much success one will be able to attain.

Theme 6: Subject choice and career guidance

Choudhary (2022) states that **astrology can help to choose the subject** for which one is best suited. Further demonstrate that there are some important combinations that predetermine the career success of learners. Apart from this, the twelve houses indicate the variety of professions that are pre decided by birth for the native. During the deliberations with learners and teachers, the issue of astrology as a guide to career choice cropped up. A follow up questions such as "can astrology assist learners in subject selection that can in turn

inform career choice?" This question provoked teacher participants to make the next remarks. Learners were not ready to respond to this question.

"… Apart from this, the twelve houses indicate the variety of professions that are pre decided by birth for the native" T2

"… planets help in subject selection …" T5

"… according to astrologers and literature indicate that various planets are related to certain subject, e.g. Sun with math, medicines, healing; Moon related to creative arts, herbs, biology, mars would relate to engineering courses, construction, arms sports …" T6

"… planets such as Mercury, Jupiter, Venus, Saturn, Sun, Moon and Mars are all related to various subjects … this indicate that astrology could help learners in choosing the relevant subjects in which learners are gifted" T8

Learners and some of the teacher did not respond or respond well to this follow-up question. One teacher who demonstrated interest and understanding of astrology made mention of the twelve houses which indicate the variety of professions that are pre decided by birth for the native. More probing questions were directed to such individuals to get more information. Teacher coded 6 went to an extent of relating some planets to certain subjects. This demonstrated that these teacher participants agree that astrology can assists in subject selection as well as career guidance.

Chapter 6

Summary, recommendations and conclusion

6.1 Introduction

In the previous chapter, the researcher has extensively dealt with analysis of data as presented by learners and teachers. Learners and teachers provided information that assisted to answer the main question *"How can astrology contribute in motivating learners to avoid dropping out of schools?* This chapter summarises the findings from the thematic analysis, and indicates how the six themes that emerged, responded to the questions.

The important information provided by the participants are quoted in the previous chapter. This chapter starts by providing the summary of the findings based on the quotes captured in chapter 5. The discussion covers all the six themes that were identified from the data collected. The themes include understanding of astrology; rate of learner dropout; causes of learner dropout; attempts to reduce the learner dropout; astrology as a motivating aspect in education; the contribution of astrology in the reduction of learners drop out of schools; and subject and career guidance.

The analysed and discussed data informed the recommendations made in this study. This means that the recommendations were based on the findings.

6.2   Summary of the findings.

Data analysis in the previous chapter, indicated that learners do not understand astrology. Instead of explaining what astrology is, they provided the contribution it can make in human life, for example "discover strengths and weaknesses … warnings on how to deal with life **(**L1); learn and gain knowledge to understand themselves … realise talents and gifts that will help them to complete their studies (L4); as well as knowing themselves and their natural talent (L5). Data analysed further demonstrate that teacher participants regard astrology as something where people use stars and planets to predict event in human life. It is all about the understanding of oneself. It is considered as a method to make predictions about people's life and the world at large. The analysis of human events through the observation and interpretation of the stars, the Sun, the Moon, and the planets is key to astrology.

The remarks made by learners indicate that the rate of learners leaving school is high and disturbing. Some learners indicated that although she is not sure of the numbers, many learners are dropping out of the school and various reasons were given for this to happen. In addition to what learners said, teachers also agree that the rate of school leavers is increasing. Teachers indicate that this action of leaving school prematurely start with absenteeism. They indicated that learners are absenting themselves because they are attracted by substances that they end abusing. There those who believe that absenteeism can be as a results of some specific socio-economic challenges from their respective families.

