The Antecedents of Generation Z consumers' Saving Behaviour in South Africa

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Abstract

Focusing on Generation Z as a unique demographic group, this study tested their savings-related behavioural patterns using the Theory of Planned Behaviour.

The study highlighted the Theory of Planned Behaviour as a well-established and extensively critiqued framework for understanding attitudes, subjective norms, perceived behavioural control, and intentions in relation to a specific behaviour.

The research employed a quantitative approach, utilising data collected from a subset of individuals who completed an online survey. The participants of the study were situated in Tshwane. A total of 141 respondents participated in the survey, contributing in varying degrees to an online questionnaire distributed via Google Forms. The data was processed using IBM Statistical Package for Social Sciences v 19 and Smartpls 4.0 software.

Although the influence of subjective norms and intention on the savings behaviour of Generation Z participants was determined to be statistically insignificant, it was observed that attitudes and perceived behavioural control exhibited positive relationships. In terms of theory, this meant that the evidence could not fully support all the hypotheses. This outcome is however not an anomaly as other studies have also shown variation, an outcome which the theory's progenitor has dealt with in published works to demonstrate resilience of the theory of planned behaviour.

The study contributes to the seminal work by demonstrating its continued relevance in behavioural choices and outcomes. In practical terms, the study presents findings which challenge policymakers and business to intervene. Here is a demographic with positive indicators on behaviours and attitudes, yet they are also constrained in how much they can save due to economic factors such as low income and high living expenses. Generation Z members reflect positive indicators on the model constructs; these indicators require support from policymakers and business.

Key words: Theory of Planned Behaviour, TPB, Generation Z, Gen Z, Quantitaive, Savings Behaviour

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy (Corporate Strategy) at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University.

I further declare that I have obtained the necessary authorisation and consent to conduct this research.

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List of Abbreviations and Acronyms

Abbreviation	Meaning
TPB	Theory of Planned Behaviour
ATT	Attitude
SN	Subjective Norm
PCB	Perceived Behavioural Control
INT	Intention
Gen Z	Generation Z
ABC	Attitude Behaviour Context
VBN	Value Belief Norm
SA	South Africa

Chapter 1: Introduction to the Research

1.1 Introduction and Background to the Research Problem

Over the past years, considerable emphasis has been placed on the mobilisation of savings due to its profound impact on both individual well-being and its broader societal implications (Dholakia et al., 2016; Mende et al., 2019; Kaiser et al., 2021).

At the macroeconomic level, the importance of savings in promoting sustained economic growth has been extensively examined in scholarly research (Karlan et al., 2014; Aghion et al., 2016; Dholakia et al., 2016). According to Tagem and Sen (2021), the United Nations has emphasised that countries exhibiting high savings rates generally experience higher economic growth. Moreover, when a country's savings rate aligns with its investment rate, it mitigates susceptibility to abrupt fluctuations in global capital movements.

When examining the individual circumstances and savings serve various purposes, including facilitating consumption smoothing, providing financial security, mitigating against unanticipated financial circumstances, and assisting in the accumulation of assets and wealth (Karlan et al., 2014; Lusardi & Mitchell, 2014; Brüggen et al., 2017). Consumption smoothing refers to the economic practice of regulating expenditure patterns to sustain a consistent consumption rate over time. This approach has been noted as useful for managing personal finances and mitigating the adverse effects of economic uncertainties (Angus Deaton, 2018, pp. 335–336).

Given the substantial presence of the informal sector in South Africa and the limited availability of formal financial services to numerous households, the significance of savings remain imperative (Mckinsey, 2020). Savings can additionally serve as a source of capital for households, enabling them to engage in entrepreneurial activities, acquire land, or make investments in education. These endeavours collectively contribute to the advancement and expansion of the economy (National Treasury, 2020).

Investigating savings behaviour is especially useful to explore in South Africa, given some of the research output from financial institutions, which emphasises the importance of savings and the current barriers (Saville et al., 2015; Stanlib, 2020; FSCA, 2022). For example, a report by Saville and Macleod (2019) titled the "Investec and GIBS Savings Index" explored the current savings state in South Africa. The report emphasises the

importance of maintaining an adequate level of savings within the South African setting, as well as the continual need for savings and financial product awareness and understanding. The primary factors contributing to this phenomenon are the lack of financial literacy and the constrained availability of savings alternatives (FSCA, 2022).

Despite the implementation of proactive measures by the South African Savings Institute, such as the promotion of National Savings Month and the Manage Money Program (South African Savings Institute, 2020), there is still a necessity for additional endeavours to encourage savings among the South African population, particularly considering the current economic conditions.

Over the years, South Africa has encountered a significant challenge in its declining gross savings rate, decreasing from 17.4% in 2009 to 14.8% in the second quarter of 2023 (The World Bank Group, 2023; South African Reserve Bank, 2023a). The decline can be seen as a reflection of the country's inadequate ability to promote consistent growth and development, which can be attributed to various factors. These factors include a sluggish rate of economic growth, elevated levels of unemployment, high credit utilisation, a significant lack of financial knowledge, and limited advancements in achieving widespread financial inclusion within the country (Stanlib, 2020; FSCA, 2022).

The focus of the research is not on savings alone but also on the generational dimensions of savings behaviour. Resultantly, the attention on savings is framed with some sensitivity to Generation Z. Motivations for a generational focus initially stem from broad observations in recent times, where the focus on the generational differences has been highlighted in differential political inclinations. For example, the urgency with which climate change has become a global existential matter (Roy & Ayalon, 2023; Kgomo & Modley, 2022), the decision in the United Kingdom to exit from the European Union (Bristow, 2020) and the collective perspectives over social interest matters (Turner, 2015) have revealed that generations appear to hold different outlooks and values. Generation Z is no exception, as it constitutes a group of young adults who have grown up in a world that is cyber-connected.

Within the scholarship of savings, this cohort could also be accounted for in the life cycle hypothesis (Matraeva et al., 2019), which principally focuses on stages in life as a key factor determining savings habits. However, while these theoretical affordances are available, they remain underutilised with respect to the generation's savings attitudes, behaviours, and dispositions. The theory of planned behaviour makes propositions

around attitudes, subjective norms, perceived behavioural control and intention and subsequently offers a useful starting point in exploring such behaviours.

Generation Z (Gen Zs) are also a unique group for their social maturity in a time of financial innovation and turbulence. They are a generation that has arrived at adulthood in the aftermath of the global recession. As such, they would have been aware of the moral and operational challenges which faced the global financial system and gave rise to critiques over its usefulness in protecting the interests of ordinary savers. Equally of concern would have been the worth of savings within the tarnished financial ecosystem. While the global financial architecture was under immense scrutiny, ostensibly viable alternatives were also on the rise, most notably cryptocurrency, which was built on blockchain technology. These technologies were alternatives available to the broad population but of interest to groups such as Gen Z as they emerged at a time when their young adulthood was in full swing. They, therefore posed as alternative investment and savings instruments. Gen Zs was and continues to be situated within this diverse socio-political and financial terrain where many alternatives and possibilities exist. Their savings behaviour, attitudes and dispositions warrant scrutiny as a unique demographic group.

Although the ability to save money is a fundamental part of an economic framework and personal financial success, it is often difficult for consumers to save, which has been a major challenge for businesses, policymakers, and economists. It is on this premise that the objective of this study was to acquire a deeper understanding of the factors that influence the saving behaviours of Gen Zs in South Africa.

Within the context of this research paper, the phrases "Generation Z" and "Gen Z" are employed interchangeably, while the terms "Theory of Planned Behaviour" and "TPB" are also used interchangeably.

The subsequent sections will present the research problem and research question that were investigated in this study, together with its underlying business and theoretical significance. Subsequently, a concise summary of the research's scope and constraints is presented, accompanied by a description of the methodology employed.

1.2 Research Problem

The global economy is rapidly evolving, with external turbulent factors occurring more frequently over the last few years, causing financial distress and anxiety. The COVID-19 pandemic has further exacerbated this uncertainty and caused significant stress. As a result, it is crucial for individuals to make prudent financial choices that promote their financial well-being and provide a safety cushion against potential risks (Mckinsey, 2020).

Although various initiatives and programs have been developed both by the South African government and the Banking sector (PICSA, 2023), there is a knowledge gap in what *drives* savings behaviour of inter and intragenerational SA consumers. There is still a need to understand the savings behaviour of consumers to design policies and product solutions that will encourage more people to save. Furthermore, this will aid in how consumer educational programmes can be developed and how they should be optimally delivered.

Acknowledging the country's lack of savings, President Cyril Ramaphosa was quoted saying "South Africa is not a country of savers" (South African Savings Institute, 2020), emphasising the need to change this narrative. To understand why this is the case, an appreciation of the South African socio-economic complexity and contemporary issues affecting incomes, savings and spending is required. South Africa is not distinctly different. Scholarly research has been abundant on the factors and savings behaviour of low- to middle-income consumers. These studies have primarily focused on limited access to financial services and insufficient financial literacy (Kaiser et al., 2021; Lown et al., 2014; International Labour Organization, 2016), to the level of disposable income and the financial consumption expenditure of households (Gomes et al., 2021).

In pursuing this study and particularly considering the generational focus that it embraces, the life-cycle theory is debated against. While a detailed engagement with the theory follows in Chapter 2, we acquaint ourselves with it here to appreciate the theoretical contribution this study pursues. The theory, as propounded by Modigliani (1966) is identified as one which suggests that “people make intelligent choices about how much they want to spend at each age, limited only by the resources available over their lives” (Deaton, 2005, p.0). Given the attention to the stage in life cycle, resource provision and spending behaviour that the theory encapsulates, this study would have found an entry point in generational differences (Carlin et al., 2019; Norum, 2003).

However, a more fruitful approach was adopted via theory of planned behaviour which offers a snapshot of savings behaviour within the generation at a point in time.

Generation Z is undoubtedly a group characterised by their adeptness with technology, self-consciousness, and motivation towards innovation (Seemiller & Grace, 2019). As such, a more subjective perspective is required to understand the behaviours within this age group. This study draws upon the Theory of Planned Behaviour by Icek Ajzen (1991) as a framework to provide insights in this regard. However, it is not uncritically embraced, as Chapter 2 will reveal. There are limitations in the chosen perspective's application in this research, but these are considered and addressed.

In conclusion, understanding Gen Zs savings behaviour is essential as they represent the future of consumer spending and investing (Deloitte, 2019). Gen Z is the most diversified and tech-savvy generation; they are currently penetrating the workforce market, contributing to the working economy, and establishing financial stability (Dolot, 2018; Gabrielova & Buchko, 2021). Understanding their savings behaviour can help businesses, banks, and financial advisors better understand how to meet their requirements and develop products and services to assist them in achieving their financial objectives.

1.3 Research Question and Objectives

The Generation Z cohort, comprising young adults, has lately encountered a significant global pandemic, namely COVID-19. This pandemic has had profound effects on their physical, emotional well-being, and financial attitudes and behaviours (GFLEC, 2021).

Comprehending the savings behaviour and intentions of Gen Zs, who represent the future of economic production, is therefore crucial (Deloitte, 2019). This research will aid governments, employers, and the financial sector in developing inclusive value propositions that resonate with this demographic and motivate them to actively participate in savings. The research question, therefore, is:

What are the antecedents for saving behaviour amongst South Africa's Generation Z consumers?

The research question articulated above is explored within the theoretical framework of the theory of planned behaviour which stipulates that actual behaviour is influenced by four constructs: attention, subjective norms, perceived behavioural control and intention (Ajzen, 1991). In light of this, the following set of research objectives were established:

a) What is the **attitude** amongst Gen Z's towards saving, and what is the correlation between that attitude and their intention to save?
b) What are the **social norms** amongst Gen Z's towards saving, and what is the correlation between those social norms and their intention to save?
c) What is the **perceived behavioural control** amongst Gen Z's towards saving, and what is the correlation between that perceived behavioural control and their intention to save?
d) Ajzen (1991) states that **perceived behavioural control** not only influences the intention of a behaviour, but it also influences with the actual behaviour. Therefore, this study seeks to determine the correlation between perceived behavioural control and savings behaviour.
e) What is Gen Z's **intention** towards saving, and what is the correlation between that intention and the actual savings behaviour?

1.4 Research Scope

Aligned to the research question, this study focused on investigating the Gen Z demographic's attitudes, subjective norms, perceived behavioural control, and savings intention. Through adopting TPB as the underlying theoretical framework, this research will, in the later chapters, provide insights on how these psychological constructs affect the saving decisions and behaviours of Gen Z consumers in Tshwane, South Africa.

1.5 Research Limitations

While this research aimed to provide insights into what influences the savings behaviour of Gen Z consumers in Tshwane, South Africa using TPB, it is essential to acknowledge the study's limitations.

The scope of this study was limited to a specific population cohort residing only in South Africa. Consequently, the generalizability of our findings is restricted to this specific context. It may not be applicable to individuals residing outside of South Africa or those beyond the age bracket of Generation Z.

Although the TPB offers valuable insights into the determinants of saving behaviour, it is important to consider that there could be other individual or contextual factors that may exert an influence on the savings behaviour of this cohort.

1.6 Theoretical Anchor

This study aimed to investigate the savings behaviours of Gen Zs and how they might be better understood and predicted using the TPB (Ajzen, 1991). The TPB is a social psychological theory that explains and predicts people's general behaviours. The theory proposes that an individual's behaviour is influenced by four key constructs: attitudes, subjective norms, and perceived behavioural control and itention (Ajzen, 1991).

Attitudes pertains to an individual's evaluation - either positive or negative - of the target behaviour; subjective norms pertain to an individual's perception of the societal influence exerted by significant others or the existing social norm regarding that particular behaviour; and perceived behavioural control involves an individual's perception of the available resources and personal capabilities that will enable the execution of the behaviour (Ajzen, 1991). In addition, the TPB posits that an individual's intentions to perform a particular behaviour are ultimately influenced by their beliefs regarding these constructs (Ajzen, 1991).

1.7 Theoretical Relevance

This study builds on the theoretical body of work of Ajzen (1991) to determine the antecedence of savings behaviour amongst Generation Z saving behaviour. Generation Z are increasingly becoming an essential contributor to the South African economy (TransUnion, 2020). Gaining knowledge about this generational cohort provides insights into their intentions and behaviours, while providing practical implications for financial education, interventions, and guidance for the financial sector and policymakers. This study fills the research gap and invites business and policymakers to understand what drives South African Generation Z's saving behaviours.

1.8 Business Relevance

According to the Financial Sector Control Authority's (FSCA) Financial Literacy Survey conducted in 2021, it was determined that a mere 22% of adults in South African adults had some sort of savings while a significant majority of 69% of the adult population lacked the ability to accumulate emergency funds equivalent to a minimum of three months' worth (FSCA, 2021). According to Saville and Macleod (2019), the 2019 Investec and

Gordon Institute of Business (GIB) Savings Index reveals a continuous decline in the propensity of South Africans to save over the past seven years. The aforementioned decrease indicates that the savings rate of South Africans is relatively low in comparison to other high-income countries. Additionally, it is observed that many households in South Africa depend on informal savings mechanisms, such as stokvels and burial societies (Saville and Macleod, 2019). Reports indicating that 80% of middle-income earners dispose of their salaries within 5 days of getting paid (News24, 2022) are also not encouraging both for national savings and for household financial security.

There are broader economic implications for studying savings behaviour and practices. As Dholakia et al. (2016) discuss in the American context, savings behaviour is key to social security as it determines what is available to pensioners on retirement. Drawing from the insights of this article, the researcher suggests that the salience of savings is much more critical considering that South Africa has a growing problem with unemployment, and the youth are significantly affected as they comprise a significant proportion of the formally unemployed (UNDP, 2023). In this environment, savings become a bulwark against financial and economic precarity on a "rainy day" or during economic shocks and a pool to draw from in advanced age (Aghion et al., 2016).

The primary benefit of the TPB within the financial services industry is that it provides a framework for understanding business strategies and consumer behaviour. The TPB can assist us in understanding and evaluating how consumers in the financial services sector think and feel about their financial decisions, as well as the impact of their expectations on their behavioural patterns (Satsios & Hadjidakis 2018).

The principal objective of the study was to utilise the TBP as a conceptual framework to explore Gen Z's savings behaviours and obtain insights into their savings decision-making process as well as their preferences for various types of products and services. Furthermore, this research endeavoured to facilitate the enhancement of financial literacy programmes and interventions, to ultimately enhance better money management among consumers.

1.9 Research Methodology

This study on "The Antecedents of Gen Z Consumers' Saving Behaviour in South Africa" utilised a research methodology that entailed the collection of quantitative data from a substantial sample of Gen Z consumers residing in Tshwane, South Africa. The research

utilised a quantitative methodology to investigate the determinants of savings behaviour among Gen Z individuals.

The study's unit of analysis comprised of Gen Z Tshwane residents, aged 18 to 28, defined as the Gen Z age group (Seemiller & Grace, 2019). Data was collected through an online survey, with most participants enlisted via social media platforms. The final number of respondents was 163, however, 14 questionnaires were eliminated from the analysis as they exceeded the specified age restriction of 28. Consequently, the final sample size consisted of 149 participants.

Chapter 4 will provide a discussion of the research methods employed in the study.

1.10 Structure of the document

This report is organised as follows:

Chapter 1: Introduction and background to the research
In this current chapter, the aim is to provide a comprehensive analysis of the research problem, together with its theoretical and business relevance. The importance of this is to familiarise the reader with the background and contextual aspects of the research.

Chapter 2: Literature review
The literature review chapter offers an in-depth review of the theoretical framework employed in this study, namely the Theory of Planned Behaviour. It further provides the theory’s application within the specific setting of Gen Zs in South Africa. Through this review, a foundation is established for developing the research question and hypotheses.

Chapter 3: Research Questions and Hypotheses
This chapter introduces the research question and hypotheses that will be examined through this study. The chapter additionally provides a rationale for the research question's importance and its potential contribution to addressing the existing gap in the current body of knowledge.

Chapter 4: Research Methodology and Design
Chapter 4 presents a comprehensive overview and rationale for the selected study approach. The approach to research design, population and sample size, unit of analysis, data collecting, ethical considerations, data analysis tools, and any limitations connected with methodology choices are all explained in detail.

Chapter 5: Results

The results section of this study offers the findings derived from the analysis of the acquired data using the quantitative research methodology described in Chapter 4. The data acquired from the study is examined and evaluated through the lens of the key constructs of the theory presented in Chapter 2.

Chapter 6: Discussion

This chapter offers an interpretation, analysis, and assessment of the findings previously introduced in Chapter 5, with respect to the relevant literature. The chapter also explores the implications of the results and highlights the insights evaluated from the study.

Chapter 7: Conclusion and recommendations

In the concluding chapter, the researcher summarises the main findings of the study, revisiting the research questions and hypotheses presented earlier. In addition, recommendations and business implications are also noted.

Chapter 2: Literature Review

2.1 Introduction

This chapter comprehensively reviews the existing literature on the antecedents of savings behaviour among South Africa's Generation Z consumers. The theoretical anchor for this study is the Theory of Planned Behaviour (Ajzen, 1991), which posits that individuals' intentions to engage in a specific behaviour are influenced by their attitudes, subjective norms, and perceived behavioural control. In the context of our unit of analysis, the Gen Z cohort, the literature aims to understand to what extent the constructs of the TPB have an effect on their savings behaviour.

In Chapter 1, the study's setting and background were introduced, along with the research problem, its significance to business, and the advancement of current theoretical frameworks. In this chapter, the study elaborates on the complexities of consumers' engagement with savings behaviour by considering the anchor theory and its implications. The chapter then examines several conceptual frameworks, including ongoing discussions within the academic sphere, and provides empirical evidence regarding the savings behaviour of Gen Zs across different contexts and disciplines. The researcher further presents a review of the theory and the factors that influence financial savings behaviour, more so on the South African Gen Z consumer. In detailing the TPB, the chapter will highlight the research variables that this study later deploys and measures. Ultimately, through a literature review, any knowledge, and methodological gaps in existing research are identified and then filled by this study.

The graphic below illustrates the structural roadmap that will be followed in this chapter's literature review. Its purpose is to offer the reader with a clear flow and structure in response to addressing the research question.

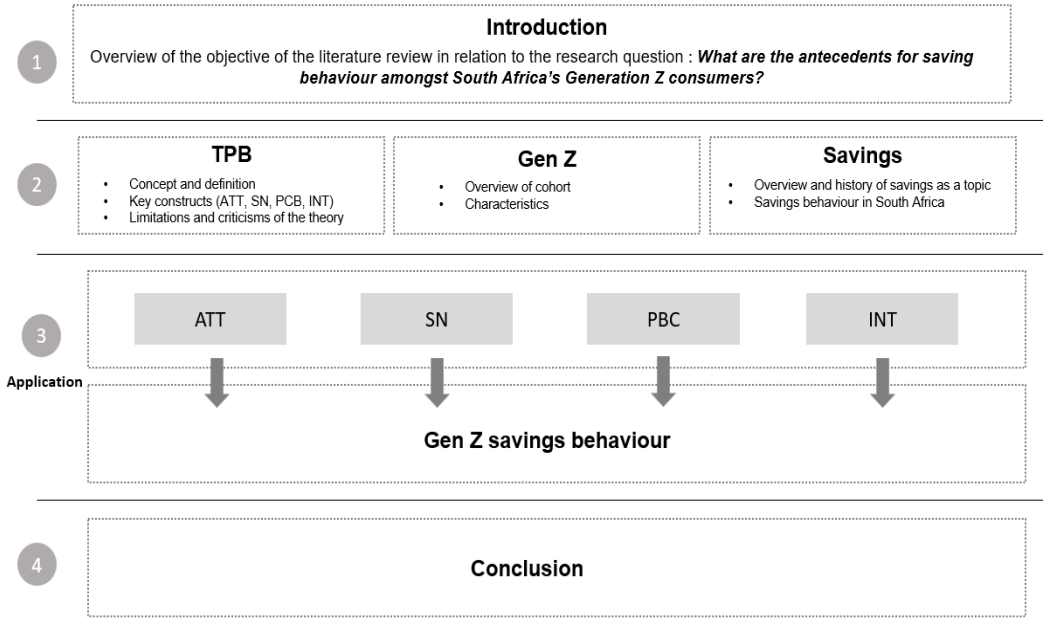

Figure 1. Literature review roadmap (researcher's own design)

2.2 Theoretical Anchor: The Theory of Planned Behaviour

2.2.1 Introduction

Theoretical anchors, often called theoretical frameworks, play an important role in academic research by providing a fundamental basis for guiding research studies. They provide researchers with a perspective from which they may comprehend the phenomena they are investigating and help establish connections between various concepts and variables (Creswell & Creswell, 2017).

As part of this literature review, the chapter asserts that theory does not exist in a vacuum. Collins and Stockton (2018) posit that the core element of a literature review is to expand the body of knowledge within a particular discipline of work. Therefore, contributing to a broader debate or set of debates which bring various thinkers into conversation.

As such, the theoretical focus this chapter presents ought to be understood as a small sampling of a wide theoretical debate around human behaviour in financial contexts. The Theory of Planned Behaviour emerged within the context of a much more robust debate around savings behaviour, which Juster and Taylor (1975) trace to the aftermath of the Second World War. In that environment, debates around savings behaviour and its effect on the American economy intensified. Within this academic sphere of understanding

savings behaviour, it is important to note three key theories that emerged from the 1940s leading into the 1960s: the relative income hypothesis, proposing that an individual's consumption is influenced by the present income levels of others (Duesenberry,1949; Alvarez-Cuadrado & Van Long, 2011; Alvarez-Cuadrado & El-Attar Vilalta, 2018); the life cycle hypothesis suggesting that individuals aim to maintain a consistent level of consumption throughout their lifetime, by adjusting saving and borrowing patterns based on their expected income over time (Modigliani, 1966; Modigliani & Cao, 2004); and the permanent income hypothesis inferring that individuals' consumption decisions are based on their long-term average income, rather than their current income. (Friedman, 1957; Straub et al., 2018).

Although the basic principles of these theoretical approaches are beyond the scope of this chapter, it is essential to indicate that their primary emphasis was predominantly directed towards income as a decisive factor in shaping savings behaviour. Moreso, in the case of the life cycle hypothesis, it also focused on an individual's life stages. This is a salient entry point to delve into the Theory of Planned Behaviour's core arguments and propositions.

TPB is a widely recognised social psychological theory that serves to enhance and complement the Theory of Reasoned Action (TRA) in the realm of understanding and predicting human behaviour (Ajzen, 1991). The seminal author further states that both theories are underpinned by rational choice as individuals make decisions on the basis of information available to them. Furthermore, the foundation of the TPB is based on the premise that an individual's behaviour is influenced by both their thinking and the external context in which they are situated (Ajzen, 1991; Cooke et al., 2014). In the context of this study, savings behaviour, the theory infers that one's social conditions and learned dispositions influence how one saves and spends money.

A more comprehensive examination of the Theory of Planned Behaviour (TPB) would suggest that individuals must develop the intention to engage in a particular behaviour before actually carrying it out. The process of developing intention is impacted by three factors: the individual's **attitude** about the behaviour, based on their positive or negative emotions associated with it; **subjective norms** that represent social influences on their behaviour; and **perceived behavioural control**, which indicates their confidence in their ability to effectively carry out the behaviour (Ajzen, 1991).

To this end, the TPB has been widely studied across disciplines to determine specific behaviours such as psychology, sociology, marketing, health sciences and environmental studies. Scholars have used this prominent theory to understand and

predict human behaviour in diverse areas such as exercise, condom use, smoking cessation, education, recycling, food consumption decisions, women's decision to stay or leave abusive relationships and tourism (Norman & Smith, 1995; Reinecke et al., 1996; Norman et al., 1999; Davis et al., 2002; Tonglet et al., 2004; Ajzen, 2015; Heim et al., 2017; Heiny et al., 2019).

For the purpose of answering the research question posed by this study (What are the antecedents for saving behaviour amongst South Africa's Generation Z consumers), the focus was on Gen Zs in South Africa and how their social, external factors and cultural characteristics affect their savings behaviour. Therefore, their attitudes, subjective norms, perceived behavioural control and intentions are considered instrumental in understanding their decision-making around savings (Ajzen, 1991).
Prior to conducting a literature analysis on Generation Z and their savings behaviour, it is necessary to understand the constructs that shape this theory.

2.2.2 Key Constructs of the Theory

The TPB comprises of four key constructs: attitude, subjective norm, perceived behavioural control, and intention.

Attitudes (ATT) pertain to an individual's overall evaluation or perception of a specific behaviour, encompassing negative or positive feelings towards engaging in the behaviour and its potential outcomes. (Ajzen, 1991). In the context of savings, a person's evaluation of saving money may vary among individuals, including members of the same social group. Positive attitudes towards saving money may stem from beliefs that saving leads to financial security, future opportunities, or peace of mind levels (Satsios & Hadjidakis, 2018). On the contrary, negative attitudes might stem from beliefs that saving money is difficult, potentially unrewarding in the long run or maybe even just unnecessary.

Subjective norms (SN) refer to an individual's perception of social pressures or influence from significant others regarding the performance or non-performance of a particular behaviour (Ajzen, 1991). The theory further expands that individuals are more likely to engage in a specific behaviour if they hold the idea that it is both socially acceptable and desirable. When approached in the context of savings, one might entail the involvement of influence of close family and friends (Satsios & Hadjidakis, 2018; Widjaja et al., 2020).

