

**The relationship among financial risk propensity, life-goal orientation and
stakeholder empathy of small business owners**

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Abstract

Small business success is key to economic growth in South Africa. Unfortunately more than 70% of start-up companies fail within the first five to seven years of inception. There needs to be a greater focus on the small business owner and their psychological decision making behaviour. The purpose of this study was to firstly, examine the relationship between life-goal orientation (extrinsic motivation, intrinsic motivation and impersonal) and financial risk propensity of small business owners. Secondly, to examine if stakeholder empathy is a mediator in the relationship between life-goal orientation and financial risk propensity and lastly, to examine the relationship between stakeholder empathy and life-goal orientation. Data was collected from 123 respondents through a survey. Correlation and regression analysis were performed in order to examine the hypotheses. The study did not find a relationship between life-goal orientation and financial risk propensity for this sample and therefore, no mediating role for stakeholder empathy could be examined. The results indicated a correlation between stakeholder empathy and intrinsic motivation, as well as stakeholder empathy and impersonal life-goal orientation. However, no correlation was found between stakeholder empathy and extrinsic motivation. The findings of this study emphasise the importance of context, demographics and environment of respondents when testing financial risk propensity, life-goal orientation and stakeholder empathy. The findings also suggests small business owners are generally more intrinsically motivated and empathetic towards stakeholders, which can have positive and negative effects on the performance of their company.

Keywords

Financial Risk Propensity, Life-Goal Orientation, Extrinsic Motivation, Intrinsic Motivation, Impersonal, Stakeholder Empathy, Small Business

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 Business Administration 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 carry out this research.

Albertus Abraham Stoop

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1 Introduction to Research Problem

1.1 Problem Statement

The purpose of this study is to examine the relationship among financial risk propensity, life-goal orientation and stakeholder empathy of small business owners in South Africa. More specifically, this study aims to shed light on the hypothesised relationship between life-goal orientation (impersonal, extrinsic motivation and intrinsic motivation) and financial risk propensity of small business owners. Every decision a business owner makes, can influence their employees and stakeholders significantly. Therefore, this study also aims to examine if stakeholder empathy plays a potential mediating role in the relationship between financial risk propensity and life-goal orientation. In addition to the possible mediating role stakeholder empathy can play, the direct relationship between stakeholder empathy and life-goal orientation is also examined.

1.2 Why the problem was selected

The notion that the success of South African small businesses is key to economic growth and job creation, is what galvanised the researcher to explore this field (Tsebe, Vukeya, Lewis, Calvino & Chiara, 2018). In order to fully understand why so many small businesses fail, there needs to be a focus on the individual owner and their decision making. The findings of the research report can offer small business owners with tools to predict their behaviour and be cognisant about their personal traits that could affect their decision making. This could ultimately lead to better decision making by small business owners that could increase the survival rate of South African small businesses. Stakeholders of small businesses will also benefit from these findings to manage their relationship with the small business owner more effectively.

1.3 Business need for this study

South Africa has one of the highest unemployment rates in the world (Unemployment, 2019). With an economy that is flooded with oligopolies, where

rates and prices can be manipulated above competitive levels (Holland, Rossouw & Staples, 2015), one can argue this could be a contributing factor to the ailing economy. In a working paper issued by the Organisation for Economic Co-operation and Development, the authors indicate that large firms are still the backbone of creating employment in the majority of sectors (Tsebe et al., 2018). These authors further emphasise the importance of the development and prosperity of small businesses as a lever to increased economic growth and further job creation. The economy requires small businesses to compete in these oligopolistic markets in an attempt to dismantle the status quo of these big companies, but this is not an easy feat. This will not only create employment, but will have a knock-on effect on the economy, as increased competition will stabilise prices and improve productivity.

There needs to be a focus on small businesses and how they operate. This could be accomplished by focusing on the small business owner, as the eventual success or failure of the business lies with this individual's decision-making ability. More particularly, financial decision-making. Micro and medium size entities struggle to survive in the initial phase of operating, with more than 70% of these start-up companies closing within the first five to seven years of trading (Bushe, 2019). The reasons for failure for these companies differ, but Bushe (2019) found that a lack of financial capital is one of the key constraints most start-up companies faces. The proper management of this scarce resource is vital for a small business owner to ensure success for their company (Poposka, Nanevski & Mihajlovska, 2016). Bushe (2019) also notes that poor financial resource management could lead to organisational failure.

Small business owners needs to act responsibly towards all its stakeholders to have a good chance of success (Cronje, Ferreira & van Antwerpen, 2017). Every financial decision a small business owner makes, has an element of risk and reward. One can argue that they need to balance these two elements in order to produce the best financial result at the lowest possible risk. But is there a difference in how different individuals view "responsible business practices"? (Cronje et al., 2017, p. 23) Does small business owners take more financial risks based on their personal traits? Can a small business owner's level of stakeholder empathy predict

their life-goal orientation? These are business related questions the research wishes to address.

1.4 Theoretical need for the study

Risk propensity can be defined as “the willingness to bear risk” (Buccioli & Miniaci, 2018, p. 160). This study is concerned with the financial element of risk propensity. Although studies have found a positive correlation between unethical practices and high risk propensity (Xu, Wang & Zhu, 2019), it must be argued that small business owners must take a significant amount of risk, somewhere in its life time, in order to have a chance of success in the current economic environment. Does this mean the small business owners that have high financial risk propensity are unethical and do not act responsibly towards its stakeholders? Does the empathy towards business stakeholders reduce their level of financial risk propensity?

Studies have found poor people management skills can lead to business failure (Bushe, 2019; Poposka, Nanevski & Mihajlovska 2016). Therefore, stakeholder empathy and its hypothesised relationship with financial risk propensity needs to be investigated. There are numerous definitions of the construct stakeholder and empathy within literature. Cuff, Brown, Taylor and Howat (2014) reviewed and critiqued 43 different empathy definitions over the years. They concluded by defining empathy as an affective reaction of an individual based on the collaboration of their personal traits and the context or state they find themselves in (Cuff et al., 2014). The authors further add that these reactions are emotional in nature and automatically produced. The term stakeholder on the other hand, has its own variety of definitions. McGrath and Whitty (2017) warns against the generic use of certain popular definitions and points out one needs to focus on interest and activity to identify stakeholders. In the context of small business in South Africa, a stakeholder can be defined as any group or individual that “can affect or is affected by the achievement of an organisation’s objectives” (Fassin, 2009, p. 1). It is important to note that this definition indicates that small business activity can affect stakeholders but that stakeholder’s activity can affect the small business as well, it is therefore a two-way street. These constructs are explored in more detail within the literature review chapter of this research.

Literature is rich with studies that attempt to understand the complexities of individual financial risk propensity. There is also a strong link between financial risk propensity and prospect theory throughout literature. Prospect theory focuses on an individual's behaviour when making decisions that involve risk or uncertainty (Tversky & Kahneman, 1979). This theory argues that individuals prefer smaller gains than the prospect of bigger gains that bare more risk (Tversky & Kahneman, 1979). Although linkages exist between prospect theory and financial risk propensity, this study focuses more on psychological decision making theory which is described by Prinsloo (2017) as the study of emotions, motivations and values of individuals.

This balancing act between risk and reward for small business owners when facing business decisions is central to the concept of financial risk propensity. Lucarelli and Brighetti (2010) argues that individuals struggles to assess their tolerance for risk adequately because they have some level of bias. This can result in individuals who see themselves as risk avoiders but in reality are risk takers. Academia has attempted to link individual personal traits to financial risk propensity in order to better understand or predict behaviour. Sekścińska and Rudzinska-Wojciechowska (2020) suggest that financial risk propensity can be explained by the dark traits (psychopathy, Machiavellianism and narcissism) an individual possesses. These authors' further state that these dark traits can be associated with lower levels of empathy towards others and describes a very self-centered individual. Djeriouat's (2017) research focuses on life-goal orientation and argues that individuals pursuing extrinsic life-goals might increase their propensity to take financial risks.

The construct life-goal orientation stems from self-determination theory. This human motivation theory was developed from extensive research in attempting to understand intrinsic and extrinsic motivation (Deci, Olafsen & Ryan, 2017). Intrinsic motivation is where satisfaction of an activity derives from within an individual and there are no external rewards (Deci et al., 2017). Extrinsic motivation involves doing an activity for external rewards, either tangible for example money and incentives or intangible, like fame or praise (Deci et al., 2017). There is also a third life-goal orientation preference namely impersonal. Impersonal is when an individual is neither extrinsic nor intrinsically motivated, but rather believe in luck or fate as an outcome (Deci et al., 2017). Although theory suggests extrinsic

motivated individuals have a high financial risk propensity, research is limited if this hypothesis holds true with regards to small business owners in a South African context. There is also little research done if stakeholder empathy can mediate this relationship.

This study aims to add to the current body of theory that suggests there is a link between financial risk propensity and life-goal orientation of individuals (Deci et al., 2017), by testing this notion within a South African small business context. It also examined the relationship between stakeholder empathy and life-goal orientation, constructs that has not been extensively researched in conjunction in existing theory. The study therefore contributes to an understanding of decision making theory in relation to small business owners, by incorporating notions of financial risk propensity, life-goal orientation and stakeholder empathy.

1.5 Key purpose statement

Based on the above, the key purpose of this study is to examine if life-goal orientation predicts financial risk propensity of small business owners. Additionally, if stakeholder empathy reduces financial risk propensity of small business owners and thus, if stakeholder empathy moderates the relationship between life-goal orientation and financial risk propensity of small business owners. Lastly, if stakeholder empathy can predict life-goal orientation.

1.6 Brief outline of document to follow

Chapters that will now follow in this paper are a literature review in order to understand what is known and what is not known regarding decision-making theory, financial risk propensity, life-goal orientation, stakeholder empathy and South African small business challenges. Followed by a description of the hypotheses for this study. Then a research methodology chapter that will indicate how data was collected in order to test the hypotheses. Followed by a results chapter from statistical data analysis. Then a chapter comprehensively discussing the results and linking it back to theory. Lastly, a conclusion chapter that also include limitations of the study and areas for future research.

2 Literature Review

2.1 Introduction

This literature review starts by describing decision-making theory in order to position the constructs of financial risk propensity, life-goal orientation and stakeholder empathy within decision-making theory. Furthermore, this chapter will discuss existing theory in financial risk propensity, life-goal orientation, stakeholder empathy as well as South African small business challenges in detail. Definitions of these constructs are outlined and existing theory is critically reviewed in order to obtain a deep comprehension of the constructs. This chapter will close with an integrative discussion of the findings.

2.2 Decision making theory

Decision making theory has been widely researched over the last century. By understanding the multiple disciplines of decision-making literature, one can lay a foundation for the exploration of the three main constructs of this study (financial risk propensity, life-goal orientation and stakeholder empathy).

Schoemaker (2013) describes four areas of interest within the decision making field. Firstly, critical thinking that focuses on logic and meaning. Secondly, decision analysis where risk and reward is quantifiable and measurable by analysis. Thirdly, creativity and problem solving that focuses on creative thinking. Lastly, behavioural decision theory that focuses on the individual and the human element of decision making.

Building on Schoemaker's model, Prinsloo (2017) formulated a three perspective view on decision making literature in order to position ones research. These are the psychological perspective that focuses on emotions, motivations and values; cognitive limitation perspective that is underpinned by sense-making and analysis of the environment; and normative interpretation that is driven by process, rationality and logic. This line of thinking is better suited to position the constructs of this study (financial risk propensity, life-goal orientation and stakeholder empathy) within the decision making literature. Although one can argue it affects all three perspectives of Prinsloo's (2017) model, this study is positioned within the

psychological perspective. In order to support this assertion, the constructs are further discussed below in detail.

2.3 Financial Risk Propensity

2.3.1 Financial risk

Every opportunistic financial decision a business owner makes has a level of uncertainty for financial returns or losses, this can be defined as financial risk (Dionne, 2013). The main types of financial risks are market risk, credit risk and liquidity risk (McNeil, Alexander, Frey & Embrechts., 2015). McNeil, Alexander, Frey and Embrechts (2015) define these constructs as follows; Market risk is concerned with the potential losses due to changes in the financial market. Credit risk is the possibility that a borrower will not meet their repayment obligations to its lender. Liquidity risk revolves around a company's ability to settle its debt without resulting in significant losses. These are all elements that small business owners deals with on a daily basis.

Decisions that affects these types of financial risks, may lead to the ultimate success or failure of a company. It is also evident that there is a level of interdependence between these types of risks. Therefore, financial risk as a whole needs to be investigated and not only certain elements thereof.

2.3.2 Meaning of risk propensity

Buccioli and Miniaci (2018) provides a short and simple definition of risk propensity as an individual's "willingness to bear risk" (Buccioli & Miniaci, 2018. p. 160). This study is concerned about the financial element of risk propensity. Brockhaus (1980) gave a more in depth definition by describing risk propensity as "the perceived probability of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure" (Brockhaus, 1980, p. 509). This balancing act between potential rewards and losses is at the heart of risk propensity.

MacCrimmon, Wehrung and Stanbury (1986) research indicates that decisions are driven by the level of risk propensity. A model created by MacCrimmon, Wehrung and Stanbury (1986), as depicted in Table 1, describes characteristics of risk averse and risk seeking individuals.

Table 1 - Characteristics of Risk Averters and Risk Takers

Components of risk	Risk averter requires	Risk seeker accepts
Magnitude of potential loss	Low maximum loss Low stakes, commitment Low variability in payoffs More information on losses More control over losses	Higher maximum loss Higher stakes, commitment Higher variability in payoffs Less information on losses Less control over losses
Chances of potential loss	Low chance of loss Familiar environment Few uncertain events More information on chances More control over uncertain events Low uncertainty	Higher chance of loss Unfamiliar environment Many uncertain events Less information on chances Less control over uncertain events Higher uncertainty
Exposure to potential loss	Low exposure Shared responsibility More information on exposure More control over exposure	Higher exposure Sole responsibility Less information on exposure Less control over exposure
Other risk components	Control by self Contingency plans Consensus Exit from risky situation	Control by others No contingency plans Conflict Participation in risky situation

Source: (MacCrimmon et al., 1986, p. 19)

It is clear from the above table that risk averse individuals has a need for information and control to understand potential losses and risks. In addition, the level of uncertainty needs to be as low as possible before making a decision. Risk

seekers on the other hand, is not concerned about the potential loss or level of uncertainty, their focus is more on the ultimate reward to satisfy their needs. What is also interesting to note from this model is that risk seekers are controlled by others and risk avoiders are controlled by themselves. This fits in well with life-goal orientation theory (later discussed in this chapter) that argues an extrinsic motivated individual's satisfaction comes from external rewards, thus also controlled by others.

Utility theory and prospect theory attempts to explain the decision-making behaviour of an individual that ultimately leads to the risk propensity an individual possesses. In addition, personality traits and planned behaviour theory has also been used in an attempt to predict financial risk propensity. These theories will now be discussed in order to position the two remaining constructs of this research (life-goal orientation and stakeholder empathy).

2.3.3 Risk propensity and prospect theory.

In early economic work, utility theory put emphasis on the satisfaction an individual receives from making a decision. These decisions are based on rational choices and assumes that an individual will always make a decision based on the maximum benefits it will obtain (Morgenstern & Von Neumann, 1953). Morgenstern and Von Neumann (1953) proposed an expected utility model that argues financial risk is quantifiable by measuring risk and return. In essence, their utility theory model argues that investors are rational, risk averse, not complex and seeks maximum wealth.

The notion that individuals are rational were criticised by Ibrahim and Lim (1995) who argued that the relationship between risk and reward is very much unstable. Since then, multiple studies have been done to support the belief that an individual is heavily complex and difficult to predict (Iqbal, 2013; Nicholson, Soane, Fenton-O'Creedy & Willman, 2005; Tversky & Kahneman, 1979; Combrink & Lew, 2020). Lucarelli and Brighetti (2010) echoed this notion with a study that argued that an individual biases distorts their level of risk tolerance. In a more recent study, Combrink and Lew (2020) found that although an investor can have high levels of over confidence, this does not necessarily affect their level of risk propensity.

In response and alternate to utility theory, Tversky and Kahneman (1979) developed prospect theory. Prospect theory focuses on the cognitive limitation of individuals and assumes decision makers avoids risk in gain situations and seek risk in loss situations (Tversky & Kahneman, 1979). The theory further explains how individuals experience gains and losses based on a specific reference point (e.g. wealth status) and that when faced with a decision, would rather take smaller gains than higher gains that bare risk. In relation to small business owners, one has to wonder if risk averse individuals will focus more on potential losses which can result in underestimation of the potential rewards and how the individual's personality will affect the decision that was made.

This study is more concerned with the psychological aspect of individual's financial decision making. Therefore, although utility and prospect theory is important to note, it is not the core angle this study aims to take.

2.3.4 Financial risk propensity and personality

The big five personality traits were constructed by multiple researchers over the last century (Digman, 1990). These researchers used factor analysis on multiple personality traits and over the years, concluded with five main personality traits that can describe an individual (extraversion, agreeableness, conscientiousness, neuroticism and openness). Mueller and Plug (2006) further explored this model and found correlations between the big five personality traits and other features of human behaviour. This enabled better and more in-depth understanding of each personality trait. Extraversion was found to be closely linked to being sociable, outgoing and adventurous. Openness correlates with being curious, imaginative and unconventional. One can argue that all these personality traits can contribute to the success of a small business.