It is important for this study to determine the causes of learners dropping out of the school. In addition to the literature provided community-related factors such as, the push and the pull, crime, drugs and violence as some of the causes of school dropout. The economic status of families has been seen as another cause of learners to drop out of school. Data analysis demonstrated that learners who are on the receiving end echoed socio-economic factors such as divorce, unemployment, financial status. Learners indicated that some of the fellow learners leave school as a results of lack of discipline and gangsters at school. In addition to what learners cited, teachers also provided hungers in high schools since feeding scheme is currently for primary schools. Many learners, especially who end up leaving school are non-compliance to the school codes of conduct. The socio-economic and cultural challenges were also repeated by teachers. Due to bullying and gangsterism, safety in schools is no longer guaranteed, criminality is high

The main aim of this study is to reduce learners who are dropping out of school before reaching grade 12. It is important to note the suggestions given by learners as most affected people. Learners considers a school as a boring environment which is focusing in what is taking place in class. They indicated that extramural activities that used to keep them at school is no longer given a priority. The learners further demonstrated that they are not given food like what is taking place in lower classes. Teachers also said that educational excursion and visiting tertiary institutions to learn more about the careers can serve as a motivation. The introduction of activities such as play indigenous games and various sporting activities which create the conducive socialising and safety learning environment. The school management and school governing bodies have missed the opportunity of creating a conducive learning and teaching environment

Data collected from learners indicated that astrology can motivate them throughout their academic life. They further demonstrated that it can assist them to expand their minds so that they able to think outside the box and to explore different views about themselves and the world we live in. the learner confessed that astrology has the ability to lead to self-discovery because through it they can become aware of their inherent qualities. The astrology develops in them a positive tendency towards their studies as they would be motivated to have a strong trust and belief in our astrology analyses. In addition to what learners advanced, teachers demonstrate that astrology could assist learners to be aware of themselves. Astrology helps students in their personal and academic lives. It further engages them in a self-discovery process of motivation. Teachers also consider astrology as a possible career guidance tool that can assist in the reduction of learners' tendency from dropping out of schools. It could assist learners to achieve their needs which are care, pride, discipline, skills, dreams and goals. Astrology can motivate learners to become aware of their personalities. So it is clear that through astrology learners can understand their natural gifted talents, strengths, weaknesses, threats and opportunities. Like adults, learners can use astrology to promote their social interaction and maintaining relationships to avoid helplessness, despair, or depression. Through astrology, learners can further have control and self-empowerment that could lead successful academic life. Through it, learners can further predict how much success one will be able to attain.

Learners and some of the teacher did not respond or respond well to the question that suggest that astrology can assists in subject choice and career guidance. One teacher who demonstrated interest and understanding of astrology made mention of the twelve houses which indicate the variety of professions that are pre decided by birth for the native. More probing questions were directed to such individuals to get more information. Teacher coded 6 went to an extent of relating some planets to certain subjects. This demonstrated that these teacher participants agree that astrology can assists in subject selection as well as career guidance.

6.3   Recommendations

It has been realised from the participants that astrology plays an important role in almost every aspect of human lives. It was indicated that the timing and placement of stars and planets at a particular time has a bearing on the education prospect in one's horoscope. Astrology can predefine scopes and planning for

education in advance. It has been realised that Astrology is not the same thing as astronomy, although they are sometimes confused. Astrology is the study of the alignment of planets, often at the time of a person's birth. People generate and read astrological charts to assist them recognise their personality traits something that assists them to gain insight into the events of their lives. Influenced by what participants advanced, one is tempted to come up with the next recommendations.

One of the recommendations proposed is the inclusion of astrology as a compulsory subject in schools. In a rapidly developing world, where individuals are seeking unique ways to understand themselves and navigate life's complexities, the idea of incorporating basic astrology as an optional subject at the school level is gaining traction. This proposal is not about predicting the future, but rather about providing learners with a tool to enhance self-awareness, interpersonal skills, and decision-making. Learning about one's astrological profile can make learners to be aware of insights into their personality traits, strengths, and areas of improvement (Self-Awareness). Basic astrology introduces the concept of compatibility and understanding others based on their astrological signs (Interpersonal Skills). Astrology can offer valuable insights into potential career paths that align with an individual's strengths and natural inclinations (Career Guidance). Learners equipped with basic astrology knowledge can make informed decisions by considering favorable planetary alignments, thereby increasing the likelihood of success (Decision-Making).