Perceived behavioural control (PBC) pertains to an individual's evaluation of the level of ease or difficulty linked to the execution of a specific behaviour. This perception can differ from one situation to another, or one action to another, leading to varying perceptions of control in different circumstances (Ajzen, 1991). Perceived behavioural control, in the context of savings behaviour, pertains to an individual's level of confidence in their capacity to consistently save money and overcome any potential barriers that could impede their savings efforts (Satsios & Hadjidakis, 2018; Widjaja et al., 2020).

Intention (INT), influenced by attitudes, subjective norms, and perceived behavioural control, refers to an individual's inclination to engage in a particular behaviour (Ajzen, 1991). Within the savings context, the aforementioned constructs would have a positive impact on an individual's inclination to save (Satsios & Hadjidakis, 2018; Widjaja et al., 2020).

The following is an overview of the TPB model, including its primary constructs and their interconnectedness.

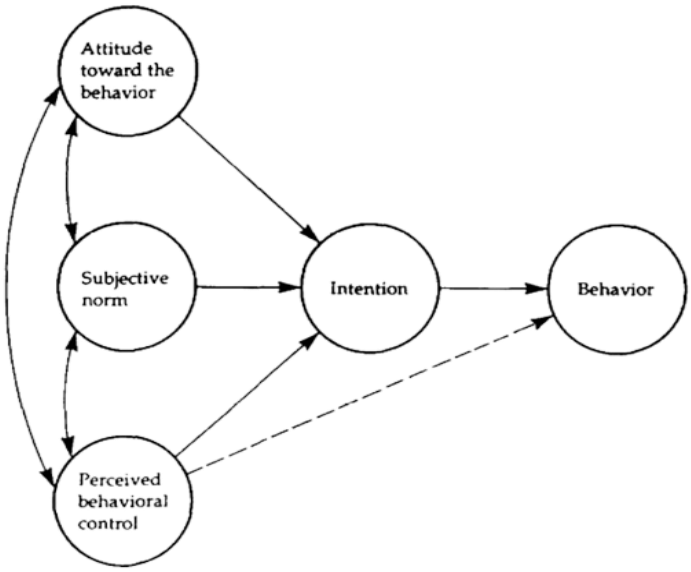

Figure 2. The Theory of Planned Behaviour - Source: Ajzen (1991, p.182)

2.2.2.1 Understanding Attitude

Attitude is a crucial construct in the TPB as it reflects an individual's positive or negative evaluation of performing a certain behaviour. Various research has consistently shown a favourable association between a positive attitude towards a particular behaviour and an enhanced inclination to engage in that behaviour (Ajzen, 1991; Armitage & Christian, 2003; Ajzen, 2015; Gao et al., 2017). Attitudes are shaped by a diverse range of factors,

including concepts, principles, societal norms, and past encounters (Gadenne et al., 2011; Ajzen et al., 2018;). Therefore, numerous elements contribute to the formation and modification of attitudes, which in turn impact an individual's behavioural intentions.

Further scholarly research has demonstrated that attitude significantly influences savings behaviour (Norvilitis et al., 2006) as it has the ability to serve as an indicator of an individual's beliefs and evaluations about saving. Research has also indicated that individuals who exhibit a favourable disposition towards the act of saving are more inclined to engage in regular saving practices and demonstrate elevated levels of accumulated savings (Kisaka, 2014). Conversely, individuals with an unfavourable attitude towards saving are less likely to save regularly and have lower savings levels (Satsios & Hadjidakis, 2018). Furthermore, individuals with a positive attitude towards saving are more likely to maintain substantial savings levels than those with an unfavourable attitude (Te'eni-Harari, 2016). This research thus served to investigate the attitude of South African Gen Zs towards saving, and the relationship between that attitude and their intention to save proactively.

Like with most theoretical frameworks, other research exists that contradicts the positive relationship between attitude and behaviour. In the domain of green consumption, the correlation between attitude and behaviour has not demonstrated a favourable association (ElHaffar et al., 2020). More so, consumers who had a positive attitude towards engaging in environmentally conscious actions were unable to effectively translate this into tangible behavioural changes (de Barcellos et al., 2011; Dzene & Eglīte, 2012; Wang et al., 2021).

To add to the contradiction in the body of evidence, a study examining sustainable food consumption further demonstrates a negative association between attitude and intention, as well as the actual behaviour. According to one study, while there has been an increase in overall interest or attitude towards consuming more sustainable foods, behavioural patterns observed do not consistently align with the positive attitude-intention behaviour (Vermeir & Verbeke, 2006).

In addition to TPB, other theories, such as the Attitude Behaviour Context (ABC) theory and the Value Belief Norm (VBN) theory, have been used to examine the attitude-intention gap. The ABC theory is a psychological framework that seeks to understand and explain the relationship between attitudes, behaviours, and contextual factors (Stern, 2000). The theory integrates various psychological concepts to provide a comprehensive understanding of how attitudes and behaviours interact within specific

contexts and emphasises the importance of considering the broader environmental and situational influences on behaviour (Salonen & Åhlberg, 2012). The VBN theory is a theoretical framework within the domain of social psychology that seeks to elucidate the mechanisms by which individual values and beliefs impact the adoption of pro-environmental behaviours (Kaiser et al., 2005). According to the theoretical framework, individuals' values act as guiding principles that reflect what they consider important, such as preserving nature, protecting future generations, or promoting social equity. These values are seen as the main driver for pro-environmental behaviour (Stern et al.,1999). The aforementioned theories fall under the rational economic paradigm, which asserts that individuals engage in purposeful decision-making around consumption in order to optimise their utility.

2.2.2.2 Understanding Subjective Norm

Subjective norm refers to an individual's perception of social pressure or influence from important people in their life, such as family, friends, and colleagues, in relation to a specific behaviour. It encompasses the beliefs about whether these significant individuals approve or disapprove of the behaviour, as well as the motivation to comply with their expectations (Ajzen, 1991).

“As social beings, normative pressure inevitably affects our behaviour. Social norms influence the way we dress, how we vote, what we buy, and a host of other behavioural decisions” (Manning, 2009, p. 649). The SN construct, therefore, forms a fundamental component of the TPB and plays a significant role in understanding human behaviour.

TPB postulates that subjective norms directly impact an individual's behavioural intentions and subsequently influence their actual behaviour. In the case of the Pomak study (Satsios & Hadjidakis, 2018), the subjective norms of saving would be determined by the individual's perception of what their family, friends, and community think about their decision to save money. This study examined the perspective of Gen Zs in South Africa regarding their subjective norms towards saving and the potential impact these beliefs have on their behavioural intentions towards saving.

Research exploring the subjective norm construct within TPB has yielded substantial evidence supporting its influence on behavioural intentions and behaviour. Numerous studies have demonstrated that strong subjective norms increase the likelihood of forming positive intentions to engage in a behaviour, while weak subjective norms are associated with a decreased intention to act (Ajzen, 2014). For instance, a study on the behaviour of condom usage found that subjective norms significantly predicted

behavioural intentions and subsequent condom use among young adults (Armitage & Conner, 2001; Ajzen et al., 1996).

Additionally, the theory of planned behaviour has been utilised to investigate a variety of research questions in the field of tourism studies. In their 2017 study on the travel decisions of young adults in Australia, Ye et al. discovered a positive correlation between SN and travel intention. Where Quintal et al. (2010) discovered that subjective norms had substantial effects on the intentions of South Korean and Chinese participants to travel to Australia.

Previous studies have demonstrated a correlation between the perceptions of peer behaviour and acceptance, and the subsequent influence on behaviours such as smoking or alcohol consumption (Simons-Morton et al., 2004; Wood et al., 2004). On the other hand, Manning (2009) describes how social approval or disapproval of a behaviour increases the strength of the SN-behaviour relationship. Based on the results of the study, it may be inferred that social SN exerts a more pronounced impact on behaviours that are not socially approved as opposed to behaviours that are socially approved. For instance, in an environment where smoking is deemed socially unacceptable, the study observed the prevalence of smoking among one's peer group, as noted by Manning (2009).

This study examined the perspective of Gen Zs in South Africa regarding their subjective norms towards saving and the potential impact these beliefs have on their behavioural intentions towards saving.

There exist contrasting perspectives regarding the relationship between SN and their impact INT and behaviour. Several research have indicated that the SN construct exhibited the lowest level of predictive power in relation to intention (Armitage & Conner, 2001). Mahon et al. (2006) conducted a study examining the correlation between the habit of consuming ready meals and takeaways and found evidence suggesting a weak association between SN and takeaway consumption. Other studies have likewise failed to identify a substantial impact on intention and behaviour (White et al., 2008; Kothe & Mullan, 2014; Earle et al., 2019).

In their study on understanding transport behaviour, Ye et al. (2017) propose an integrated model based on the Norm Activation Model and the Theory of Planned

Behaviour by combining normative and rational factors to predict the intention to reduce the utilisation of car transport. The Norm Activation Model (NAM) is a theoretical framework that explains how individuals develop and activate their personal norms, which in turn influence their behaviour (Schwartz, 1977). The model posits that people go through several stages of processing information before deciding whether to act in line with a particular norm. This decision-making process is influenced by various factors such as personal values, beliefs, social norms, and perceived behavioural control (Le & Nguyen, 2022). Another study on customer recycling behaviour proposes combining the two approaches as well. Park and Ha (2014) have highlighted how both social and moral elements create subjective norms by integrating these two models, recognising the dual influence of social pressures and moral considerations.

2.2.2.3 Understanding Perceived Behavioural Control

Perceived Behavioural Control pertains to an individual's evaluation of the ease or difficulty associated with engaging in a particular behaviour. PBC has a relationship with both INT and the actual behaviour (Ajzen, 1991). Individuals with a high level of PBC are more likely to have positive behavioural intentions, as they believe they possess the necessary resources, skills, and opportunities to successfully perform the behaviour (Ajzen, 1991; Armitage & Conner, 2001). Conversely, individuals with low PBC are more likely to have negative behavioural intentions, perceiving barriers and limitations that hinder their ability to engage in the behaviour.

In the case of Pomak's study (Satsios & Hadjidakis, 2018), the PBC of saving money would be based one's beliefs about being capable to save, such as the amount of money one has available to save and the discipline to refrain from spending money. Other research, such as Tonglet et al. (2004), who analysed planned behaviour among recyclers in the United Kingdom, have also demonstrated this positive correlation. Gao et al. (2017) also extend this notion through the study of energy conservation in the workplace, where Godin and Kok (1996) observed a significant impact of perceived behavioural control on university students' intentions to partake in safe sexual behaviour.

This study aimed to examine the relationship between Gen Zs perceived behavioural control, intention and the actual savings behaviour.

Other studies, however, have not found this correlation. Mahon et al. (2006) found a weak relationship between PBC, INT and behaviour. Another study investigates the

PBC-behaviour gap within organic food consumption and further highlights the weak relationship between the constructs (Sultan et al., 2020).

2.2.2.4 Understanding Intention

Intention is a key construct of the TPB and states that an individual's intention to engage in a behaviour is determined by their attitude, subjective norms, and perceived behavioural control (Ajzen, 1991). INT directly influences behaviour, since it indicates the level to which people are willing to execute an action. As an example, the voting decision for a presidential election has been empirically demonstrated to exhibit a high correlation to the intention assessed prior to the election (Ajzen, 1985; Ajzen, 1991).
Numerous studies have consistently provided empirical evidence supporting the association between intention and subsequent behaviour within the framework of the TPB. An example of this is the study conducted by Conner and Armitage (1998), in which a meta-analysis was performed to analyse a variety of studies covering many areas. This study's findings gave strong support for the idea that intention plays a crucial role in forecasting future behaviours. Another study revealed a positive correlation between intention and tourism activities (Heiny et al., 2019). More so, it was found that the constructs of SN and PBC had the most significant influence on the intention to engage in actual tourism behaviour, contrary to the prevailing belief that ATT would be the most influential construct in most studies.

Therefore, the aim of this study was to investigate the correlation between the intention of Gen Z individuals and their actual savings activity.

Important to also note that some studies have found a weak relationship between intention and behaviour, known as the intention-behaviour gap. One key factor identified in the weak relationship is PBC. According to Ajzen (2002), PBC reflects an individual's perception of their ability to execute a specific behaviour. If an individual perceives low control over performing a behaviour despite having positive intentions, this may result in a wider intention-behaviour gap.

Conner et al. (2005) studied the idea of the intention-behaviour gap and how it relates to moral norms. They argue that individuals whose intentions are in alignment with their moral norms are more likely to engage in the corresponding behaviours than those whose intentions are more aligned with attitudes. Researchers have proposed various strategies to bridge the intention-behaviour gap and enhance behaviour change. One approach is to strengthen individuals' self-regulatory skills. Schwarzer (2008) argued that

self-regulation involves setting specific goals, monitoring progress, and implementing action plans, which can help individuals bridge the gap between intentions and behaviour.

2.2.3 Criticism of the theory

This section responds to some of the criticism levelled at the TBP, while also discussing alternative viewpoints. However, its primary focus is to present a compelling argument regarding the significance of the theory within various academic disciplines.

Despite its formulation in the 1970s, the Theory of Planned Behaviour continues to draw criticism from researchers who are unsympathetic with its empirical claims, its theoretical rigour and its conceptual interpretations. Among some of the pushbacks, there have been concerns over contradictions and lack of clarity over concepts such as social norms and values versus personal values; neither does it appear to fully account for affective evaluations made in decisions of individuals (Sniehotta et al., 2014), a criticism that Ajzen (2011) partly recognises but justifies as misinterpretation. The seminal author further explains the criticism has often been mistaken to imply that the theory assumes an irrational individual who is easily influenced and biased in nature. However, the TBP is an interconnected theory with nuances (Ajzen, 2011).

In the case of affective evaluations, while a decision might appear bad at face value, the possible influence of affective influences is often overseen. Buying an expensive car for a parent who sacrificed a lot for a now-successful child can be readily dismissed as reckless or indicative of poor financial knowledge. Yet, there may be an affective dimension which is afforded primacy, given the social ties between a parent who sacrificed all s/he had for the success of their child. Having succeeded, the child might feel a near-sacrificial expression of gratitude is much more valuable than some rational-choice consideration of costs/benefits off savings for the short and long term. In disclosing some of the supposed shortcomings, scholars have added alternatives to the debates such as Model of Motivation and Personality (Asebedo et al., 2019) that have been offered as more insightful for understanding behaviour. A primary concern is the personal characteristics that influence or shape behaviour, and savings, which appears to be the dominant logic in the field. Börsch--Supan and Stahl (1991) extend their analysis using the extended life cycle hypothesis.

Even after some stern criticism around shortcomings, limited reach and applicability, TPB continues to garner support as a perspective that underpins many new theories, a theory that is powerful despite its simplicity and a theory that has sufficient room for flexibility in application (Conner, 2015). Beyond the concepts are debates around appropriate models to deploy using TPB. Earlier work by Rhodes and Courneya (2003) deployed two modelling techniques. The initial model investigated previous behaviour as either a causal influence or as an "autoregressive influence on current behaviour", while the second model "demonstrated a novel approach to including past behaviour and current behaviour" (Rhodes & Courneya, 2003, p.57). In this sense, the theory has been engaged both as an explanatory retrospective lens as well as to gain a sense of its predictive rigour.

Despite the aforementioned critique, the utility of TPB is reaffirmed, suggesting that it not only shows correlations but also causality of behaviour. In this sense, the theory is most valuable in contemporary analyses of savings behaviour (Conner, 2015). The implication is that the theory is much broader than some critics are willing to admit. Its conceptual and practical rigour remains intact long after some scholars have read out its obituary.

2.2.4 The Resilience of TPB

The chapter has so far presented TPB as a central pillar in the study given its selection as an analytical lens. It has also traced the theory's history and various uses, noting that some criticism has culminated in some scholars' work. Given its centrality, it is important to reorient our focus on the salience of TPB, this time focusing on the theory's resilience. It is because of this resilience that the theory will be persisted within the remainder of the study. A major attraction of TPB is its longevity, which draws from its applicability in various situations. It is therefore why TPB has been deployed in various contexts to explain and predict behaviour. Krueger and Carsrud (1993), for example, invoke TPB in a study concerned with entrepreneurial intentions, while Cooke et al. (2016) query whether the theory can predict alcohol consumption. These studies demonstrate the sheer range with which the theory can be applied.

While the reach is broad, there are variances in how aspects of the theories are presented. This becomes evident through empirical work identifying the effects of norms, attitudes, and self-efficacy on financial knowledge and behaviour, which are variable (Akhtar & Das, 2019). Xiao (2008) emphasises this perspective in his work, employing an analytical approach which incorporates the Theory of Planned Behaviour and the

theoretical model for behavioural change. In this study, the role of values and attitudes is most prominent. In addition, Copur and Gutter (2019) borrow concepts from TPB and other theories to consider psychological, social and economic factors affecting savings behaviour. Again, the emphasis placed on some aspects of TPB differs. The theory's offering has also not been taken as fixed, with new scholarship adding dimensions to the prototype. In this mould are researchers who have added moral values to the subjective norms (Chen, 2016; Wang et al., 2023). This stretches the conceptual depth of the theory without invalidating the initial premises.

Another issue here, is that TPB does not exist in isolation but can be deployed either against other theories or to complement them. Given the versatility of the theory, it comes as little surprise then that despite vociferous criticism, the theory has remained useful for many scholars.

2.3 Understanding Generation Z as a cohort

Generations are typically characterised by specific shared experiences, values, and beliefs, which can lead to observable differences between individuals of different ages and time periods. This pattern is particularly evident when examining generational cohorts, including Baby Boomers, Generation X, Millennials, and Generation Z. Each is characterised by distinct characteristics, experiences, and values (Seemiller & Grace, 2019). This literature review will focus on Generation Z and their specific characteristics.

2.3.1 Generation Z: Characteristics

Generation Z (Gen Z) can be defined as a cohort of individuals born between 1995 and 2010. (Seemiller & Grace, 2019). This generation is renowned for its advanced technological proficiency, as the majority of its members have grown with access to technology.

With the increased access to technology, this generation is more connected and globally aware than preceding generations (Seemiller & Grace, 2019). Despite being born in an exciting technology era, it is critical to understand the characteristics of Gen Zs and what influences their thinking and behavioural patterns. The following sections, therefore, discuss the distinctive characteristics of Gen Zs.

2.3.2 Values

A key aspect of Generation Z that researchers have explored, is their values. A study conducted by Howe and Strauss (2000) indicates that Gen Zs are more tolerant of diversity than previous generations. In addition, they are more tolerant of alternative lifestyles and sexual orientations (Pew Research Center, 2020). Environmentalism has also been identified as a core value of Generation Z with 76% of respondents from a Deloitte survey (2019) concerned about climate change. Gen Zs are therefore more likely to support businesses with environmentally responsible practices.

2.3.3 Attitudes

In terms of attitudes, Generation Z has been characterised as being independent and entrepreneurial-minded (Talmon, 2019). They understand the significance of identity and self-expression; however they are more cautious when it comes to taking chances than previous generations. This proclivity could be attributed to their upbringing during unstable times (Twenge et al., 2020). In terms of preferences, Generation Z leans towards ideologies and is more likely to support policies that promote social justice, such as racial equality and immigration reform (Pew Research Centre, 2020). Therefore, Gen Zs seem to embody more progressive social attitudes than other generations.

2.3.4 Behaviour

A notable behavioural Gen Z trend is their reliance on technology for communication and information gathering (Twenge et al., 2020). Social media platforms like Instagram and Snapchat have grown in popularity among Gen Zs. As a result, their social lives, such as friendships and romantic relationships, have a propensity to be formed through online platforms. (Twenge et al., 2020).

Another characteristic of Gen Zs, is their preference for experiences over material possessions (Seemiller & Grace, 2019). They tend to value travel and adventure more than accumulating wealth. Gen Zs also value authenticity and individuality; they tend to value self-expression over conformity and seek out brands or influencers that reflect their personal identity (Turner, 2015). They are not easily swayed by traditional advertising tactics; instead, they respond more positively to authentic content created by real people like themselves (McKinsey & Company, 2018). This desire for authenticity extends beyond consumerism: Gen Zs also prioritise honesty in relationships and expect transparency from those around them.

2.3.5 Innovation

Gen Z's outlook on innovation is significantly different to that of other generations, primarily because of their early exposure to technology, which has made them more comfortable with the evolving forms of technology (Pew Research Center, 2018). Gen Zs are therefore more accustomed to making decisions quickly due to this access, and expect near-instant gratification with the increase of online purchase delivery and digital platforms that give them on-demand access to movies, music, banking platforms and delivery services (Seemiller & Grace, 2019). With the introduction of online-only "neo banks" and digitised banking services, Gen Zs are using these services even more frequently. Neo banks can be described as fintech banks that are fully digitised (Forbes Advisor, 2021). This transition to digital has also allowed this generation to become more engaged with their finances, as they can easily and quickly access information regarding transactions and savings (Investec, 2021). Gen Zs are also open to collaboration when it comes to innovation; they are quick to share ideas, collaborate, and problem-solve in online hubs and forums such as GitHub and other tech sites (Pew Research Center, 2019). This has allowed them to amplify their reach when it comes to problem-solving and creating breakthrough solutions. Therefore, they expect innovative and agile banking and saving solutions that incorporate their lifestyles and ease of access with educational information available online, on social media and through shared video content.

2.4 Understanding Savings Behaviour

The words on savings of Browning and Lusardi (1996), quoting John Maynard Keynes (1936) encapsulate some of the conventional thinking around savings among economists and financial managers:

1. "To build up a reserve against unforeseen contingencies" (the pre-cautionary motive);
2. "To provide for an anticipated future relationship between the income and the needs of the individual” (the life-cycle motive);
3. "To enjoy interest and appreciation . . ." (the intertemporal substitution motive);
4. "To enjoy a gradually increasing expenditure . . ." (the improvement motive);
5. "To enjoy a sense of independence and the power to do things, though without a clear idea or definite intention of specific action" (the independence motive);

6. "To secure a masse de manoeuvre to carry out speculative or business projects" (the enterprise motive);
7. "To bequeath a fortune" (the bequest motive);
8. “To satisfy pure miserliness, i.e., unreasonable but insistent inhibitions against acts of expenditure as such" (the avarice motive);
9. “To accumulate deposits to buy houses, cars, and other durables” (the downpayment motive).

Savings, therefore, perform various functions. However, theories and models around their use, their formation and behavioural approaches constitute an area that continues to wield immense research potential.

2.4.1 Savings Behaviour in South Africa

Savings significantly contribute to the expansion and advancement of an economy. South Africa, like most emerging countries, has had a low savings rate for several years. This has significantly impacted investment prospects and, more importantly, the country's economic progress. (Saville & Macleod, 2019). The decline is attributed to high levels of household debt, a high unemployment rate, low income levels, and a lack of financial education across the country.

Furthermore, the presence of political instability has exacerbated the decline in savings rates, as individuals experience heightened uncertainty regarding their prospective income (African Development Bank, 2013). Over the course of the past decade, South Africa has experienced fluctuations in its savings rate, and despite much effort, the country has struggled to exceed a savings rate of 19%, which was witnessed in 2000. More recently, the 2022 savings rate declined to 14.8% from 18% in June 2021 (South African Reserve Bank, 2023).

A study by Investec Bank and The Gordon Institute of Business School (GIBS) on the national savings index reported that a high gross savings rate is imperative for sustainable economic growth in South Africa, indicating that a high gross savings rate enables a nation to finance investment, which is necessary for long-term economic health (Saville & Macleod, 2019).

The causes of South Africa's low savings rate are complex and varied, including income level, age dependency ratio, inflation, real interest rate (Chipote & Tsegaye, 2014), household debt (Mongale et al., 2013), lack of access to formal financial services and education (International Labour Organization, 2016). Financial literacy also affects saving habits, as only 42% of South Africans are financially literate. This has led to

reliance on low-interest informal savings like stokvels due to a lack of knowledge about investment options (Bophela & Khumalo, 2019).

To address the issue of low savings rates in South Africa, various strategies have been proposed including campaigns promoting financial literacy and better access to formal financial institutions for underbanked populations (National Treasury, 2020). In addition, The National Treasury has proposed savings models similar to the India Government saving schemes to promote savings across the income spectrum. These schemes accommodate and promote low to high value deposits through incentivising savings with a reasonable interest rate and tax benefits (National Treasury, 2020).

2.4.2 Generation Z and savings behaviour

Understanding the factors that shape saving behaviour among Generation Z consumers is crucial, as they represent an important segment of the population with unique characteristics and preferences.
A survey by Travis Credit Union (2020) shows that gross savings are an essential priority to Gen Z's, with the majority having opened a savings account by age 19 and contributing consistently towards their savings goals. The key saving goals from the survey were: property, retirement, travel and education (Travis Credit Union, 2020).

The findings of a study conducted by Visa in 2019 indicate that individuals in the age range of 15 to 24 exhibit the highest levels of engagement with online banking services (Visa, 2023). Furthermore, individuals belonging to Gen Z have exhibited a growing preference for utilising digital platforms and various methods of digital payment, including digital wallets, mobile banking applications, and peer-to-peer (P2P) payment systems (Sopra Banking Software, 2020). This suggests that Gen Zs are becoming more comfortable with managing their finances through platforms rather than traditional banking methods. The growing acceptance of technological advancements has resulted in the emergence of services such as digital currency, peer-to-peer payment solutions, and robo advisors. These advancements have aided the expansion of digital banking services (Investec, 2021).
These alternative banking solutions offer Gen Zs increased levels of autonomy and flexibility when it comes to managing their finances. For example, P2P payments have become increasingly popular for Gen Zs, enabling them to transfer and receive funds easily and securely (The Financial Brand, 2022). Similarly, the availability of cryptocurrency has served as a secure alternative for Gen Zs to store and trade their funds (BBC News, 2022). Overall, the emergence of such technologies has opened up

new pathways for Gen Zs to venture into fintech, thus driving greater levels of financial habitation amongst them.

With a plethora and flexibility of investment and savings options, the study then considers what drives Gen Z's saving behaviours. It is therefore important to determine the savings goals, methods and motivating factors of Gen Zs in order to develop an attractive savings plan and encourage their adoption of saving habits (Uzelac & Lucic, 2020). More precisely, it is key that while an understanding of their goals, methods and motivations is made, researchers also engage the gap with regard to such practices in context. It is here that South Africa becomes a useful empirical site.

2.4.3 The savings behaviour and financial literacy of Generation Z in South Africa

The study of Gen Zs behaviour in South Africa, is a topic that has received limited scholarly attention. This section of the chapter presents a thorough examination of the current body of literature concerning this specific cohort, while also highlighting the areas where gaps in knowledge still exist and will be addressed. To begin, it is essential to consider the attributes of the collective.

2.4.3.1 General characteristics

In the digital era, Generation Z demonstrates a strong inclination towards prioritising contact and engagement. This cohort is characterised by relatively shorter attention spans and is notably recognised as one of the most outspoken and active generations in terms of advocating for social justice and initiating transformative change through various social platforms (Bizcommunity, 2022). This level of engagement has been understood to translate to more political activism (Edelman Africa, 2022).

2.4.3.2 Financial Literacy

Improved financial understanding is a catalyst for increased economic growth and enhanced financial planning skills among the youth. Financial literacy encompasses an in-depth knowledge of the fundamental principles of money management, as well as the aptitude to make well-informed decisions regarding one's personal finances. It comprises various aspects such as budgeting, investing, credit management, saving for retirement, and understanding financial products and services (Lusardi, 2019). There are debates and contestations regarding Gen Z's savings behaviour, some research shows that financial literacy among young people has decreased significantly (Lusardi & Mitchell,

2014). On the other hand, some studies indicate that Gen Zs have better saving habits than previous generations (Uzelac & Lucic, 2020), while others indicate that many still struggle with saving due to a lack of knowledge or experience (T. Rowe Price, 2020). Therefore, it is essential to understand exactly how younger generations manage their finances.