Zhang, Xiang, Zhang, Chen and Ren (2020) used the big five framework in their study to better understand risk propensity in relation to personality traits. They found that risk propensity plays a mediating role in construction workers intention to take risk and their respective personality traits. Another study conducted by Czerwonka (2019) also utilised the big five framework to examine financial risk propensity and its link to personality traits. Their study found that an individual's

financial risk propensity can be predicted by high levels of extraversion and low levels of conscientiousness.

Although this study does not explicitly utilise the big five personality trait as a framework, the constructs of life-goal orientation and stakeholder empathy (discussed later in this chapter) spawned out of the psychological traits that the framework describes.

2.3.5 Financial risk propensity and planned behaviour

The theory of planned behaviour was developed by Ajzen (1985). The theory argues that an individual's attitude, subject norms and perceived behavioural control shapes their intentions and ultimately, their behaviour. Figure 1 visually depicts the integration of the concepts that underpin the theory.

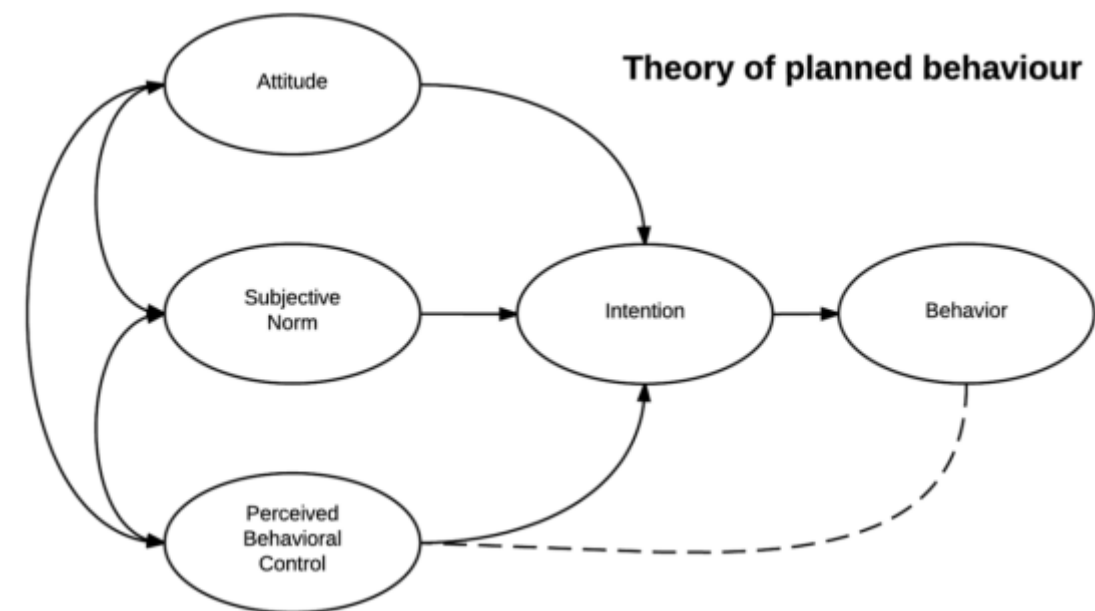


Figure 1 - Theory of planned behaviour

Source: (Hausenblas, Carron & Mack, 1997, p. 37)

Akhtar and Das (2019) utilised the theory in their study to predict financial risk propensity of prospective investors in the Indian stock market. Their study found that attitude plays a mediating role between the correlated finding of financial risk

propensity and investment intention, but that subjective norm showed an insignificant effect on an individual's willingness to take financial risk.

One can argue attitude, what people believe is the norm and what they perceive they control can be driven by personal traits and motivation. Therefore, these variables are closely linked to life-goal orientation and stakeholder empathy. Once these concepts are understood, one can predict the eventual behaviour (for purposes of this study, financial risk propensity of individuals).

2.3.6 Other potential factors influencing financial risk propensity

Nicholson, Soane, Fenton-O'Creevy and Willman (2005) highlights how inconsistent individuals are and the role context plays when taking financial risk by building on initial studies on prospect theory. Their study highlights the inconsistencies in financial risk propensity of individuals based on different demographics. The study also argues that an individual's career path and industry they find themselves in plays a role in the level of financial risk propensity they consist. Lastly, they also note that personality plays a role towards the level of financial risk propensity an individual possess.

The notion that an individuals may process information differently and sometimes illogically, is also supported by a study by Iqbal (2013). Iqbal (2013) highlights the unpredictability of risk propensity in individuals and the importance to put equal emphasis in testing not only risk averseness, but also risk seeking behaviour, Linking certain personality traits to risk propensity is also not as easy as previous studies suggests, thorough investigation is required before making any conclusions on risk propensity of individuals (Combrink & Lew, 2020).

Scholars supports the notion that in order to measure risk propensity, one needs to focus on the individual's personality traits (Jochemczyk, Pietrzak, Buczkowski, Stolarski & Markiewicz, 2017). Impulsivity, extraversion psychopathy, Machiavellianism and narcissism, to name a few, has shown a positive correlation with financial risk propensity of individuals (Sekścińska & Rudzinska-Wojciechowska, 2020; Jochemczyk et al., 2017).

2.3.7 Proposition and focus

It is clear that from the current body of knowledge, the focus needs to be on the individual and not the rational consideration of gains and losses. One can argue that due to the high level of subjectivity and complexity in predicting an individual's decision making behaviour along with the ever-changing economic environment small business owners operates in, further research is warranted. More so when different stakeholders are involved in the decision. One specific construct that has shown a positive correlation with financial risk propensity is an individual's life-goal orientation (Deci et al., 2017).

2.4 Life-goal orientation

Life-goal orientation as a construct that originated from Self-determination theory. Deci, Olafsen and Ryan (2017) defined self-determination theory as the study of different types of human motivation and the effects thereof. At the center of Self-determination theory is life-goal orientation and the comparison between intrinsic and extrinsic motivation of individuals (Deci, Olafsen & Ryan, 2017).

2.4.1 Intrinsic motivation

Intrinsic motivation can be defined as activities by an individual where the satisfaction and reward lies within the behaviour itself (Deci et al., 2017). Individuals, who are intrinsically motivated, do not need external rewards (e.g. money, fame or recognition) in order to engage in an activity, as the enjoyment in the activity itself is naturally satisfying to the individual. The activity is usually interesting for the individual and highly enjoyable, thus growth and development goes hand in hand with intrinsic motivation (Çınar, Bektas, Aslan, 2011).

Fischer, Malycha and Schafmann (2019) found that intrinsic motivated individuals are more creative and innovative. This continuous drive and curiosity to explore more is driven by the individual's passion from the heart and not just the mind (Mansoor, 2012). Cerasoli, Nicklin and Ford (2014) study found that intrinsically motivated individuals has a higher level of engagement in learning environments than those that consist of extrinsic motivation.

2.4.2 Extrinsic motivation

Extrinsic motivation revolves around behaviour of an individual only to attain an external reward, be it tangible or intangible (Deci et al., 2017). There is an instrumental value attached to the activity that drives it. Mansoor (2012) best describe these instruments in a corporate environment as follows; financial compensation to drive employee productivity, rewards to influence behaviour, manager recognition, employee empowerment, and staff training as motivational tool. Extrinsic motivated individuals' needs to be externally forced to action (Deci, 2000). This makes quality learning difficult as there is a sense of antipathy, lack of interest and resistance to the activity as there is no external reward.

Deci, Olafsen and Ryan (2017) argues that extrinsic goal seekers behaviour is controlled by others and intrinsic goal seekers controlled by themselves. This is an important factor to consider with regards to small business owners and where their organisation is situated in the business eco-system, as there are multiple external parties that can have potential rewards for certain activities that might come at a certain level of financial risk. One can argue that business owners have control over themselves and the business, which speaks to intrinsic motivation. However, in a complex eco-system in which a small business operate, stakeholders can also have a high level of influence and control in the decisions a small business owner makes, which leans more towards extrinsic motivation.

2.4.3 Further studies within life-goal orientation literature

Over decades, academia has investigated an individual life-goal orientation and potential correlations with various personal traits. Deci (1972) is a pioneer in the field and was one of the first to investigate the construct. Deci (1972) argued that money decreases intrinsic motivation, but that verbal reinforcement increases intrinsic motivation. This reaffirms the notion that intrinsic motivated individuals has the ability to motivate themselves and do not need external rewards. A later study by Deci (2017) showed extrinsic motivated individuals tend to take more ethical, recreational, financial and health risks, but less social risks. For purposes of this study, it is interesting to note the positive correlation found between financial risk propensity and extrinsic motivated individuals by Deci (2017). One can also

conclude from Deci's (2017) study, that ethical risk propensity goes hand in hand with financial risk propensity.

Deci and Ryan (1985) build on their self-determination theory work to create two sub-theories namely, Organismic Integration Theory and Causality Orientation Theory. These theories described a third motivation type namely, amotivational. This form of motivation is described as impersonal, where an individual is neither extrinsic nor intrinsic motivated and almost in an emotionless state (Deci & Ryan, 2000; Olesen et al., 2010). An amotivated individual believes that outcomes are out of their control and is down to luck or fate (Deci & Ryan, 2000). In addition to the introduction to impersonal life-goal orientation, extrinsic motivation was further broken down into four levels namely; external regulation, introjection, identification and integration. This confirms the notion that extrinsic motivated individuals are not only driven by tangible rewards like money, but also intangible rewards like enhancing their ego.

In order to shed more light on these sub-theories, Deci and Ryan (2000) formulated the taxonomy of human motivation model as seen below.

Table 2 - A taxonomy of human motivation

Regulatory styles	Amotivation	Extrinsic motivation				Intrinsic motivation
		External regulation	Introjection	Identification	Integration	
Associated process	Low perceived competence. Non-relevance.	Salience of extrinsic rewards or punishment	Ego involvement. Focus on approval from self or others.	Conscious Valuing of activity. Self-endorsement of goals.	Hierarchical synthesis of goals. Congruence.	Interest/ Enjoyment. Inherent satisfaction.
Perceived locus of causality	Impersonal	External	Somewhat external	Somewhat internal	Internal	Internal

Source: (Deci & Ryan, 2000, p. 61)

This model depicts visually, almost in a linear fashion, the level of individual motivation. Starting with amotivational on the far left and moving through the four stages of extrinsic motivation and ending of with intrinsic motivation on the far right. What is interesting to note is the four new stages of extrinsic motivation compared to their earlier work. This shows that a person can be in the externally motivated stage where they are highly extrinsically motivated (where external reward is the only motivation), then move towards the integration stage where a sense of congruence takes place and the individual, although still extrinsically motivated, is much closer to the intrinsic motivation stage.

Onu, Oats and Kirchler's (2019) research shows a correlation between an individual's life-goal orientation and their moral norms to comply. The authors found that intrinsic motivated individuals has a stronger sense of complying with rules and regulation as they see it as fair, but that extrinsic motivated individuals questions the rules and regulations as they see it as a stumble block to greater gains (Onu et al., 2019). One can argue intrinsic motivated individuals are proactive in complying with certain rules and regulations, whereas extrinsic motivated Individuals will delay compliance (perceived pain) as long as possible. This links well with prospect theory, where a loss is perceived much worse than a gain.

Sekścińska and Rudzinska-Wojciechowska (2020) research focused on financial risk propensity and how it is linked to an individual's dark triad traits. The authors found that increased levels of narcissism and psychopathy results in a higher financial risk propensity. The authors suggests that these findings might change within a small business context and that empathy might mediate this finding. These questions have not yet been answered in literature.

Li and Wen (2019) study found that extrinsic motivated individuals would participate in an activity if the perceived usefulness was present, whereas intrinsically motivated individuals requires a sense of fitting in that leads to enjoyment and ultimate participation. Li and Wen's (2019) study shows the importance of understanding individuals in order to obtain engagement. Deci and Ryan (2000) warns against employing extrinsic rewards to intrinsic motivators as it could lead to disengagement. The same applies to assuming individuals are intrinsically engaged

in an activity when in fact, it does not interest them and they require extrinsic rewards to engage.

It is clear the above literature paints the picture that extrinsic motivated individuals are self-centered, struggle to accept rules and have no consideration of others. In times where “creating shared value” (Porter & Kramer, 2019, p. 323) can be a step to business success, one needs to challenge this notion that individuals that are extrinsically motivated will reveal themselves as easily as they did in the past. Business success might be the external reward for acting in an intrinsic manner towards various stakeholders. Therefore, it is vital to use tried and tested scales or tools to measure an individual's life-goal orientation in order to make appropriate conclusions and accurate findings. These scales and tools are later discussed within the methodology chapter of this research.

2.4.4 Life-goal orientation of small business owners

Another important factor to consider is the unique South African small business context. Studies has already shown how cultural differences plays a role in determining an individual's intrinsic or extrinsic motivation level (Snelgar, Shelton & Giesser, 2017). South Africa is a highly diverse country, which makes this construct even more complex to understand and to measure. Entrepreneurs might naturally have a life-goal orientation preference but may need both extrinsic and intrinsic motivating elements during different stages of their business life cycle (Shane, Lock & Collins, 2003). Intrinsic motivation alone might lead to missed opportunities, as the business owner only focuses on where their interest and enjoyment lies. There needs to be an element of financial success and competition to drive the organisation forward.

A strong theme in life-goal orientation theory revolves around moral norms and ethical consideration. One has to wonder if the level of empathy that business owners have, affects their level of extrinsic or intrinsic motivation. This leads to the investigation into the construct of stakeholder empathy and the potential role it plays with life-goal orientation.

Stakeholder empathy will now be discussed by firstly investigating the term stakeholder on its own then by looking at the multiple definitions empathy has in literature. Lastly, current literature will be discussed where positive relationships were found between empathy and personal traits.

2.5 Stakeholder empathy

2.5.1 Stakeholder

Freeman (1984) was first to explore the term stakeholder within business sciences. He defined the term as a person or group whose actions affects a company but noted the contra also exists, where the actions of the company affects the stakeholder. Since then, there has been multiple definitions of the term stakeholder within literature. McGrath and Whitty's (2017) paper attempted to simplify the term and concluded that stakeholder is to do with activity and interest when selecting the appropriate definition for the context it is required.

After investigating numerous definitions, one has to argue Freeman's definition still holds true and is most relevant to the context of this study. Mainardes, Alves and Raposo (2011) notes how stakeholder theory can act as a tool to combine ethical dilemmas and complex business environments. This begs the question, to what level stakeholders influence small business owner's decisions?

For purposes of this study, the focus is on small business owners and the South African context they find themselves. Therefore, stakeholders can include shareholders, employees, suppliers, consultants, rival companies, banks, government and customers.

2.5.2 Empathy

Cuff, Brown, Taylor and Howat (2014) points out that although empathy is an relatively old construct researched over many years, it still has multiple definitions that can cause confusion. The authors further emphasise the importance in considering the related constructs that empathy is being used with in order to select the appropriate definition. After rigorously interrogating multiple definitions, Cuff,

Brown, Taylor and Howat (2014) define empathy as “an emotional response (affective), dependent upon the interaction between trait capacities and state influences. Empathic processes are automatically elicited but are also shaped by top-down control processes. The resulting emotion is similar to one’s perception (directly experienced or imagined) and understanding (cognitive empathy) of the stimulus emotion, with recognition that the source of the emotion is not one’s own” (Cuff et al., 2014, p. 7). This top down control process means that the notion of feeling empathetic towards someone has originated by information that has entered the brain and processed by the individual before feeling or sensing any level of empathy. The result empathy produces is compared to perception, experienced or imagined, as well as ones understanding of the stimulus it provides.

Cognitive empathy is related to attempting to understand what an individual might be thinking or feeling, whereas affective empathy relates to a sense of shared feelings among individuals (Cuff et al., 2014). Cuff, Brown, Taylor and Howat (2014) definition makes provision for affective and cognitive empathy, but recent studies aims to dissociate the two types of empathy (de Waal & Preston, 2017).

The perception–action model is explored by de Waal and Preston (2017) who concludes that the observers past experiences in similar situations, plays a significant role in understanding the emotional state of others. The notion of putting yourself in someone else’s shoes before making any business decision, can also be seen as a method in predicting behaviour or response of stakeholders. The spontaneous nature of individuals to help those in need is advocated by de Waal and Preston (2017), but emphasis is placed on the difference in level of empathy of individuals that can influence their perception and reaction to certain situations.

One needs to ponder if these findings and nuances are also applicable within the South African small business environment.

2.5.3 Further studies within empathy literature

Waller et al. (2020) research focused on callous-unemotional traits, which they define as “low levels empathy, guilt and prosociality” (Waller et al., 2020. p. 1). Their study found that callous-unemotional traits correlates with antisocial

behaviour. These authors further warn about the dangers antisocial behaviour present to society, the financial burden it creates and notes how treatment is difficult. One can argue small business owners need to be socially active in order to network, build strong business relationships and gain clients.

Klimecki (2019) argued that empathy can be a key tool when resolving conflict situations. Her study showed that empathy has a link to prosocial behaviour and that individuals with high levels of empathy have a better sense of achieving reconciliation in conflict situations. Empathy also shows lower levels of aggression, which can have multiple other benefits to society. However, one can argue too much empathy can be harmful in a business environment as poor performance and lack of productivity need to be addressed timeously.