The inclusion of astrology as a compulsory subject in schools will depend on teacher training since not all teachers have sufficient knowledge on it. Learning astrology well enough to apply in teaching profession can be done in relatively short time, which one can suggest 5 to 6 months of training. Empowering teachers can also be given while in training and from specialised astrology teachers. In that time the trainee can apply astrological knowledge to his/her friends and relatives to get to know them better and gather necessary skills for chart reading such as selective intuition, to interpret the meaning of a given astrological indicator. The skills they gather can be used in class to help learners to realise their strengths and weaknesses.

It can also be recommended that astrology be effectively applied in the field of education by teachers and student counsellors. In this way, learners will be able to understand themselves and their academic ability, something that will make them enjoy schooling. School management teams should consider the benefits

promised by Astrology for education. The main intention is to make learners remain in school until grade 12. Astrology has the ability to motivate learners to continue schooling.

Astrology can be considered as a science that needs its own scientific research methods, which is based on the symbolically language of the stars. It is also an interpretive art that is linked and can be applied to various fields that are closely related with humanity and the human life experience. In case were the powers on the spot do not wish to consider it as a compulsory subject, it can be a discipline in which all the forces that operate behind the subjects such as psychology, physiology, sociology, geography, just to mention a few.

Astrology can be effectively applied in the field of education by teachers and student counsellors. We should really consider the benefits that are promised by Astrology for education. This is a discipline that needs to be criticized on its own terms; observations, hypotheses, laws and axioms. Stars suppose, they don't force things to happen. They indicate the forces operate on time which also depend on causality and free-will. An astrological point of view concludes that the free will is thought as a human development area which urgently needs development on both individual and collective terms at the moment, if we are to achieve a better future than the times of crisis.

The learner dropout in South Africa continues to rise and it seems unmanageable with detrimental effects on the education system and society. The South African Schools Act, 24 of 1996, provides that all children attend school from the first day of the year in which they turn seven, until the last day of the year in which they turn fifteen. Using astrology as a *motivating tool* can reduce the rate of learner drop-out. Using it for self-awareness, interpersonal skills and decision-making, as indicated previously is the way of making learners to remain motivated. Astrology can be a diagnostic basis to launch her intuitive forces and do a psychic surgery, on the go while conversing with the client. The astrology also tunes the intuition to the cyclic forces and such information can prevent mishaps way before without even looking at charts after internalization of the solar consciousness.

Participants regarded gangsterism, bulling, drugs abuse, bad social-life style poor and poor economic life within the families are considered as the causes of learners dropping out of the school. Some of these things happen because learners do not understand themselves – that is their strength and weaknesses. They lack knowledge of their future career. Motivation that may be generated by astrology can assist learners in

reducing the rate of absenteeism which is so disturbing as it sometimes leads to drop out of school. The gangsterism, bulling and drugs abuse can lead to absenteeism. Motivated learners who understand him/herself may also enjoy to do the school work. This will also reduce friction between teachers and learners. Less friction will make learners to be comfortable in their learning environment.

To reduce the learner dropout rate, one recommend that the school management teams and school governing bodies should take the opportunity and create a conducive learning and teaching environment. They should also take the opportunity to identify and target students at the risk of dropping out. Including parents is important since at-risk youth often lack access to such support that takes part outside the school and are difficult to engage when programs are available. The states too often fail to ensure that expanded learning opportunities are effective and focused on dropout prevention.

The educational trips, travel to tertiary institutions to learn more about the careers that they would like to follow when completing their Matric. Discouraging extramural activities, educational trips and excursions was not a good move from the side of the educational authorities. Pressure that is placed on school management educational authorities for better results made many schools to abandon sports, music and other activities that made schools enjoyable.

The schools should use astrologers, motivational speakers, career guidance facilitators to motivate learners to remain in schools. since the ancient times, astrology has helped many learners to mollify the planets so that they can overcome the hurdles and difficulties in their academic life. Astrologers can make interpretations based on the positions of the planets and stars in the sky and their relationship with human behavior. As indicated previously, there are many ways in which astrology can motivate people throughout their academic life and beyond. It allows people to expand their minds and to explore different views about themselves and the world they live in.