On average, Gen Zs save at least half of their income each month (Merrill Edge report, 2019). This finding suggests that this generation is aware of the importance of saving money and possibly has better personal finance habits than previous generations. In contradiction, previous research studies have shown that many young adults struggle with saving because they lack proper knowledge or experience (Hira & Loibl, 2005). However, there is agreement that to improve financial literacy in individuals, including Gen Zs, education is a core enabler. Individuals who receive personal finance courses at an early stage of their lifecycle earn higher credit scores and have fewer defaults compared to those who don't receive any financial education (National Endowment for Financial Education, 2020). Similarly, those who are provided with financial education demonstrate a higher propensity to engage in regular savings behaviour (Gutter et al., 2010). Parents greatly impact their children's savings habits. Discussing money and displaying good financial behaviour positively affects a child's confidence in handling finances (T. Rowe Price, 2020). This guidance also teaches budgeting and goal setting skills to showcase the importance of money (Klapper et al., 2014).

2.4.3.3 The reality

Given the theoretical contributions which span economics, psychology and sociology, it is almost inconceivable that a small project could offer a novel theoretical insight into savings behaviour. However, considering the generational focus of the study, insights are possible on a specific generation's approach to savings rather than considering the long-term horizon as does the life cycle hypothesis (Börsch--Supan & Stahl, 1991); an intra-generational focus allows for understanding savings in a specific moment in time. The participants in the study are young and are only beginning to enter formal labour market. Others are still in school at tertiary and secondary levels. They are therefore still in their formative years, either developing or refining their approaches to savings. It is in this sense that antecedence bears prominence as crucial in savings.

2.5 TPB and Gen Z

For all its unique features and appearance of distinction, Generation Z has been well connected to the old and proven conceptual framework of the theory of planned behaviour. To this end, there have been studies on investment behaviour (Elango & Ajah, 2023), household savings, mobile gadget changes (Genakos et al., 2023), and energy saving (Wang et al., 2023). The theory has been used in studies that cast attention on Generation Z. While this is established, including in the area of savings, focus on the phenomena in developing world contexts is as yet feeble. This gap is engaged here.

2.6 Thinking differently from TPB: The Life cycle theory

As noted in the previous section, the TPB has not only limitations but some criticism around the application of the different constructs in relation to actual behaviour. The critique and commentary constitute a lively debate worth noting. This debate is essential to flag as it allows for a deeper comprehension of alternative theories that deal with understanding or predicting human behaviour. Generally, the theoretical gaps in savings theories contrast economic viewpoints against those that employ psychological and/or sociological frameworks.

As a starting point in outlining theories that lie on the economics end of the spectrum, we consider the Precautionary Savings Theory (Baiardi et al., 2020). The theory is premised on the idea that in a waged employment environment, wages are subject to unpredictability, and so savings become an important tool for hedging against periods of risk, uncertainty, or income shocks. The processes used to get savings vary depending on the variables evaluated in the process of exercising caution (Leland, 1978; Rothschild & Stiglitz, 1970). However, the underlying logic is as presented earlier. Although this perspective presents intuitively valid claims, it faces difficulty in accounting for savings in times of abundance and relative certainty.

The wider coterie of what may be termed neoclassical economics theories (such as Solow's model and endogenous growth theory) on savings are largely focused on the macroeconomic effects. Here, savings are understood to be important because they contribute to growth (Cesaratto, 1999) and this is often presented via analyses that deploy the aggregate household savings theory (Salotti, 2010). The literature is thus

preoccupied with macro or aggregate structures, which acts as motivation to engage more with the local and individual drivers of savings. When scholarship shifts from the macro to the household level, savings help to protect household welfare, and microeconomic perspectives become centred on household marginal propensities to save and consume.

Micro-theories are summed up by Attanasio & Bamks (2001, 7), as "models that relax the assumption of expected utility; models that relax exponential discounting; and models that relax the assumption that the household is a single decision unit." These models largely attend to economic explanations for explaining savings behaviour. Again, while economics lens are useful, they do not capture all motivations for savings and therefore receive ample support from theoretical lens from other fields. This enables researchers to go beyond economic concepts and include wider causes and effects beyond those identified by Keynes in Chapter 1's opening quotation. The quotation articulates why people save and is understood by Browning & Lusardi (1996, 1797) to seem "complete, [contain] considerable heterogeneity in the motives for saving and [bear] many of the motives [which] are complementary". We have already noted the need to go beyond economics and so turn in that direction.

The theory of planned behaviour stands in contrast to purely economic perspectives which rely on purely economic conceptions of savings behaviour such as Milton Friedman's or variants in the neoclassical school. In taking a contrarian standpoint, TPB then complements conceptual readings inspired by scholars such as George Katona (1974) who is principally concerned with the psychological and social perception variables and influences in savings and spending. Rather than thinking of a rational being who seeks to maximise utility given a set of options, the psychological conceptions cast attention on the person as a feeling and affected individual who makes decision which reflect their psyche. While the theory reveals that there is more to savings decision-making than just cost-benefit comparisons, it nonetheless remains attached to economics as the outcome it seeks to explain is an economic one. The TPB builds on psychological work by demonstrating the psycho-social impulses which contribute to savings decisions.

Socio-psychological thinking which recognises the long-term motivations for saving given life expectancy and demographics. Browning (2000) presents such a theory in considering women and men in two-person households where a typical arrangement

prevails between an older man and a younger woman. This perspective pushes back against a household intertemporal allocation whose insights are premised in utility function. In this sense, a socio-psychological perspective is deployed to argue against economist theorising.

One perspective that deviates from largely economics is the life-cycle model. Some of the factors which the life cycle model argues for include “human capital, housing, borrowing constraints, background risk” (Gomes, 2020) among others. These factors are appendages added to the theory as reflections and debates have ensued. In the traditional life cycle theory, age is understood to affect consumption, savings and health with a study by Borsch-Supan noting that the elderly increase savings and wealth. Asebedo et al. (2019) add that personality plays a moderating effect in the savings behaviour. This is a salient point for the current study as age or more specifically societal generation is a key element of focus. On the basis of the theory's original premises, the older generations would likely behave differently compared to younger ones. However, as already suggested, scholarship has complicated the theory to recognise other factors which bear prominence in the life cycle of persons.

Additional factors which play a part in the savings decisions and behaviours of households over a lifetime are engaged via prospect theory which suggests that there are multiple motives to household savings (Fisher & Montalto, 2010). In other words, a household does not make choices about savings solely based on what the theory of planned behaviour articulates but also on anticipations about the future. This dimension does not entirely discredit the theory of planned behaviours contributions but adds a layer of complexity which allows for personal factors as well as exogenous ones.

Besides debates on the theorisation of savings behaviour, scholars concerned with the subject have also been identified as engaged in debates that mainly reflect disciplinary loyalties. These loyalties shape the scholarly focus of what drives, motivates, influences, or spurs savings behaviour. As such, one finds motivations in economic, sociological, and psychological analyses (Gutter et al., 2012). The almost obvious problem with such an approach is that it tends to be narrow yet the behaviour studied and theorised is broad. In other words, neither sociology, nor economics or psychology alone can give a full account of how the behaviour plays out. A much more interdisciplinary approach would most likely yield better insights or at the very least, fresh perspectives. Fig 3 below offers a conceptual review of the perspectives that each discipline has offered.

Importantly, Gutter et al. (2012) highlight that there is more insight to be drawn from embracing multiple perspectives.

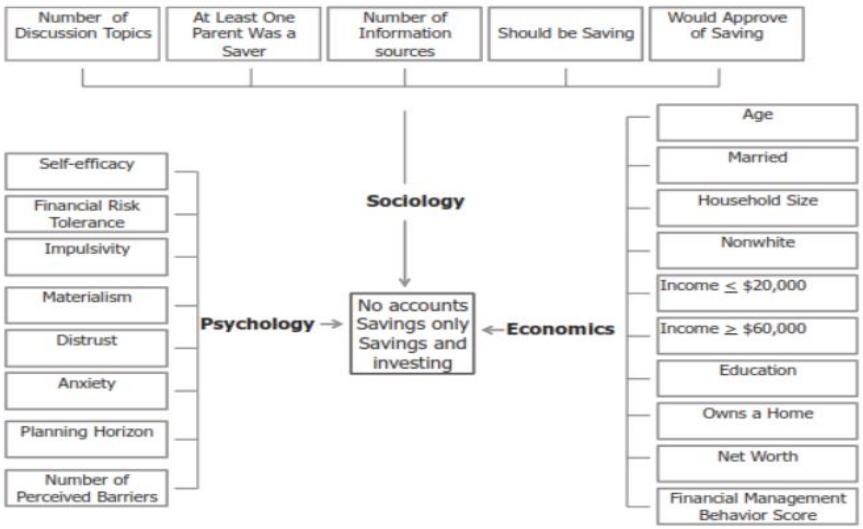

Figure 3. Economic, sociological, and psychological concepts employed to explain savings behaviour. Source : Gutter et al. (2012, p.91)

The unit of analysis clearly differs depending on disciplinary commitments. Economists are inclined to read savings through pecuniary measures, sociologists are gripped by institutions, norms and actors while psychologists might be more concerned with the psyche and postmaterialist elements. As a result of such variances, the conceptual formulations become limited for as long as one retains their disciplinary loyalties. In fact, one of the criticisms of TPB concerns empirical inconsistency and part of the inconsistencies are only due to variances in measurement and conceptual premises.

There are other conceptual approaches in the scholarship which have taken a macro perspective to savings. One such approach considers how economic growth leads to savings (Carroll et al., 2000). The model developed by Carroll and colleagues relies primarily on data from the United States which might not be representative of many countries such as South Africa. Nonetheless, the link it establishes has been noted in the literature and offers some useful conceptual insights, a situation which then invites researchers to consider South Africa's status given its floundering economic fortunes. If growth leads to more savings, then it should be the case that savings would have enjoyed a marked uptick in South Africa in the period leading up to 2010 and soon after. Yet the literature paints a gloomy picture over time such that more subjective and micro-oriented theoretical lens may be useful in making sense of savings behaviour. Adopting a more subject-oriented approach to their work, Carroll et al., (2000) then present a savings model which considers the salience of habit formation in the savings patterns of

households. They argue that "that habits make the relationship between saving and growth more positive" (Carroll et al., 2000, p. 348). Their model is largely concerned with the utility function and therefore fits well in explaining savings among households and not just aggregates as prior studies had done. In addition, they consider the contributing role of policy in influencing savings behaviours. This is a salient point as households are not entirely aloof to the changes and shifts that happen in the policy environment. Such a perspective complements disequilibrium-savings theory which is summed up by Staal as follows:

> assumes that individuals have incomplete information on prices. According to the theory, individuals also cannot distinguish between relative and absolute price changes. Consequently, actual real income deviates from anticipated real income and individuals save this deviation (Staal, 2023, p. 3)

Tied to this perspective is the buffer stock model which explains how savers set “average consumption growth equal to average labour income growth, regardless of tastes” (Carroll, 1996). These savers’ behaviour is further explained as

> Buffer-stock savers have a target wealth-to-permanent-income ratio such that, if wealth is below the target, the precautionary saving motive will dominate impatience, and the consumer will save, while if wealth is above the target, impatience will dominate prudence, and the consumer will dissave (p.2).

As such, the model treats “money 'as if' the economy had a well determined stock demand for it which is realised at each and every moment” (Laidler, 1984, p.6).

The result of much theorising is that some saving theories based on economics and behavioural finance have yielded a cluster analysis six groups residual savers, contractual savers, security savers, risk hedgers, prudent investors, and divergent strategies. These clusters can then be deployed by financial institutions and policymakers to craft products and policies for clients/the public. The discussion of concepts and theoretical lens is therefore not detached from real or practical use.

Among economists, Milton Friedman’s permanent-income theory (Lugilde et al., 2019; Weil, 1993) is attributed with predicting that individuals increase precautionary savings to compensate for income decreases (Weil, 1993). These savings help to smooth consumption expenditures. Therefore, income uncertainty is expected to positively affect the savings ratio. The importance of this perspective in light if TPB is that it places income in the centre of the framework which is after all, what households and individuals save.

Unlike the TPB which is concerned with the subjective features as they determine savings, the actual income dimension is worthy of consideration both in the short term and in the long term. Incomes may not always be consistent and so the aspect of permanence is germane in considering what savings turn out to be. Put in the form of a rhetorical question, the permanent-income theory compels researchers to think of what actors do to save incomes which might fluctuate from time to time. This is a marked difference from a perspective which is primarily concerned with one's attitudes, norms intentions and behaviours because it puts into question what matters most between the subjective and the economic. Both might complement one another or even co-exist but as far as the theories are presented, the two possibilities stand in isolation if not conflict.

Other conceptions of savings' behaviour consider behavioural dimensions which include motives, habits, personality traits, expectations, and attitudes. It is in this frame that Carroll et al. (1994) take a more sociological approach to consider the role of culture in determining savings behaviour. They find no evidence for such an influence although they also quickly indicate that their "saving and wealth data for a large sample of native-born citizens and immigrants and, for immigrants, information on the country of origin and the date of immigration. The best data we have been able to find is in the Canadian Surveys" (p.686). Given this admission, there is therefore shaky ground on which their conclusions are made. In any case, migrant communities may be a good proxy to make cultural comparisons, but some elements of culture may not necessarily be retained when in host communities. Moreover, there are aspects to migration which affect behaviours and full participation in cultural activities. For example, regular/formal/legal immigrants may have greater freedom to publicly perform their cultural practices while irregular/informal/illegal immigrants do not have similar privileges.

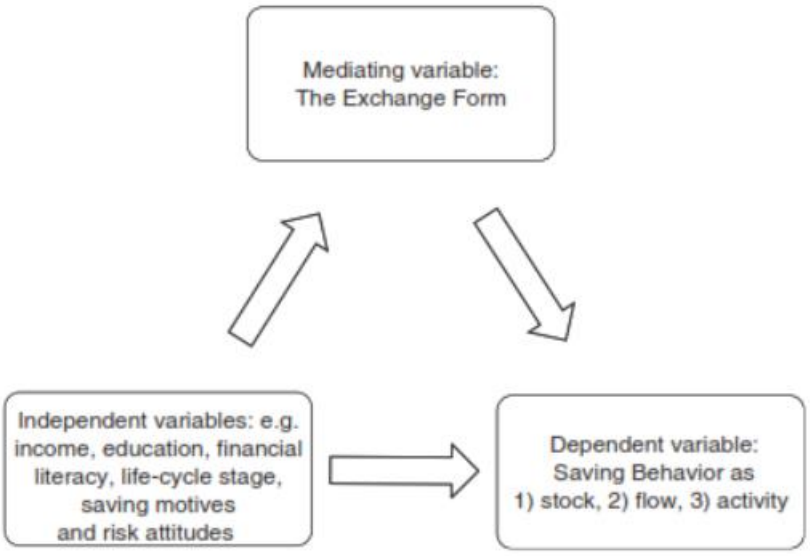

Figure 4. A model of saving behaviour with the exchange form as partially mediating variable
Source: Eriksson & Hermansson (2014)

The key limitation in this model presented in Figure 4 is its empirical reach seeing as it is primarily concerned with interaction within the banking context. The explanatory power outside of this context remains largely untested even though other scholars have tapped into its value. Offering a slightly broader view, Browning & Lusardi (1996) present the certainty equivalent (CEQ) model and also the optimality condition.

In closing on this brief section, we move back closer to the chapter's main theoretical focus: theory of planned behaviour. The buffer stock perspective has already been detailed and its key insights highlighted. It is important however to note that it is variably deployed such that it incorporates the long-term and can be used to explain savings into retirement just as the life cycle hypothesis does. As Love (2006) reveals in a discussion of America's 401k retirement savings, there is a longitudinal reach in buffer stock. This then implies that intergenerational and generational insights can be deduced from empirical work deploying buffer stock models or even the life cycle perspective. The theory of planned behaviour is not excluded from this and therefore retains prominence in the current study.

2.7 Chapter Summary

The TPB has served as a mature framework for comprehending and understanding human behaviour in a wide range of behavioural domains, from physical activity, drug

use, financial savings, and retirement savings. Given that it is a mature theory which is predominantly used to explain behaviour, it has mostly been investigated from a positivist lens using quantitative research methodologies. Such dominance does not however imply that qualitative insights cannot be drawn. As the theoretical reach discussed in this chapter suggests, the scope for versatility has been amply demonstrated. What remains scantily engaged is how the theory interacts with intragenerational behavioural practices. It is this dimension that the study makes a theoretical contribution towards. As far as empirical rigour is concerned, the TPB has revived wide attention which has only been sparingly attended to in this chapter. Suffice to state that various studies confirm the positive correlation between the key constructs of the theory (Heim et al., 2017; Heiny et al., 2019; Ajzen & Schmidt, 2020; Sok et al., 2020). Satsios and Hadjidakis (2018) confirm some of the hypotheses but also state that the construct of Subjective Norm emerged as the most influential predictor of individuals' desire to engage in saving behaviours.

Chapter 3: Research Question and Hypotheses

3.1 Introduction

The preceding chapter provided an overview of the existing literature examining the factors influencing the savings behaviour of Gen Z in South Africa, using the theoretical framework of the TPB. This chapter will present the study's research question and underlying hypotheses.

Research questions and hypotheses are crucial in providing guidance and structure in a research study. A research question serves to express what the researcher intends to investigate, whereas hypotheses are testable statements underlying the research question based on existing literature (Creswell & Creswell, 2017). A well-defined research question can enable the researcher to identify knowledge gaps where the study investigation aims to fill.

Through investigating and testing the hypotheses, a quantitative research study gathers and analyses numerical data to uncover patterns, correlations, and trends, ultimately providing answers and insights to the research (Babbie, 2016).

3.2 Research Question

Creswell and Creswell (2017) provide an extensive guide and framework for formulating research questions in the context of a research study. According to the authors, research inquiries have an objective of not only guiding the study's framework but also understanding how the variables being examined are interconnected.

Therefore, the principal objective of this study was to address the following research question:

What are the antecedents of the saving behaviour of South Africa's Generation Z consumers?

3.3 Hypotheses

According to Babbie (2016), hypotheses are derived from existing theories or previous empirical evidence and are formulated and tested to investigate the research question(s).

They form a critical part of the research study and guide the data collection and analysis. The model of TPB (Ajzen, 1991) was applied as theoretical framework to explore the extent to which attitude, subjective norm and perceived behavioural control influence Generation Z consumers' saving behaviour. The following hypotheses are therefore derived from literature, acknowledging the TPB theory:

3.3.1 Attitude

Attitude refers to an individual positive or negative perception of performing a particular behaviour (Ajzen, 1991). The relationship between attitude and behaviour is a topic that has been a studied for decades, indicating that our attitudes often have an impact on how we behave and conduct ourselves (Ajzen, 1991; Fishbein & Ajzen, 1975; Albarracin & Johnson, 2014). Similarly, attitude plays a crucial role in an individual's savings behaviour as it reflects their beliefs and opinions on saving (Abrahamse & Steg, 2009). Research has provided evidence that individuals with a positive attitude towards saving are more likely to save than those who have a negative attitude towards saving (Satsios & Hadjidakis, 2018; Zyphur et al., 2015, Gerhard et al., 2018; Abrahamse & Steg, 2009). Therefore, the first hypothesis was:

H1: *A positive attitude towards saving, significantly enhances Gen Z's intention to save.*

3.3.2 Subjective Norms

Subjective norm can be described as an individual's perception of social approval associated with engaging in a particular behaviour (Ajzen, 1991). Subjective norms have a great influence on an individual's intention to perform a particular behaviour with research providing evidence that people tend to conform to the judgements and behaviours of others (Ajzen, 1991; Manning, 2009). Subjective norm therefore has an influence on individuals' intention to save. Where there is pressure and influence from subjective norms, there tends to be a positive correlation towards the intention to save *(*Ajzen, 1991, Ruefenacht et al., 2015, Satsios & Hadjidakis, 2018). The second hypothesis was therefore:

H2: *Subjective norms significantly and positively influence Gen Z's intention to save.*

3.3.3 Perceived Behavioural Control

Perceived behavioural control plays a significant role in shaping an individual's intention to perform a behaviour and can be described as an individual's belief or perception of

the ease or difficulty associated with performing a certain behaviour (Ajzen, 1991). Ajzen (1991) further states that an individual's perceived behavioural control not only has an influence on the intention towards a behaviour but also influences the actual behaviour being investigated. In the context of personal savings, an individual who possesses a perception of behavioural control will have the belief that they possess the necessary resources and a supportive environment that will influence the behavioural intention and enable them to effectively engage in saving practices (Hagger et al., 2022; Satsios & Hadjidakis, 2018). The following hypotheses were therefore formulated:

H3: *Perceived behavioural control significantly influences Gen Z's intention to save.*

H4: *Perceived behavioural control significantly influences Gen Z's actual savings behaviour.*

3.3.4 Intention

The TPB posits that intentions are a cognitive representation of an individual's motivation to perform a particular behaviour and that strong intentions are more likely to influence particular behaviours (Ajzen, 1991). Ajzen (1991) further suggests that the three preceding constructs (attitude, subjective norms and perceived behavioural control) collectively shape an individuals intention to save and ultimately the actual saving behaviour. Therefore, the stronger an individual's intention to save; influenced by positive attitudes, positive subjective norms and positive perceived behavioural control; the higher they are to engage in savings behaviours (Ajzen, 1991, Satsios & Hadjidakis, 2018). This study, therefore, proposed that:

H5: *A positive correlation exists between Gen Z's' intention to save and their actual saving behaviour.*

The hypotheses are summarised in a conceptual model in Figure 1 below.

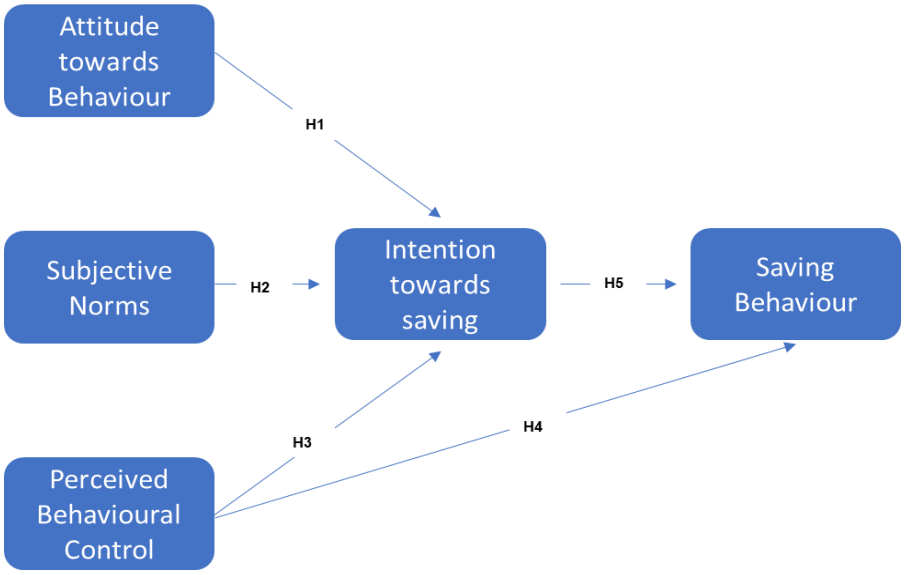

Figure 5.Model of the Theory of Planned Behaviour constructs (Ajzen, 1991).

Chapter 4: Research Methodology and Design

4.1 Introduction

This chapter outlines the research design and methodology used to conduct the study based on the research question and underlying hypotheses, presented in the previous chapters. It further presents an evaluation of the overall efficacy, reliability, and accuracy of the research. It appraises the methodological framework by which the data germane to this research will be collected, processed and analysed to understand the antecedents of Generation Z (Gen Z) consumers' savings behaviour in South Africa. It further explains and justifies the chosen research design to apprehend the determinants of Gen Zs savings behaviours within the South African context. Lastly, this chapter details the research strategy, sampling target population, the methods of data collection and analysis, followed by the testing of the proposed hypotheses.

4.2 Research design

A research design can be defined as a comprehensive technique for integrating numerous components of a study in a coherent and logical manner while maintaining maximum control over elements that may jeopardise the validity of the findings. A research design thereby assist in ensuring the research questions are effectively addressed (Akhtar, 2016). According to Bryman (2016) and Nayak and Singh (2016), a research design is a broader approach to organise a research project, determining its ontological and epistemological positions. They further explain that the research design constitutes the blueprint for the selection of subjects, research sites, data collection, measurement, and analysis procedures in which the research question(s) can be answered. Creswell and Creswell (2017) expand on this position that the gaol of a research design is to provide a strategic framework to effectively execute the research project and provide results that are sound and credible.

The primary focus of this study was to perform a quantitative examination of the factors that influence the saving habits of Generation Z consumers in South Africa, using the Theory of Planned Behaviour as a theoretical anchor. This study employed a quantitative research design in line with Edmondson and Mcmanus (2007), who recommended that quantitative research designs should be applied for studies that have a mature state of prior research, as is the case with consumers' savings behaviour. Investigating the

antecedents of Gen Z consumers' saving behaviour in South Africa, therefore, required a dynamic explanatory research approach that is firmly rooted in quantitative research.

4.3 Limitations of the research design

Despite the benefits of quantitative research, the method has inherent limitations (Queiros et al. 2017). When conducting quantitative research, a significant number of respondents must be contacted because the researcher sampled a section of a population to obtain their opinions, which have been interpreted as those of the general population. In this regard, many respondents had to be consulted to get a fair view or percentage of the target population. The outcome of this research is then generalised as the view of the entire population. In quantitative research, the outcomes are usually limited because the results are generally based on the researcher's conclusions derived from numerical data. This limited outcome is due to the structured pattern of the questionnaires which usually has close ended questions giving a respondent little or no opportunity of explanations. Therefore, the answers provided are limited to the predetermined questions. Queiros et al. (2017) explain that quantitative researchers generally fail to develop more profound understanding of underlying meanings and explanations involved in participants' viewpoints.

4.4 Population and sample

4.4.1 Target population

The target population for a survey refers to the complete set of respondents from which survey data is collected to be used to draw conclusions (Boddy, 2016). Identifying a well-founded and precise target population for this study was an essential part of the entire research process as it drives the sampling methodology, feasibility, and sample size.

The target population for this study comprised of the Gen Z cohort who reside in Tshwane. Tshwane is one of the largest metros in South Africa and its population comprises of a healthy mix of young and old who are financially literate but comprise a black population which has been identified by Matemane (2018) as relatively less literate than other social groups. The familiarity with a specific aspect of financial awareness and

praxis (savings) therefore finds salience in the Tshwane metropole. For this research, there was no gender distinction, which allowed for a more comprehensive analysis of the target population and saving behaviour.

4.4.2 Unit of Analysis

The unit of analysis in a research study refers to the main parameter that is being investigated in that research (Saunders et al., 2019). The careful selection of the unit of analysis is a crucial aspect of conducting a quantitative study. The choice has an impact on ensuring that data collection and analysis later correspond with the research questions and objectives (Bell et al., 2019). Our study's primary goal was to look at people between the ages of 18 and 28 (during the study period). It should be noted that having a savings account was not required for participation.

4.4.3 Sample size and determination

Sampling is a principal element of any empirical and quantitative research study and refers to the process that involves using a subset of the population for making conclusions about the entire population. The core premise of sampling is through selecting certain elements from the population for the researcher to draw inferences of the populace (Taherdoost, 2016). Sampling provides a method of collecting information about a population without the need to study every individual within the population (Creswell & Creswell, 2017). The sample size refers to the number of respondents who can be included in a study (Boddy, 2016). A non-probability sampling method, specifically a convenience sample, was utilised in an effort to achieve a sufficient sample size for the study. This was equally useful given the time limitations associated with a quantitative research project as part of an academic endeavour.