König, Graf-Vlachy, Bundy and Little (2020) argues that empathy can be “a blessing and a curse” (p. 1) for business leaders. These authors conducted a study on chief executive officers and concluded that although there are many benefits empathy holds (recognition of warning signs quicker, better stakeholder relations, better ability to manage organisational interpersonal relationships), there are negative aspects as well (more prone to false alarms, too forgiving, not addressing poor performance, lack of focus in operational system of organisation) (König et al., 2020). Understanding when to provide empathy is also important. There might be instances where providing empathy will distance certain individuals (Bennett & Rosner, 2019). A good example of this is where disabled people do not want anyone to feel sorry for them.

Professional empathy is a construct on its own that was explored by academia in recent times. Steenbakkers, Lu, Brinkema, Gültekin (2015) defined professional empathy as “the ability to identify with the professional thoughts and feelings of other stakeholders in a collaborative context” (p. 2). Professional empathy is argued as a skill that can be taught and developed by business leaders to improve their collaboration ability (Steenbakkers et al., 2015). There are multiple tools or ice breakers that corporates use to elicit empathy among them when collaborating, but ultimately only a deep understanding of each other’s businesses and practices can lead to commitment, as depicted in the below figure (Steenbakkers et al., 2015).

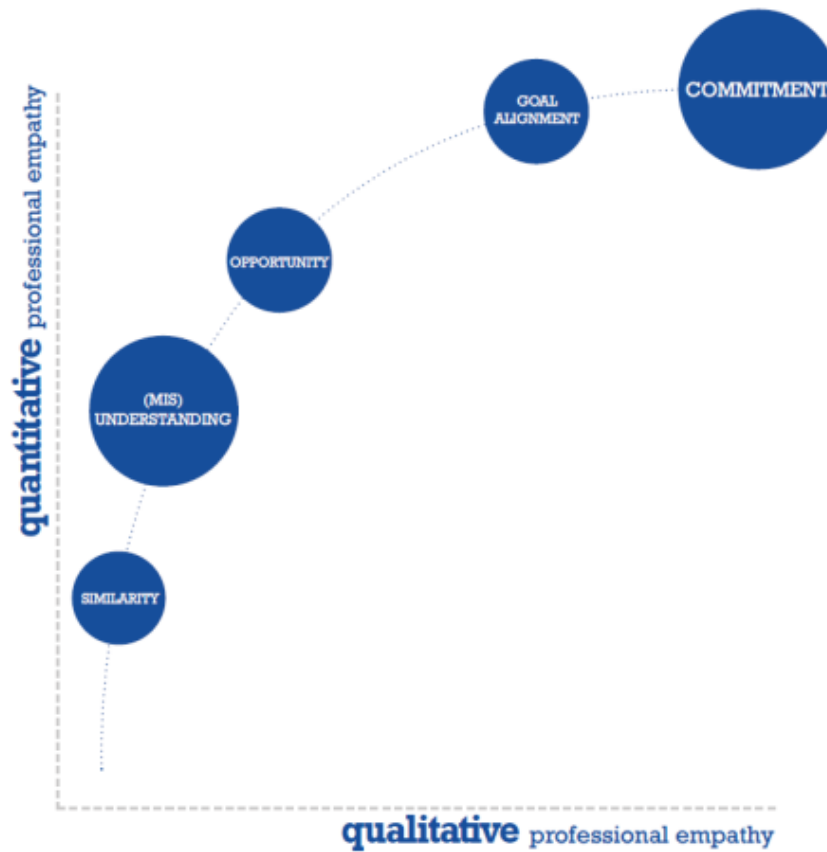


Figure 2 - Abstract graph of professional empathy creation

Source: (Steenbakkers et al., 2015, p. 10)

Based on the above, stakeholder empathy plays a significant role in any business. In addition, the fact that professional empathy can be taught is an interesting notion that can assist small business in the challenges they face in the current economic environment. This leaves the questions, does stakeholder empathy play a mediating role in the relationship between financial risk propensity and life-goal orientation? Does stakeholder empathy correlate with life-goal orientation? By answering these questions, it may assist in addressing the numerous challenges small businesses faces in South Africa

2.6 Small Business challenges in South Africa

More than 70% of start-up companies fail within the first five to seven years of inception (Bushe, 2019). A study by Akinyemi and Ojah (2018) also concluded that the birth phase of South African small companies is where they are the most volatile. However, what is interesting to note is once a company moves from the

birth phase to a persistent phase, they transition easily to the established phase. Ligthelm (2010) notes the complexity of emerging markets and the difficulty for small businesses to survive in these market conditions. Entrepreneurial acumen and business management skills are vital to small business success, but what is also important to note is the firm's ability to adapt and change as economic conditions change. Government has multiple legislative assistance for small businesses in order to stimulate their growth. One of these is the broad-based black economic empowerment act (*Broad-Based Black Economic Empowerment Act No. 53, 2003*). The enterprise and supplier development section of the act forces bigger companies to assist and guide their smaller counterparts. Therefore, the constant collaboration among peer companies requires a level of alignment and commitment. As explained earlier, professional empathy can assist with this process. One can argue that this collaboration can lead to skills transfer from big to small companies and address multiple challenges small business owners face. These challenges can include cash flow shortage, skills shortage and limited access to markets (Zondi, 2017). Personal objectives of small business owners play a significant role in how they manage their organisation's finances (Wong et al., 2018). Making key financial decisions was found to be strongly related to business management skills and entrepreneurial acumen (Wong et al., 2018). Collaboration among corporates are important for small business success and professional empathy can assist to drive that.

2.7 Conclusion

The current body of theory that exists within financial risk propensity, life-goal orientation and stakeholder empathy provides a solid base for this study to build on. It is clear that the constructs in this study has been researched in-depth individually over the years but limited research exists to understand how these concepts interrelate. The focus needs to be on the individual's personal traits in order to predict their decisions. One has to ask, can a small business owner's financial propensity be predicted by their life-goal orientation? Can stakeholder empathy potentially play a mediating role in this relationship? Does stakeholder empathy correlate with life-goal orientation? These are questions in literature that this study aims to answer.

3 Hypotheses formulation

3.1 Introduction

This chapter outlines and discusses the formulated hypotheses based on the literature review conducted in chapter two. The following four hypotheses will examine the relationship among financial risk propensity, life-goal orientation and stakeholder empathy of small business owners.

3.2 Hypothesis 1

Deci et al. (2017) found a positive correlation between life-goal orientation and financial risk propensity of individuals. This finding argued that individuals that are motivated by extrinsic factors take more financial risk and individuals that are motivated by intrinsic factors take less financial risk. One has to wonder if this relationship also exists with regards to South African small business owners. Therefore, the first hypotheses is:

- H1₁ Life goal orientation predict financial risk propensity of small business owners.**
- H1₀ Life goal orientation does not predict financial risk propensity of small business owners.**

3.3 Hypothesis 2

Sekścińska and Rudzinska-Wojciechowska (2020) found a positive correlation between an individual's dark traits (psychopathy, Machiavellianism and narcissism) and financial risk propensity. In addition, these authors found that some dark traits can be associated with lower levels of empathy towards others. Empathy is therefore a construct that warrants investigation, especially if it affects the decision making of small business owners who have multiple stakeholders that they rely on in order to be successful (Bushe, 2019). Therefore, the second hypothesis is:

- H2₁ Stakeholder empathy reduces financial risk propensity of small business owners.**
- H2₀ Stakeholder empathy does not reduce financial risk propensity of small business owners.**

3.4 Hypothesis 3

The third hypothesis depends on the findings of the first two hypotheses. If there is a positive relationship found between financial risk propensity and life-goal orientation, one wonders if stakeholder empathy mediates this relationship. Small business owners financial decisions impacts their stakeholders immensely, especially employees. If extrinsically motivated individuals are found to take more financial risk, does this relationship weaken if the individual has high stakeholder empathy? Therefore, the third hypothesis is:

H3₁ Stakeholder empathy mediate financial risk propensity of small business owners.

H3₀ Stakeholder empathy does not mediate financial risk propensity of small business owners.

3.5 Hypothesis 4

The fourth and final hypothesis investigates the relationship between stakeholder empathy and life-goal orientation. Extrinsically motivated individuals seek external rewards, one have to ponder if they will walk over others to obtain this. Intrinsically motivated individuals were described as open for growth, does this mean they are more empathetic towards stakeholders as they are aware they require them in order to grow? Therefore, the fourth hypothesis is:

H4₁ Level of stakeholder empathy predicts life-goal orientation of small business owners.

H4₀ Level of stakeholder empathy does not predict life-goal orientation of small business owners.

3.6 Conclusion and proposed research model

Figure 3 visually depicts how these hypothesis interlink the constructs in this study.

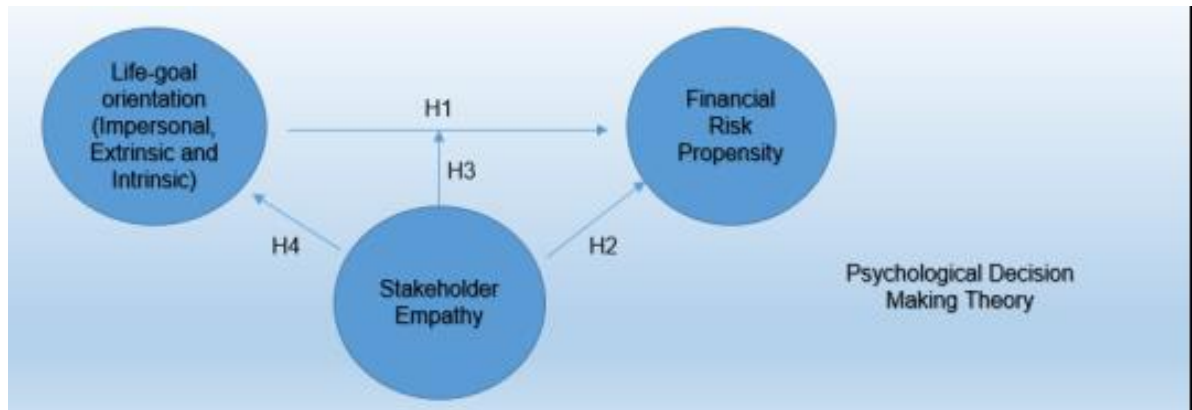


Figure 3 - Proposed research model

Tried and tested measurement tools was required in order to examine these constructs in an effective manner in order to make accurate conclusions. The research methodology that was applied to test these hypotheses is discussed in detail in the next chapter.

4 Research Methodology

4.1 Introduction

The following chapter outlines the research philosophy, design and methodology that was used for this study. As stated before, the purpose of this study is to examine the relationship between financial risk propensity, life-goal orientation and stakeholder empathy of small business owners in South Africa.

This research is quantitative in nature and this section will discuss the multiple instruments that was used to gather data as well as the analysis techniques was employed to test the four hypotheses. Lastly, the section will conclude with the quality controls that were in place as well as the research limitations.

4.2 Research methodology and design

The research philosophy for this study is positivism. Research philosophy can be defined as the overarching views and beliefs of knowledge and how it develops and expands over time through research (Saunders & Lewis, 2018). This positivist philosophical approach is where the study aims to examine and describe the relationship between observable and measurable variables (Saunders & Lewis, 2018).

Positivism rejects conscious thoughts and instinctual knowledge as these constructs does not align with the stance that everything operates according to general laws or science (Saunders & Lewis, 2018). Wilson (2019) believes that positivism offers a practical approach to combine science and industry that makes for a better world for all. In addition, Wilson (2019) argues positivism avoids speculative development. This aligns with the research problem, as the study measured relationships between constructs using statistical analysis. These constructs consist of two variables (Life-goal orientation and financial risk propensity) and a mediator (stake holder empathy). The key for the researcher was to ensure the measurement instruments that are used to test the hypotheses are credible and thoroughly tested within theory.

The approach for this research was deductive in nature. Deductive reasoning starts at a general principle, but then focuses on a logical process to arrive at a conclusion (Zikmund, Babin, Carr & Griffin, 2013). This approach was aligned to this study, as the general principal or theory regarding the constructs already exists within literature as described in the literature review chapter of this report. In addition, data was collected (based on the research strategy employed) in order to test hypotheses that originated out of the existing theory.

The methodological choice was a mono-method that can be defined as one data collection method and corresponding analysis (Saunders & Lewis, 2018). This was aligned with the study as data was collected using one method; an online self-administered questionnaire. Thereafter, a statistical analysis was performed to test the hypotheses.

The study was explanatory in nature, this can be defined as the study of the relationship of two variables (Saunders & Lewis, 2018). Exploratory research is often used to generate formal hypotheses as articulated by Tajalli & Shields (2006). It is clear from the research problem there were two variables (financial risk propensity and life-goal orientation) and a mediator (stakeholder empathy). The research aims to explain the relationship between these constructs through generating and testing hypotheses.

Data collection through a survey needs to be structured and from a sizeable population (Saunders & Lewis, 2018). Data for this research was collected through an online self-administered questionnaire. Psychometric scales are most common in questionnaires and are frequently used in social science research studies (Robinson, 2018). However, it is important to understand the technical procedure and issues surrounding the development of such scales in order for it to be an effective measuring instrument (Robinson, 2018). The measurement instruments that was used in this study in order to examine the three constructs of financial risk propensity, life-goal orientation and stakeholder empathy in small business owners are explained in detail later in this chapter.

Data was collected through a self-administered questionnaire distributed electronically. The research is representative of the online questionnaire respondents at a certain point in time and therefore, the study is cross-sectional in nature (Saunders & Lewis, 2018).

4.3 Population and unit of analysis

The population universe that is applicable to this study is all small business owners within South Africa that has access to the internet. Small business is any privately owned company within South Africa with revenue less than R50 million annually (*Broad-Based Black Economic Empowerment Act No. 53, 2003*). This was put forward as a qualifying question in the survey (Annexure A)

These privately owned companies are defined by the broad-based black economic empowerment act of South Africa as Except Micro Enterprises (revenue less than R10 million annually) and Qualified Small Enterprises (revenue less than R50 million annually) and are seen as small business for purposes of this study. Owners is defined as a natural person that has majority shareholding and that also acts as key decision maker within the operations of the company.

The unit of analysis is the individual (small business owner). This is because this study tested hypotheses with regards to financial risk propensity, life-goal orientation and stakeholder empathy of small business owners through statistical analysis obtained through responses from a questionnaire. It is important to avoid confusing the term unit of analysis, which looks at a micro level (e.g. components of a system), with the level of analysis, which looks at a macro level (e.g. the entire system) (Yurdusev, 1993).

4.4 Sampling method and size

The data was gathered by a self-administered online questionnaire. The sampling technique was purposive sampling that can be defined as a type of non-probability sampling, where the researcher selects a sample out of the population universe based on numerous qualifying criteria (Saunders & Lewis, 2018). This is aligned with this study as respondents needed to own and run a small business in order to participate in this survey.

The survey was distributed on all social media platforms and e-mailing lists. Care was taken to ensure that respondents are within the population universe by asking a qualifying question prior to the commencement of the survey. Concise and clear instructions on how to complete the questionnaire was given and instructions was also given if the respondents wishes to share the survey link on other platforms like social media or e-mails. Suspicious cases (e.g. where all questions had the same answer) was not considered in the statistical analysis (Marcus, Weigelt, Hergert, Gurt, & Gelléri, 2017). Outliers were also investigated and scrutinized for validity. The sample can therefore be described as small business owners that operates in South Africa. The number of respondents and data gathered is later discussed in this research report.

4.5 Measurement instruments

4.5.1 Financial risk propensity: Self-assessed questions on financial risk propensity (Buccioli & Miniaci, 2018)

Buccioli and Miniaci (2018) constructed the self-assessed questions on financial risk propensity in order to successfully measure the degree of risk an individual would take in relation to a financial decision that has a potential payoff. This measurement instrument was developed for the use of financial services providers, researchers and household finance managers.

This tool consist out of six statements and follows a Likert scale of one to seven whereby one is totally disagree and seven is total agree with the statement. (Table 3). Buccioli and Miniaci (2018) found a Cronbach's of 0.79 and a pairwise polychoric correlation range between 0.18 and 0.62 in their study. The Cronbach in relation to this research was calculated at 0.64.

Table 3 - Self-assessed questions on financial risk propensity

Statement 1	“I think it is more important to have safe investments and guaranteed returns, than to take a risk to have a chance to get the highest possible returns”
Statement 2	“I would never consider investments in shares because I find this too risky”
Statement 3	“If I think an investment will be profitable, I am prepared to borrow money to make this investment”
Statement 4	“I want to be certain that my investments are safe”
Statement 5	“I get more and more convinced that I should take greater financial risks to improve my financial position”
Statement 6	“I am prepared to take the risk to lose money, when there is also a chance to gain money”

Source: (Buccioli & Miniaci, 2018, p. 166)

The questions were formulated in a manner where high scores for questions one, two and four indicate high financial risk propensity and the reverse for questions three, five and six where low scores will indicate high financial risk propensity. Therefore, reverse coding was performed on questions three, five and six in order to perform statistical analysis.

The respondent’s total score represents the level of financial risk propensity they consist of. This score out of seven was used to perform correlation and regression analysis with results found in life-goal orientation and stakeholder empathy.