All stakeholders concern with the education of learners, should use astrology for subject choice and career guidance. Astrology can help to choose the subject for which one is best suited. There are some important combinations that predetermine the career success of learners. Apart from this, the twelve houses indicate

the variety of professions that are pre decided by birth for the native. The twelve houses indicate the variety of professions that are pre decided by birth. Then according to astrologers and literature indicate that various planets are related to certain subject, e.g. Sun with math, medicines, healing; Moon related to creative arts, herbs, biology, mars would relate to engineering courses, construction, arms sports. The planets such as Mercury, Jupiter, Venus, Saturn, Sun, Moon and Mars are all related to various subjects.

Conclusion

The objectives of the study were to determine the way in which astrology can contribute in motivating learners to avoid dropping out of schools in South Africa. The study, through the information provided by literature and the group of people that were sampled advanced several causes that usually lead to learners dropping out of schools. The study further succeeded in identifying attempts to reduce the learner dropout. The study also determined the way in which learners can be motivated to remain in school and also to check how astrology can assist in reducing learner dropout.

All the issues or objectives mentioned above are summed up in the recommendations provided above. The recommendations were informed by what participants provided. The main recommendation is that astrology can contribute in motivating learners to avoid dropping out of schools in South Africa and that its importance should be acknowledged by all stakeholders in the education circles.

However, it should be acknowledged that this study does not provide all answers that can make learners to hold on until they reach grade 12 and beyond. The study indicated several causes that make learners to leave school. One suggest that further research can be conducted to determine the manner in which these causes can be mitigated.

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6. APPENDICES

Appendix number:	Name of appendix:	Attached YES /NO
A	Questionnaires for learners	YES
B	Telephonic questions to teachers	YES
C	Approval letter from GDE	YES
D	Approval letter from District	YES

Appendix A: Open-ended question for learners

UNISA | university of south africa

Instruction: *This document consists of Open-ended questions with an intention of allowing and encouraging you as the respondent to answer in open-text format based on your knowledge, feeling, and understanding on astrology and its contribute to discouraging leaners from dropping out school. Provide detailed response since this questions are not limited to a set of options.*	
QUESTIONS	**Learners responses**
Understanding Astrology	
• Astrology is the study of the movements and relative positions of spiritual bodies interpreted as having an influence on human affairs and the natural world.	
• Astrology is a method of predicting ordinary events based upon the	

assumption that the spiritual bodies— particularly the planets and the stars considered in their arbitrary combinations or configurations (called constellations)	

Do the following lead to learners drop-out of school? Explain how it lead to learner dropout.

• Push and pull factors	
• Peer pressure	
• Lack of positive interest to study	
• Family background	
• Parental involvement	
• Socio-economic factors	

Attempts at reducing the learner dropout rate

• Are there any efforts by your teachers to make you enjoy schooling?	
• Are there any efforts by your school to encourage learners to remain in school until grade 12?	
• Are there any efforts by department of education to discourage learners from leaving school before finishing grade 12?	

To what extent can astrology serve as a motivating aspect in education for learners to remain in school

Astrology plays an important role in almost every aspect of our lives.	
The astrology should be a compulsory subject in schools	
The timing and placement of stars and planets at a particular time has a bearing on the education prospect in one's horoscope.	
Astrology can predefine scopes and planning for education in advance. Learn here in detail the role of astrology in the field of education.	
Education Astrology helps the parents to have informative detail as to develop their child's mind in an organized and goal-oriented manner to pursue their academic goals on the basis of their planet's orbit in their horoscope.	
To what extent can astrology contribute in the reduction of learners tendency of dropping out of school	
Astrology can be a helpful tool for understanding your strengths and weaknesses in terms of your career.	
I am convinced that astrology can contribute to the reduction of learner dropout in school	
Astrology can assist learners to understand their life and future interests	

Astrology allows students <u>to expand their minds, think outside the box, and explore different views about</u> themselves and the world they live in.	
By engaging students in learning all about astrology, educators can stimulate their interest in science, history, and culture while providing them with an opportunity to develop critical thinking skills.	
Astrology has been well-known as an effective means of education and has helped many students and learners to appease the planets so that they can overcome the hurdles and difficulties in their academic or student life.	
What is an Astrological Profile?	
The Astrological Profile is a series of Snaps that cover the ten different planets (Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn, Neptune, Pluto, Uranus) and an Astrology Profile Summary.	
To access your Astrological Profile, go to your Profile and tap the Astrological Sign next to your name. Then enter your birthday, time of birth, and place of birth.	