A sizeable group of respondents were recruited using an invitation that was circulated online via email and social media platforms. Those who met the set criteria were considered in the study. The criteria for the research was a specific agecohort (18 to 28 years), and residence in Tshwane.

4.5 Data Collection

An electronic questionnaire survey was selected as the most appropriate information gathering techniques for this study. Literature review of scholarly journal articles and books provided a philosophical starting point for the survey questionnaire (Babbie, 2016). According to Bell et al. (2019), through data collection, the researcher produced evidence to support arguments based on existing facts or information.

Previous research on the TPB has also employed a quantitative approach by utilising a questionnaire survey to gather data. The questionnaire utilised in this study was developed based on existing literature and subsequently adjusted to align with the specific context of the research (Gao et al., 2017; Satsios & Hadjidakis, 2018; Si et al., 2020; Yuriev et al., 2020).

The questionnaire was constructed in accordance with the guidelines proposed by the seminal author (Ajzen, 2006). It utilised a seven-point Likert-type scale to assess the factors that influence the saving behaviour of Generation Z consumers in the context of South Africa. Furthermore, additional literature examining the theory, including studies by Du and Pan (2021), Gao et al. (2017), and Satsios and Hadjidakis (2018), informed the development of the research instruments.

Social media platforms, specifically Facebook, Instagram, and WhatsApp, were used as means of participant recruitment and to achieve the desired sample size. A digital advertisement was generated and disseminated on various online platforms, providing comprehensive information about the project and its intended audience. The advertisement featured a hyperlink leading to an online survey that incorporated eligibility verifications to ensure that only the intended participants completed the questionnaire. The respondents were directed to Microsoft Forms through the provided questionnaire link, where they proceeded to complete the questionnaire. The raw data obtained from their responses was temporarily stored within Microsoft Forms, awaiting further analysis. The process of data collection was conducted through the administration of a questionnaire survey, spanning a duration of three weeks within the months of September and October in the year 2023.

4.6 Measuring Instrument

The **introductory section of the questionnaire** endeavoured to present the research subject and the purpose of the survey to the respondents. According to Brace (2008), the introduction of the questionnaire serves as a hook to keep respondents interested in the survey therefore the introduction establishes sentiment to gain the respondents confidence by guarantying confidentiality and anonymity. The questionnaire was introduced in a **cover letter** stating the purpose and objective of the study, its relevance, time commitment, the importance of their response in order to derive valuable insights, the data to be collected as well as the confidentiality and anonymity of the study.

The first section **(Section A)** of the questionnaire solicited demographic profiles of the respondents, including age, gender, level of education and occupation. The prime importance to include demographic profiles when conducting surveys of this nature as recent literature denotes that age, gender, level of education and occupation influence saving behaviours (Brace, 2008).

The subsequent section (**Section B**) enquired about the financial knowledge and savings habits of the respondents as some form of background that can be presented descriptively, with the last section **(Section C**) that measured the constructs of the theory: attitudes towards savings, subjective norms, perceived behavioural control and intention towards savings.

Reflective questions were formulated using a seven-point Likert scale, where a rating of 1 signifies a significant level of disagreement, while a rating of 7 indicates a substantial level of agreement (Ajzen, 2006).

4.7 Data Analysis and Presentation

The next stage after the collection of the primary data was the cleaning, entering and processing of data before being analysed. Harding (2019) succinctly describes data scrutiny as a procedure of attaching meaning and sequence to the preponderance of obtained data. In Brace's (2018) view, data analysis refers to a procedure that depends on approaches and practices of mining raw data for insights relevant to the research and transforming it from figures into data applicable in instigating improvement. Harding

(2019) further adduces that the incorporation of analytical and statistical techniques is necessary for this process to be carried out successfully.

At the outset of the data analysis process, a data cleaning procedure was done. This involved conducting a preliminary analysis of the completed questionnaires in order to identify and remove any instances of incomplete data. A comprehensive evaluation of the finalised questionnaires was conducted, wherein the researcher carefully observed and documented the how respondents understood the meanings of the concepts being investigated. The data was analysed to gain a comprehensive understanding and conduct pertinent assessments that would assist in achieving the research objectives and addressing the research questions. The Statistical Package for the Social Sciences (SPSS) software version 25 was used to capture, analyse and store the empirical data collected. Durbarry (2017), notes that this software is a highly versatile and responsive program designed to undertake an array of statistical functions in processing and analysing survey data. It offers an excessive number of basic numerical operations, such as cross tabulation and the calculation of statistical tests (Bala, 2016).

The initial step involved conducting descriptive analyses. Subsequently, as discussed with the statistician, inferential statistical tests were conducted to assess the relationships between variables through the examination of formulated hypotheses. The tests played a crucial role in ascertaining the factors that influence the saving behaviours of Generation Z consumers in Pretoria. The researcher conducted these tests to evaluate the presence of significant associations among the variables outlined in the various hypotheses.

The hypotheses were tested as follows:

H1: *A positive attitude towards saving, significantly enhances Gen Z's intention to save. [Q10-14 *Q30-33]*
H2: *Subjective norms significantly and positively influence Gen Z's intention to save.*
[Q15-18*Q30-33]
H3: *Perceived behavioural control significantly influences Gen Z's intention to save. [Q19-24*Q30-33]*
H4: *Perceived behavioural control significantly influences Gen Z's actual savings behaviour. [Q19-24*Q25-29]*
H5: *A positive correlation exists between Gen Z's' intention to save and their actual saving behaviour.*
[Q30-33 Q25-29]*

4.8 Research Quality and Rigour

Within the positivist research paradigm, there is general agreement that research studies should be carried out rigorously (Bell et al., 2022; Creswell & Creswell, 2023). In this sense, rigour has become a prerequisite for quality in both quantitative and qualitative research. The extent to which a researcher strives to improve the quality of their study is therefore referred to as rigour (Bell et al., 2022). Additionally, according to Creswell and Creswell (2023), rigor demonstrates integrity, expertise, and the overall legitimacy of the research process. The absence of rigour in research poses a potential danger of deviating towards journalistic practises, thereby undermining its role as a reliable and authoritative source of knowledge.

In order to uphold the standards of quality and rigour in this study, meticulous attention was devoted to the criteria of validity and reliability. The concept of research quality and rigour pertains to the methodologies and protocols implemented by researchers in order to guarantee the production of high-quality findings. According to Bell et al. (2022), research places significant emphasis on ensuring the accuracy of data and its potential for generalizability. The authors additionally assert that quantitative research is focused on assessing consistency of results over time and the validity of measuring the intended constructs. These concepts affect the quality of findings and their applicability to broader populations (Bell et al., 2022).

The researcher maintained the reliability of the research instrument in order to assure the accuracy and validity of the study's results. In order to assure the dependability of the tool, it was necessary to employ exact and meticulous phrasing for each question, with the aim of avoiding ambiguity and preventing any potential influence on responders towards a specific answer. To this end, this research used Cronbach's alpha - using a measure of 0.7 as the cut-off point (Vaske et al., 2017) - and the average inter-item correlation to ensure the reliability of the variables considered in the data collection.

However, due to the potential of respondent bias, the internal validity of the study cannot be assured entirely. Creswell and Creswell (2023) define rigour in quantitative research as the degree to which the design and analysis techniques are specific, objective, and restricted, and determine the extent to which the rules have been rigorously followed and implemented in all decision-making processes. The researcher discussed all the analytical processes and was guided by a qualified statistician.

Additionally, the study focused on content validity, where validity refers to the degree to which research instruments measure the factors under study with accuracy (Bell et al., 2022) by using questions that have been used by other seminal authors in prior studies.

4.9 Ethical Considerations

Ethical considerations are important in a research study. Researchers have a duty to undertake research in an ethical manner. To achieve this, the researcher ensured that the entire research process adhered to the ethical norms that support the validity and relevance of the research and ensured the guidelines provided by the University of Pretoria's Ethics Committee as made available by GIBS, were adhered to. Before attending to some of the individual ethical issues that pertain to research studies, it was important to flag that according to Seemiller and Grace (2019) Gen Z includes persons born between 1995 and 2010, although the study only included those aged 18 years and older.

Written **informed consent** (see Appendix) was received from all respondents prior to the completion of the questionnaire. Ryen (2010) terms informed consent as a potential respondent's consensus to willingly partake in a study and is arrived at following the absorption of crucial information regarding the research. Persons aged above 18 are considered adults and could therefore give consent of their own volition.

All the respondents were informed about **their rights** to willingly accept or decline to participate without facing harm if they decide not to participate. Additionally, respondents were informed about the **objective of the study** and on the methodology that would be employed in data collection. Furthermore, they were guaranteed that **no impending risks or costs** would be involved. **Dates and intervals** for administering online questionnaire surveys were shared discussed.

Confidentiality and anonymity were guaranteed and maintained all the way through the research: anonymity is achieved when respondents cannot be identified even by the researcher, through his or her individual feedback. When respondents are guaranteed confidentiality, it entails that the responses they give will be openly published although in an aggregated manner that does not identify them. In this study, anonymity and confidentiality was guaranteed by not disclosing respondent's identities when recording or disseminating the data and by **storing the data collected in a password protected**

folder for 10 years. Identifying information was entered in questionnaires and in the final report.

The maintenance of scientific integrity was regarded as a primary **ethical responsibility** in conducting this research. The researcher endeavoured to mitigate any potential for unethical behaviour by diligently and veraciously documenting the participants' responses. Additionally, the researcher did not suppress, falsify or invent findings to meet the research needs. Data collected from the questionnaires was inputted into SPSS software to avoid the manipulation of data by the researcher through subjective collaboration. Ethical considerations extend beyond the mere collection and analysis of data, encompassing the compilation, composition, and dissemination of the research report as well. In this particular context, the researcher implemented measures to guarantee the **absence of biased language or discriminatory terminology** targeting individuals on the basis of their gender, sexual orientation, race, ethnicity, disability, or age. The researcher utilised **appropriate language** to describe the professions, gender identities, racial backgrounds, sexual orientations, and ages of the respondents.

4.10 Limitations

There are limitations linked to conducting surveys in quantitative research. These limitations encompass concerns related to selecting the sample, response rates, self-selection bias, managing measurement error and lack of control over the survey environment. Nonetheless these risks can be mitigated by employing mitigating strategiesas discussed below.

Sampling limitations: Online surveys may suffer from sampling limitations as they rely on voluntary participation rather than random selection. This could lead to biased samples that do not represent the target population adequately (Gillham, 2011). To reduce this risk, quota sampling was used to target specific individuals to ensure a more representative sample in terms of gender (Krosnick , 2017). A **delimitation**, was that the sample was recruited in one province in South Africa only.

Response rates: Online questionnaire surveys often face lower response rates compared to other survey methods. This can introduce non-response bias if certain groups are less likely to participate than others (Gillham, 2011). This can be mitigated through personalising invitations, sending out reminders and providing a clear and

unambiguous purpose and objective of the study (Gillham, 2011; Bell et al., 2019). Reaching out through social media did not allow for this.

Self-Selection bias: Since online surveys rely on individuals voluntarily participating, respondents may have different characteristics and motivations than those who choose not to participate. Self-selection bias could impact the generalizability of findings (Gillham, 2011) and can be mitigated by analysing the demographic information of the respondents and comparing it with known population characteristics when interpreting the results, which was implemented.

Measurement error: Measurement error is an inherent limitation in any type of survey research. In online questionnaires, participants might misinterpret questions or provide inaccurate responses due to fatigue or inattentiveness (Gillham, 2011). Careful wording and structure of questions can therefore assist in minimising ambiguity and confusion for respondents.

Lack of control over the survey environment: In online surveys, researchers have limited control over the respondent's environment during data collection. This lack of control introduces potential distractions or interruptions that may affect response quality (Gillham, 2011). The risk was hopefully reduced by emphasising the importance of completing the survey in a quiet and focused setting while providing clear instructions for participants (Bryman, 2016).

Data collection instrument, the questionnaire: For this study, an online self-completion questionnaire loaded on Qualtrics, was used to capture primary data from the target population. This allowed for the prompt collection of empirical data from the target population. Questionnaires are a valuable instrument for data collection due to their expeditious assembly, operational efficiency, and cost-effectiveness. Questionnaire results are highly valuable to researchers due to their ability to provide data that can be subjected to statistical analysis, thereby yielding valuable insights and identifying significant patterns. This facilitates their capacity to recognise and comprehend valuable observations.

The following chapter presents the findings of the study.

Chapter 5: Results

5.1 Introduction

The preceding chapter presented the methodical approach of this study, offering a comprehensive examination of the research design and data collection techniques. This chapter presents the findings of the investigation. This chapter provides an overview of the characteristics of the participants before addressing the research question and hypotheses (as presented in Chapter 3), with broad remarks of the outcomes.

5.2 Sample profile

The study initially comprised a sample size of 163 respondents who were all between 18 to 28 years of age. However, 14 respondents exceeded the upper age limit of 28 years, and were withdrawn from the sample, therefore, the final sample size was 149 respondents.

The following section provides an overview of the sample's distribution in relation to the characteristics, namely: gender, age, relationship status, academic accomplishments, ethnicity, source of income, and saving behaviours.

5.2.1 Socio Demographics

Table 1. Socio Demographics

		n	%
Gender	**Male**	54	36.2%
	Female	94	63.1%
	Prefer not to say	1	0.7%
	Total	149	100%
Age	**18 years**	3	2.0%
	19 - 21 years	39	26.2%
	22 - 24 years	41	27.5%
	25 - 28 years	66	44.3%
	Total	149	100%
Marital Status	**Single**	128	85.9%
	Married	13	8.7%
	Widowed	1	0.7%
	Other	7	4.7%
	Total	149	100%
Level of Education	**Primary education**	1	0.7%

	Secondary education	25	16.8%
	Technical/Vocational Qualification	13	8.7%
	Tertiary education	110	73.8%
	Total	149	100%
Employment status	**Full-time employed**	43	51.2%
	Part-time employed	9	10.7%
	Unemployed	32	38.1%
	Total	84	100%
Ethnicity	**African/Black**	138	92.6%
	Asian	1	0.7%
	Coloured	7	4.7%
	Indian	1	0.7%
	White	2	1.3%
	Total	149	100%

Gender: The sample consists predominantly of female participants (63.1%), with males comprising the remaining proportion (36.2%). A single participant, constituting 0.7% of the total sample, opted to withhold their gender information.

Age: The age range of 25-28 years has the largest proportion of participants, accounting for 44.3% of the total. The age categories of 19-21 years and 22-24 years exhibit a comparable distribution, accounting for 26.2% and 27.5% of the sample population, respectively. The age group with the lowest number of participation comprises individuals who are 18 years old, accounting for 2.0% of the total population.

Marital Status: The vast majority of participants in the study are unmarried, comprising 85.9% of the total sample. A minority of individuals, comprising 8.7% of the population, are in a marital union. The percentage of participants who are widowed is less than 1%. The remaining individuals are classified into the "Other" group, comprising 4.7% of the total participants.

Educational Attainment: The majority of participants, comprising 73.8%, have successfully attained tertiary education. Approximately 16.8% of individuals possess a secondary level of education. Only a small proportion of the participants possess an elementary education, specifically 0.7%. A total of 8.7% of the participants possess a technical or vocational qualification.

Employment Status: The largest percentage of participants, comprising 51.2%, are engaged in full-time employment. A lesser proportion of individuals are experiencing unemployment, with a rate of 38.1%. According to the data collected, it was found that 10.7% of the participants reported engaging in part-time job.

Ethnicity: The majority of individuals (92.6%) in the study identify as African/Black. The proportion of individuals who self-identified as belonging to a racial or ethnic group other than white is 4.7%. The proportion of individuals of Asian and Indian descent is 0.7% each. The sample consists of 1.3% white persons.

Overall, the data presented in this study demonstrates a sample that is characterised by its diversity, with a predominant representation of female participants. The age distribution indicates a notable clustering of individuals within the age range of approximately 25 to 29 years. The majority of participants in the study are unmarried and have achieved a minimum of a tertiary-level degree. The employment status exhibits variation, with a predominant proportion of individuals being engaged in full-time employment. Ultimately, a significant section of the participants self-identify as individuals of African/Black descent, whilst smaller fractions of the sample population are attributed to various other ethnic origins.

5.2.2 Saving Habits and Financial Knowledge

Table 2. Saving Habits and Financial Knowledge

		n	%
How would you rate your overall knowledge and understanding of personal finance management?	**Very poor**	3	2.0%
	Poor	14	9.4%
	Good	50	33.6%
	Fair	66	44.3%
	Excellent	16	10.7%
	Total	149	100%
Do you have a regular source of income?	**Yes**	99	69.7%
	No	43	30.3%
	Total	142	100%
If yes, what is your main source of income?	**Allowance**	21	21.2%
	Salary	71	71.7%
	Investments	1	1.0%
	Other	6	6.1%
	Total	99	100%
On average, how much money do you earn or receive monthly?	**Under R1000**	25	16.8%
	R1000 - R3000	35	23.5%
	R3000 - R5000	12	8.1%
	Over R5000	77	51.7%
	Total	149	100%
Do you save regularly?	**Yes**	63	42.3%
	No	86	57.7%
	Total	149	100%
If yes, what proportion of what you earn or receive do you generally try to save?	**none**	1	1.6%
	Less than 10%	24	38.1%
	11 - 20%	18	28.6%

	21 - 30%	12	19.0%
	More than 30%	8	12.7%
	Total	63	100%

General Proficiency in Personal Finance Management: A significant proportion of respondents indicated that their level of knowledge and comprehension in personal finance management was either "Good" (33.6%) or "Fair" (44.3%). Merely a little fraction of individuals assessed their level of comprehension as "Very poor" (2.0%) or "Poor" (9.4%). A significant proportion of participants said that their knowledge and understanding were of high quality, with 10.7% rating it as "Excellent."

Regular Source of Income: Most of the participants (69.7%) indicated that they possessed a consistent and reliable source of income, whilst a notable minority (30.3%) reported lacking such a source.

Primary Source of Revenue: Among respondents who possess a consistent revenue stream, the predominant source is salary, as indicated by 71.7% of the participants. The provision of an allowance constitutes the primary means of financial support for 21.2% of the individuals surveyed. A minority of participants, namely 1.0%, depend on investments, while 6.1% rely on alternative sources of income.

Monthly Income: A significant proportion of respondents (51.7%) said that their monthly income exceeded R5000. A notable segment of the population received incomes ranging from R1000 to R3000, accounting for 23.5% of the total. Similarly, an equivalent proportion of individuals earned less than R1000, amounting to 16.8%. Merely a minor proportion of respondents, amounting to 8.1%, indicated that their earnings fell within the range of R3000 - R5000.

Regular Saving Habits: A significant percentage of respondents (42.3%) indicated that they engage in consistent savings practises. Nevertheless, the findings of the study indicate that a significant proportion of the participants, specifically 57.7%, expressed a lack of regularity in their savings habits.

Proportion of Income Saved: -Among the cohort of individuals who engage in regular savings, a significant portion of them aspire to allocate less than 10% (38.1%) or between 11 - 20% (28.6%) of their total income towards savings. A subset of the participants expressed their intention to achieve savings ranging from 21% to 30% (19.0%), while a

smaller proportion sought to achieve savings beyond 30% (12.7%). A minuscule proportion of respondents indicated that they did not save any amount, specifically 1.6%.

The aforementioned figures offer significant insights into the participants' understanding of personal finance management, sources of income, patterns of saving, and the percentage of income they aspire to save. The results indicate that the participants exhibited differing degrees of financial literacy and had a combination of saving behaviours.

5.3 Descriptive Statistics

Descriptive statistics are essential in providing a full understanding of the characteristics displayed by a particular sample. The following attributes were examined in this data: mean, median, and standard deviation (SD). The mean and median measure central tendency with the mean representing the average of the dataset and the median the middle value within a dataset (Kaur et al., 2018). Whereas the standard deviation measures the spread or dispersion of values in a dataset. It quantifies how far individual values depart from the mean (Kaur et al., 2018). The collective utilisation of the mean, median, and standard deviation offers significant descriptive statistics that succinctly outline the central tendency, variability, and distribution of a given dataset.

Table 3. Descriptive Statistics

		Mean	Standard Deviation
Attitude	I perceive consistent saving as prudent and important.	5.47	1.85
	Saving is not difficult to accomplish.	3.97	1.90
	I perceive saving as highly beneficial.	5.82	1.78
	Savings is a good habit.	5.83	1.76
	Saving is a sensible thing to do.	5.77	1.77
Subjective norms	My close family and friends (social group) encourage me to save.	4.48	1.87
	My social group encourages the importance of saving.	4.23	1.88
	My social group recommends saving for the future and for emergencies.	4.33	1.96
	My social group encourages me to save.	4.24	1.94
Perceived behavioral control	I know how to ensure that I save regularly.	4.42	1.83
	I consider saving as compulsory	4.64	1.88
	I have access to the adequate platforms, such savings accounts, to save.	5.30	1.86
	I am disciplined to save consistently.	3.94	1.88

	I am determined to save for the future.	5.47	1.77
	I find it easy to save for the long term	4.00	2.01
Intention to save	I have the desire to start saving for the future.	5.73	1.78
	Within the next three months, I want to start saving for the long term.	5.49	1.90
	Saving consistently is something that I want to do.	5.85	1.79
	I recommend saving towards future goals and emergencies.	5.94	1.73
Actual savings behavior	Savings is something that I do as a matter of habit.	3.73	1.89
	I have already benefited from my savings account.	4.64	2.02
	I constantly look for options where my savings can grow faster.	4.73	2.03
	Over the past three months, I have consistently saved money.	3.92	2.21
	I am already saving towards my future goals and emergencies.	3.96	2.16
Additional	I need a good reason to save.	4.38	2.14
	I feel good when I see my savings growing.	5.73	1.74
	Saving makes me feel responsible	5.82	1.59
	I want to be in control of my finances and therefore, I save	5.54	1.79

The data from the study revealed that Generation Z consumers perceive a need for a compelling reason to save, experience a sense of responsibility and control when saving, and derive emotional satisfaction from seeing their savings grow. The following sections gives an overview of the insights derived from the descriptive statistics.

5.3.1 Attitude towards Saving

The data indicate that South African Generation Z consumers possess a generally positive attitude towards saving. With mean scores ranging from 5.47 to 5.83, respondents perceive consistent saving as prudent, important, beneficial, and a sensible and good habit. The majority of respondents have a median score of 6.0, indicating a stronger positive attitude towards saving with standard deviations ranging from 1.76 to 1.90, suggesting some level of variability in the responses for these attitude variables.

5.3.2 Subjective Norms

The study reveals a moderate level of influence exerted by social groups on the saving behaviour of Generation Z consumers. The mean scores for subjective norms range from 4.23 to 4.48, indicating a moderate level of influence from the respondents' social groups on their saving behaviour. The median scores for these variables are generally higher, ranging from 4.0 to 5.0, suggesting a stronger perception of social encouragement and recommendations to save. The standard deviations range from 1.87 to 1.96, indicating some variability in the perceived influence of social groups on saving behaviour. Overall, respondents reported that close family and friends encourage them to save, and that their social groups endorse the importance of saving. This indicates that social networks play a role in shaping the saving behaviour norms of South African Generation Z consumers.

5.3.3 Perceived Behavioural Control

On average, the data demonstrates a moderate level of perceived behavioural control towards saving, with mean scores ranging from 3.94 to 5.47. The median scores for perceived behavioural control are generally higher, ranging from 4.0 to 6.0, indicating a relatively stronger perception of control over saving behaviour. The standard deviations range from 1.77 to 2.01, suggesting some variability in the perceived control over saving. Therefore, South African Generation Z consumers exhibit a moderate level of perceived behavioural control towards saving. Individuals in this group reported varying levels of discipline, knowledge, and access to savings platforms. The findings suggest that Generation Z consumers believe they possess the necessary skills and resources to save, although there is some variability in their level of perceived control.

5.3.4 Intention to Save

The respondents, on average, have a strong intention to save, as indicated by the mean scores ranging from 5.49 to 5.94. The median scores for intention to save range from 6.0 to 7.0, indicating a stronger desire to start saving for the future and savings consistency. The standard deviations range from 1.73 to 1.90, suggesting some variability in respondents' intention to save. Generally, South African Generation Z consumers expressed a strong intention to save for their future. The findings indicate that respondents have a desire to initiate and maintain consistent saving habits, and recommend saving towards future goals and emergencies.

5.3.5 Actual Savings Behaviour

The study identifies a moderate level of engagement in saving behaviour among Generation Z consumers in South Africa. Although the mean scores for actual savings behaviour ranged from 3.73 to 4.73, indicating room for improvement, the findings demonstrate that Generation Z consumers are already saving as a matter of habit, benefiting from their savings accounts, and actively seeking opportunities for their savings to grow. The median scores range from 3.0 to 5.0, suggesting varying levels of adherence to saving habits with standard deviations ranging from 1.89 to 2.21, indicating variability in respondents' actual savings behaviour.

5.3.6 Additional Variables

The study further revealed that Generation Z consumers perceive a need for a compelling reason to save, experience a sense of responsibility and control when saving, and derive emotional satisfaction from seeing their savings grow.

Overall, the findings suggest that Generation Z consumers in South Africa have a generally positive attitude and intention to save, perceive a moderate level of social norms and control towards saving and engage to a moderate extent in actual savings behaviour. These insights align with the Theory of Planned Behaviour as the antecedents examined are central to understanding and predicting saving behaviour among Generation Z consumers.

5.4 Hypothesis Testing

Inferential statistics were used to test and evaluate the stated hypotheses in accordance with the theoretical model. The study used the Structural Equation Modelling (SEM) method, especially the Partial Least Squares SEM (PLS-SEM) method proposed by Hair Jr. et al. (2017). SEM was selected due to its applicability as a statistical tool for the study of multivariate data, with a focus on the investigation of structural correlations (Hair et al., 2017). In SEM, the combination of component analysis and multiple regression analysis allows for the investigation of complicated interactions between observable and latent variables.

5.4.1 Measurement model – Factor loading and model fit

Factor loadings play an important role in determining validity in constructs within a research instrument (Hair et al., 2017). They therefore indicate the extent to which observable variables, also known as indicators, are associated with hidden factors. The indicators provide an indication of the extent to which each indicator effectively measures its intended construct. Greater factor loadings indicate stronger connections between the indicators and the latent variables that underlie them (Hair et al., 2017). Through the analysis of factor loadings, this study can determine whether the items effectively represent the concept they are intended to measure.

Below is a representation of the factor loadings for this study.

Table 4. Factor loading and model fit

		Factor Loading	Standard Deviation	T Statistics	P Values
Attitude	Q10	0.892	0.033	26.839	0.000
	Q11	0.473	0.067	7.107	0.000
	Q12	0.952	0.013	71.896	0.000
	Q13	0.976	0.006	157.130	0.000
	Q14	0.954	0.018	54.202	0.000
Subjective norms	Q15	0.803	0.044	18.180	0.000
	Q16	0.945	0.010	94.823	0.000
	Q17	0.927	0.017	55.396	0.000
	Q18	0.922	0.020	46.988	0.000
Perceived behavioral control	Q19	0.861	0.027	32.324	0.000
	Q20	0.822	0.029	28.097	0.000
	Q21	0.780	0.042	18.387	0.000
	Q22	0.805	0.032	25.010	0.000
	Q23	0.778	0.043	18.248	0.000
	Q24	0.802	0.029	27.754	0.000
Saving behavior	Q25	0.858	0.027	31.452	0.000
	Q26	0.828	0.030	27.450	0.000
	Q27	0.786	0.041	19.006	0.000
	Q28	0.871	0.021	41.620	0.000
	Q29	0.872	0.023	38.759	0.000
Intention	Q30	0.953	0.013	73.631	0.000
	Q31	0.897	0.034	26.749	0.000
	Q32	0.951	0.021	44.814	0.000
	Q33	0.959	0.010	96.358	0.000

The factor loadings represent the strength and direction of the relationship between each survey item and its underlying construct (attitude, subjective norms, perceived

behavioural control, saving behaviour, and intention). In this study, all factor loadings are substantial, ranging from 0.473 to 0.976. in addition, the standard deviations associated with each factor loading are generally low, indicating that the measurement items are consistent in their assessment of each construct. This suggests that respondents' answers to the survey items are similar and reliable, providing a consistent measurement of the constructs.