4.5.2 *Life-goal orientation: General causality orientation scale (Deci & Ryan, 1985)*

This measurement instrument was developed by Deci and Ryan (1985) in order to measure if an individual has extrinsic, intrinsic or impersonal life-goal orientation. The three orientation subscales within this measurement instrument is firstly autonomy, which assesses intrinsic life-goal orientation; secondly controlled, which assesses extrinsic life-goal orientation; and lastly impersonal, that describes an

individual that is neither intrinsic nor extrinsically motivated but rather believes in fate or luck in achieving desired outcomes.

The general causality orientation scale holds a Cronbach alpha of approximately 0.75 and a test-retest coefficient of 0.74, as found in the study conducted by Deci and Ryan (1985). The Cronbach alpha found in this study is also at sufficient levels of 0.803 for impersonal, 0.719 for extrinsic motivation and 0.637 for intrinsic motivation. This scale stands firmly among academics as reliable and accurate with approximately 4 383 citations on google scholar (*General causality orientation scale*, 2020). Notable academics that used this scale for their research are among others, Olesen, Thomsen, Schnieber and Tønnesvang (2010) whose research looked at general causality orientations and personality traits. A more recent study was conducted by Xi and Hamari (2019) that looked at gamification features and the relationship it holds with intrinsic motivation.

The questionnaire consists of 12 vignettes with three accommodating likely actions to be taken to each vignette. Overall, the scale consist of 36 items where the respondent must answer the questions based on a seven point Likert scale where one is very unlikely and seven is very likely. Each vignette, accompanied by its three likely actions, measures the three subscales separately. The researcher focused on the first two orientation subscales that measure intrinsic and extrinsic motivation but tested impersonal as well, as relevance was found. Total points per subscale will represent the life-goal orientation preference of the individual. These results were used to perform correlation and regression analysis with results found in financial risk propensity and stakeholder empathy. Appendix B shows the comprehensive questionnaire and how it was presented to respondents. The below figure is an example of a vignette and three likely actions to be taken, each action measuring a subscale as indicated.

Table 4 - Example of vignette with three likely actions testing Life-Goal Orientation

<p>Q14. You have a school-age daughter. On parents' night the teacher tells you that your daughter is doing poorly and doesn't seem involved in the work. You are likely to (answer 1-7 Likert scale):</p>
<p><i>Likely actions:</i></p>
<p>Talk it over with your daughter to understand further what the problem is. <i>(Test extrinsic)</i></p>
<p>Scold her and hope she does better. <i>(Test impersonal)</i></p>
<p>Make sure she does the assignments, because she should be working harder. <i>(Tests intrinsic)</i></p>

4.5.3 Stakeholder empathy: Toronto Empathy Questionnaire (Spreng McKinnon, Mar, Levine & Brian, 2009)

Sprengs, McKinnon, Mar, Levine and Brian (2009) developed the Toronto empathy questionnaire in order to measure a respondents level of empathy. This was done by conducting three studies to explore the construct and formulate a measuring tool that is reliable, measurable and easy to use. Sprengs, McKinnon, Mar, Levine and Brian (2009) found a high Cronbach of 0.85 in their study which compares well with the Cronbach found in this research of 0.828. Therefore, high reliance can be placed on this tool.

The Toronto empathy questionnaire consists of 16 statements where the respondent needs to rate how frequently they feel or act in relation to the statement (Annexure A). Scoring consists of a four-scale response where zero is never, one is rarely, two is sometimes, three is often and four is always. For purposes of this study, the response scale was adapted to a Likert scale of one to seven where one is very unlikely and seven is very likely. This made correlation and regression analysis with relation to financial risk propensity and life-goal orientation easier as both these constructs also consisted of the same Likert scale response options.

What is also important to note is that questions two, four, seven, ten, eleven, twelve, fourteen and fifteen has reverse wording. Therefore, reverse coding was performed on these responses in order to perform statistical analysis. This resulted in a high score indicating high levels of empathy for the respondent.

For purposes of this research, the respondent was requested to answer these questions in relation to their business stakeholders. This was clearly stated on the questionnaire. The below figure is an example of the questions where stakeholder empathy was tested.

Table 5 - Example of questions testing Stakeholder empathy

<p>Q25. Please read the following statements and rate how frequently you act to the statement in relation to your company stakeholders. (answers 1-7 Likert scale)</p>
When someone else is feeling excited, I tend to get excited too
Other people’s misfortunes do not disturb me a great deal
It upsets me to see someone being treated disrespectfully

4.6 Data preparation

4.6.1 Data collection tool

Data was collected through an online-questionnaire that was created through an online survey development tool (Survey Monkey). Once sufficient samples were collected, data was exported into Microsoft excel that was in return, imported into a statistical analysis tool called IBM SPSS where all statistical analysis was conducted.

4.6.2 Coding

The questionnaire consisted of categorical data for the demographic questions that was converted into numerical values for analysis. The data in relation to testing the constructs were ordinal in nature as per the Likert scale of one to seven, where one

is strongly disagree, two is disagree, three is slightly disagree, four is neutral, five is slightly agree, six is agree and seven is strongly agree. This ordinal data was also converted to numerical values in order to perform statistical analysis.

Reverse coding was performed for the financial propensity scale and empathy scale, as some questions were constructed in a manner where a strongly agree response tests the opposite of the other questions within the scale. This reverse coding ensured consistency in numerical values that represented the measurement of a particular construct.

4.7 Data analysis

As mentioned above, the data was gathered by a self-administered online questionnaire (Annexure B). The link to the online survey was shared through social media, instant messaging and e-mail lists by the researcher. Rights of respondents were protected as best possible and the questions were structured not to offend any respondent (Saunders & Lewis, 2018).

Statistical techniques were administered using IBM SPSS. The first step was to conduct descriptive statistics on the demographics of the respondents. This was followed by tests for normality, validity and reliability in order to ensure the tools used and data collected could be relied on. Factor analysis was then conducted to ensure there were no elements of the data that needed to be excluded for statistical analysis. Linearity of responses was visually depicted by scatter plots and homoscedasticity was also tested. Results for each hypothesis started with descriptive statistics in order to obtain greater insight into the central tendency, dispersion and trends of the variables (Saunders & Lewis, 2018). Then, correlation testing was conducted using the Spearman correlation. The Spearman correlation assesses the relationship between two variables that are ordinal in nature (Saunders & Lewis, 2018). It is important to note the researcher did consider Pearson correlation as the responses were based on a Likert scale and therefore numerical in nature. But after testing for normality not all constructs were normally distributed therefore Spearman correlation was used.

In order to test hypothesis four, regression analysis was performed as a correlation was found (Saunders & Lewis, 2018). This statistical technique formulates a regression equation, which can be used to predict the effect of the relationship between stakeholder empathy and life-goal orientation.

The researcher ensured all respondents had a unique respondents identification number, as per the data collection tool (Survey Monkey). Suspicious data (e.g. where all questions had the same answer) were identified and not considered for statistical analysis (Marcus et al., 2017). Steps to share the survey link were clearly outlined for participants. A clear qualifying question was put forward in order to ensure the respondent was within the population universe. Outliers were investigated and scrutinized in order to identify errors in responses. Chapter five of this report provides more in-depth details regarding the data analysis and results.

4.8 Ethics

The researcher maintained a high level of ethics throughout the study and especially with regards to data collection. This was done by ensuring that questions did not reveal respondents identity in any way. In addition, the questionnaire started with a survey consent outlining what the research was about (Annexure A). This ensured respondents were aware of the need for the study and type of questions that will follow.

4.9 Limitations

Although industry of respondents were collected, this study will not be industry specific. Therefore, it does not take into consideration the different dynamics and nuances of industries and how this may affect responses. The population universe is immense; sampling will be at a minor percentage of the entire population universe due to the large amount of small business owners in South Africa. The term stakeholder can differ from person to person. This research was conducted during the time of the COVID-19 pandemic, which might distort the views and beliefs of respondents based on the unprecedented times the world is in as compared to before or after the pandemic.

4.10 Conclusion

This chapter describes the methodology that was used in collecting and analysing data for this research. In addition, it describes the scales and sub scales that was used to test the constructs (financial risk propensity, life-goal orientation and stakeholder empathy). The results chapter will now follow in order to test the hypotheses as outlined in chapter three.

5 Results

5.1 Introduction

The following chapter outlines the results of the statistical analysis that was conducted on the data collected from the online survey questionnaire. By applying the methodology, as outlined in chapter four, the results addresses the hypotheses that were put forward in chapter three.

Firstly, this chapter will describe the number of respondent and the demographics of the sample. Secondly, validity and reliability tests are discussed per construct. Lastly, results from the correlation and regression testing are shown in order to test the four hypotheses as outlined in chapter three.

5.2 Number of responses

The survey consisted of one qualifying question, five demographic questions and 58 questions testing the three constructs based on the scales that was outlined in chapter four. The survey received a total of 123 responses. However, a total of 12 respondents answered no to the qualifying question and was excluded from the data analysis. A further 20 respondents did not continue with the survey although answering yes to the qualifying question, they were also excluded from the data analysis. The remaining 91 respondents completed the survey in full and had no other missing values. These responses were used for statistical analysis.

5.3 Demographics and sample description

5.3.1 Gender

The majority of respondents were male with 83.52%. Females represented 16.48% of total respondents

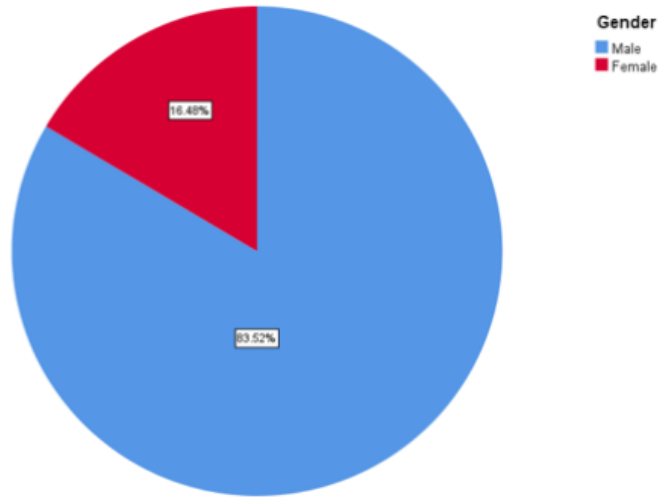


Figure 4 - Gender of survey respondents

5.3.2 Age

The bulk of the respondents were aged between 30 and 40 years old with 40.66%. Respondents aged between 40 and 50 years were 29.67% and between 50 and 60 years at 23.08%. Only 4.40% of respondents were aged between 20 and 30 years and 2.20% aged over 60 years

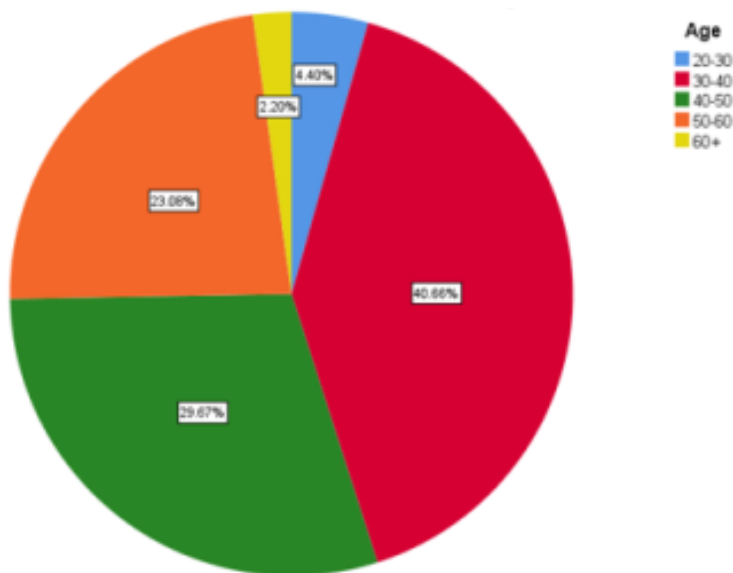


Figure 5 - Age of survey respondents

5.3.3 Education level

All respondents had at least a matric level of qualification. 49.45% of respondents had some kind of diploma or degree where as 46.15% respondents only had matric. Respondents who were at a masters or doctorate education level were at 4.40%.

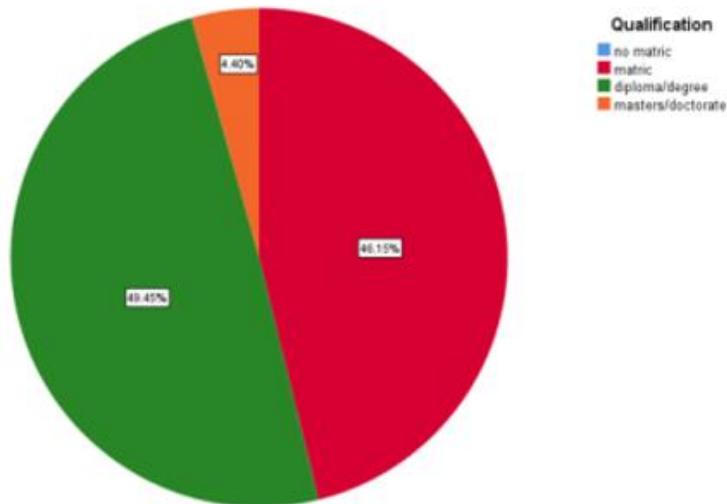


Figure 6 - Education level of survey respondents

5.3.4 Industry

The majority of respondents were in the information technology and communication industry at 58.13%. This was followed by 19.78% in the financial services industry, 5.49% in consulting, 2.20% in construction and mining, and 1.10% in manufacturing. 3.30% of respondents were from other industries.

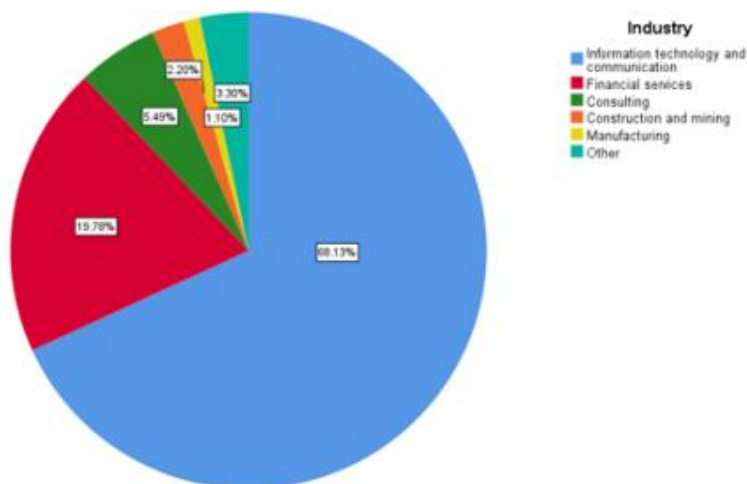


Figure 7 - Industry of survey respondents

5.3.5 Ethnicity

Majority of respondents were white at 48.35%, followed closely by African at 36.26%. Indian respondents were at 10.99% and coloured respondents at 4.40%. No Asian or other ethnicity respondents conducted the survey.

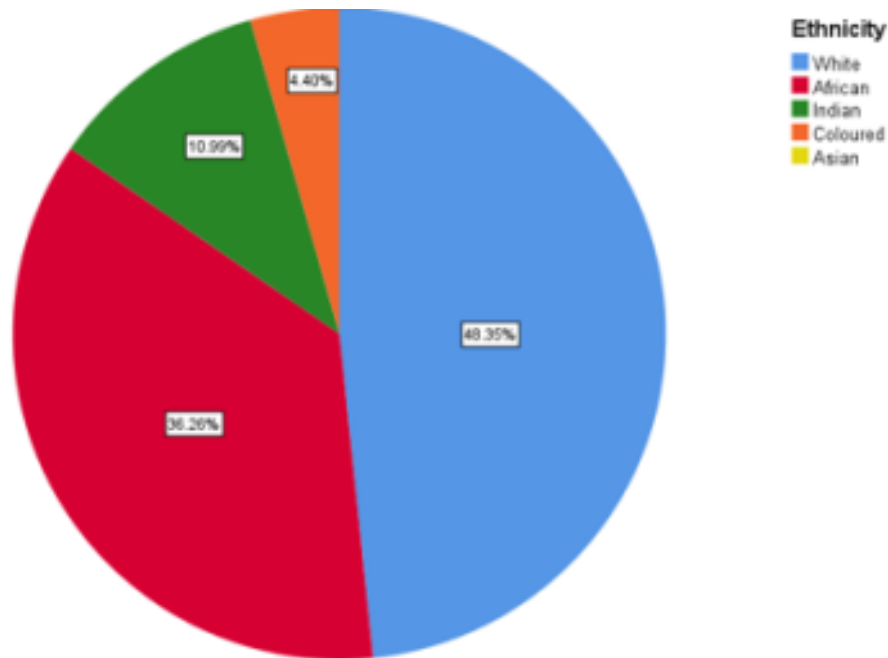


Figure 8 - Ethnicity of respondents to survey

5.4 Normality

For correlation analysis, since all the concepts being compared are no longer Likert scale values but rather numeric scores, Pearson's correlation was considered (Saunders & Lewis, 2018). The first step in order to use Pearson's correlation is to assess if the data is normally distributed or not. Normality was tested using the Shapiro-Wilk and Kolmogorov-Smirnov tests as displayed in table 6 below.