APPENDIX B: Open-ended questions for teachers

<table>
<tr><td colspan="2">UNISA | university of south africa</td></tr>
<tr><td colspan="2">This document consists of Open-ended questions with an intention of allowing and encouraging teacher respondent to answer in open-text format based on their knowledge, feeling, and understanding on astrology and its contribute to discouraging leaners from dropping out school. This schedule does not include probing questions as such questions depend on the discussion.</td></tr>
<tr><td colspan="2"></td></tr>
<tr><td colspan="2">Basic questions</td></tr>
<tr><td colspan="2">1. What is astrology?</td></tr>
<tr><td colspan="2">2. What is your knowledge and understanding of astrology?</td></tr>
<tr><td colspan="2">3. What is the rate of dropout in south African schools?</td></tr>
<tr><td colspan="2">4. To what extent do you think the following lead to learners drop-out of school? Explain in detail.

      Push and pull factors
      Peer pressure
      lack of positive interest to study
      Family background
      Parental involvement
      Socio-economic factors</td></tr>
<tr><td colspan="2">5. In your view which efforts are taken by your school to reduce learner dropout rate</td></tr>
<tr><td colspan="2">6. In your view which efforts are taken by department of education to encourage your learners to remain in school until grade 12?</td></tr>
<tr><td colspan="2">7. What contribution can astrology have in making learners to remain in school until grade 12?</td></tr>
</table>

GAUTENG PROVINCE

Department: Education

REPUBLIC OF SOUTH AFRICA

GDE RESEARCH APPROVAL LETTER

Date:	13 October 2020
Validity of Research Approval:	08 February 2021– 30 September 2021
	2019/643
Name of Researcher:	Ngwila FS
Address of Researcher:	1740 A Chiawelo
	Nephawe Street
Telephone Number:	073 076 3293
Email address:	08439214@mylife.unisa.ac.za
Research Topic:	The contribution of astrological studies on the motivation of learners to avoid dropping out of schools in Ekurhuleni district
Type of qualification	Master's in Education
Number and type of schools:	5 Secondary Schools
District/s/HO	Ekurhuleni South

Re: *Approval in Respect of Request to Conduct Research*

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

13/10/2020

The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1. *Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.*

1

Making education a societal priority
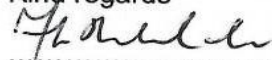
1. Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.

2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.

3. **Because of COVID 19 pandemic researchers can ONLY collect data online, telephonically or may make arrangements for Zoom with the school Principal. Requests for such arrangements should be submitted to the GDE Education Research and Knowledge Management directorate. The approval letter will then indicate the type of arrangements that have been made with the school.**

4. **The Researchers are advised to make arrangements with the schools via Fax, email or telephonically with the Principal.**

5. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.

6. A letter / document that outline the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.

7. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.

8. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.

9. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.

10. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.

11. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.

12. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.

13. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.

14. On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.

15. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.

16. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

....

Mr Gumani Mukatuni

Acting CES: Education Research and Knowledge Management

DATE: 13/10/2020 ....

2

Making education a societal priority

Office of the Director: Education Research and Knowledge Management
7th Floor, 17 Simmonds Street, Johannesburg, 2001
Tel: (011) 355 0488
Email: Faith.Tshabalala@gauteng.gov.za
Website: www.education.gpg.gov.za

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GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

To: District Based Support Team

Subject: Research Approval

Please be advised that the Gauteng Department of Education has given Mr FS Ngwila permission to conduct research. The research is purely on a voluntary basis and the researcher would be interviewing staff members at the school. The research at the schools will be conducted during Term 1 and 2 of 2021.

The research title is:
"The contribution of astrological studies on the motivation of learners to avoid dropping out of schools in Ekurhuleni district."

B.P. Luthuli
District Director
3 March 2021