The model fit statistics, including the t statistics and p values, indicate that the factor loadings are statistically significant. All t statistics are substantially larger than 2, and the associated p values are very small ($p < 0.001$), suggesting strong evidence in support of the hypothesized relationships between the items and their respective constructs.

Overall, the factor loadings and model fit statistics provide robust evidence for the TPB as a suitable framework for understanding the antecedents of Generation Z consumers' saving behaviour in South Africa. The strong and significant relationships observed among attitude, subjective norms, perceived behavioural control, saving behaviour, and intention suggest that these constructs play important roles in shaping the saving behaviour of Generation Z consumers in South Africa.

Table 5. Measurement model

	Estimated Model	95%	99%
SRMR	0.048	0.056	0.061
d_ULS	0.687	0.952	1.100
d_G	0.535	0.702	0.789
NFI	0.879	-	-

Standardised Root Mean Square Residual (SRMR) is a measure of how well the estimated model fits the observed data. In this study, the SRMR value is 0.048, which indicated a good fit between the model and the data.

The d_ULS is an index of overall model fit, with lower values suggesting better fit. In this study, the d_ULS value is 0.687, which indicated a good fit between the theoretical model and the observed data. The d_G statistic is another measure of overall model fit, with lower values indicating better fit. In this study, the d_G value is 0.535, which suggested a good fit between the model and the data.

Additionally, Normed Fit Index (NFI) is a measure of how well the estimated model fits the observed data, with values closer to 1 indicating a better fit. In this study, the NFI value is 0.879, which indicates a good fit between the model and the data.

Overall, it can be concluded that the theoretical model utilising the Theory of Planned Behaviour fits the data well, suggesting that the model can explain Generation Z's savings behaviour.

5.4.2 Measurement model – validity and reliability

The validity and reliability of the model were assessed using two measures: Average Variance Extracted (AVE) and Composite Reliability (CR).

Table 6. Convergent validity

	Average variance extracted	Composite reliability
Attitude	0.757	0.94
Intention	0.885	0.97
Perceived behavioural control	0.654	0.92
Saving behaviour	0.712	0.93
Subjective norms	0.812	0.95

Average Variance Extracted (AVE) measures the amount of variance captured by the latent construct relative to the measurement error. Higher AVE values indicate stronger convergent validity (Hair et al., 2017). In this model, all construct AVE values range between 0.654 and 0.885, indicating good convergent validity. This suggests that a substantial portion of the variance in the constructs (attitude, intention, perceived behavioural control, saving behaviour, and subjective norms) is explained by the shared variance among the measurement items.

Composite Reliability (CR) assesses the internal consistency or reliability of the measures within each construct. Higher CR values indicate better reliability (Hair et al., 2017). In this model, all construct CR values range between 0.92 and 0.97, indicating good internal consistency. This suggests that the measurement items within each construct reliably assess the same underlying construct, indicating consistency and stability in the model.

It can therefore be concluded that the model in the research study exhibits good convergent validity and reliability suggesting that the measurement items for each construct effectively capture their underlying concepts, and the constructs are internally consistent.

5.4.3 Discriminant validity

The discriminant validity of the model was analysis with Fornell-Larcker criterion, and Heterotrait-monotrait ratio (HTMT) (Hair et al., 2017).

5.4.2.1 Fornell-Larcker criterion measures

The Fornell-Larcker criterion quantifies the extent to which a construct is truly distinct from other constructs within the model. Discriminant validity is established when a certain construct demonstrates a higher level of correlation with its own indicators in comparison to its correlations with other constructs present within the model. (Hair et al., 2017).

Table 7. Fornell-Larcker criterion measures

	Attitude	Intention	Perceived behavioral control	Saving behavior	Subjective norms
Attitude	0.870				
Intention	0.756	0.941			
Perceived behavioral control	0.635	0.650	0.808		
Saving behavior	0.481	0.529	0.806	0.844	
Subjective norms	0.514	0.470	0.533	0.442	0.901

To apply the Fornell-Larcker criterion in this study, the square root of the average variance extracted (AVE) for each construct was calculated. The AVE represents the amount of variance that is captured by the indicators of a specific construct. If the square root of AVE for a construct is higher than its correlation coefficient with any other construct, then it satisfies the Fornell-Larcker criterion and demonstrates discriminant validity.

1. Attitude:
- Square root of AVE = √0.870 = 0.933
- Correlation with Intention = 0.756
- Correlation with Perceived behavioural control = 0.635
- Correlation with Saving behaviour = 0.481
- Correlation with Subjective norms = 0.514

2. Subjective norms:
- Square root of AVE = √0.901= 0.949
- Correlation with Attitude= 0.514
- Correlation with Intention= 0.470

- Correlation with Perceived behavioural control= 0.533
- Correlation with Saving behaviour= 0.442

3. Perceived behavioural control:
- Square root of AVE = √0.808 = 0.899
- Correlation with Attitude = 0.635
- Correlation with Intention = 0.650
- Correlation with Saving behaviour = 0.806
- Correlation with Subjective norms = 0.533

4. Intention:
- Square root of AVE = √0.941 = 0.970
- Correlation with Attitude = 0.756
- Correlation with Perceived behavioural control = 0.650
- Correlation with Saving behaviour = 0.529
- Correlation with Subjective norms = 0.470

5. Saving behaviour:
- Square root of AVE = √0.844 = 0.919
- Correlation with Attitude = 0.481
- Correlation with Intention = 0.529
- Correlation with Perceived behavioural control = 0.806
- Correlation with Subjective norms = 0.442

Based on the Fornell-Larcker criterion, each construct's square root of AVE is higher than its correlation coefficient with any other construct, indicating discriminant validity among the constructs in this model.

5.4.2.2 Heterotrait-monotrait ratio (HTMT) matrix

The HTMT ratio compares the average correlation between constructs to the average correlation correlation between constructs with themselves (Hair et al., 2017). If the HTMT ratio is below 1, then we can conclude that the constructs have discriminant validity.

Table 8. Heterotrait-monotrait ratio (HTMT) matrix

	Attitude	Intention	Perceived behavioral control	Saving behavior
Intention	0.789			
Perceived behavioral control	0.741	0.688		
Saving behavior	0.589	0.573	0.890	
Subjective norms	0.578	0.500	0.584	0.484

Based on the HTMT matrix, we can conclude that there is good discriminant validity among the constructs in the model. All heterotrait correlations are below 1, indicating that the constructs are distinct from each other. However, some correlations are relatively high (e.g., Attitude - Intention) or moderate (e.g., Attitude - Perceived behavioural control), suggesting potential interrelationships or overlapping aspects of these constructs in the context of savings behaviour using the theory of planned behaviour.

5.5 Reliability - Cronbach's alpha

Cronbach's alpha is a statistical measure used to assess the internal consistency or reliability of a scale or questionnaire. It measures how closely related a set of items are as a group and provides an estimate of the average correlation among all possible pairs of items (Hair et al., 2017). Generally, Cronbach's alpha ranges from 0 to 1, with higher values indicating greater internal consistency.

Table 9. Cronbach's alpha

	Cronbach's alpha
Attitude	0.909
Intention	0.956
Subjective norms	0.921
Perceived behavioural control	0.894
Saving behaviour	0.898

The above results indicates that the items within each construct (attitude, subjective norms, perceived behavioural control, intention, saving behaviour,) are highly correlated with each other, supporting the use of these constructs in the study.

5.6 Structural Equation Model

A Structural Equation Model (SEM) is a statistical technique used to analyse the relationships among multiple variables in a complex system.

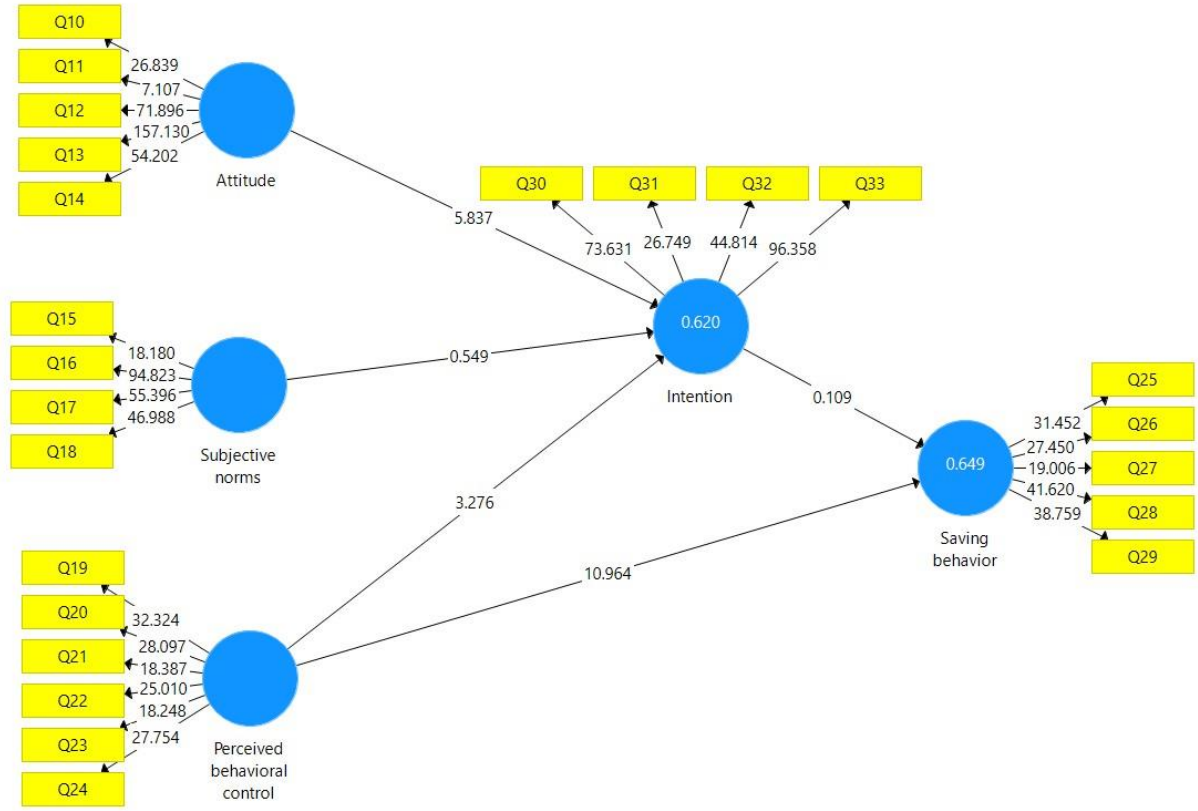

Figure 6. Structural Equation Model

The above structural model was developed with bootstrapping procedure and includes the below t-statistics and the p-values for the factor loading and paths.

Table 10. Factor loading and paths

	Coefficient	Standard Deviation	T Statistics	P Values
Attitude -> Intention	0.565	0.097	5.837	0.000
Subjective norms -> Intention	0.034	0.061	0.549	0.583
Perceived behavioral control -> Intention	0.273	0.083	3.276	0.001
Perceived behavioral control -> Saving behavior	0.800	0.073	10.964	0.000
Intention -> Saving behavior	0.009	0.082	0.109	0.914

Attitude -> Intention: The coefficient of 0.565 indicates that attitude has a significant positive effect on intention to engage in savings behaviour. Therefore, individuals with more positive attitudes towards saving are more likely to have stronger intentions to save. The t-statistic of 5.837 and p-value of 0.000 suggest that this relationship is statistically significant.

Subjective norms -> Intention: the coefficient of 0.034 suggests a weak positive effect of subjective norms on intention to save. Subjective norms represent the influence of social factors and the approval or disapproval of significant others regarding saving behaviour. However, with a t-statistic of 0.549 and a high p-value of 0.583, this relationship is not statistically significant at conventional levels.

Perceived behavioural control -> Intention: with a coefficient of 0.273, perceived behavioural control has a moderate positive effect on intention to save. Individuals who perceive greater control over their ability to save are more likely to have stronger intentions to save. The t-statistic of 3.276 and p-value of 0.001 indicate that this relationship is statistically significant.

Perceived behavioural control -> Saving behaviour: the coefficient of 0.800 reveals a strong positive effect of perceived behavioural control on actual saving behaviour. This suggests that individuals who perceive higher levels of control over their ability to save are more likely to engage in saving behaviour themselves. The t-statistic of 10.964 and p-value < 0.001 confirm the

Intention -> Saving behaviour: the coefficient of 0.009 suggests a weak positive effect of intention on actual saving behaviour. However, with a t-statistic of 0.109 and a high p-value of 0.914, this relationship is not statistically significant. Indicating that while intention plays a role in shaping saving behaviour, it may not be the sole determinant.

5.7 Path hypothesis

Path hypotheses play a crucial role in quantitative studies as they provide a framework for understanding and testing relationships between variables. According to Hair et al. (2017), "Path hypotheses specify proposed causal relationships between two or more variables" (p. 115).

Table 11. Path hypothesis

	Path (Hypothesis)	**Decision**
H1	Attitude -> intention to save	Accept
H2	Subjective norms -> intention to save	Reject
H3	Perceived behavioural control -> intention to save	Accept
H4	Perceived behavioural control -> Actual saving behaviour	Accept
H5	Intention -> Saving behavior	Reject

The first path hypothesis suggests that individuals' decision attitude towards saving will positively influence their intention to save. This means that if individuals have a positive attitude towards saving, they are more likely to intend to save.

The study therefore **accepts** the hypothesis:

H1: A positive attitude towards saving, significantly enhances Gen Z's intention to save
The second path hypothesis proposes that subjective norms, which refer to social pressures or perceived expectations regarding saving behavior, will influence individuals' intention to save. However, it states that there is no significant relationship between subjective norms and intention to save. This implies that social influences may not be strong determinants of one's intention to save.

The study therefore **rejects** the hypothesis:

H2: Subjective norms significantly and positively influence Gen Z's intention to save.
According to the third path hypothesis, perceived behavioral control, which reflects an individual's perception of their ability to perform the desired behavior (saving), will impact their intention to save. The path hypothesis therfore infers that higher levels of PBC lead to stronger intentions to save.

The study therefore **accepts** the hypothesis:

H3: Perceived behavioural control significantly influences Gen Z's intention to save.
The fourth path hypothesis suggests that perceived behavioral control also has a direct impact on actual saving behavior. If an individual perceives high control over their ability to save, they are more likely to engage in actual saving behaviors.

The study therefore **accepts** the hypothesis:

H4: Perceived behavioural control significantly influences Gen Z's actual savings behaviour.

The last path hypothesis proposes that individuals' intentions to save will lead them to engage in actual saving behaviours. The path hypothesis however infers that there is no significant relationship between intention and savings behaviour.

The study therefore **rejects** the hypothesis:

H5: A positive correlation exists between Gen Z's' intention to save and their actual saving behaviour.

5.8 Chapter Summary

The findings of this study provides valuable insights into Gen Z's saving habits. The first hypothesis confirmed that a positive attitude towards saving significantly enhances Gen Z's intention to save (H1). This suggests that individuals who hold a favourable view of saving are more likely to have the intention to save. However, contrary to expectations, the second hypothesis revealed no significant relationship between subjective norms and intention to save (H2), indicating that social pressures or perceived expectations may not heavily influence Gen Z's saving intentions. On the other hand, the third hypothesis demonstrated that perceived behavioural control has a significant influence on Gen Z's intention to save (H3). Higher levels of perceived control over their ability to save lead to stronger intentions to save. Moreover, in line with expectations, the fourth hypothesis showed that perceived behavioural control also directly affects Gen Z's actual savings behaviour (H4). Individuals who perceive high control over their ability to save are more likely to engage in actual saving behaviours. Lastly, contrary to expectations, the fifth hypothesis found no significant correlation between Gen Z's intention to save and their actual saving behaviour (H5).

Overall, these findings shed light on factors influencing Gen Z's savings behaviour and can inform strategies aimed at promoting financial literacy and encouraging responsible saving practices among young adults.

Chapter 6: Discussion

6.1 Introduction

A central tool in the analysis of data that deploys TBP is Francis et al's. (2004) manual which offers a guide to computation and analysis. The manual stipulates steps to be adopted in conducting computations for analysis as well as the analysis stage itself.

The previous chapter followed guidance from the manual in presenting the findings. Chapter 6 now builds on the findings that were presented and presents a discussion which is theoretically defined under the theory of planned behaviour. In this sense the chapter brings together the empirical data that was extracted with the literature discussed in Chapter 2. Moreover, the discussion is not just presented in a general sense but follows the research questions that we presented in Chapter 3. In this sense, chapter 6 is an amalgam of the key issues that were raised in previous chapters to present the thesis broad argument.

Given the research's the agenda is to establish a sense of how members within Gen Zs behave with regards to their savings, this insight forms the main focus and contribution of the study. The following sections will be presented as follows: the first subsection will present an income and savings profile of Generation Z and compare this general profile with what other researchers have identified in different contexts. In addition, the section will also hint at what are the theoretical lens have to say about generational savings habits attitudes and behaviours. Hereafter, five subsections are presented, each attending to the hypothesis outlined in chapter 3. As a result, the subsections will address positive attitude, subjective norms, perceived behavioural control, saving intention, and actual saving behaviour. These issues were addressed in the findings chapter and so will now be attended to largely as a discussion of the findings.

6.2 Generation Z's income and savings profile

The starting point in this study was to identify the characteristics of participants particularly with respect to their demographic profile and their knowledge of savings as well as savings activity. The study found that participants were generally literate as indicated by their education profile. This finding is consistent with the profile that is

presented by Pangestu and Karnadi (2020) who have studied the Generation Z cohort in Indonesia. With 74.4% having attended tertiary education, the participants were generally highly literate, and mostly professed knowledge of savings with 53.5% either reporting that they were either fair or excellent in savings.

Slightly over 35% of the participants stated that they rated themselves moderately good with regards to savings. This indicates that more than 88% of the total participants rated themselves positively with regards to knowledge of savings. Again, such a figure suggests a ample knowledge about finances. Djafarova and Foots (2022) indicate that Generation Z members are also very familiar with broader societal concerns such as environmental challenges and sustainability. Such knowledge is important to observe, as Widjaja et al. (2020) argue that financial literacy is the bedrock for savings behaviour. Setiawan et al. (2022) even add that digital financial literacy affects spending and saving. The study however did not attend to broad forms of knowledge due to the framing of the scope of the research which were outlined in the preliminary chapters. Hence focus remained on savings knowledge habits and behaviour.

In this regard, participants indicated the issues that affected them either positively or negatively concerning their savings. On the positive side. with such aspects as personal goals, long term projects, education for children and hedging against risk among others. On the negative side, the issues that affected one's ability to save included lack of income, black tax, unrestrained spending, and poor budgeting. The key observation was that there is consistency in terms of breadth of knowledge within the Generation Z that group that was studied.

6.3 Gen Z's attitude towards saving and intention to save

The data collected in this study indicate that South African Generation Z consumers possess a generally positive attitude towards saving.

To recap, Ajzen (1991) stated: "Attitudes toward a given behaviour are defined as the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question."

According to the findings of this study, respondents regard consistent saving as smart, important, beneficial, and a sensible and good habit. The majority of respondents have a more favourable attitude towards saving, with mean values ranging from 5.47 to 5.83.

However, the standard deviations for these attitude variables range from 1.76 to 1.90, indicating some diversity in the responses.

These findings are consistent with findings elsewhere on the African continent albeit in a study on entrepreneurs in Kenya (Kisaka, 2014). Elsewhere, Robichaud and Yu (2022) conducted a study on Gen Zs ethical spending intentions and related outcomes. While the approach is from an inverse position in the sense that they are interested in spending, the consistent factor with this study is focus on intention versus outcomes. They found that their respondents had good knowledge about ethical issues and therefore responded ultimately through their purchasing. However, Williams and Hodges (2022) suggest that in their study, although respondents indicated that they were aware of environmental concerns and they had an intention to avoid harmful product as much as possible, they were nonetheless engaged in unintentional sustainable interventions. Therefore, intention and the actual result we're not always tied together as respondents did not always actively seek information. Given these variations in insights from the cited studies as well as the difference in approach, this study reflected on the implications of findings with respect to the theory of planned behaviour. Concerning attitudes towards savings, the theory suggests that a positive attitude would most likely lead to a deliberate intention to save. This proposition contrasts Williams and Hodges' (2022) findings. The proposition is, however, supported in this study.

According to TPB, how people feel about a behaviour influences their motivation to engage in that action. This notion is supported by our research, which reveals that attitude has a significant positive effect on the desire to save money. The coefficient value of 0.565 indicates that persons who feel better about saving are more likely to have stronger saving strategies. The t-statistic of 5.837 and the p-value of 0.000 therefore suggest the statistical significance of this relationship.

The study's participants had a generally good knowledge of saves, as indicated in the income and savings profile at the beginning of the chapter, and this was consistent with their self-reported attitudes towards savings. According to the findings, a significant portion of individuals have a median score of 6.0, indicating a more strong favourable propensity towards saving. The standard deviations, which range from 1.76 to 1.90, show that there is some variation in the responses to these attitude components.

Although Ruefenacht et al. (2015) focused on the long term savings behaviour of German respondents who comprised of a broader demographic profile, their findings are nonetheless consistent with what the study here has identified which is that a positive attitude to save positively influences the savings intention of individuals.

Considering the South African context, research by Oseifuah (2014) explored the factors influencing savings behaviour among South African undergraduate students. The study found that a positive attitude towards saving significantly influenced students' intention to save. Moreover, socioeconomic factors such as income and financial knowledge were found to mediate the relationship between attitude and savings behaviour. Another study that looked into the impact of Ghanaian students' propensity towards indebtedness on their saves behaviour discovered that attitude has a favourable influence on savings behaviour, especially in persons who are financially literate (Owusu et al., 2023).

In concluding on this section, the study confirms that a positive attitude towards savings amongst the participants had in equally positive effect on the participants intention to save. Contrary to Zwane, et al. (2016), the study has established that incomes, gender and other socio-economic and demographic factors do not account for savings alone but cam also be complemented by one’s attitude.

6.4 Subjective norms and Gen Z's intention to save

The TPB proposes that subjective norms, which refer to social pressures or perceived expectations regarding behaviour, influence intention to engage in that behaviour. Writing on subjective norms, Icek Ajzen (1991) states that Subjective norms are defined as the perceived social pressure to engage or not engage in a particular behaviour.

The model produced t-statistic of 0.549 and the high p-value of 0.583 indicating that the relationship between subjective norms and intention to save did not attain an acceptable level of statistical significance. A coefficient of 0.034 suggests that subjective norms have a minimal influence on the intention to save among South African Generation Z.

In other words, other factors were likely to be more influential in the model and these could have been those included in the theory of planned behaviour or those unaccounted for. Nonetheless, the findings presented were consistent with Ruefenacht et al., (2015) who observed that social context variables have a bearing on the intentions to save among participants in their study. Among the variables that they considered were subjective norms. Equally in agreement among the scholars relying on the theory of planned behaviour are Elango and Ajah (2023) in their study conducted in India. However, subjective or social norms may not always be reliable predictors of behaviour within some contexts as Graf et al. (2023) observed in discussing norms and incentives.

As such, the study's findings differed with what the model establishes suggesting that among the Generation Z sample, other factors may have had a much more significant effect. The findings in the study are nonetheless consistent with the observation by another researcher who states that "perceived control behaviour is not positively significant to investment intention" (Hapsari, 2020, p. 137). There is therefore variation in the findings that researchers have made and this variation partly accounts for the detailed critiques and continued scrutiny which were mentioned in Chapter 2. In fact, Ajzen (2020) is fully aware of these variations and therefore addresses the possibility that some contexts might yield different outcomes but not necessarily translate to invalidation of the theory. After all, while the study has found Generation Z's subjective norms to have no clear effect on intention to save and is consistent with the earlier-cited work, Qalati et al. (2022) observe that behavioural control has a significant effect on energy saving while Suntornsan et al. (2022) observe an indirect effect between behavioural norms and energy saving behaviour. This represents scholarship with markedly different findings yet informed by the same theory. A more comprehensive critique reveals that a significant proportion of the examined studies (86%) fail to consider the indirect variables associated with the TPB, namely behavioural, normative, and control views (Yuriev et al., 2020).

Also worth observing is that although the findings are consistent with findings elsewhere, Gerhard et al. (2018) give a timely reminder about the possible effect of confounding factors in the relationship between psychological characteristics and savings. However, while this insight is noted, the study's ability to account for subjective norms in line with the model are sufficient at this stage as the connection that was tested in the hypothesis has been established. Subjective norms do partly account for individual intentions to save. The role of societal influence is therefore notable among Generation Z members. This is an important contribution as it suggests that social influence and collective voice may be instrumental in encouraging savings at an individual level. For the participants who are based in South Africa, the implications for household savings invite scrutiny on collective savings groups popularly known as stokvels. Since Generation Z members are responsive to the encouragement of society via norms, they could be an ignored constituency for the extension of informal savings models such as the stokvel (Lappeman et al., 2020; Verhoef & Hellman, 2001). The stokvel is and it has been widely studied in South Africa (Koenane, 2019; Lappeman et al., 2020; Ngcobo et al., 2023). It relies on social capital as well as social norms which the theory of planned behaviour attends to. Given the established influence of social norms in Generation Z, scope for further study on possibilities of savings products and models are open.

In light of the study's findings, it is therefore pertinent to engage the question of why social influence appears to have had little effect on Generation Z participants. To then make sense of the finding on subjective norms and intention to save, the study considers the savings dynamics in South Africa. This is especially striking given the role of social and communal savings mobilisation mechanisms such as the stokvel. Stokvels are "informal savings clubs" (Ngcobo et al., 2023) in South Africa which serve to cater for people excluded from the formal financial services for various reasons. Importantly for the discussion made here, they rely on forms of collective, social and communal behavioural norms which Koenane (2019) has discussed using ubuntu as a theoretical frame. In this light, subjective norms appear to have established a salient role in the lives of South Africans in the past and yet do not appear prominent in this study. This is an area requiring further scrutiny because although savings are problematic due to poor incomes as the participants have revealed and business cycle downturns (Simleit et al., 2011), this still does not fully account for the feeble role of subjective norms among the Generation Z group.

A final remark concerning the study's result to reject the hypothesis would be to recognise that some scholars (Chen, 2016; Wang et al., 2023) have begun to identify areas where the original theory could be enhanced. Moral norms have been added by Chen (2016) to reflect the wider influences of social norms on human behaviour. Given the study finding on subjective norms and intention to save, such factors are worth considering as they pose possibly richer avenues to accept or reject the hypothesis.

6.5 Perceived behavioural control and Gen Z's intention to save

Perceived behavioural control is explained as "behavioural beliefs and subjective norms on accessible normative beliefs, perceived behavioural control is assumed to be based on accessible control beliefs" (Ajzen, 2020, p. 316). An individual ill believe that they have the capacity to conduct themselves in a given behaviour under specific constraints. This construct is goal-oriented and hints at one's self-reported position regarding perceived capability to direct oneself to an action.