Constructs that shows a significance level of above 0.05 is accepted as normally distributed where as a significance level of under 0.05 shows that the data was not normally distributed (Saunders & Lewis, 2018).

It was found that Financial Risk Propensity is not normally distributed, but intrinsic motivation, extrinsic motivation and empathy are all normally distributed. Impersonal was found to be normally distributed by the Komogorov-Smirnov test but not by the Shapiro-Wilk test.

Since normality was not found across all constructs, Spearman's correlation was used to perform statistical analysis. Data-entry errors and outliers were investigated, but not enough evidence were present to remove these responses from data analysis.

Table 6 - Tests of normality results

Construct	<u>Kolmogorov-Smirnov</u>			<u>Shapiro-Wilk</u>		
	Statistic	df	Sig.	Statistic	df	Sig.
Financial Risk Propensity	.093	91	.049	.964	91	.014
Stakeholder Empathy	.083	91	.158	.973	91	.054
Impersonal	.073	91	.200*	.955	91	.003
Extrinsic Motivation	.091	91	.062	.989	91	.638
Intrinsic Motivation	.064	91	.200*	.992	91	.882
Financial Risk Propensity	.093	91	.049	.964	91	.014

Normality test for constructs are visually depicted in the below histograms. One can clearly see financial risk propensity not to be normally distributed.

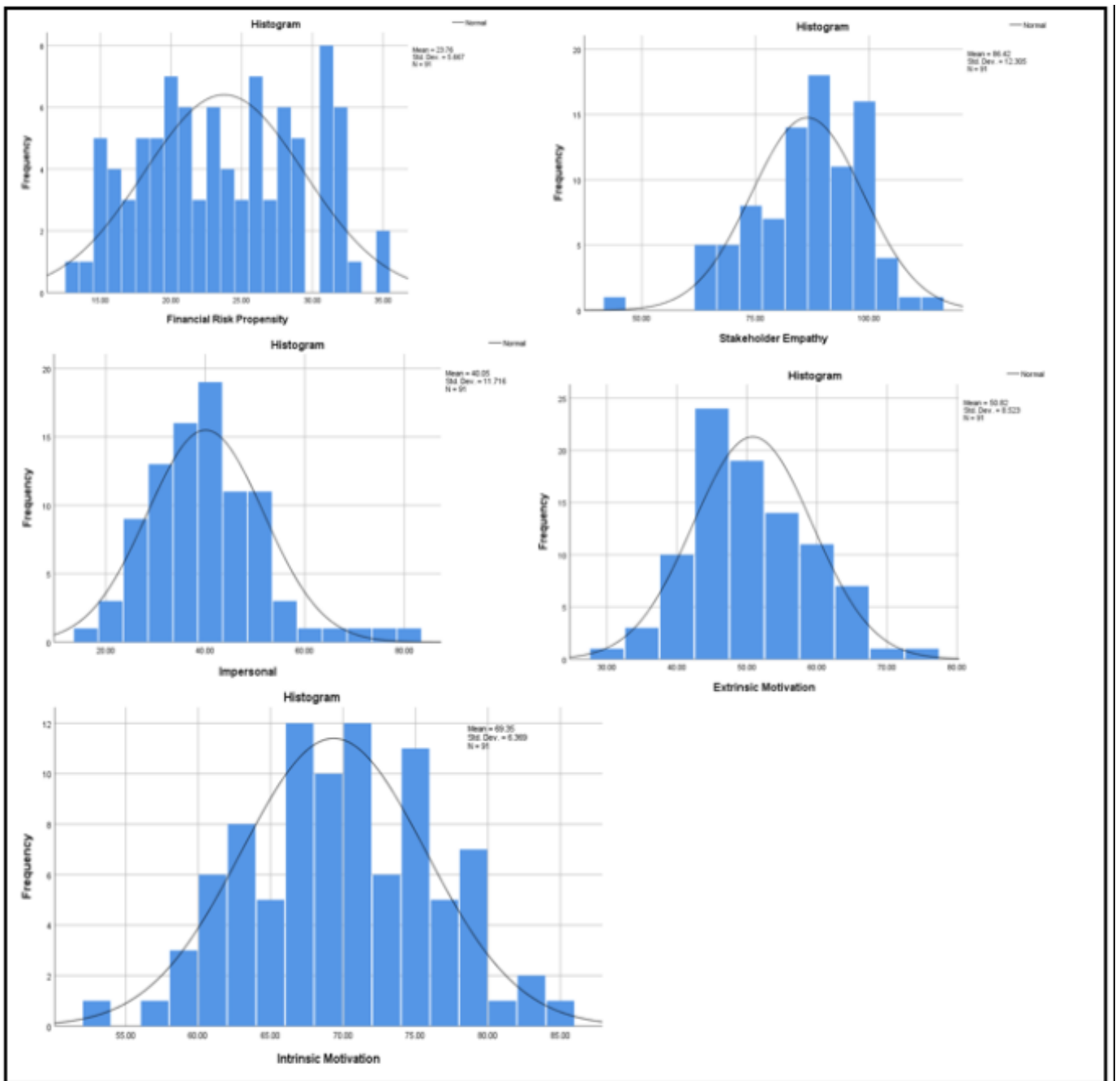


Figure 9 - Histograms displaying normality test per construct

5.5 Validity

In order to test validity, Spearman's correlation was performed between all questions within each construct and the scale in totality (Kinnear & Gray, 2012). The results of the validity tests are depicted in Annexure C.1. All correlations within the financial risk propensity, impersonal and intrinsic motivation scales, and most of the questions in the extrinsic motivation scale, were found to be significant with correlation coefficients ranging between 0.326 and 0.760.

It was found within the extrinsic motivation scale, three questions had correlation coefficient below the acceptable range of 0.30 (Hair, Black, Babin & Anderson, 2010). Question 10 and 12 had correlation coefficients of 0.210 and 0.234 respectively that is slightly below the 0.30 range, which still exhibits convergent validity. However, question one of the extrinsic motivation scale showed a correlation coefficient of 0.058 and was removed from the reliability analysis.

5.6 Reliability

Reliability testing of the relevant constructs were done by measuring the Cronbach Alpha for each scale. The results are shown in the below table.

Table 7 - Cronbach Alpha value and number of questions per construct

Construct	Number of Questions	Cronbach Alpha
Financial Risk Propensity	6	0.640
Impersonal	12	0.803
Extrinsic Motivation	12	0.719
Intrinsic Motivation	12	0.637
Stakeholder Empathy	16	0.828

Impersonal, Extrinsic motivation and stakeholder empathy showed Cronbach Alpha's of above 0.70, which Zikmund et al (2013) indicates as good to excellent reliability. Financial Risk propensity and Intrinsic Motivation displayed a Cronbach Alpha of 0.640 and 0.637 respectively, which indicates fair reasonability (Zikmund et al., 2013).

It is also important to note that scales with less than 10 questions struggle to display a high Cronbach Alpha (Kinnear & Gray, 2012). The Financial Risk Propensity construct had six questions. Impersonal, Extrinsic Motivation and Intrinsic Motivation had 12 questions respectively. Stakeholder empathy consisted of 16 questions. Based on the Cronbach Alpha per scale, data retrieved for all constructs were seen as acceptable for exploratory research (Saunders & Lewis, 2018).

5.7 Factor Analysis

5.7.1 Confirmatory Factor Analysis versus Exploratory Factor Analysis

Factor analysis in statistics looks at inconsistency in variables that are used for analysis (Hair et al., 2010). By performing factor analysis, one can ensure the questions in relation to a scale or construct is consistent in order to perform analysis. There are two factor analysis techniques namely Confirmatory Factor Analysis and Exploratory Factor Analysis.

Confirmatory Factor Analysis is best suited to test scales that has already been validated or tested in theory but is sensitive to small sample sizes (Hair et al., 2010). All scales, as described in chapter four, originated out of existing literature and has been tested by multiple researchers, but the sample size of 91 is relatively small which will make Confirmatory Factor Analysis difficult (Hair et al., 2010). Exploratory Factor Analysis explores undeveloped or untested variable structures and their interrelationship testing a specific construct (Hair et al., 2010). For purposes of this study and due to the small sample size, exploratory factor analysis was performed to test the reliability of the questions pertaining to each scale.

5.7.2 Viability of Exploratory Factor Analysis

Before conducting Exploratory Factor Analysis, the constructs were assessed if factor analysis is possible. The two statistical test that were performed are Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity. In addition to these tests, visual inspection of correlations were performed in order to identify questions that may distort the findings. All constructs reported a Kaiser-Meyer-Olkin Measure of Sampling Adequacy of greater than 0.7 which is higher

than the acceptable value of 0.5 (Hair et al., 2010). In addition, all constructs reported a Bartlett's Test of Sphericity significant level of less than 0.001 which shows that inter-item correlation are present. The correlation matrix indicates that each variable correlated with at least one other variable in the set with a correlation coefficient greater than 0.3.

5.7.3 Principal Component Analysis

Principal Component Analysis aim is to reduce the number of variables within a scale based on which variable explains the extracted factors the best. This is done by assigning a weighting percentage on each factor to show importance and ultimately, the principal components of a scale (Hair et al., 2010). The principal component analysis was performed on SPSS with the following settings: Extraction method based on Eigenvalues greater than one and maximum number of iterations for convergence set at 25. Rotation method was set at Varimax that ensures high factor loadings variables are at a minimum. The results are presented in the below table.

Table 8 - Principal Component Analysis Summary

Construct	Components extracted	Cumulative % of variance	Number of questions
Financial Risk Propensity	2	59.52%	6
Impersonal	4	62.60%	12
Extrinsic Motivation	5	66.37%	12
Intrinsic Motivation	5	62.72%	12
Stakeholder Empathy	4	56.95%	16

Financial Risk Propensity extracted two components that explains 59.52% of the variance. Impersonal extracted four components equating to 62.60% of the variance. Extrinsic and Intrinsic motivation extracted four components each with 66.37% and 62.72% cumulative percentage of the variance respectively.

Stakeholder empathy extracted four components that explains 56.95% of the variance. The full analysis is shown in Appendix C.1

As explained before, all constructs are based on questionnaires that have been peer reviewed and are well tested in theory. Exploratory Factor Analysis was conducted to indicate any variables that would significantly affect the hypotheses testing. The findings show no clear problematic variable. In addition, due to the small sample size and the fact that the amount of questions per construct are relatively few (ranging from six to 16), one has to rely on the scales as is. Therefore, no questions were excluded in order to perform analysis.

5.8 Linearity

In order to test for correlation between a dependent and independent variable, one needs to make the assumption that a linear relationship exists (Chiba, 2015). In order to visually depict linearity among the constructs that will test hypotheses one to four, the below scatter plots were constructed.