The study was also interested in asserting connections between perceived behavioural control and the intention to save. The logic behind the theory of planned behaviour is that attitudes influence intention to save and similarly, one's imagined sense of control also has a bearing on one's intention and resultantly actual saving. In this subsection a

discussion of the perceived behavioural control and intention to save is presented relying on the data presented in chapter 5. The TPB argues that “perceived behavioural control is a moderating variable, affecting the degree to which attitudes and subjective norms influence intentions" (Ajzen, 2020, 317). This postulation guides the discussion here, building on the finding presented in previous chapter that the model’s coefficient of correlation was 0.27. The finding indicated that the hypothesis behavioural control significantly influences Gen Z’s actual savings could be sufficiently accounted for in the model. The t-statistic of 3.276 and p-value of 0.001 further support the statistical significance of this relationship.

The findings presented here are consistent with Tonglet et al. (2004) who examined planned behaviour among recyclers in the United Kingdom. Self-reported behavioural control is deemed influential in shaping intentions among recyclers and also among individuals in saving. Copur & Gutter (2019) highlight the importance of psychological factors in saving. One’s perception and mindset are instrumental in whether they save income or even hold a savings account in Turkey. The findings are statistically significant as were the findings in this study. The key difference, however, is that while the study at this stage discusses intended action, the study by Copur and Gutter (2019) reported on action. Considering that the behavioural control in the model is perceived and therefore self-reported, the study presents contrarian evidence compared to Asebedo et al. (2019) who find that some psychological factors have no statistical significance when tested for influence on savings. Despite different models deployed, the divergent perspectives are indicative of variable perspectives and results on how social and psychological factors influence intentions and outcomes in savings.

The focus on the behavioural dimensions to savings behaviour is however to be engaged with caution since Simleit et al. (2011) present findings which suggest that savings are influenced by macroeconomic outcomes. Economic downturns, they argue, are associated with increased savings in South Africa while periods of growth yield less savings. Hence individual behaviour might not fully account for savings intention. Moreover, Browning (2000) has previously indicated in a household set-up, the distribution of income is a key element in shaping decision to save as well as how much is saved and for what purpose. This is a dimension which was not engaged in the TPB and might warrant further scrutiny from researchers.

6.6 Perceived behavioural control and Gen Z's actual savings behaviour

The previous subsection highlighted the study's finding with respect to perceived behavioural control and savings *intention*. In this subsection, perceived behavioural control is considered in relation to actual savings. Intention is a moderator between perceived control and actual behaviour; for now the attention is on perceived behaviour and the actual behaviour. This is a more direct interaction. Perhaps unsurprisingly therefore, the model's coefficient of correlation was 0.80, which was the most marked effect on savings behaviour.

Joubert & Van Der Merwe (2021) have argued that in South Africa, savings have been on a decline for years. Moreover, the decline has culminated in dissaving. The study has partly pushed back against this assertion by demonstrating that Generation Z members are involved in behaviours which result in actual savings. While the behaviour certainly does not reflect on savings volumes, it nonetheless highlights that people are actively engaged in behaviours which culminate in savings.

The model which informs this study's analytical frames and guides the discussion suggests that an individuals' perceived ability to control themselves has an influence on the behaviour outcome that they seek. With respect to savings, this would suggest that one's perceived ability to control themselves to save, will influence one's actual savings behaviour way a person believes that they are able to control themselves then that holds heavy bearing on savings. This suggests a positive relationship between the two. Importantly, the relationship between perceived behavioural control and actual savings is indirect and also direct. It is direct in the sense that perceived control can affect savings activity while as discussed in the previous subsection, perception can also affect savings intention which then affects actual behaviour.

The study's question is principally interested in actual savings of Generation Z members. As such, the finding made is consistent with findings of other studies such as Satsios and Hadjidakis, (2018), Wang et al. (2023) and Elango and Ajah (2023) is encouraging. The insights are also worth engaging in detail as they apply to Generation Z. Generation Z members have been recognised by some researchers as unique for their knowledgeability and sensitivity to various issues (Gabrielova & Buchko, 2021; Seemiller & Grace, 2019). While this is known, besides their financial literacy including of savings (Pangestu & Karnadi, 2020), their savings behaviour in connection to their financial knowledge has until now been a sparsely attended area. In this section, the report has

gone further to reveal that besides knowledge and possible action, the members demonstrate behaviours that actually lead to positive action. They are therefore not just engaged in the abstract familiarity with things but actively engage towards an outcome.

The model which informs this study's analytical frames and guides the discussion suggests that an individuals' perceived ability to control themselves has an influence on the behaviour outcome that they seek. With respect to savings, this would suggest that one's perceived ability to control themselves to save, will influence one's actual savings behaviour way a person believes that they are able to control themselves then that holds heavy bearing on savings. This suggests a positive relationship between the two. Importantly, the relationship between perceived behavioural control and actual savings is indirect and also direct. It is direct in the sense that perceived control can affect savings activity while as discussed in the previous subsection, perception can also affect savings intention which then affects actual behaviour.

6.7 Gen Z's' intention to save and their actual saving behaviour

According to Ajzen (1991), "behavioural intentions are assumed to capture the motivational factors that influence behaviour" (p. 181). In other words, an individual's intention to perform a behaviour reflects their motivation and willingness to engage in that behaviour.

Our study revealed a noteworthy finding about the association between intention and actual saving activity among Generation Z adults in South Africa. Surprisingly, we saw a little beneficial impact of intention on actual saving conduct. The coefficient of 0.009 suggests a statistically significant positive association between individuals' intention and their savings conduct. Nevertheless, the obtained t-statistic of 0.109 and the somewhat high p-value of 0.914 indicate that the observed association lacks statistical significance. The findings of this study indicate that although intention may have influence on the formation of saving conduct, it may not be the exclusive factor determining such activity.

Hassan et al. (2016) suggests that there is a scarcity of research investigating the phenomenon known as the intention-behaviour gap. Carrington et al. (2010) conducted an empirical investigation highlighting the insufficient comprehension among researchers regarding the intention-behaviour disparity. The researchers additionally propose that there exists a mediating role between planning and intention in influencing

behaviour. Other studies have further investigated and confirmed the mediating effect of planning (Wiedemann et al., 2009).

Cultural and societal factors may also influence the relationship between intention and actual savings behaviour among Generation Z individuals in South Africa. Certain cultural contexts may place a heightened significance on communal cohabitation and the provision of assistance to extended family members. Consequently, individuals may experience a sense of obligation to utilise their savings in order to fulfil familial duties and responsibilities. This phenomenon is explored in the study conducted by Mangoma and Wilson-Prangley (2018), who delve into the financial burdens faced by black working-class South Africans in terms of providing financial support to their families and communities. Consequently, this phenomenon has the potential to divert attention away from or hinder individual financial savings objectives, even in cases when the intention to save is present. Moreover, pressing demands on already low incomes might account for the finding. As has been identified in earlier chapter, South Africans who are middle-income earners (PICSA, 2023) and even those who are lower paid (Reyers, 2019) hardly have much left available five days after receiving their salaries. This could imply very little left for savings let alone for sustenance in the remainder of the month.

While the Theory of Planned Behaviour suggests that intention is a strong predictor of actual behaviour, there are various reasons within the South African context where intention may not significantly influence the savings behaviour of Generation Z. The current economic climate, interest rates, limited job opportunities, and cultural influences all play a role in hindering the translation of intentions into actual savings behaviour. These factors underline the importance of considering contextual factors when examining the relationship between intention and behaviour.

6.8 Chapter Summary

In summary, the research determined that certain aspects of the theory of planned behaviour were evident in the savings behaviours of Generation Z. The findings of this study indicate that Generation Z consumers in South Africa generally possess a positive attitude towards saving, and this attitude significantly influences their intentions to engage in saving behaviours. The findings further confirm the attitude hypothesis: a positive attitude towards saving, significantly enhances Gen Z's intention to save (H1).

The study's findings indicate that subjective norms have a limited impact on the intention of Generation Z individuals to engage in saving behaviours. The subjective norm hypothesis is therefore rejected by the study: subjective norms have a large and positive influence on Gen Z's intention to save (H2). Nevertheless, the implications of this finding could have substantial consequences for financial institutions, politicians, and marketers. These will be discussed in detail in the subsequent chapter.

The research conducted in this study revealed a positive correlation between perceived behavioural control and both intention and actual savings behaviour, which is consistent with other studies on this particular construct. The study thus confirms the validity of the PCB hypotheses: Perceived behavioural control significantly influences Gen Z's intention to save (H3), and Perceived behavioural control significantly influences Gen Z's actual savings behaviour (H4).

The findings of this study indicated that the impact of intention on individuals' savings behaviour is constrained, underscoring the importance of contextual influences in understanding this result. Consequently, the investigation rejects the proposed hypothesis: A positive correlation exists between Gen Z's' intention to save and their actual saving behaviour (H5). The subsequent chapter provides a more comprehensive analysis of recommendations and potential areas of further research pertaining to the phenomenon known as the intention-behaviour gap.

The following chapter contains conclusions and recommendations that address some of the potential paths for future research into such concerns.

Chapter 7: Conclusions, Recommendations, and Limitations

7.1 Introduction

The study has engaged the antecedents of savings behaviour among Generation Z members. Departing from the TPB of Ajzen (1991), the study undertook to understand the interrelationships between the constructs of the theory: attitudes, subjective norms, perceived behavioural control and intention. Based on a sample of 147 participants based in Pretoria, the study tested five hypotheses which were as follows:

> ***H1*****:** A positive attitude towards saving, significantly enhances Gen Z's intention to save.
>
> ***H2:*** *Subjective norms significantly and positively influence Gen Z's intention to save.*
>
> ***H3*****:** Perceived behavioural control significantly influences Gen Z's intention to save.
>
> ***H4*****:** Perceived behavioural control significantly influences Gen Z's actual savings behaviour.
>
> ***H5*****:** A positive correlation exists between Gen Z's' intention to save and their actual saving behaviour.

7.2 Conclusions

The conclusions offered in this paper address the empirical contributions and theoretical implications of the investigation.

7.2.1 Contributing to empirical findings in South Africa

One of the contributions made in the study relates to establishing empirical data on savings among Generation Z members in South Africa. Although research has previously been conducted on savings in South Africa from multiple perspectives, the focus had until now been on other socio-demographic groups such as racial groupings. While these findings were beneficial, the now-adult Generation Z deserved more attention due to

their distinct characteristics, such as being more aware of broad social concerns and accepting of diversity.

Importantly, as a generation which has known a world connected by technology and the internet, the generation's attitudes, behaviours and actions are considered to be different to previous generations. This then draws attention to such practices as savings. Through this study, the imagined differences have been dispelled with regards to savings.

Joubert and Van Der Merwe (2021) have made recent contributions to the literature on household savings in South Africa. Their study focused on savings flow and savings stock of households between 1995 and 2018. The focus is predominantly on the patterns of actual action and not the behaviours in the process of saving. The current study has augmented to the perspectives through which savings in South Africa can be understood by contributing to the behavioural dimension.

In considering the status of a generation using theory of planned behaviour, the study has also added value to the knowledge on financial literacy (although this study's findings are based on self-perceptions) and its behavioural influence. This is an area which Matemane (2018) has engaged, also focusing on a select demographic in South Africa. While his research was interested in a historically marginalised group in Black South Africans, the study here has revealed that behaviour around savings cuts across racial lines and more importantly showed through a profile of Generation Z that they are a generation under immense financial strain. Many earn low levels of income on a regular basis and therefore hardly manage to save despite knowing that savings is a good habit with beneficial outcomes later in life.

7.2.2 Contribution to theory in general

The theory of planned behaviour has proven its relevance over the years despite a raft of critique. In testing the theory on Generation Z members based in Tshwane, South Africa, the study has contributed to affirming the theory as valid for the context. It has also added a layer to the theory by highlighting how generational characteristics do not appear to cause a shift in planned behaviour with specific focus on savings as a planned behaviour. The literature is vast with scholars who have tested the theory of planned behaviour using various moderators (Djafarova & Foots, 2022; Du & Pan, 2021; Gao et al., 2017; Hagger et al., 2022; Satsios & Hadjidakis, 2018, 2018) and in much of what is established, there is hardly any refutation.

7.3 Recommendations

The brief sections below provide recommendations for various actors. It responds to the question that all researchers arrive at when a research project comes to an end –if ever it does–: *quo vadimus*? Where do "we" go? What next from here? The response is availed in the form of recommendations directed at researchers, corporates, and policymakers.

7.3.1 For researchers

The first area where recommendations are made for future research is in attending to a much broader area than Gauteng. A more incisive perspective of the savings behaviours of Generation Z members could benefit from a much broader study which, in the case of South Africa, could extend beyond Tshwane and Gauteng. Although Gauteng is an economic hub, it does not represent the demographic diversity of South African youths and most certainly does not comprise of a typical income profile of South Africa's Generation Z which is located in urban, peri-urban, and rural areas. Tshwane as a largely urban area excludes some members.

Future research could also benefit from a more positivist approach to allow for generalisation of findings. The sampling approach deployed in the study was not probability-based and so implied that generalisations could not be made on findings made.

Also related to methodological matters, future research could move away from self-reports for data such as knowledge about savings, adopting observations instead. As some of the meta-evaluations of the literature identified by Xiao (2008) have stated, self-reports are not a reliable information source.

The chosen theoretical framework approaches the question of behaviour and outcomes from set perspectives with clear parameters. These are however not the only dynamics which play out in human behaviour as many behavioural theories demonstrate. Future research could therefore deploy different theoretical frames on the same generational cohort to establish consistency of behaviours in findings made. Where differences are found, more scrutiny could then be made to better understand how Generation Z members behave within specified contexts.

7.3.2 For corporates

Businesses seek to extract value in the form of profit from their market. Such profits rely on well-paid markets where incomes are decent, and consumers have disposable

income. The study has revealed that incomes are mostly low among studied participants and savings behaviour is mixed. Corporates could do well to engage generations on the terms peculiar to each group. Among Generation Z members, this could include recognition of their existence on the income margins while holding admirable attitudes which suggest financial awareness and responsibility. Understanding the demographic group and offering products and services which are tailored for their circumstances is anticipated to yield value for corporates while ensuring the generation's members are not thrust into further strain.

7.3.3 Policymakers and government

For government and policymakers, a very worrying profile has been presented which is concerning for the economic prospects of a generation. Consistent with the widely observed youth unemployment and income precarity, the study has noted that Generation Z participants in Tshwane largely earned paltry incomes which then affected their ability to save. Given the established importance of savings for economic growth and even household security, the small sample's profile suggests that there could be a serious cause for concern and need for intervention to avert what could be a disastrous outcome ahead. The last outcome that any government would want is to have youths on income grants as one participant indicated to rely on.

References

Abrahamse, W., & Steg, L. (2009). How do socio-demographic and psychological factors relate to households' direct and indirect energy use and savings? *Journal of Economic Psychology*, *30*(5), 711–720. https://doi.org/10.1016/j.joep.2009.05.006

African Development Bank. (2013). Financial Inclusion in Africa. In *African Development Bank*. https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Financial_Inclusion_in_Africa.pdf

Aghion, P., Comin, D., Howitt, P., & Tecu, I. (2016). When Does Domestic Savings Matter for Economic Growth? *IMF Economic Review*, *64*(3), 381–407. https://doi.org/10.1057/imfer.2015.41

Ajzen, I. (1985). From Intentions to Actions: A Theory of Planned Behavior. *Action Control*, *1*(1), 11–39. https://doi.org/10.1007/978-3-642-69746-3_2

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, *32*(4), 665–683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.x

Ajzen, I. (2006). *Constructing a Theory of Planned Behavior Questionnaire*. https://people.umass.edu/~aizen/pdf/tpb.measurement.pdf

Ajzen, I. (2011). The Theory of Planned Behaviour: Reactions and Reflections. *Psychology & Health*, *26*(9), 1113–1127. https://doi.org/10.1080/08870446.2011.613995

Ajzen, I. (2014). The Theory of Planned Behaviour is alive and well, and not ready to retire. *Health Psychology Review*, *9*(2), 131–137. https://doi.org/10.1080/17437199.2014.883474

Ajzen, I. (2015). Consumer attitudes and behavior: the theory of planned behavior applied to food consumption decisions. *Rivista Di Economia Agraria*, *70*(2), 121–138. https://doi.org/10.13128/REA-18003

Ajzen, I. (2019). *TPB Questionnaire Construction - Constructing a theory of planned behavior questionnaire*. https://people.umass.edu/aizen/pdf/tpb.measurement.pdf

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, *2*(4), 314–324. https://doi.org/10.1002/hbe2.195

Ajzen, I., & Fishbein, M. (2009). *Predicting and Changing Behavior: The Reasoned Action Approach* (1st ed., Vol. 1). Taylor & Francis Group.

Ajzen, I., Fishbein, M., Lohmann, S., & Albarracín, D. (2018). *The Handbook of Attitudes* (2nd ed., Vol. 1). Routledge, Taylor & Francis Group. https://people.umass.edu/aizen/pubs/aonb.pdf

Ajzen, I., Reinecke, J., & Schmidt, P. (1996). Application of the Theory of Planned Behavior to Adolescents' Condom Use: A Panel Study1. *Journal of Applied Social Psychology*, *26*(9), 749–772. https://doi.org/10.1111/j.1559-1816.1996.tb01128.x

Ajzen, I., & Schmidt, P. (2020). *Changing Behavior Using the Theory of Planned Behavior* (K. Hamilton, L. D. Cameron, M. S. Hagger, N. Hankonen, & T. Lintunen, Eds.). Cambridge University Press; Cambridge University Press. https://www.cambridge.org/core/books/abs/handbook-of-behavior-change/changing-behavior-using-the-theory-of-planned-behavior/BB87E67D7E443C718DE4BFA0EA9356DE

Akhtar, F., & Das, N. (2019). Predictors of investment intention in Indian stock markets. *International Journal of Bank Marketing*, *37*(1), 97–119. https://doi.org/10.1108/ijbm-08-2017-0167

Albarracin, D., & Johnson, B. T. (2014). *The handbook of attitudes. Volume 1, Basic principles*. Routledge. file:///C:/Users/Lmathenje/Downloads/9781410612823_previewpdf.pdf

Allen, F., Demirguc-Kunt, A., Klapper, L., & Martinez Peria, M. S. (2016). The foundations of financial inclusion: Understanding ownership and use of formal accounts. *Journal of Financial Intermediation*, *27*, 1–30. https://doi.org/10.1016/j.jfi.2015.12.003

Alvarez-Cuadrado, F., & El-Attar Vilalta, M. (2018). Income Inequality and Saving. *Oxford Bulletin of Economics and Statistics*, *80*(6), 1029–1061. https://doi.org/10.1111/obes.12236

Alvarez-Cuadrado, F., & Van Long, N. (2011). The relative income hypothesis. *Journal of Economic Dynamics and Control*, *35*(9), 1489–1501. https://doi.org/10.1016/j.jedc.2011.03.012

Angus Deaton. (2018). *The analysis of household surveys : a microeconometric approach to development policy* (a, pp. 335–474). World Bank Publications.

Armitage, C. J., & Christian, J. (2003). From Attitudes to behaviour: Basic and Applied Research on the Theory of Planned Behaviour. *Current Psychology*, *22*(3), 187–195. https://doi.org/10.1007/s12144-003-1015-5

Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: a meta-analytic Review. *British Journal of Social Psychology*, *40*(4), 471–499. https://doi.org/10.1348/014466601164939

Asebedo, S. D., Wilmarth, M. J., Seay, M. C., Archuleta, K., Brase, G. L., & MacDonald, M. (2018). Personality and Saving Behavior Among Older Adults.

Journal of Consumer Affairs, *53*(2), 488–519. https://doi.org/10.1111/joca.12199

Attanasio, O., & Banks, J. (2001). The Assessment: Household Saving - Issues in Theory and Policy. *Oxford Review of Economic Policy*, *17*(1), 1–19. https://doi.org/10.1093/oxrep/17.1.1

Babbie, E. R. (2016). *Practice of social research* (14th ed.). Cengage Learning.

Babbie, E. R. (2018). *Basics Of Social Research.* Cengage Learning.

Baiardi, D., Magnani, M., & Menegatti, M. (2019). The theory of precautionary saving: an overview of recent developments. *Review of Economics of the Household*, *18*(2), 513–542. https://doi.org/10.1007/s11150-019-09460-3

Bala, J. (2016). Contribution of SPSS in Social Sciences Research. *International Journal of Advanced Research in Computer Science*, *7*.

BBC News. (2022, May 17). How Gen Z is hooked on cryptocurrency and NFTs. *BBC News*. https://www.bbc.com/news/business-60566575

Bell, E., Bryman, A., & Harley, B. (2019). *Business Research Methods* (5th ed.). Oxford University Press.

Bizcommunity. (2022, May). *Gen Z are the hottest new audience*. Bizcommunity. https://www.bizcommunity.com/Article/196/347/227548.html#

Bophela, M. J. K., & Khumalo, N. (2019). The role of stokvels in South Africa: a case of economic transformation of a municipality. *Problems and Perspectives in Management*, *17*(4), 26–37. https://doi.org/10.21511/ppm.17(4).2019.03

Börsch-Supan, A., & Stahl, K. (1991). Life cycle savings and consumption constraints. *Journal of Population Economics*, *4*(3), 233–255. https://doi.org/10.1007/bf00602431

Brace, I. (2018). *Questionnaire design : how to plan, structure and write survey material for effective market research* (4th ed.). Kogan Page.

Bristow, J. (2020). Post-Brexit Boomer blaming: The contradictions of generational grievance. *The Sociological Review*, *69*(4), 003802611989988. https://doi.org/10.1177/0038026119899882

Browning, M., & Lusardi, A. (1996). Household Saving: Micro Theories and Micro Facts. *Journal of Economic Literature*, *34*(4), 1797–1855. https://www.jstor.org/stable/2729595

Brüggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research*, *79*, 228–237. https://doi.org/10.1016/j.jbusres.2017.03.013

Bryman, A. (2016). *Social Research Methods* (5th ed.). Oxford University Press.

Carlin, B., Olafsson, A., & Pagel, M. (2019). Generational Differences in Managing Personal Finances. *AEA Papers and Proceedings*, *109*, 54–59. https://doi.org/10.1257/pandp.20191011

Carroll, C. D. (1996, October 1). Buffer-Stock Saving and the Life Cycle/Permanent Income Hypothesis. *NBER Working Paper Series*. https://doi.org/10.3386/w5788

Carroll, C. D., Overland, J., & Weil, D. N. (2000). Saving and Growth with Habit Formation. *American Economic Review*, *90*(3), 341–355. https://doi.org/10.1257/aer.90.3.341

Carroll, C. D., Rhee, B.-K. ., & Rhee, C. (1994). Are There Cultural Effects on Saving? Some Cross-Sectional Evidence. *The Quarterly Journal of Economics*, *109*(3), 685–699. https://doi.org/10.2307/2118418

Cesaratto, S. (1999). Savings and Economic Growth in Neoclassical Theory. *Cambridge Journal of Economics*, *23*(6), 771–793. https://econpapers.repec.org/article/oupcambje/v_3a23_3ay_3a1999_3ai_3a6_3ap_3a771-93.htm

Chen, M.-F. (2016). Extending the theory of planned behavior model to explain people's energy savings and carbon reduction behavioral intentions to mitigate climate change in Taiwan–moral obligation matters. *Journal of Cleaner Production*, *112*, 1746–1753. https://doi.org/10.1016/j.jclepro.2015.07.043

Chipote, P., & Tsegaye, A. (2014). Determinants of Household Savings in South Africa: An Econometric Approach (1990-2011). *Mediterranean Journal of Social Sciences*, *5*(15). https://doi.org/10.5901/mjss.2014.v5n15p183

Collins, C. S., & Stockton, C. M. (2018). The Central Role of Theory in Qualitative Research. *International Journal of Qualitative Methods*, *17*(1), 1–10. Sagepub. https://doi.org/10.1177/1609406918797475

Conner, M. (2014). Extending not retiring the theory of planned behaviour: a commentary on Sniehotta, Presseau and Araújo-Soares. *Health Psychology Review*, *9*(2), 141–145. https://doi.org/10.1080/17437199.2014.899060

Conner, M., & Armitage, C. J. (1998). Extending the Theory of Planned Behavior: A Review and Avenues for Further Research. *Journal of Applied Social Psychology*, *28*(15), 1429–1464. https://doi.org/10.1111/j.1559-1816.1998.tb01685.x

Conner, M., Godin, G., & Sheeran, P. (2005). Bridging the intention-behaviour gap: The role of moral norm. *British Journal of Social Psychology*, *44*(4), 497–512. https://doi.org/10.1348/014466604x17452

Cooke, R., Dahdah, M., Norman, P., & French, D. P. (2014). How well does the theory of planned behaviour predict alcohol consumption? A systematic review and meta-analysis. *Health Psychology Review*, *10*(2), 148–167. https://doi.org/10.1080/17437199.2014.947547

Cooper, D. R., & Schindler, P. S. (2014). *Business research methods* (12th ed.). Mcgraw-Hill Education.

Copur, Z., & Gutter, M. S. (2019). Economic, Sociological, and Psychological Factors of the Saving Behavior: Turkey Case. *Journal of Family and Economic Issues*, *40*(2), 305–322. https://doi.org/10.1007/s10834-018-09606-y

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and Mixed Methods Approaches* (5th ed.). SAGE Publications.

Davis, L. E., Ajzen, I., Saunders, J., & Williams, T. (2002). The decision of African American students to complete high school: An application of the theory of planned behavior. *Journal of Educational Psychology*, *94*(4), 810–819. https://doi.org/10.1037/0022-0663.94.4.810

de Barcellos, M. D., Krystallis, A., de Melo Saab, M. S., Kügler, J. O., & Grunert, K. G. (2011). Investigating the gap between citizens' sustainability attitudes and food purchasing behaviour: empirical evidence from Brazilian pork consumers. *International Journal of Consumer Studies*, *35*(4), 391–402. https://doi.org/10.1111/j.1470-6431.2010.00978.x

Deaton, A. (2005, March 1). *Franco Modigliani and the Life Cycle Theory of Consumption*. Papers.ssrn.com. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=686475

Deloitte. (2019). Welcome to Generation Z. In *Deloitte*. Deloitte. https://www2.deloitte.com/content/dam/Deloitte/us/Documents/consumer-business/welcome-to-gen-z.pdf

Deloitte. (2023). The Deloitte Global 2022 Gen Z and Millennial Survey. In *Deloitte*. https://www2.deloitte.com/content/dam/Deloitte/at/Documents/human-capital/at-gen-z-millennial-survey-2022.pdf

Dholakia, U., Tam, L., Yoon, S., & Wong, N. (2016). The Ant and the Grasshopper: Understanding Personal Saving Orientation of Consumers. *Journal of Consumer Research*, *43*(1), 134–155. https://doi.org/10.1093/jcr/ucw004

Djafarova, E., & Foots, S. (2022). Exploring Ethical Consumption of Generation Z: Theory of Planned Behaviour. *Young Consumers*, *23*(3), 413–431. https://doi.org/10.1108/yc-10-2021-1405

Dolot, A. (2018). The characteristics of Generation Z. *E-Mentor*, *2*(74), 44–50. https://doi.org/10.15219/em74.1351

Du, J., & Pan, W. (2021). Examining energy saving behaviors in student dormitories using an expanded theory of planned behavior. *Habitat International*, *107*, 102308. https://doi.org/10.1016/j.habitatint.2020.102308

Duesenberry, J. S. (1949). Income Saving And The Theory Of Consumer Behavior. In *Internet Archive*. Oxford University Press. https://archive.org/details/in.ernet.dli.2015.84155/page/n7/mode/2up

Durbarry, R. (2017). Research Methods for Tourism Students. In *Google Books*. Routledge. https://books.google.com/books?hl=en&lr=&id=uFAPEAAAQBAJ&oi=fnd&pg=PP1&dq=Durbarry+(2017)&ots=N9QsGmodTS&sig=GNwNNCj1mY2Nu-7S8FB-RIupKIc

Dzene, S., & Eglīte, A. (2012). *Perspective of sustainable food consumption In Latvia*. Research for Rural Development . https://llufb.llu.lv/conference/Research-for-Rural-Development/2012/LatviaResearchRuralDev18th_volume2-210-215.pdf

Earle, A. M., Napper, L. E., LaBrie, J. W., Brooks-Russell, A., Smith, D. J., & de Rutte, J. (2019). Examining interactions within the theory of planned behavior in the prediction of intentions to engage in cannabis-related driving behaviors. *Journal of American College Health*, *68*(4), 1–7. https://doi.org/10.1080/07448481.2018.1557197

Edelman Africa. (2022, October 31). *Edelman Special Report: South African Gen Zs are becoming a central influence in political and social change*. Edelman Africa.

https://www.africa.edelman.com/research/edelman-special-report-south-african-gen-zs-are-becoming-central-influence-political-and-social

Edmondson, A. C., & Mcmanus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, *32*(4), 1155–1179. https://doi.org/10.5465/amr.2007.26586086

Elango, D., & Ajah, S. N. (2023). Factors Influencing Investment Intention Among Gen Z: The Antecedent of India. *Interdisciplinary Research Review*, *18*(3). https://ph02.tci-thaijo.org/index.php/jtir/article/view/247505

ElHaffar, G., Durif, F., & Dubé, L. (2020). Towards closing the attitude-intention-behavior gap in green consumption: A narrative review of the literature and an overview of future research directions. *Journal of Cleaner Production*, *275*(1), 122556. https://doi.org/10.1016/j.jclepro.2020.122556

Eriksson, K., & Hermansson, C. (2014). Searching for new saving behavior theories. *International Journal of Bank Marketing*, *32*(4), 279–299. https://doi.org/10.1108/IJBM-03-2014-0040

Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). SAGE Publications.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Addison-Wesley Pub. Co. https://people.umass.edu/aizen/pubs/book/ch1.pdf

Fisher, P. J., & Montalto, C. P. (2010). Effect of saving motives and horizon on saving behaviors. *Journal of Economic Psychology*, *31*(1), 92–105. https://doi.org/10.1016/j.joep.2009.11.002

Forbes. (2023, February 14). *How Financial Confidence Can Help You Build Wealth*. Forbes. https://www.forbes.com/sites/melissahouston/2023/02/14/how-financial-confidence-can-help-you-build-wealth/?sh=1747c315ee5e

Forbes Advisor. (2021, June 24). *What Is A Neobank?* Forbes Advisor. https://www.forbes.com/advisor/banking/what-is-a-neobank/

Francis, J., Eccles, M. P., Johnston, M., Walker, A. E., Grimshaw, J. M., Foy, R., Kaner, E. F. S., Smith, L., & Bonetti, D. (2004). *Constructing questionnaires based on the theory of planned behaviour: A manual for health services researchers*. Openaccess.city.ac.uk. https://openaccess.city.ac.uk/id/eprint/1735/

Friedman, M. (1957). *A Theory of the Consumption Function*. https://www.nber.org/system/files/chapters/c4405/c4405.pdf

FSCA. (2021). Financial Literacy in South Africa: Results from the 2020 Baseline Survey. In *FSCA*. https://www.fscamymoney.co.za/Research%20Documents/Financial%20Literacy%20in%20South%20Africa%20Results%20from%20the%202020%20Baseline%20Survey.pdf

FSCA. (2022). *Financial Sector Outlook Study*. FSCA. https://www.fsca.co.za/Documents/FSCA%20Financial%20Sector%20Outlook%20Study%202022.pdf

Gabrielova, K., & Buchko, A. A. (2021). Here comes Generation Z: Millennials as managers. *Business Horizons*, *64*(4), 489–499. https://doi.org/10.1016/j.bushor.2021.02.013

Gadenne, D., Sharma, B., Kerr, D., & Smith, T. (2011). The influence of consumers' environmental beliefs and attitudes on energy saving behaviours. *Energy Policy*, *39*(12), 7684–7694. https://doi.org/10.1016/j.enpol.2011.09.002

Gao, L., Wang, S., Li, J., & Li, H. (2017). Application of the extended theory of planned behavior to understand individual's energy saving behavior in workplaces. *Resources, Conservation and Recycling*, *127*, 107–113. https://doi.org/10.1016/j.resconrec.2017.08.030

Genakos, C., Roumanias, C., & Valletti, T. (2023). Is having an expert “friend” enough? An analysis of consumer switching behavior in mobile telephony. *Journal of Economic Behavior & Organization*, *213*, 359–372. https://doi.org/10.1016/j.jebo.2023.07.004

Gerhard, P., Gladstone, J. J., & Hoffmann, A. O. I. (2018). Psychological characteristics and household savings behavior: The importance of accounting for latent heterogeneity. *Journal of Economic Behavior & Organization*, *148*, 66–82. https://doi.org/10.1016/j.jebo.2018.02.013

GFLEC. (2021). Millennials’ and Gen Z’s Money Management During COVID-19: Challenges and Opportunities. In *Global Financial Literacy Excellence Center*. https://gflec.org/wp-content/uploads/2022/10/Millennials-and-Gen-Zs-Money-Management-During-COVID-19-Challenges-and-Opportunities_November_FINAL.pdf

Gillham, B. (2011). *Developing a questionnaire* (2nd ed.). Bloomsbury Academic.

Godin, G., & Kok, G. (1996). The Theory of Planned Behavior: A Review of Its Applications to Health-Related Behaviors. *American Journal of Health Promotion*, *11*(2). https://doi.org/10.4278/0890-1171-11.2.87

Gomes, F. (2020). Portfolio Choice Over the Life Cycle: A Survey. *Annual Review of Financial Economics*, *12*(1), 277–304. https://doi.org/10.1146/annurev-financial-012820-113815

Gomes, F., Haliassos, M., & Ramadorai, T. (2021). Household Finance. *Journal of Economic Literature*, *59*(3), 919–1000. https://doi.org/10.1257/jel.20201461

Graf, C., Suanet, B., Wiepking, P., & Merz, E.-M. (2023). Social norms offer explanation for inconsistent effects of incentives on prosocial behavior. *Journal of Economic Behavior & Organization*, *211*, 429–441. https://doi.org/10.1016/j.jebo.2023.05.003

Gutter, M. S., Garrison, S., & Copur, Z. (2010). Social Learning Opportunities and the Financial Behaviors of College Students. *Family and Consumer Sciences Research Journal*, *38*(4), 387–404. https://doi.org/10.1111/j.1552-3934.2010.00034.x

Gutter, M. S., Hayhoe, C. R., DeVaney, S. A., Kim, J., Bowen, C. F., Cheang, M., ... & Dorman, R. (2012). Exploring the relationship of economic, sociological, and psychological factors to the savings behavior of low-to moderate-income households. *Family and Consumer Sciences Research Journal*, *41*(1), 86-101. https://doi.org/10.1111/j.1552-3934.2012.02130.x

Hagger, M. S., Cheung, M. W.-L. ., Ajzen, I., & Hamilton, K. (2022). Perceived behavioral control moderating effects in the theory of planned behavior: A meta-analysis. *Health Psychology*, *41*(2). https://doi.org/10.1037/hea0001153

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM).* Thousand Oaks: Sage

Hair Jr., J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, *1*(2), 107. https://doi.org/10.1504/ijmda.2017.10008574

Hamilton, K., Phipps, D. J., Schmidt, P., Bamberg, S., & Ajzen, I. (2022). First test of the theory of reasoned goal pursuit: predicting physical activity. *Psychology & Health*, *38*(6), 1–18. https://doi.org/10.1080/08870446.2022.2026946

Hapsari, S. (2020). The Theory of Planned Behavior and Financial Literacy to Analyze Intention in Mutual Fund Product Investment. *Advances in Economics, Business and Management Research*, *187*, 136–141.

Harding, J. (2019). *Qualitative data analysis from start to finish* (2nd ed.). SAGE.

Hassan, L. M., Shiu, E., & Shaw, D. (2016). Who Says There is an Intention–Behaviour Gap? Assessing the Empirical Evidence of an Intention–Behaviour Gap in

Ethical Consumption. *Journal of Business Ethics*, *136*(2), 219–236. https://doi.org/10.1007/s10551-014-2440-0

Heim, E., Ajzen, I., Schmidt, P., & Seddig, D. (2017). Women's Decisions to Stay in or Leave an Abusive Relationship: Results From a Longitudinal Study in Bolivia. *Violence against Women*, *24*(14), 1639–1657. https://doi.org/10.1177/1077801217741993

Heiny, J., Ajzen, I., Leonhäuser, I.-U., & Schmidt, P. (2019). Intentions to Enhance Tourism in Private Households: Explanation and Mediated Effects of Entrepreneurial Experience. *Journal of Entrepreneurship and Innovation in Emerging Economies*, *5*(2), 128–148. https://doi.org/10.1177/2393957519858531

Hira, T. K., & Loibl, C. (2005). Understanding the impact of employer-provided financial education on workplace satisfaction. *Journal of Consumer Affairs*, *39*(1), 173–194. https://doi.org/10.1111/j.1745-6606.2005.00008.x

Howe, N., & Strauss, W. (2000). *Millennials Rising: The Next Great Generation*. Vintage Books.

Icek Ajzen. (1985). *From intentions to actions : a theory of planned behavior* (pp. 11–39). S.N.

International Labour Organization . (2016, February 24). *Financial Education in South Africa - Overview of key initiatives and actors*. Www.ilo.org; International Labour Organization . https://www.ilo.org/empent/areas/social-finance/WCMS_545803/lang--en/index.htm

Investec. (2021, August 31). *What Gen Z Expects From Their Bank?* Investec. https://www.investec.com/en_za/focus/innovation/what-does-gen-z-want-and-expect-from-banking-and-wealth-management.html

John Maynard Keynes. (1936). *The General Theory of Employment, Interest, and Money*. https://www.files.ethz.ch/isn/125515/1366_KeynesTheoryofEmployment.pdf

Joubert, F., & Van der Merwe, T. (2021). Household saving and wealth in South Africa. *South African Journal of Economic and Management Sciences*, *24*(1). https://doi.org/10.4102/sajems.v24i1.3764

Juster, F. T., & Taylor, L. D. (1975). Towards a Theory of Saving Behavior. *The American Economic Review*, *65*(2), 203–209. https://www.jstor.org/stable/pdf/1818853.pdf?refreqid=fastly-default%3Ac2da821f738ce9fccc328a29491df393&ab_segments=&origin=&initiator=&acceptTC=1

Kaiser, T., Lusardi, A., Menkhoff, L., & Urban, C. (2021). Financial Education Affects Financial Knowledge and Downstream Behaviors. *Journal of Financial Economics*, *145*(2). https://doi.org/10.1016/j.jfineco.2021.09.022

Karlan, D., Ratan, A. L., & Zinman, J. (2014). Savings by and for the Poor: A Research Review and Agenda. *Review of Income and Wealth*, *60*(1), 36–78. https://doi.org/10.1111/roiw.12101

Katona, G. (1974). Psychology and Consumer Economics. *Journal of Consumer Research*, *1*(1), 1–8. https://www.jstor.org/stable/2488948

Kgomo, T. J., & Modley, L.-A. S. (2022). Do younger generations care more about environmental issues? A comparison of perceptions between Gen Z and Gen X in Jo-hannesburg, South Africa. *South African Geographical Journal*, *105*(3), 1–20. https://doi.org/10.1080/03736245.2022.2150283

Kaur, P., Stoltzfus, J., & Yellapu, V. (2018). Descriptive Statistics. *International Journal of Academic Medicine*, *4*(1), 60–63. ResearchGate. https://doi.org/10.4103/ijam.ijam_7_18

Kisaka, S. E. (2014). The Impact of Attitudes towards Saving, Borrowing and Investment on the Capital Accumulation Process in Kenya: An Application of the Theory of Planned Behavior. *Research Journal of Finance and Accounting*, *5*(9), 140–151.

Klapper, L., Lusardi, A., & Van Oudheusden, P. (2014). *Financial Literacy Around the World: Insights from the Standard & Poor's ratings services global financial literacy survey*. https://www.cssf.lu/wp-content/uploads/S_P_Survey.pdf

Koenane, M. L. (2019). Economic development in Africa through the stokvel system: "our" indigenous way or "theirs." *Filosofia Theoretica: Journal of African Philosophy, Culture and Religions*, *8*(1), 109. https://doi.org/10.4314/ft.v8i1.8

Kojo Oseifuah, E. (2010). Financial literacy and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies*, *1*(2), 164–182. https://doi.org/10.1108/20400701011073473

Kothe, E. J., & Mullan, B. A. (2014). Interaction effects in the theory of planned behaviour: Predicting fruit and vegetable consumption in three prospective cohorts. *British Journal of Health Psychology*, *20*(3), 549–562. https://doi.org/10.1111/bjhp.12115

Krosnick, J. A. (2017). Questionnaire Design. *The Palgrave Handbook of Survey Research*, 439–455. https://doi.org/10.1007/978-3-319-54395-6_53

Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, *5*(4), 315–330. https://doi.org/10.1080/08985629300000020

La Barbera, F., & Ajzen, I. (2020). Control interactions in the theory of planned behavior: Rethinking the role of subjective norm. *Europe's Journal of Psychology*, *16*(3), 401–417. https://doi.org/10.5964/ejop.v16i3.2056

Laidler, D. (1984). The `Buffer Stock Notion in Monetary Economics. *The Economic Journal*, *94*, 17. https://doi.org/10.2307/2232652

Lappeman, J., Litkie, J., Bramdaw, S., & Quibell, A. (2019). Exploring retail orientated rotating savings and credit associations: festive season “stokvels” in South Africa. *The International Review of Retail, Distribution and Consumer Research*, *30*(3), 331–358. https://doi.org/10.1080/09593969.2019.1667853

Le, M. H., & Nguyen, P. M. (2022). Integrating the Theory of Planned Behavior and the Norm Activation Model to Investigate Organic Food Purchase Intention: Evidence from Vietnam. *Sustainability*, *14*(2), 816. https://doi.org/10.3390/su14020816

Leedy, P. D., & Jeanne Ellis Ormrod. (2016). *Practical research : planning and design*. Pearson Education Limited.

Leland, H. E. (1978). Saving And Uncertainty: The Precautionary Demand For Saving. *Elsevier EBooks*, 127–139. https://doi.org/10.1016/b978-0-12-214850-7.50014-0

Love, D. (2006). Buffer stock saving in retirement accounts. *Journal of Monetary Economics*, *53*(7), 1473–1492. https://doi.org/10.1016/j.jmoneco.2005.05.004

Lown, J. M., Kim, J., Gutter, M. S., & Hunt, A.-T. (2014). Self-efficacy and Savings Among Middle and Low Income Households. *Journal of Family and Economic Issues*, *36*(4), 491–502. https://doi.org/10.1007/s10834-014-9419-y

Lugilde, A., Bande, R., & Riveiro, D. (2019). Precautionary saving: A review of the empirical literature. *Journal of Economic Surveys*, 33(2), 481–515. https://doi.org/10.1111/joes.12284

Lusardi, A. (2008). Household Saving Behavior: The Role of Financial Literacy, Information, and Financial Education Programs. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1094102

Lusardi, A. (2019). Financial literacy and the need for Financial Education: Evidence and implications. *Swiss Journal of Economics and Statistics*, *155*(1). https://doi.org/10.1186/s41937-019-0027-5

Lusardi, A., & Mitchell, O. S. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5

Mahon, D., Cowan, C., & McCarthy, M. (2006). The role of attitudes, subjective norm, perceived control and habit in the consumption of ready meals and takeaways in great Britain. *Food Quality and Preference*, *17*(6), 474–481. https://doi.org/10.1016/j.foodqual.2005.06.001

Mangoma, A., & Wilson-Prangley, A. (2018). Black Tax: Understanding the financial transfers of the emerging black middle class. *Development Southern Africa*, *36*(4), 443–460. https://doi.org/10.1080/0376835x.2018.1516545

Manning, M. (2009). The effects of subjective norms on behaviour in the theory of planned behaviour: A meta-analysis. *British Journal of Social Psychology*, *48*(4), 649–705. https://doi.org/10.1348/014466608x393136

Martini, A., & Spataro, L. (2023). At the origins of the life cycle hypothesis of Franco Modigliani and Richard Brumberg: an attempt at analysis. *European Journal of the History of Economic Thought*, 1–34. https://doi.org/10.1080/09672567.2023.2238858

Matemane, M. R. (2018). Saving for Tomorrow: Does the Level of Financial Literacy in the South African Working Class Matter? *Southern African Business Review*, *22*. https://doi.org/10.25159/1998-8125/4443

Matraeva, L., Vasiutina, E., Belyak, A., Solodukha, P., Bondarchuk, N., & Efimova, M. (2019). Economic Model of Generation Z Behavior. *Academic Journal of Interdisciplinary Studies*, *8*(3), 123–134.

Mckinsey. (2020). Living pay cheque to pay cheque 2020 South Africa Consumer Sentiment Survey. In *Mckinsey*. https://www.mckinsey.com/za/~/media/McKinsey/Locations/Africa/South%20Afri

ca/Our%20Insights/Living%20pay%20cheque%20to%20pay%20cheque/Living-pay-cheque-to-pay-cheque.pdf

McKinsey&Company. (2018). “True Gen”: Generation Z and its implications for companies. In *McKinsey&Company*. McKinsey&Company. https://www.mckinsey.com/~/media/McKinsey/Industries/Consumer%20Packaged%20Goods/Our%20Insights/True%20Gen%20Generation%20Z%20and%20its%20implications%20for%20companies/Generation-Z-and-its-implication-for-companies.pdf

Mende, M., Salisbury, L. C., Nenkov, G. Y., & Scott, M. L. (2019). Improving Financial Inclusion through Communal Financial Orientation: How Financial Service Providers Can Better Engage Consumers in Banking Deserts. *Journal of Consumer Psychology*, *30*(2). https://doi.org/10.1002/jcpy.1103

Merrill Edge. (2019). Merrill Edge Report. In *Merrill Edge*. https://olui2.fs.ml.com/Publish/Content/application/pdf/GWMOL/Merrill_Edge_Report_Spring_2019.pdf

Modigliani , F. (1966). The Life Cycle Hypothesis Of Saving, The Demand For Wealth And The Supply Of Capital. *The Johns Hopkins University Press*, *33*(2), 160–217. https://www.jstor.org/stable/pdf/40969831.pdf?casa_token=wO8HkmWq0sYAAAA:Kvp9gmOSpgA5v-faLbc5WYHq845McgDXc6gEwV_C3YtUHy8JTYrDFKyuGH30xXAMutgyq2v_ZjoauiYmaBznfw5vVNpGC2uSHB-L_aeul8cWG7RKZoZc

Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: an interpretation of cross-section data. *Kenneth K. Kurihara, Ed., PostKeynesian Economics,* 388–436. New Brunswick, NJ. Rutgers University Press.

Modigliani, F., & Cao, S. L. (2004). The Chinese Saving Puzzle and the Life-Cycle Hypothesis. *Journal of Economic Literature*, *42*(1), 145–170.

Mongale, I. P., Mukuddem-Petersen, J., Petersen, M. A., & Meniago, C. (2013). Household Savings in South Africa: An Econometric Analysis. *Mediterranean Journal of Social Sciences*, *4*(13). https://doi.org/10.5901/mjss.2013.v4n13p519

National Endowment for Financial Education . (2020). Annual Report. In *National Endowment for Financial Education*. https://www.nefe.org/impact/NEFE-Annual-Report-2020.pdf

National Treasury. (2020). Financial Inclusion Policy. In *www.treasury.gov.za*. https://www.treasury.gov.za/comm_media/press/2020/Financial%20Inclusion%20Policy%20-%20An%20Inclusive%20Financial%20Sector%20For%20All.pdf

National Treasury. (2021, December 14). *Encouraging South African households to save more for retirement* . Www.treasury.gov.za. https://www.treasury.gov.za/comm_media/press/2021/2021121401%20Two-pot%20system%20retirement%20proposal%20and%20auto%20enrolment.pdf

Nayak, J. K., & Singh, P. (2016). *Fundamentals of research methodology : Problems and Prospects*. Ssdn Publishers & Distributors.

Ngcobo, L., Joseph, J. C., & MaseTshaba, M. T. (2023). Stokvel saving and banking sector liquidity in South Africa: cointegration and short-run dynamics. *International Journal of Research in Business and Social Science (2147- 4478)*, *12*(7), 263–270. https://doi.org/10.20525/ijrbs.v12i7.2850

Norman, P., Conner, M., & Bell, R. (1999). The theory of planned behavior and smoking cessation. *Health Psychology*, *18*(1), 89–94. https://doi.org/10.1037/0278-6133.18.1.89

News24. 'FNB Says Middle-Income Consumers Spend up to 80% of Monthly Salary in 5 Days'. *News24: Trusted News, First* (blog), 17 May 2022. https://www.news24.com/news24/community-newspaper/pe-express/fnb-says-middle-income-consumers-spend-up-to-80-percent-of-monthly-salary-in-5-days--20220517.

Norman, P., & Smith, L. (1995). The theory of planned behaviour and exercise: An investigation into the role of prior behaviour, behavioural intentions and attitude

variability. *European Journal of Social Psychology*, *25*(4), 403–415. https://doi.org/10.1002/ejsp.2420250405

Norum, P. S. (2003). Examination of Generational Differences in Household Apparel Expenditures. *Family and Consumer Sciences Research Journal*, *32*(1), 52–75. https://doi.org/10.1177/1077727x03255901

Norvilitis, J. M., Merwin, M. M., Osberg, T. M., Roehling, P. V., Young, P., & Kamas, M. M. (2006). Personality Factors, Money Attitudes, Financial Knowledge, and Credit-Card Debt in College Students1. *Journal of Applied Social Psychology*, *36*(6), 1395–1413. https://doi.org/10.1111/j.0021-9029.2006.00065.x

OECD. (2021). Report on Lessons Learnt and Effective Approaches to Protect Consumers and Support Financial Inclusion in the Context of COVID-19. In *Organisation for Economic Co-operation and Development*. https://www.oecd.org/daf/fin/financial-education/G20-OECD-report-on-financial-consumer-protection-and-financial-inclusion-in-the-context-of-covid-19.pdf

Osch, L., Reubsaet, A., Lechner, L., Beenackers, M., Candel, M., & Vries, H. (2010). Planning health behaviour change: Comparing the behavioural influence of two types of self-regulatory planning. *British Journal of Health Psychology*, *15*(1), 133–149. https://doi.org/10.1348/135910709x436723

Oseifuah, E. K. (2014). Analysis of the Level of Financial Literacy among South African Undergraduate Students. *Journal of Economics and Behavioral Studies*, *6*(3), 242–250. https://doi.org/10.22610/jebs.v6i3.487

Owusu, G. M. Y., Kwakye, T. O., & Duah, H. (2023). The propensity towards indebtedness and savings behaviour of undergraduate students: The moderating role of financial literacy. *Journal of Applied Research in Higher Education*. Emerald Publishing Limited. https://doi.org/10.1108/JARHE-11-2022-0340

Pangestu, S., & Karnadi, E. B. (2020). The effects of financial literacy and materialism on the savings decision of generation Z Indonesians. *Cogent Business & Management*, *7*(1). https://doi.org/10.1080/23311975.2020.1743618

Park, J., & Ha, S. (2014). Understanding Consumer Recycling Behavior: Combining the Theory of Planned Behavior and the Norm Activation Model. *Family and Consumer Sciences Research Journal*, *42*(3), 278–291. https://doi.org/10.1111/fcsr.12061

Pew Research Center. (2018, May 31). *Teens, social media & technology 2018*. Pew Research Center. https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/

Pew Research Center. (2020, May 14). *What We Know About Gen Z So Far*. Pew Research Center; Pew Research Center. https://www.pewresearch.org/social-trends/2020/05/14/on-the-cusp-of-adulthood-and-facing-an-uncertain-future-what-we-know-about-gen-z-so-far-2/

PICSA. (2023). 'Supporting Low-Incoome Workers: National Savings Month and How Employers Can Help'. *PICSA* (blog), 17 July 2023. https://www.picsa.com/blog/tag/workplace+savings+programs.

Qalati, S. A., Ostic, D., Sulaiman, M. A. B. A., Gopang, A. A., & Khan, A. (2022). Social Media and SMEs' Performance in Developing Countries: Effects of Technological-Organizational-Environmental Factors on the Adoption of Social Media. *SAGE Open*, *12*(2), 215824402210945. https://doi.org/10.1177/21582440221094594

Quintal, V. A., Lee, J. A., & Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behavior: A tourism example. *Tourism Management*, *31*(6), 797–805. https://doi.org/10.1016/j.tourman.2009.08.006

Reyers, M. (2019). Financial capability and emergency savings among South Africans living above and below the poverty line. *International Journal of Consumer Studies*, 43(4), 335–347. https://doi.org/10.1111/ijcs.12520

Rhodes, R., & Courneya, K. (2003). Modelling the theory of planned behaviour and past behaviour. *Psychology, Health & Medicine*, *8*(1), 57–69. https://doi.org/10.1080/1354850021000059269

Robichaud, Z., & Yu, H. (2021). Do young consumers care about ethical consumption? Modelling Gen Z's purchase intention towards fair trade coffee. *British Food Journal*, *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/bfj-05-2021-0536

Rosenzweig, M. R. (2001). Savings behaviour in low-income countries. *Oxford Review of Economic Policy*, *17*(1), 40–54. https://doi.org/10.1093/oxrep/17.1.40

Rothschild, M., & Stiglitz, J. E. (1970). Increasing risk: I. A definition. *Journal of Economic Theory*, *2*(3), 225–243. https://doi.org/10.1016/0022-0531(70)90038-4

Roy, S., & Ayalon, L. (2023). Measurement Development and Validation to Capture Perceptions of Younger People's Climate Action: An Opportunity for Intergenerational Collaboration and Dialogue. *Journal of Intergenerational Relationships*, 1–15. https://doi.org/10.1080/15350770.2023.2205846

Ruefenacht, M., Schlager, T., Maas, P., & Puustinen, P. (2015). Drivers of long-term savings behavior from the consumers' perspective. *International Journal of Bank Marketing*, *33*(7), 922–943. https://doi.org/10.1108/ijbm-11-2014-0168

Ryen, A. (2010). Ethics and Qualitative Research. In D. Silverman (Ed.), *Qualitative Research* (3rd ed., pp. 416–438). SAGE.

Salonen, A. O., & Åhlberg, M. K. (2012). The Path towards Planetary Responsibility - Expanding the Domain of Human Responsibility Is a Fundamental Goal for Lifelong Learning in a High-Consumption Society. *Journal of Sustainable Development*, *5*(8). https://doi.org/10.5539/jsd.v5n8p13

Salotti, S. (2010). Global imbalances and household savings: The role of wealth. *The Social Science Journal*, *47*(1), 21–44. https://doi.org/10.1016/j.soscij.2009.07.004

Satsios, N., & Hadjidakis, S. (2018). Applying the Theory of Planned Behaviour (TPB) in Saving Behaviour of Pomak Households. *International Journal of Financial Research*, *9*(2), 122. https://doi.org/10.5430/ijfr.v9n2p122

Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th ed.). Pearson.