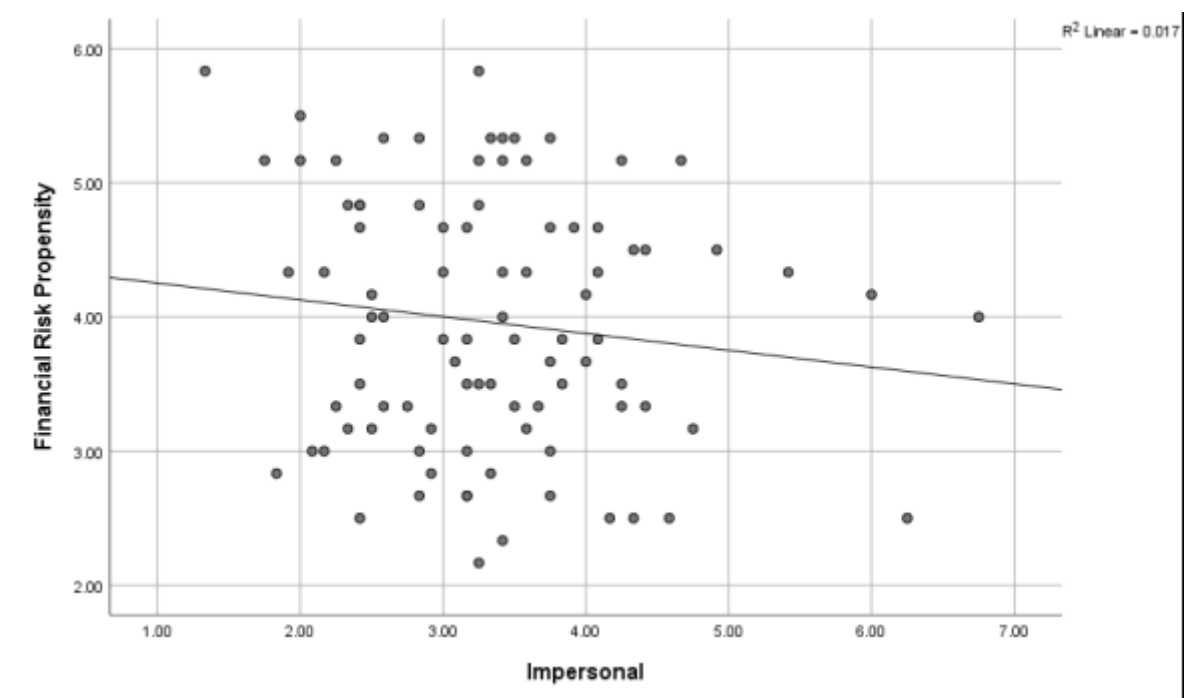


Figure 10 - Scatter plot Impersonal to Financial Risk Propensity

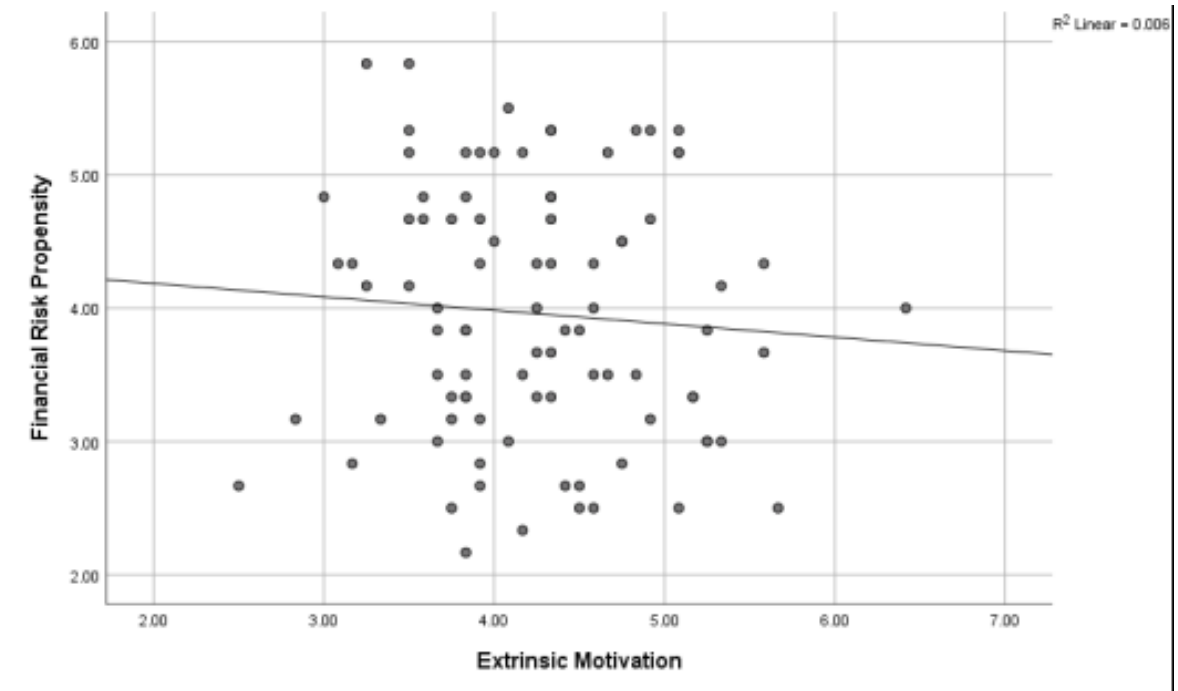


Figure 11 - Scatter plot Extrinsic Motivation to Financial Risk Propensity

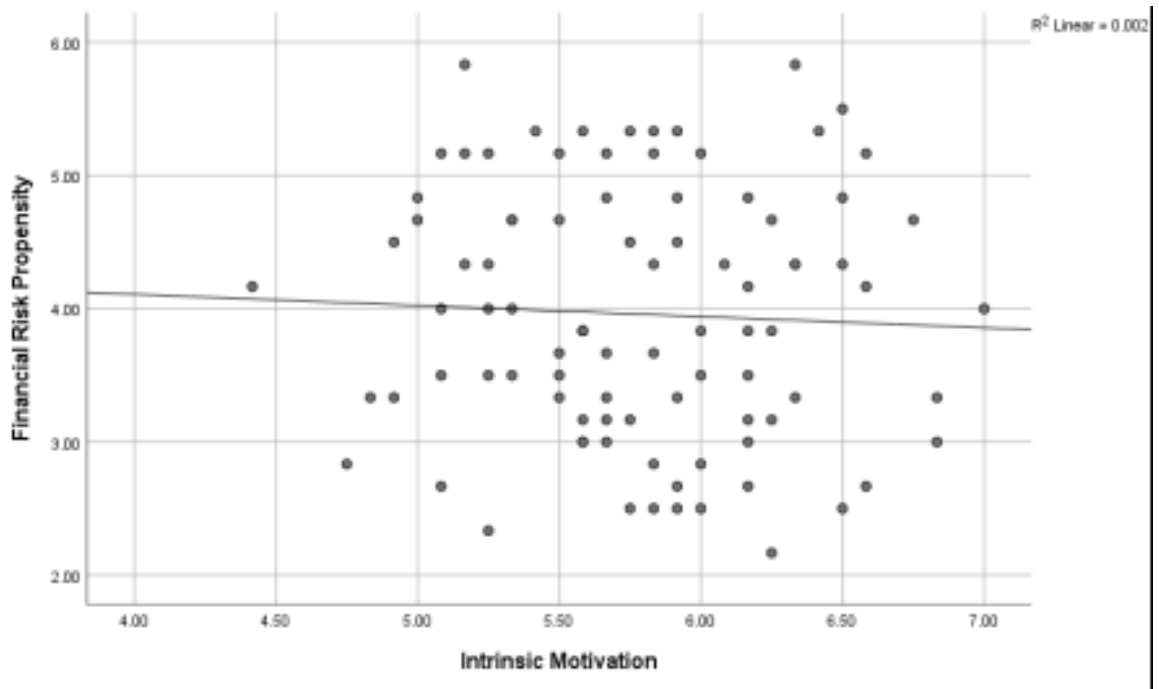


Figure 12 - Scatter plot Intrinsic Motivation to Financial Risk Propensity

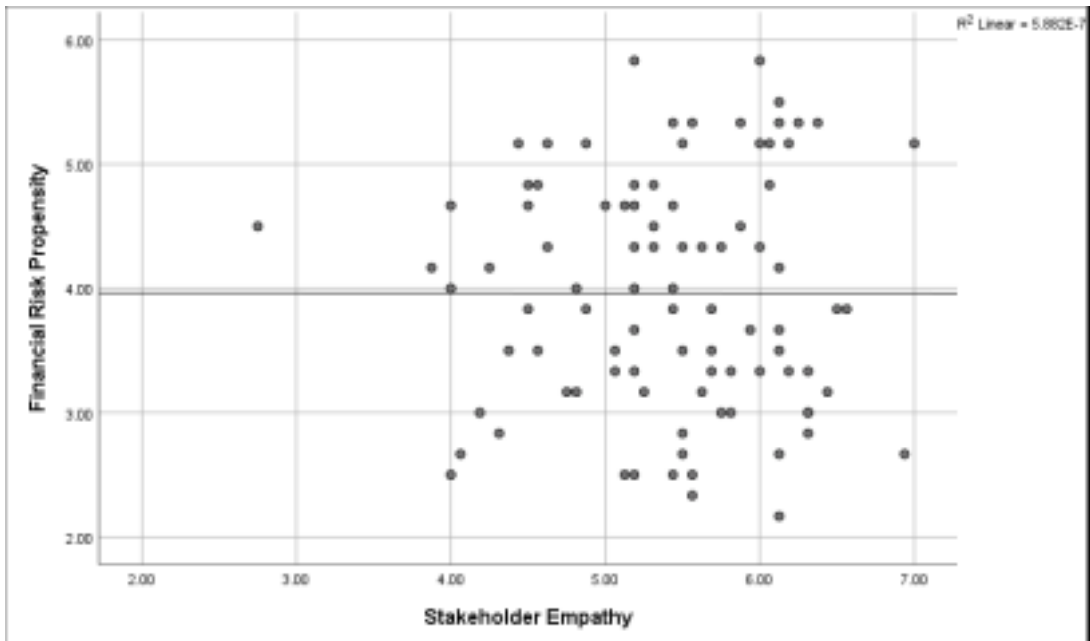


Figure 13 - Scatter plot Stakeholder Empathy to Financial Risk Propensity

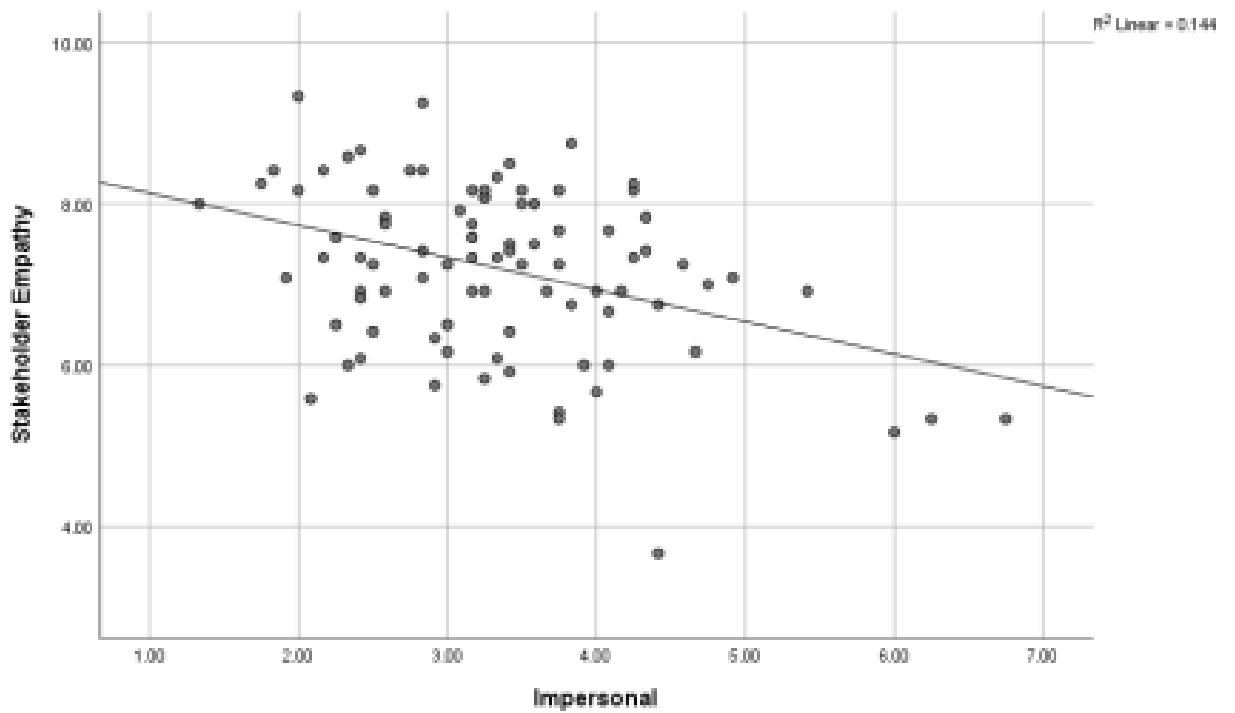


Figure 14 - Scatter plot Impersonal to Stakeholder Empathy

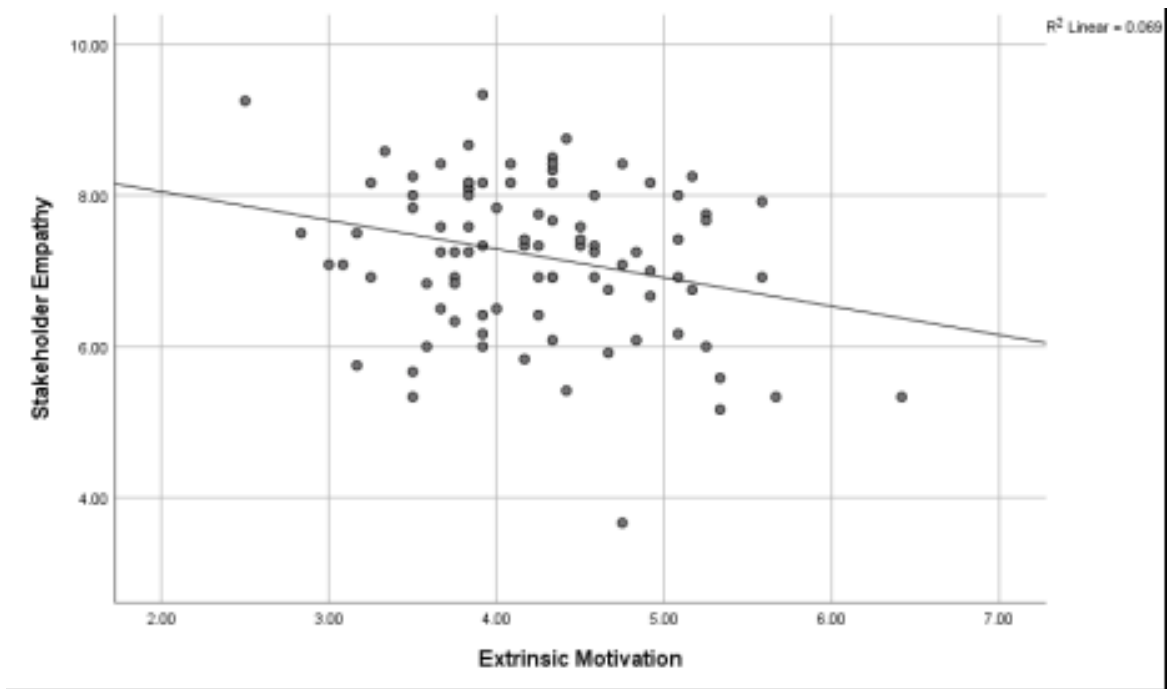


Figure 15 - Scatter plot Extrinsic Motivation to Stakeholder Empathy

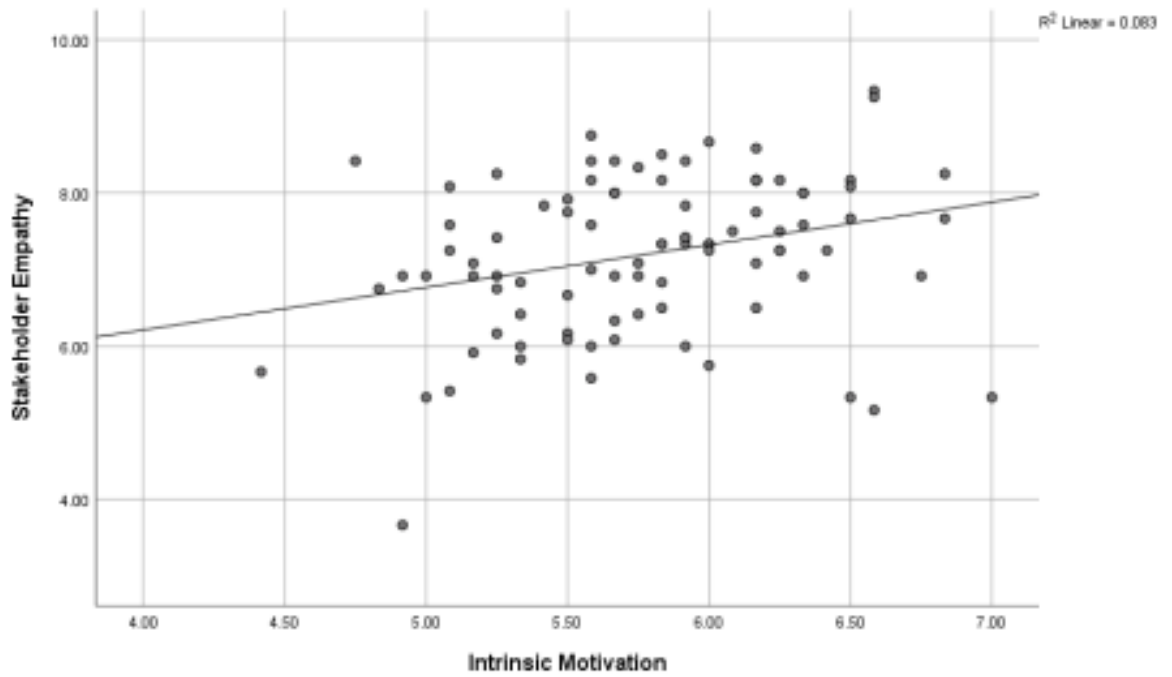


Figure 16 - Scatter plot Intrinsic Motivation to Stakeholder Empathy

From these scatter plots one can see linearity between stakeholder empathy and all three life-goal orientations (impersonal, extrinsic and intrinsic). All constructs has a few outliers, but there is not enough evidence to remove these outliers from statistical analysis.

5.9 Homoscedasticity

Homoscedasticity occurs when a sequence of variable displays the same fixed variance. In order to test if Homoscedasticity was present, scatter plots were constructed with the standardised residuals and predicted dependent values. These scatter plots were inspected as provided in Appendix C.3 and showed no significant indication of homoscedasticity.

5.10 Singularity and Multicollinearity

Multicollinearity is instances where the correlation between variables are too high that can distort statistical analysis (Saunders & Lewis, 2018). Any two variables with a correlation coefficient above 0.80 is seen as Multicollinearity (Saunders & Lewis, 2018). Singularity is where two variables are perfectly correlated (with a correlation coefficient of 1) that also causes distortion. In both instances the researcher is required to exclude these variables for statistical analysis. The correlation matrix per construct was inspected and found no instances of Singularity or Multicollinearity.

5.11 Results Hypothesis 1: Life goal orientation and Financial risk propensity

This first hypothesis was that life-goal orientation (Impersonal, Extrinsic Motivation and Intrinsic Motivation) predicts Financial Risk Propensity of Small business owners in South Africa.

Descriptive statistics for each Life-Goal orientation type as well as Financial Risk propensity is shown in the table below.

Table 9 - Descriptive Statistics: Life Goal Orientation and Financial Risk Propensity

	Financial Risk Propensity	Impersonal	Extrinsic Motivation	Intrinsic Motivation
N	91	91	91	91
Mean	3.96	3.34	4.24	5.78
Median	3.83	3.25	4.25	5.75
Mode	5.17	2.42	3.83	5.58
Std. Deviation	.95	.98	.71	.53

In order to test the hypothesised relationship between Life-goal orientation and Financial Risk Propensity, a Spearman correlation was conducted as shown in the below table.

Table 10 - Spearman correlation for Hypothesis 1

Spearman's Correlation	Test	Financial Risk Propensity
Impersonal	Correlation Coefficient	-.095
	Sig. (2-tailed)	.373
	N	91
Extrinsic Motivation	Correlation Coefficient	-.084
	Sig. (2-tailed)	.431
	N	91
Intrinsic Motivation	Correlation Coefficient	-.057
	Sig. (2-tailed)	.592
	N	91

The results show that there is no significant correlation present. The correlation for impersonal, extrinsic motivation and intrinsic motivation ranged from 0.057 to 0.095, which is very close to zero. The p-value for the constructs was also well above the 0.05 significance level (assuming the 95% confidence rule), which indicates no relationship exists. Therefore, the researcher fails to reject the null hypothesis. This finding is further discussed in chapter six.

5.12 Results Hypothesis 2: Stakeholder empathy and financial risk propensity

The second hypothesis test whether stakeholder empathy reduces financial risk propensity. The descriptive statistics for stakeholder empathy are shown in the below table.

Table 11 - Descriptive Statistics for Stakeholder Empathy

	Stakeholder Empathy
N	91
Mean	5.40
Median	5.50
Mode	5.19
Std. Deviation	0.77

In order to test if stakeholder empathy reduces Financial Risk Propensity a Spearman correlation was performed. The result of this test is shown in the table below.

Table 12 - Spearman correlation for Hypothesis 2

Spearman's Correlation	Test	Stakeholder Empathy
Financial Risk Propensity	Correlation Coefficient	-.008
	Sig. (2-tailed)	.937
	N	91

The results show that there is no significant correlation present. The correlation for stakeholder empathy is -0.008, which is very close to zero. The p-value for

stakeholder empathy is at 0.937, which is also well above the 0.05 significance level. Therefore, the researcher fails to reject the null hypothesis. This finding is further discussed in chapter six.

5.13 Results Hypothesis 3: Stakeholder empathy mediating role between financial risk propensity and life-goal orientation

Since no correlation was found, as shown in Hypothesis 1 and 2, one can assume that there is no moderation effect of stakeholder empathy on Financial Risk Propensity. Therefore, there is no need to perform any statistical analysis on hypothesis 3.

5.14 Results Hypothesis 4: Stakeholder empathy and life-goal orientation

The descriptive statistics of Stakeholder empathy and life-goal orientation has already been provided in table 9 and 11 above. In order to test the potential relationship between these two constructs a Spearman correlation was performed. The results are shown in the table below.

Table 13 - Spearman correlation for Hypothesis 4

Spearman's Correlation	Test	Stakeholder Empathy
Impersonal	Correlation Coefficient	-.281**
	Sig. (2-tailed)	.007
	N	91
Extrinsic Motivation	Correlation Coefficient	-.185
	Sig. (2-tailed)	.078
	N	91
Intrinsic Motivation	Correlation Coefficient	.296**
	Sig. (2-tailed)	.004
	N	91

The results show that a correlation exist between stakeholder empathy and impersonal life-goal orientation (p-value 0.007) as well as intrinsic motivation (p-value 0.004). Extrinsic motivation shows no correlation with stakeholder empathy with a p-value of 0.078. Therefore, the researcher rejects the null hypothesis regarding impersonal and intrinsic motivation, but fail to reject the null hypothesis for extrinsic motivation.

5.15 Regression Analysis on Hypothesis 4

Regression analysis is used to predict the value of a “dependent variable based on the value of an independent variable” (Chiba, 2015, p. 1). The relationship between the two constructs needs to be linear in order to perform regression analysis. Linearity has already been established for stakeholder empathy (independent variable) and impersonal life-goal orientation (dependent variable) as well as stakeholder empathy (independent variable) and intrinsic motivation life-goal orientation (dependent variable) in section 5.8 of this document. This linear relationship was also confirmed with a Spearman correlation as discussed in 5.14 that showed p-values for both cases below the significance level of 0.05. A simple linier regression was performed between the constructs and yielded the below results.

Table 14 - Simple linier regression of Stakeholder Empathy to Impersonal

Construct	R	R Square	Adjusted R Square	Std. Error of the Estimate
Stakeholder Empathy to Impersonal	.380	.144	.135	.908

Table 15 - Simple linier regression of Stakeholder Empathy to Intrinsic Motivation

Construct	R	R Square	Adjusted R Square	Std. Error of the Estimate
Stakeholder Empathy to Intrinsic motivation	.287	.083	.072	.5112

The R value of 0.380 for impersonal and 0.287 for intrinsic motivation can be seen as the measure of quality of the prediction. In this case, it shows a weak level of prediction. The R-squared (also known as the coefficient of determination) indicate “the proportion of variance in the dependent variable that can be explained by the independent variable” (Chiba, 2015, p. 11). The adjusted R-square takes the positively-biasedness of the sample in consideration and is more appropriate to report on for regression analysis (Chiba, 2015). The adjusted R-square value of 0.135 for impersonal and 0.072 for intrinsic motivation is considered as a very weak effect (Zikmund et al., 2013).

Table 16 - ANOVA for Stakeholder Empathy to Impersonal

Stakeholder Empathy to Impersonal	Sum of Squares	df	Mean Square	F	Sig.
Regression	12.377	1	12.377	15.004	.000
Residual	73.420	89	.825		
Total	85.797	90			
Regression	12.377	1	12.377	15.004	.000

Table 17 - ANOVA for Stakeholder Empathy to Intrinsic Motivation

Stakeholder Empathy to Intrinsic motivation	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.095	1	2.095	8.018	.006
Residual	23.257	89	.261		
Total	25.352	90			
Regression	2.095	1	2.095	8.018	.006

The ANOVA tables above tests whether the proposed model is a good fit for the data (Chiba, 2015). The general significance rule of 95% confidence interval applies with regards to the significance value. Both impersonal and intrinsic motivation showed a p-value of less than 0.05 that indicates the proposed model is a good fit.

Table 18 - Coefficient results for Stakeholder Empathy and Impersonal

Dependent Variable : Impersonal	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	5.942	.679		8.750	.000
Stakeholder Empathy	-.362	.093	-.380	-3.873	.000

Table 19 - Coefficient results for Stakeholder Empathy and Intrinsic Motivation

Dependent Variable: Intrinsic Motivation	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.708	.382		12.31	.000
Stakeholder Empathy	.149	.053	.287	2.83	.006

Beta indicates the slope of the regression line. The regression formulas are as follows:

$$\text{Impersonal} = 5.94 - 0.36 (\text{Stakeholder Empathy})$$

$$\text{Intrinsic Motivation} = 4.71 + 0.15 (\text{Stakeholder Empathy})$$

What is also important to note is that the p-value for both impersonal and intrinsic motivation is below 0.05 which indicates significance.

5.16 Conclusion

This chapter presented the results of statistical data analysis that was performed in order to test the hypotheses as outlined in chapter three. Firstly, describing the sample size and demographics then testing for normality, validity and reliability. Factor analysis results was shown and discussed followed by the depiction of linear scatter plots and ultimately, correlation testing per hypothesis. Lastly, the fourth hypothesis necessitated a simple regression analysis that was performed.

The results indicated that no correlation exist between financial risk propensity and life-goal orientation and therefore, no mediating relationship exist for stakeholder empathy. However, a correlation was found between stakeholder empathy and intrinsic motivation as well as impersonal life-goal orientation. No correlation was found between stakeholder empathy and extrinsic life-goal orientation. Chapter six will now discuss these results in detail and how they contribute to existing theory.

6 Discussion of Results

6.1 Introduction

This chapter discusses the four hypotheses as outlined in chapter three in detail. The discussion of the results is done in an integrated manner by elaborating on the results that was outlined in chapter five and linking it to the literature review findings as shown in chapter two.

The objective of this study was to examine the relationship among financial risk propensity, life-goal orientation and stakeholder empathy of small business owners in South Africa. By examining these constructs and their potential interrelatedness, business owners will be able to make better financial decisions by understanding how their personal traits may play a role in how they view and address a financial decision. Stakeholders of small businesses, including larger companies, will also benefit from this study as they will have better understanding of their small business owner partner.

The discussion of these results hopes to add to existing literature and add value for small businesses as well as their stakeholders. Better financial decisions can lead to better success rates of small companies. Improved collaboration and stronger relationships between small and big companies can also lead to greater economic growth (Tsebe et al., 2018). Decision making theory has been widely researched over the last century and is therefore very dense. The behavioural decision making sub theory, as described by Schoemaker (2013), looks at the human element and places the individual as focal point. Building on behaviour decision making theory, Prinsloo's (2017) three perspective model on decision making theory was used to position the constructs of this research within the psychological decision making field.

Although psychological decision making theory is at the core of this study, hypothesis four was more concerned with exploring the relationship between two personal traits a small business owner possesses (stakeholder empathy and life-goal orientation). Further studies are required to test the impact the relationship between these two constructs can have on decision making. A simple linier

regression was performed in an attempt to predict how an individual's level of stakeholder empathy predicts intrinsic motivation and impersonal.

6.2 Discussion of Hypothesis 1

As indicated in 3.1.1, hypothesis 1 was as follows:

H1₁ Life goal orientation predict financial risk propensity of small business owners.

H1₀ Life goal orientation does not predict financial risk propensity of small business owners.

The results as indicated in 5.11 indicates that no correlation between financial risk propensity and life-goal orientation exist. This challenges Deci et al's (2017) finding that there is a correlated relationship between life-goal orientation and financial risk propensity of individuals.

The sample mean score for financial risk propensity and impersonal life-goal orientation were slightly below neutral with 3.96 and 3.34 respectively. Extrinsic motivation on the other hand, leaned slightly toward the agree side with a mean of 4.24. Intrinsic motivation had the highest mean among all scales with a score of 5.78. The median for all constructs showed similar results. The descriptive statistics therefore indicates that the respondents are not high financial risk takers, but not necessarily financial risk avoiders. The bulk of the respondents are intrinsically motivated. These scores can be a good indication of what level of financial risk propensity and life-goal orientation small business owners has compared to individuals within other business contexts. One can argue that the high score in intrinsic motivation indicates that these individuals start their own business, not for external rewards like money and fame, but because they love what they do and their satisfaction therefore comes from within.

Although the bulk of literature indicates a correlated relationship exist between financial risk propensity and personal traits like life-goal orientation (Akhtar & Das, 2019; Deci et al., 2017; Djeriouat, 2017), the finding by Nicholson, Soane, Fenton-O'Creevy and Willman (2005) that indicate the important role context plays is evident in this study. The current economic environment that small business owners operate in, may influence and supersede their natural decision making

ability. Also, the different factors and nuances relating to the multiple industries these small business owners operate in, emphasises the unique context. It must be noted the majority of respondents were male at 83.52% and most of the respondents operate within the information technology and communication industry. This can also distort the findings as demographics can show inconsistencies when testing financial risk propensity (Nicholson et al., 2005). These limitations are also discussed within the conclusion chapter of this report.

The results of hypothesis one indicates that the general consensus in literature that extrinsic motivated individuals generally take more financial risk, is not as clear cut as it seems. Iqbal (2013) notes how individuals process information differently and sometimes illogically. The results of hypothesis one supports the notion advocated by Iqbal (2013) that individuals are unpredictable. One cannot simply assume the findings in one study regarding personal traits and its relationship with financial risk propensity, holds true in another context or environment. Combrink and Lew's (2020) study also advocates the notion that even though an individual can be overconfident and have certain level of bias, it does not always affect their financial risk propensity.

An important factor to take in consideration regarding the context of this study, is the fact that 70% of start-up companies fail within the first five to seven years of inception (Bushe, 2019). The inception phase is where small companies are at their most vulnerable (Akinyemi & Ojah, 2018). The difficulty to survive in complex emerging markets is also emphasised by Ligthelm (2010). This research that focused on small business owners in South Africa, which is an emerging market, shows the unique context this study was conducted in and can be one of the reasons why no correlation was found between financial risk propensity and life-goal orientation.

6.3 Discussion of Hypothesis 2

As indicated in 3.1.2 hypothesis 2 was as follows:

H2₁ Stakeholder empathy reduces financial risk propensity of small business owners.

H2₀ Stakeholder empathy does not reduce financial risk propensity of small business owners.

As indicated in 5.12, no correlation exists between stakeholder empathy and financial risk propensity. This finding is in line with the first hypothesis which also failed to find a correlation between financial risk propensity and a personal trait (life-goal orientation). Again, the finding by Nicholson, Soane, Fenton-O'Creevy and Willman (2005) as well as Iqbal (2013) that highlight the complexity of measuring financial risk propensity and the importance of context, is very much applicable to the results of hypothesis 2. It must be noted, like hypothesis 1, literature indicate that there is a positive relationship between some personal traits that are strongly related to empathy (Sekścińska & Rudzinska-Wojciechowska, 2020). The finding of hypothesis 2 therefore does not support this notion and highlights the importance of other factors like context, demographics and industry that can potentially distort findings.

The mean and median score for stakeholder empathy was 5.40 and 5.50 respectively. This indicates that the bulk of the respondents has a high level of stakeholder empathy. One can argue based on these results that small business owners are generally empathetic towards their stakeholders but that this level of empathy does not necessarily play a role in the financial risks they take.

Small business owners needs to have networking skills and some level of entrepreneurial spirit to survive (Poposka et al., 2016). Therefore, the finding by Waller et al. (2020) that low levels of empathy correlates with anti-social behaviour, supports the notion that small business owners generally display a high level of empathy. The finding that small business owners have high levels of empathy also assists them with conflict situations (Klimecki, 2019). This could be a tool that can be used for small business success. But small business owners must be wary of too much empathy, as warned by König et al. (2020), as it can result in poor performance as a result of being too forgiving.

6.4 Discussion of Hypothesis 3

As indicated in 3.1.3 hypothesis 3 was as follows:

H3₁ Stakeholder empathy mediate financial risk propensity of small business owners.

H3₀ Stakeholder empathy does not mediate financial risk propensity of small business owners.

Since no relationship was found between financial risk propensity and life-goal orientation as well as stakeholder empathy and financial risk propensity, hypothesis 3 could not be tested. This potential mediation relationship stakeholder empathy could have played in the relationship between financial risk propensity and life-goal orientation, originated out of questions posed by Sekścińska and Rudzinska-Wojciechowska (2020) in their recent study on an individual's dark traits and its relations to financial risk propensity. The findings of hypothesis 3 attempts to answer that question by indicating that no mediating relationship exist.

In order to find a personal trait that correlates with financial risk propensity was already found to be a difficult task due to the specific environment, different demographics and context of respondents during this study. Hypothesis 2 also indicated that no relationship exist between stakeholder empathy and financial risk propensity and therefore, by default, stakeholder empathy cannot play a mediating role between financial risk propensity and life-goal orientation.

6.5 Discussion of Hypothesis 4

As indicated in 3.1.4 hypothesis 4 was as follows:

H4₁ Life-goal orientation predicts level of stakeholder empathy of small business owners.

H4₀ Life-goal orientation does not predict level of stakeholder empathy of small business owners.

The results of hypothesis 4 indicate that a correlation exists between stakeholder empathy and intrinsic motivation as well as impersonal life-goal orientation. But no correlation exist between stakeholder empathy and extrinsic life-goal orientation. Li

and Wen (2019) found that extrinsic motivated individuals are more likely to participate in an activity if the perceived usefulness is displayed. One can argue that extrinsic motivated individuals might have been reluctant to complete the questionnaire as it did not seem useful for them. This is also supported by the fact that the sample showed much higher means for intrinsic motivation as compared to extrinsic motivation. Therefore, the finding that intrinsic motivation and impersonal correlates with stakeholder empathy but that extrinsic motivation does not, warrants further investigation.

The scatter plot, as depicted in Figure 16, indicates the linear relationship between stakeholder empathy and intrinsic motivation. As stakeholder empathy increases, so does intrinsic motivation. The relationship correlates, as already indicated above as the p-value was below 0.05 (assuming 95% confidence level). A simple linear regression analysis was performed as shown in 5.15 that yielded a regression formula that can be used to calculate the effect stakeholder empathy (independent variable) will have on intrinsic motivation (dependent variable). The p-value was also found to be below 0.05 for the regression analysis and therefore indicated significance.

Intrinsic motivated individuals do not need external rewards in order to engage in an activity that they find interest in, as the satisfaction of the activity is internally generated (Deci et al., 2017). Therefore, it is argued they love what they do and that can lead to greater innovation and growth (Çınar, Bektas, Aslan, 2011). One can argue in order to grow in a certain area, the successful collaboration and interaction between stakeholders is important. The finding of hypothesis 4 shows that intrinsic motivated small business owners are generally more empathetic towards their stakeholders. This is an interesting notion that fits in well with Cerasoli, Nicklin and Ford (2014) study that intrinsically motivated individuals are highly engaged in learning environments, as the bulk of skills transfer and learning for small business owners comes from their stakeholders (especially from their big corporate partners). In order to be empathetic towards stakeholders, one needs to put yourself in their shoes (de Waal & Preston, 2017). By being empathetic, intrinsic motivated individuals may have the ability to understand their stakeholders better that can lead to better collaboration and alignment between them.

The scatter plot, as depicted in Figure 14, indicates the linear relationship between stakeholder empathy and impersonal life-goal orientation. As stakeholder empathy

decreases, impersonal life-goal orientation increases. The relationship correlates as already indicated above as the p-value was below 0.05 (assuming 95% confidence level). A simple linear regression analysis was performed (similar to the regression analysis performed between stakeholder empathy and intrinsic life-goal orientation) as shown in 5.15. This regression analysis yielded a regression formula that can be used to calculate the effect stakeholder empathy (independent variable) will have on impersonal life-goal orientation (dependent variable). The p-value was also found to be below 0.05 for the regression analysis and therefore indicated significance.

An individual that scores high in impersonal life-goal orientation was described by researchers as being amotivational and almost in an emotionless state (Deci & Ryan, 2000; Olesen et al., 2010). At the core of empathy is emotion (McGrath & Whitty, 2017). Therefore, the finding that respondents in this study that scored high for impersonal life-goal orientation had a low score in stakeholder empathy, makes sense and fits in well with current literature. Waller et al. (2020) found a correlation between callous-unemotional traits and antisocial behaviour. The findings of hypothesis 4 that respondents that scored high on impersonal life-goal orientation showed lower levels of empathy supports Waller et al's (2020) finding. Small business owners that has high impersonal life-goal orientation needs to understand the problems that it can create. One can argue that anti-social behaviour and low levels of empathy can stifle growth, networking as well as innovation within a small business. This assertion supports Klimecki's (2019) study where he argues empathy is a key tool when resolving conflict situations.

Deci (2017) found that extrinsic motivated individuals do not take social risks. Waller et al. (2020) found that antisocial behaviour correlates with callous-unemotional traits (whereby low levels of empathy is one of these traits). These studies contradict with the finding of hypotheses 4 that extrinsic motivation does not correlate with stakeholder empathy. In order to shed some light on this finding, one can refer to the argument by Deci, Olafsen and Ryan (2017) that extrinsic motivated individuals are controlled by others. Does this perhaps mean that extrinsic motivated individuals are aware of their reliance on others to obtain satisfaction and therefore are not necessarily less empathic as research suggests? An interesting notion that warrants further investigation as indicated in the conclusion chapter of this document.

6.6 Conclusion

This chapter discussed the results found in chapter five in detail. The constructs of this study (Financial risk propensity, life-goal orientation and stakeholder empathy) are well positioned within psychological decision making theory. An in-depth discussion on the results of each hypotheses indicated how this study added value to existing theory as well as business by better understanding the small business owner. Results on hypotheses one, two and three indicated the complexity of finding a correlation between financial risk propensity and personal traits of small business owners. Different demographics, contexts and environments small business owners find themselves in, can distort findings. Hypotheses four indicated a correlation between stakeholder empathy and intrinsic motivation, as well as a correlation between stakeholder empathy and impersonal life-goal orientation. These finding sets a good platform for future research on decision making behaviour of small business owners. This is further discussed within the final conclusion chapter of this report.

7 Conclusion and Recommendations

7.1 Introduction

The purpose of this study was firstly, to test if life-goal orientation (Extrinsic motivation, intrinsic motivation and impersonal) can predict financial risk propensity of small business owners. Secondly, to test the potential mediating role of stakeholder empathy in the hypothesised relationship between life-goal orientation and financial risk propensity. Lastly, the relationship between stakeholder empathy and life-goal orientation was examined.

Psychological decision making theory as described by Prinsloo (2017) is at the core of this study due to its focus on human behaviour and personal traits of individuals. The differences and nuances of risk averters and risk seekers has been well researched over the years in an attempt to understand and predict human behaviour (MacCrimmon et al., 1986). The big five personality traits model has been used in recent studies in an attempt to link financial risk propensity to personal traits of individuals (Zhang et al., 2020). The theory on planned behaviour that looks at the attitude, subjective norm and perceived control that lead to the ultimate behaviour of individuals, is also a popular model used by academia to link financial risk propensity (Akhtar & Das, 2019).