Saville, A., Firth, K., & Madinginye, T. (2015). Investec GIBS Savings Index. In *Gibs.co.za*. https://www.gibs.co.za/about-us/faculty/documents/whitepapers/saville_investec%20gibs%20savings%20index_2014.pdf

Saville, A., & Macleod, I. (2019a). A path to prosperity for South Africa. In *Gibs.co.za*. https://www.gibs.co.za/about-us/faculty/documents/whitepapers/saville_investec%20gibs%20savings%20index_2019.pdf

Schmidt, P., Gordoni, G., Ajzen, I., Beuthner, C., Davidov, E., Silber, H., Steinmetz, H., & Weiß, B. (2022). Twitter Users' Privacy Behavior: A Reasoned Action Approach. *Social Media + Society*, *8*(3), 205630512211260. https://doi.org/10.1177/20563051221126085

Schwartz, S. H. (1977, January 1). *Normative Influences on Altruism* (L. Berkowitz, Ed.). ScienceDirect; Academic Press. https://www.sciencedirect.com/science/article/abs/pii/S0065260108603585

Schwarzer, R. (2008). Modeling Health Behavior Change: How to Predict and Modify the Adoption and Maintenance of Health Behaviors. *Applied Psychology*, *57*(1), 1–29. https://doi.org/10.1111/j.1464-0597.2007.00325.x

Seemiller, C., & Grace, M. (2019). *Generation Z: A Century in the Making* (First). Routledge: Taylor & Francis Group.

Setiawan, M., Effendi, N., Santoso, T., Dewi, V. I., & Sapulette, M. S. (2020). Digital financial literacy, current behavior of saving and spending and its future

foresight. *Economics of Innovation and New Technology*, *31*(4), 1–19. https://doi.org/10.1080/10438599.2020.1799142

Sheeran, P. (2002). Intention—Behavior Relations: A Conceptual and Empirical Review. *European Review of Social Psychology*, *12*(1), 1–36. https://doi.org/10.1080/14792772143000003

Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology*, *30*(6), 708–723. https://doi.org/10.1016/j.appdev.2009.02.003

Si, H., Shi, J., Tang, D., Wu, G., & Lan, J. (2020). Understanding intention and behavior toward sustainable usage of bike sharing by extending the theory of planned behavior. *Resources, Conservation and Recycling*, *152*, 104513. https://doi.org/10.1016/j.resconrec.2019.104513

Simleit, C., Keeton, G., & Botha, F. (2011). The determinants of household savings in South Africa. *Studies in Economics and Econometrics*, *35*(3), 1-20.

Simons-Morton, B., Chen, R., Abroms, L., & Haynie, D. L. (2004). Latent Growth Curve Analyses of Peer and Parent Influences on Smoking Progression Among Early Adolescents. *Health Psychology*, *23*(6), 612–621. https://doi.org/10.1037/0278-6133.23.6.612

Sniehotta, F. F., Presseau, J., & Araújo-Soares, V. (2014). Time to retire the theory of planned behaviour. *Health Psychology Review*, *8*(1), 1–7. https://doi.org/10.1080/17437199.2013.869710

Social Research and Demonstration Corporation. (2016). The link between financial confidence and financial outcomes among working-aged Canadians. In *Social Research and Demonstration Corporation*. https://www.srdc.org/media/199920/fcac-full-report-on-financial-confidence-en.pdf

Sok, J., Borges, J. R., Schmidt, P., & Ajzen, I. (2020). Farmer Behaviour as Reasoned Action: A Critical Review of Research with the Theory of Planned Behaviour. *Journal of Agricultural Economics*, *72*(2). https://doi.org/10.1111/1477-9552.12408

Sopra Banking Software. (2020, August 10). *Generation Z: Preparing for a new dawn in banking*. Sopra Banking Software | Banking & Financing Platforms. https://www.soprabanking.com/insights/generation-z-preparing-for-a-new-dawn-in-banking/

South African National Treasury. (2021, December 14). *Encouraging South African households to save more for retirement*. Www.treasury.gov.za; South African National Treasury. https://www.treasury.gov.za/comm_media/press/2021/2021121401%20Two-pot%20system%20retirement%20proposal%20and%20auto%20enrolment.pdf

South African Reserve Bank. (2023a). *Key Statistics : Gross saving as % of GDP*. Www.resbank.co.za. https://www.resbank.co.za/en/home/what-we-do/statistics/key-statistics

South African Reserve Bank. (2023b). Quarterly Bulletin. In *South African Reserve Bank* (p. 21). https://www.resbank.co.za/content/dam/sarb/publications/quarterly-bulletins/quarterly-bulletin-publications/2023/june/01Full%20Quarterly%20Bulletin.pdf

South African Savings Institute. (2020, April 22). *Can South Africans save for a rainy day?* South African Savings Institute. https://savingsinstitute.co.za/can-south-africans-save-for-a-rainy-day/

Staal, K. (2023). Household Savings and Negative Interest Rates. *International Advances in Economic Research*, *29*(1-2), 1–13. https://doi.org/10.1007/s11294-023-09870-1

Stanlib. (2020). Savings Report. In *Stanlib*. https://stanlib.com/Documents/STANLIB_Savings-Month-Report_20July2020.pdf

Statistics How To. (2023). *Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy*. Statistics How To. https://www.statisticshowto.com/kaiser-meyer-olkin/#What%20Is%20The%20Kaiser-Meyer-Olkin%20(KMO)%20Test?

StatsSA. (2011). *City of Tshwane*. Statssa.gov.za. https://www.statssa.gov.za/?page_id=993&id=city-of-tshwane-municipality

Stern, P. C. (2000). New Environmental Theories: Toward a Coherent Theory of Environmentally Significant Behavior. *Journal of Social Issues*, *56*(3), 407–424. https://spssi.onlinelibrary.wiley.com/doi/abs/10.1111/0022-4537.00175

Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism. *Human Ecology Review*, *6*(2), 81–97. https://www.jstor.org/stable/24707060

Straub, L., Acemoglu, D., Angeletos, M., Auclert, A., Fanelli, S., Liu, E., Rognlie, M., Zorzi, N., Beraja, M., Bhattacharya, V., Caballero, R., Costinot, A., Gallagher, E., Greenwald, D., Guren, A., Howard, G., Lian, C., Palmer, C., Sarto, A., & Wang, O. (2018). *Consumption, Savings, And The Distribution Of Permanent Income*. https://economics.yale.edu/sites/default/files/jmp_straub_jan_2_0.pdf

Sultan, P., Tarafder, T., Pearson, D., & Henryks, J. (2020). Intention-behaviour gap and perceived behavioural control-behaviour gap in theory of planned behaviour: moderating roles of communication, satisfaction and trust in organic food consumption. *Food Quality and Preference*, *81*(81), 103838. https://doi.org/10.1016/j.foodqual.2019.103838

Suntornsan, S., Chudech, S., & Janmaimool, P. (2022). The Role of the Theory of Planned Behavior in Explaining the Energy-Saving Behaviors of High School Students with Physical Impairments. *Behavioral Sciences*, *12*(9), 334. https://doi.org/10.3390/bs12090334

T. Rowe Price. (2020). *Money Confident Kids*. Www.troweprice.com. https://www.troweprice.com/corporate/us/en/press/t--rowe-price-relaunches-money-confident-kids-website-with-five-.html

Tagem, A., & Sen, K. (2021, August). *Unlocking the mystery of domestic savings [Blog post]*. UNU WIDER; United Nations University World Institute for Development Economics Research. https://www.wider.unu.edu/publication/unlocking-mystery-domestic-savings

Talmon, G. A. (2019). Generation Z: What's Next? *Medical Science Educator*, *29*(1). https://doi.org/10.1007/s40670-019-00796-0

Te'eni-Harari, T. (2016). Financial literacy among children: the role of involvement in saving money. *Young Consumers*, *17*(2), 197–208. https://doi.org/10.1108/yc-01-2016-00579

The Financial Brand. (2022, March 22). *Gen Z Payment Trends: How They Use Cash, P2P and BNPL*. The Financial Brand. https://thefinancialbrand.com/news/gen-z-banking/gen-z-payment-trends-how-they-use-cash-p2p-and-bnpl-133133/

The World Bank Group. (2023). *World Bank Open Data*. World Bank Open Data. https://data.worldbank.org/indicator/NY.GNS.ICTR.ZS?contextual=default&end=2022&locations=ZA&start=2009

Tonglet, M., Phillips, P. S., & Read, A. D. (2004). Using the Theory of Planned Behaviour to investigate the determinants of recycling behaviour: a case study from Brixworth, UK. *Resources, Conservation and Recycling*, *41*(3), 191–214. https://doi.org/10.1016/j.resconrec.2003.11.001

TransUnion. (2020, February 12). *Gen Z Consumers Start to Shape South African Credit Market as They Become Increasingly Credit Active*. Gen Z Consumers Start to Shape South African Credit Market as They Become Increasingly Credit Active; TransUnion. https://newsroom.transunion.co.za/gen-z-consumers-start-to-shape-south-african-credit-market-as-they-become-increasingly-credit-active/

Travis Credit Union. (2020, June). *The Money Saving Habits of America's Young Adults*. Travis Credit Union. https://www.traviscu.org/my-life/blogs/financial-wellness/june-2020/millennial-gen-z-saving-habits/

Turner, A. (2015). Generation Z: Technology and Social Interest. *The Journal of Individual Psychology*, *71*(2), 103–113. https://doi.org/10.1353/jip.2015.0021

Twenge, J. M., Cooper, A. B., Joiner, T. E., Duffy, M. E., & Binau, S. G. (2019). Age, period, and cohort trends in mood disorder indicators and suicide-related outcomes in a nationally representative dataset, 2005–2017. *Journal of Abnormal Psychology*, *128*(3), 185–199. https://doi.org/10.1037/abn0000410

Uzelac, M., & Lucic, A. (2020). The Investigation of Saving Habits of Generation Z's Young Adults. *35th International Business Information Management Association Conference (IBIMA): Education Excellence and Innovation Management*, *2025*, 14940–14952.

Vaske, J. J., Beaman, J., & Sponarski, C. C. (2017). Rethinking Internal Consistency in Cronbach's Alpha. *Leisure Sciences*, *39*(2), 163–173. https://doi.org/10.1080/01490400.2015.1127189

Verhoef, G. (2001). Informal Financial Service Institutions for Survival: African Women and Stokvels in Urban South Africa, 1930–1998. *Enterprise & Society*, *2*(2), 259–296. https://doi.org/10.1093/es/2.2.259

Vermeir, I., & Verbeke, W. (2006). Sustainable Food Consumption: Exploring the Consumer "Attitude – Behavioral Intention" Gap. *Journal of Agricultural and*

Environmental Ethics, *19*(2), 169–194. https://doi.org/10.1007/s10806-005-5485-3

Visa. (2023, April). *How Gen Z is Shaping the Future of Commerce*. Visa. https://www.visa.gp/partner-with-us/info-for-partners/blog/how-gen-z-is-shaping-the-future-of-commerce.html

Wang, J., Shen, M., & Chu, M. (2021). Why is green consumption easier said than done? Exploring the green consumption attitude-intention gap in China with behavioral reasoning theory. *Cleaner and Responsible Consumption*, *2*, 100015. https://doi.org/10.1016/j.clrc.2021.100015

Wang, Qian-Cheng, Yi-Tian Ren, Xuan Liu, Rui-Dong Chang, and Jian Zuo. (2023). 'Exploring the Heterogeneity in Drivers of Energy-Saving Behaviours among Hotel Guests: Insights from the Theory of Planned Behaviour and Personality Profiles'. *Environmental Impact Assessment Review* 99: 107012. https://doi.org/10.1016/j.eiar.2022.107012.

Weil, P. (1993). Precautionary savings and the Permanent Income Hypothesis. *The Review of Economic Studies*, 60(2), 367–383. https://doi.org/10.2307/2298062

White, K. M., Thomas, I., Johnston, K. L., & Hyde, M. K. (2008). Predicting Attendance at Peer-Assisted Study Sessions for Statistics: Role Identity and the Theory of Planned Behavior. *The Journal of Social Psychology*, *148*(4), 473–492. https://doi.org/10.3200/socp.148.4.473-492

Widjaja, I., Arifin, A., & Setini, M. (2020). The effects of financial literacy and subjective norms on saving behavior. *Management Science Letters*, *10*(15), 3635–3642. http://m.growingscience.com/beta/msl/4077-the-effects-of-financial-literacy-and-subjective-norms-on-saving-behavior.html

Wiedemann, A. U., Schüz, B., Sniehotta, F., Scholz, U., & Schwarzer, R. (2009). Disentangling the relation between intentions, planning, and behaviour: A

moderated mediation analysis. *Psychology & Health*, *24*(1), 67–79. https://doi.org/10.1080/08870440801958214

Williams, A., & Hodges, N. (2022). Adolescent Generation Z and sustainable and responsible fashion consumption: exploring the value-action gap. *Young Consumers*, *23*(4), 651–666. https://doi.org/10.1108/yc-11-2021-1419

Wood, M. D., Read, J. P., Mitchell, R. E., & Brand, N. H. (2004). Do Parents Still Matter? Parent and Peer Influences on Alcohol Involvement Among Recent High School Graduates. *Psychology of Addictive Behaviors*, *18*(1), 19–30. https://doi.org/10.1037/0893-164x.18.1.19

World Economic Forum. (2018, November 30). *Why Generation Z has a totally different approach to money*. World Economic Forum. https://www.weforum.org/agenda/2018/11/why-gen-z-is-approaching-money-differently-than-other-generations-95032cb6-6046-4269-a38a-0763bd7909ff/

World Economic Forum. (2022, July 29). *To build financial resilience, we need to promote savings*. World Economic Forum. https://www.weforum.org/agenda/2022/07/financial-resilience-promote-savings/

Xiao, J. J. (2008). Applying Behavior Theories to Financial Behavior. *Handbook of Consumer Finance Research*, 69–81. https://doi.org/10.1007/978-0-387-75734-6_5

Ye, S., Soutar, G. N., Sneddon, J. N., & Lee, J. A. (2017). Personal values and the theory of planned behaviour: A study of values and holiday trade-offs in young adults. *Tourism Management*, *62*, 107–109. https://doi.org/10.1016/j.tourman.2016.12.023

Yuriev, A., Dahmen, M., Paillé, P., Boiral, O., & Guillaumie, L. (2020). Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review. *Resources, Conservation and Recycling*, *155*(1), 104660. https://doi.org/10.1016/j.resconrec.2019.104660

Yzer, M., & van den Putte, B. (2014). Control perceptions moderate attitudinal and normative effects on intention to quit smoking. *Psychology of Addictive Behaviors*, *28*(4), 1153–1161. https://doi.org/10.1037/a0037924

Zyphur, M. J., Li, W.-D., Zhang, Z., Arvey, R. D., & Barsky, A. P. (2015). Income, personality, and subjective financial well-being: the role of gender in their genetic and environmental relationships. *Frontiers in Psychology*, *6*. https://doi.org/10.3389/fpsyg.2015.01493

Annexure A: Questionnaire Survey

Annexure B: Letter of consent

Dear respondent.

Thank you for assisting in this survey. I am conducting research on The Antecedents of Generation Z consumers' Saving Behaviour in South Africa. To that end, you are asked to complete a survey relating to my topic. Your contribution is invaluable in terms of the findings of this study.

The survey should take no more than 20 minutes to complete. Your participation is voluntary and you can withdraw at any time without penalty. There are no right or wrong answers. Your participation is anonymous, no names will be reported, and only aggregated data will be reported, which means that it will be impossible to isolate your contributions.

By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact my supervisor or me. Our details are provided below.
By completing the survey, you confirm your willingness to participate, based on the above mentioned conditions.

Thank you for your time!

Researcher name: Lebogang Mathenje
Email: 27226418@mygibs.co.za
Phone: 061 4800 392

Research supervisor name: Prof Alet C Erasmus
Email: ErasmusA@gibs.co.za

Phone: 082 784 2467

Annexure C: Questionnaire

SECTION A: SOCIO-DEMOGRAPHIC DATA

1. Gender

Male	
Female	
Prefer not to disclose	

2. Age

≤18	
19-21	
22-24	
≥25	

3. Marital Status

Single	
Married	
Divorced	
Widowed	
Other	

4. Level of Education

No education	
Primary Education	
Secondary Education	
Technical/ Vocational Qualification	
Tertiary Education	

5. Ethnicity

African/Black	

White	
Coloured	
Indian	
Other	

SECTION B: SAVING HABITS AND FINANCIAL KNOWLEDGE

6. How would you rate your overall knowledge and understanding of personal finance management?

☐ Excellent
☐ Good
☐ Fair
☐ Poor
☐ Very poor

7. Do you have a regular source of income?

Yes ☐ No ☐

If yes, what is your main source of income?

☐ Allowance
☐ Salary
☐ Investments
☐ Other (please specify) _____

8. On average, how much money do you earn or receive **monthly**?

☐ Under ZAR 1,000
☐ ZAR 1,000 - ZAR 3,000
☐ ZAR 3,000 – ZAR 5,000
☐ Over ZAR 5,000
☐

9. Do you save regularly?

Yes ☐ No ☐

If yes, what proportion of what you earn or receive do you generally try to save?

☐ none
☐ **less than 10%**
☐ 11 to 20%
☐ 21 to 30%
☐

more than 30%

SECTION C: INFLUENCING FACTORS

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
ATTITUDE							
10. I perceive consistent saving as prudent and important.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
11. Saving is not difficult to accomplish.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
12. I perceive saving as highly beneficial.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
13. Savings is a good habit.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
14. Saving is a sensible thing to do.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
SUBJECTIVE NORM							
15. My close family and friends (social group) encourage me to save.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
16. My social group encourages the importance of saving.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
17. My social group recommends saving for the future and for emergencies.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
18. My social group encourages me to save.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
PERCEIVED BEHAVIOURAL CONTROL							
19. I know how to ensure that I save regularly.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
20. I consider saving as compulsory	**1**	**2**	**3**	**4**	**5**	**6**	**7**
21. I have access to the adequate platforms, such savings accounts, to save.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
22. I am disciplined to save consistently.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
23. I am determined to save for the future.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

24. It find it easy to save for the long term	**1**	**2**	**3**	**4**	**5**	**6**	**7**
INTENTION AND HABIT							
25. Savings is something that I do as a matter of habit.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
26. I have already benefited from my savings account.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
27. I constantly look for options where my savings can grow faster.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
28. Over the past three months, I have consistently saved money.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
29. I am already saving towards my future goals and emergencies.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
30. I have the desire to start saving for the future.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
31. Within the next three months, I want to start saving for the long term.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
32. Saving consistenty is something that I want to do.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
33. I recommend saving towards future goals and emergencies.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
34. I need a good reason to save.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
35. I feel good when I see my savings growing.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
36. Saving makes me feel responsible	**1**	**2**	**3**	**4**	**5**	**6**	**7**
37. I want to be in control of my finances and therefore, I save	**1**	**2**	**3**	**4**	**5**	**6**	**7**

THANK YOU FOR YOUR PARTICIPATION!

APPENDIX: STATISTICAL ANALYSES

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.747	50.916	50.916	13.747	50.916	50.916
2	3.255	12.057	62.973	3.255	12.057	62.973
3	2.088	7.732	70.705	2.088	7.732	70.705
4	1.133	4.196	74.901	1.133	4.196	74.901
5	.820	3.039	77.940			
6	.679	2.514	80.453			
7	.624	2.310	82.764			
8	.576	2.132	84.896			
9	.463	1.715	86.610			
10	.445	1.649	88.259			
11	.412	1.526	89.785			
12	.365	1.352	91.137			
13	.310	1.150	92.286			
14	.273	1.010	93.297			
15	.250	.925	94.222			
16	.247	.913	95.135			
17	.229	.850	95.985			
18	.187	.692	96.677			
19	.172	.637	97.314			
20	.166	.613	97.928			
21	.137	.509	98.437			
22	.108	.399	98.836			
23	.090	.334	99.170			
24	.079	.293	99.463			
25	.065	.240	99.703			
26	.046	.171	99.874			
27	.034	.126	100.000			

Extraction Method: Principal Component Analysis.

Table 12: Computations for attitudes, subjective norms, behavioural intention to save, behaved actual savings and correlations.

Participant	Attitudes	Subjective norms	Intention to Save	Actual Savings	Correlation
1	96	72	72	48	144
2	135	-45	162	180	63
3	0	0	0	20	0
4	0	0	0	56	0
5	-7	-21	-56	80	56
6	0	0	0	-3	0
7	12	30	42	-70	18
8	-84	24	0	0	-48
9	0	0	0	135	0
10	0	0	0	9	0
11	3	21	36	12	9
12	6	36	45	75	6
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	15	0
16	0	0	0	-16	0
17	72	0	-12	4	48
18	0	0	0	-24	0
19	132	-36	72	30	144
20	24	40	32	56	24
21	60	144	216	270	144
22	105	84	126	270	-14
23	72	132	204	255	144
24	20	16	36	99	24
25	30	6	18	-15	36
26	180	144	192	240	144
27	144	-48	204	221	144
28	0	0	0	100	0
29	0	0	0	-20	0
30	24	24	84	42	12
31	-60	24	78	143	66
32	20	16	28	35	16
33	-7	-70	28	-40	21
34	-130	70	130	130	80
35	-22	44	-33	15	110
36	40	35	10	4	30
37	0	0	0	0	0
38	0	0	0	48	0
39	48	30	54	0	-12
40	36	0	36	6	54
41	0	-18	9	9	0
42	168	48	108	72	132

43	0	0	0	4	0
44	0	0	0	8	0
45	0	0	0	99	0
46	0	0	0	-12	0
47	0	0	0	120	0
48	72	45	-36	-24	-27
49	0	0	0	4	0
50	28	32	40	100	20
51	4	14	16	72	0
52	36	120	132	-22	144
53	48	48	156	195	144
54	0	0	0	-24	0
55	0	0	0	21	0
56	0	0	0	-12	0
57	24	22	28	-14	0
58	0	0	0	0	0
59	120	-64	64	72	56
60	6	12	24	-8	30
61	132	144	60	-5	132
62	77	-84	42	-24	84
63	-36	-16	-68	17	-4
64	112	24	136	170	56
65	0	0	0	-21	0
66	0	0	0	42	0
67	20	28	32	80	24
68	120	96	120	60	64
69	0	0	0	-18	0
70	0	0	0	15	0
71	0	0	0	-22	0
72	6	-12	-12	-72	-8
73	64	64	24	3	80
74	156	120	156	182	132
75	36	20	32	56	16
76	18	12	30	20	3
77	60	30	42	7	30
78	27	3	24	64	9
79	0	-27	54	36	-9
80	0	0	0	12	0
81	0	0	0	60	0
82	45	40	50	90	30
83	45	10	70	168	20
84	-4	0	4	0	4
85	44	55	44	56	33
86	99	-36	90	40	90
87	36	28	-44	-121	12
88	8	-24	26	78	4

89	6	10	6	15	8
90	0	0	0	135	0
91	0	0	0	0	0
92	36	144	216	252	24
93	24	-48	144	156	12
94	14	-49	28	-20	0
95	0	0	0	-14	0
96	-10	-25	35	56	30
97	2	22	12	30	4
98	0	0	0	48	0
99	0	0	0	135	0
100	180	144	216	270	144
101	180	144	216	270	144
102	0	0	0	48	0
103	15	24	33	121	12
104	-99	-81	-54	-12	9
105	0	0	0	-21	0
106	-15	30	36	72	-6
107	0	0	0	8	0
108	168	132	108	45	120
109	20	16	24	30	16
110	72	120	216	216	0
111	14	-63	-98	196	7
112	132	48	120	130	96
113	96	0	180	75	24
114	40	-16	0	0	56
115	0	0	0	72	0
116	0	0	0	72	0
117	0	0	0	98	0
118	24	88	48	60	40
119	132	0	165	195	121
120	-75	-55	75	135	0
121	0	0	0	36	0
122	6	0	24	8	27
123	0	0	0	0	0
124	0	0	0	6	0
125	36	0	48	24	120
126	0	0	0	4	0
127	0	0	0	-30	0
128	144	36	216	270	144
129	9	12	-24	80	21
130	12	36	39	78	15
131	72	48	144	198	64
132	-104	-88	96	72	64
133	0	72	18	27	18
134	-56	-48	-32	8	16

135	154	121	143	182	99
136	98	42	84	84	49
137	9	18	9	6	6
138	0	0	0	8	0
139	144	-48	84	70	96
140	0	0	0	110	0
141	22	8	18	-9	-2
142	120	144	-84	70	144
143	15	30	21	35	9
144	0	0	0	0	0
145	48	84	144	132	120
146	72	72	-16	10	72
147	0	0	0	187	0
148	0	0	0	-14	0
149	60	48	72	-54	12
150	21	24	39	39	27
151	54	0	0	0	0
152	0	0	0	104	0
153	77	132	77	42	88
154	54	48	96	176	36
155	0	0	0	77	0
156	18	30	39	65	0
157	60	48	-24	44	24
158	24	20	24	30	24
159	0	0	0	16	0
160	-48	12	216	270	144
161	20	16	24	30	16

H1AttInt2Sav

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-130	1	.6	.6	.6
	-104	1	.6	.6	1.2
	-99	1	.6	.6	1.9
	-84	1	.6	.6	2.5
	-75	1	.6	.6	3.1
	-60	1	.6	.6	3.7
	-56	1	.6	.6	4.3
	-48	1	.6	.6	5.0
	-36	1	.6	.6	5.6
	-22	1	.6	.6	6.2
	-15	1	.6	.6	6.8
	-10	1	.6	.6	7.5
	-7	2	1.2	1.2	8.7
	-4	1	.6	.6	9.3
	0	58	35.8	36.0	45.3
	2	1	.6	.6	46.0
	3	1	.6	.6	46.6
	4	1	.6	.6	47.2
	6	5	3.1	3.1	50.3
	8	1	.6	.6	50.9
	9	2	1.2	1.2	52.2
	12	2	1.2	1.2	53.4
	14	2	1.2	1.2	54.7
	15	2	1.2	1.2	55.9
	18	2	1.2	1.2	57.1
	20	5	3.1	3.1	60.2
	21	1	.6	.6	60.9
	22	1	.6	.6	61.5
	24	6	3.7	3.7	65.2
	27	1	.6	.6	65.8
	28	1	.6	.6	66.5
	30	1	.6	.6	67.1
	36	6	3.7	3.7	70.8
	40	2	1.2	1.2	72.0
	44	1	.6	.6	72.7

	45	2	1.2	1.2	73.9
	48	3	1.9	1.9	75.8
	54	2	1.2	1.2	77.0
	60	4	2.5	2.5	79.5
	64	1	.6	.6	80.1
	72	6	3.7	3.7	83.9
	77	2	1.2	1.2	85.1
	96	2	1.2	1.2	86.3
	98	1	.6	.6	87.0
	99	1	.6	.6	87.6
	105	1	.6	.6	88.2
	112	1	.6	.6	88.8
	120	3	1.9	1.9	90.7
	132	4	2.5	2.5	93.2
	135	1	.6	.6	93.8
	144	3	1.9	1.9	95.7
	154	1	.6	.6	96.3
	156	1	.6	.6	96.9
	168	2	1.2	1.2	98.1
	180	3	1.9	1.9	100.0
	Total	161	99.4	100.0	
Missing	System	1	.6		
Total		162	100.0		