The taxonomy of human motivation model created by Deci and Ryan (2000) serves as a tool to describe the three types of life-goal orientations. Extrinsic motivated individuals requires external rewards to participate, while intrinsic motivated individuals find satisfaction within (Deci & Ryan, 2000; Olesen et al., 2010). Impersonal, or so called amotivational individuals, believe in luck or fate as an outcome (Deci & Ryan, 2000; Olesen et al., 2010). The constructs of this research, financial risk propensity, life-goal orientation and stakeholder empathy are well placed within psychological decision making theory as indicated above. In order to test the hypotheses, tools were used that have already been tried and tested within theory. The Self-assessed questions on financial risk propensity developed by Bucciol and Miniaci (2018) was used to test financial risk propensity. The General causality orientation scale developed by Deci and Ryan (1985) was used to test the three types of life-goal orientation (extrinsic, intrinsic and impersonal). The Toronto

Empathy Questionnaire created by Spreng McKinnon, Mar, Levine and Brian (2009) was used to test stakeholder empathy.

An online survey was conducted that received 123 responses. From these responses 12 respondents fell outside the population universe by answering no to the qualifying question. In addition, 20 respondents, although answering yes to the qualifying question, did not continue with the survey. These respondents were excluded from statistical analysis. Therefore, data collected from 91 respondents were used for statistical analysis.

7.2 Principle conclusions

The results of this research report indicated that no relationship exist between life-goal orientation and financial risk propensity for this sample, and therefore no mediating role can exist for stakeholder empathy in the relationship. A correlation was found between stakeholder empathy and intrinsic motivation as well as stakeholder empathy and impersonal life-goal orientation. No correlation was found between stakeholder empathy and extrinsic motivation.

The finding that no correlation exist between financial risk propensity and life-goal orientation challenges the notion in current theory that a relationship exists (Akhtar & Das, 2019; Deci et al., 2017; Djeriouat, 2017). Studies by Nicholson, Soane, Fenton-O'Creevy and Willman (2005) emphasise the important role context, environment and demographics of respondents' play in testing decision making behaviour. This is also supported by Iqbal (2013) that highlight the complexity and unpredictability of individuals when making decisions. The South African context and economic environment small business operate in, could be a reason for the finding that no correlation exist between financial risk propensity and life-goal orientation

Intrinsically motivated individuals were found to have high levels of stakeholder empathy. The level of empathy for other stakeholders can assist small business owners to strengthen their relationship with their stakeholders. This is an important factor that supports Cerasoli, Nicklin and Ford's (2014) study that indicates intrinsically motivated individuals are more engaged in learning environments.

Impersonal life-goal orientated individuals were found to have low levels of stakeholder empathy. This finding supports Waller et al's (2020) study that found a correlation between callous-unemotional traits and antisocial behaviour.

7.3 Implication for small businesses and other relevant stakeholders

This study supports studies by Iqbal (2013) as well as Nicholson, Soane, Fenton-O'Creevy and Willman (2005) that individuals are complex and unpredictable. One cannot simply assume findings of one study on psychological decision making behaviour is applicable to another. The unique context, demographics and environment that a specific individual is in, plays an important role in attempting to understand their financial decision making behaviour (Nicholson et al., 2005).

Small business owners need to understand the negative impact of having an impersonal life-goal orientation and low level of empathy toward stakeholders. Waller et al. (2020) found that unemotional traits correlates with antisocial behaviour and this could stifle growth for small businesses. Intrinsic motivation on the other hand is associated with high level of innovation and growth (Çınar, Bektas, Aslan, 2011). By being intrinsically motivated small business owners may have a better chance of success. The finding of this research that intrinsically motivated small business owners have high levels of stakeholder empathy also supports this notion.

Large corporates who collaborate and conduct business with their small business partners need to be cognisant about the life-goal orientation and level of stakeholder empathy their small business partner has, as this could potentially affect the business relationship. In addition, large corporates cannot solely rely on findings in current research in the physiological decision making behaviour field to predict financial risk propensity of their small business partners. They need to take in consideration the context, environment and demographics of their small business partners before making assumptions. This research recommends large companies to evaluate personal traits and decision making behaviour (similar to the constructs of this study) of their small business partners prior to on-boarding them as an enterprise or supplier development partner. This will ensure they select partners that are aligned with their strategy and values.

7.4 Limitations of the research

This research was conducted during the COVID-19 pandemic and as such, respondent's answers in the questionnaire could have been different to what it would have been before or after the pandemic. Most of the respondents were men in the information technology and communication sector which may affect the findings to be applicable to all small business owners. The sample is relatively small in relation to the population universe. This is due to the large amount of small businesses registered in South Africa

7.5 Suggestions for future research

Highly extrinsic motivated individuals only participate in an activity if the usefulness for them is evident (Li & Wen, 2019). These individuals are also reliant on others for external rewards (Deci et al., 2017). Therefore, better and more innovative measurement tools are required to identify extrinsic motivated individuals and their potential relationship with personal traits.

More focused studies are required on the effect of different contexts, environments and demographics within financial risk propensity, life-goal orientation and stakeholder empathy of small business owners.

Professional empathy is seen as a tool to business success (Steenbakkens et al., 2015). Research is required to measure the level of professional empathy within small businesses. In addition, research is required to create potential tools to develop professional empathy as an instrument to business success.

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9 Appendices

9.1 Appendix A: Survey Consent Letter

Survey Consent

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfillment of an MBA.

I am conducting research to better understand small business owners by investigating the relationship between their financial risk propensity, life-goal orientation and level of stakeholder empathy. The questionnaire will not take you more than 15 minutes. Please note that most questions are based on hypothetical scenarios, although it might not be your lived experience, please answer each question as if you were in the described situation as best possible.

Your participation is voluntary, and you can withdraw at any time without penalty. Your participation is anonymous and only aggregated data will be reported. 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.

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* 1. I have read and accept the above Survey Consent and also confirm I own and run a small business (Revenue less than R50 million per annum) in South Africa.

Yes

No

9.3 Appendix B: Survey questionnaire

2. What is your gender?

- Male
- Female
- Prefer not to answer

3. What is your age bracket

- 20-30
- 30-40
- 40-50
- 50-60
- 60+

4. What is your level of qualification

- no matric
- matric
- diploma/degree
- masters/doctorate

5. In what industry is your business?

- Information technology and communication
- Financial Services
- Consulting
- Construction and mining
- Manufacturing
- Other

6. Ethnicity

- White
- African
- Indian
- Coloured
- Asian
- Other
- Prefer not to say

* 7. I think it is more important to have safe investments and guaranteed returns, than to take a risk to have a chance to get the highest possible returns

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 8. I would never consider investments in shares because I find this too risky

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 9. If I think an investment will be profitable, I am prepared to borrow money to make this investment

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 10. I want to be certain that my investments are safe

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 11. I get more and more convinced that I should take greater financial risks to improve my financial position

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 12. I am prepared to take the risk to lose money, when there is also a chance to gain money

Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 13. You have been offered a new position in a company where you have worked for some time. How likely will this be the first question that come to mind:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
What if I can't live up to the new responsibility?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Will I earn more at this position?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wonder if the new work will be interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 14. You have a school-age daughter. On parents' night the teacher tells you that your daughter is doing poorly and doesn't seem involved in the work. You are likely to:

	Very Unlikely	Unlikely	Somewhat Likely	Neutral	Somewhat Likely	Likely	Very Likely
Talk it over with your daughter to understand further what the problem is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scold her and hope she does better.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make sure she does the assignments, because she should be working harder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 15. You had a job interview several weeks ago. In the mail you received a form letter which states that the position has been filled. It is likely that you might think:

	Very unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
It's not what you know, but who you know.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm probably not good enough for the job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Somehow they didn't see my qualifications as matching their needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 16. You are a plant supervisor and have been charged with the task of allotting coffee breaks to three workers who cannot all break at once. You would likely handle this by:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
Telling the three workers the situation and having them work with you on the schedule.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Simply assigning times that each can break to avoid any problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Find out from someone in authority what to do or do what was done in the past.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 17. A close (same-sex) friend of yours has been moody lately, and a couple of times has become very angry with you over "nothing." You might:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
Share your observations with him/her and try to find out what is going on for him/her.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ignore it because there's not much you can do about it anyway.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tell him/her that you're willing to spend time together if and only if he/she makes more effort to control him/herself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. You have just received the results of a test you took, and you discovered that you did very poorly. Your initial reaction is likely to be:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
"I can't do anything right," and feel sad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"I wonder how it is I did so poorly," and feel disappointed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"That stupid test doesn't show anything," and feel angry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 19. You have been invited to a large party where you know very few people. As you look forward to the evening, you would likely expect that:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
You'll try to fit in with whatever is happening in order to have a good time and not look bad.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You'll find some people with whom you can relate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You'll probably feel somewhat isolated and unnoticed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 20. You are asked to plan a picnic for yourself and your fellow employees. Your style for approaching this project could most likely be characterized as:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
Take charge: that is, you would make most of the major decisions yourself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Follow precedent: you're not really up to the task so you'd do it the way it's been done before.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seek participation: get inputs from others who want to make them before you make the final plans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 21. Recently a position opened up at your place of work that could have meant a promotion for you. However, a person you work with was offered the job rather than you. In evaluating the situation, you're likely to think:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
You didn't really expect the job; you frequently get passed over.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The other person probably "did the right things" politically to get the job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You would probably take a look at factors in your own performance that led you to be passed over.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 22. You are embarking on a new career. The most important consideration is likely to be:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
Whether you can do the work without getting in over your head.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How interested you are in that kind of work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whether there are good possibilities for advancement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 23. A woman who works for you has generally done an adequate job. However, for the past two weeks her work has not been up to par and she appears to be less actively interested in her work. Your reaction is likely to be:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
Tell her that her work is below what is expected and that she should start working harder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ask her about the problem and let her know you are available to help work it out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's hard to know what to do to get her straightened out.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 24. Your company has promoted you to a position in a city far from your present location. As you think about the move you would probably:

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
Feel interested in the new challenge and a little nervous at the same time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feel excited about the higher status and salary that is involved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feel stressed and anxious about the upcoming changes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 25. Please read the following statements and rate how frequently you act to the statement in relation to your company stakeholders.

	Very Unlikely	Unlikely	Somewhat Unlikely	Neutral	Somewhat Likely	Likely	Very Likely
When someone else is feeling excited, I tend to get excited too	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other people's misfortunes do not disturb me a great deal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It upsets me to see someone being treated disrespectfully	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I remain unaffected when someone close to me is happy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy making other people feel better	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have tender, concerned feelings for people less fortunate than me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When a friend starts to talk about his/her problems, I try to steer the conversation towards something else	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can tell when others are sad even when they do not say anything	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find that I am "in tune" with other people's moods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not feel sympathy for people who cause their own serious illnesses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I become irritated when someone cries

I am not really interested in how other people feel

I get a strong urge to help when I see someone who is upset

When I see someone being treated unfairly, I do not feel very much pity for them

I find it silly for people to cry out of happiness

When I see someone being taken advantage of, I feel kind of protective towards him/her

9.4 Appendix C: Statistical Analysis

9.4.1 C.1 Validity Tests

		Financial Risk Propensity	
Spearman's rho	Financial Risk Propensity	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	91
	I think it is more important to have safe investments and guaranteed returns, than to take a risk to have a chance to get the highest possible returns	Correlation Coefficient	.703**
		Sig. (2-tailed)	.000
		N	91
	I would never consider investments in shares because I find this too risky	Correlation Coefficient	.620**
		Sig. (2-tailed)	.000
		N	91
	If I think an investment will be profitable, I am prepared to borrow money to make this investment	Correlation Coefficient	.581**
		Sig. (2-tailed)	.000
		N	91
	I want to be certain that my investments are safe	Correlation Coefficient	.372**
		Sig. (2-tailed)	.000
		N	91
	I get more and more convinced that I should take greater financial risks to improve my financial position	Correlation Coefficient	.620**
		Sig. (2-tailed)	.000
		N	91
	I am prepared to take the risk to lose money, when there is also a chance to gain money	Correlation Coefficient	.760**
		Sig. (2-tailed)	.000
		N	91

		Impersonal	
Spearman's rho	Impersonal	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	91
	What if I can't live up to the new responsibility?	Correlation Coefficient	.565**
		Sig. (2-tailed)	.000
		N	91
	Scold her and hope she does better.	Correlation Coefficient	.382**
		Sig. (2-tailed)	.000
		N	91
	I'm probably not good enough for the job.	Correlation Coefficient	.626**
		Sig. (2-tailed)	.000
		N	91
	Find out from someone in authority what to do or do what was done in the past.	Correlation Coefficient	.571**
		Sig. (2-tailed)	.000
		N	91
Ignore it because there's not much you can do about it anyway.	Correlation Coefficient	.459**	
	Sig. (2-tailed)	.000	
	N	91	
"I can't do anything right," and feel sad.	Correlation Coefficient	.580**	
	Sig. (2-tailed)	.000	
	N	91	
You'll probably feel somewhat isolated and unnoticed	Correlation Coefficient	.578**	
	Sig. (2-tailed)	.000	
	N	91	
You didn't really expect the job; you frequently get passed over.	Correlation Coefficient	.534**	
	Sig. (2-tailed)	.000	
	N	91	
Whether you can do the work without getting in over your head.	Correlation Coefficient	.441**	
	Sig. (2-tailed)	.000	
	N	91	
It's hard to know what to do to get her straightened out.	Correlation Coefficient	.561**	
	Sig. (2-tailed)	.000	
	N	91	
Feel stressed and anxious about the upcoming	Correlation Coefficient	.482**	
	Sig. (2-tailed)	.000	

changes.	N	91
Follow precedent: you're not really up to the task so you'd do it the way it's been done before.	Correlation Coefficient	.617**
	Sig. (2-tailed)	.000
	N	91

		Extrinsic Motivation	
Spearman's rho	Extrinsic Motivation	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	91
	Will I earn more at this position?	Correlation Coefficient	.058
		Sig. (2-tailed)	.584
		N	91
	Make sure she does the assignments, because she should be working harder.	Correlation Coefficient	.389**
		Sig. (2-tailed)	.000
		N	91
	It's not what you know, but who you know.	Correlation Coefficient	.628**
		Sig. (2-tailed)	.000
		N	91
	Simply assigning times that each can break to avoid any problems.	Correlation Coefficient	.612**
		Sig. (2-tailed)	.000
		N	91
Tell him/her that you're willing to spend time together if and only if he/she makes more effort to control him/herself.	Correlation Coefficient	.521**	
	Sig. (2-tailed)	.000	
	N	90	
"That stupid test doesn't show anything," and feel angry.	Correlation Coefficient	.532**	
	Sig. (2-tailed)	.000	
	N	91	
You'll try to fit in with whatever is happening in order to have a good time and not look bad.	Correlation Coefficient	.326**	
	Sig. (2-tailed)	.002	
	N	91	
Take charge: that is, you would make most of the major decisions yourself.	Correlation Coefficient	.577**	
	Sig. (2-tailed)	.000	
	N	91	
The other person probably "did the right things" politically to get the job.	Correlation Coefficient	.611**	
	Sig. (2-tailed)	.000	
	N	91	
Whether there are good possibilities for	Correlation Coefficient	.210*	

advancement.	Sig. (2-tailed)	.046
	N	91
Tell her that her work is below what is expected and that she should start working harder.	Correlation Coefficient	.553**
	Sig. (2-tailed)	.000
	N	91
Feel excited about the higher status and salary that is involved.	Correlation Coefficient	.234*
	Sig. (2-tailed)	.026
	N	91

		Intrinsic Motivation	
Spearman's rho	Intrinsic Motivation	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	91
	I wonder if the new work will be interesting.	Correlation Coefficient	.512**
		Sig. (2-tailed)	.000
		N	91
	Talk it over with your daughter to understand further what the problem is.	Correlation Coefficient	.403**
		Sig. (2-tailed)	.000
		N	91
	Somehow they didn't see my qualifications as matching their needs.	Correlation Coefficient	.438**
		Sig. (2-tailed)	.000
		N	91
	Telling the three workers the situation and having them work with you on the schedule.	Correlation Coefficient	.456**
		Sig. (2-tailed)	.000
		N	91
	Share your observations with him/her and try to find out what is going on for him/her.	Correlation Coefficient	.524**
		Sig. (2-tailed)	.000
		N	91
	"I wonder how it is I did so poorly," and feel disappointed.	Correlation Coefficient	.516**
		Sig. (2-tailed)	.000
		N	91
	You'll find some people with whom you can relate	Correlation Coefficient	.430**
		Sig. (2-tailed)	.000
		N	91
	Seek participation: get	Correlation Coefficient	.498**

inputs from others who want to make them before you make the final plans.	Sig. (2-tailed)	.000
	N	91
You would probably take a look at factors in your own performance that led you to be passed over.	Correlation Coefficient	.558**
	Sig. (2-tailed)	.000
	N	91
How interested you are in that kind of work.	Correlation Coefficient	.473**
	Sig. (2-tailed)	.000
	N	91
Ask her about the problem and let her know you are available to help work it out.	Correlation Coefficient	.343**
	Sig. (2-tailed)	.001
	N	91
Feel interested in the new challenge and a little nervous at the same time.	Correlation Coefficient	.503**
	Sig. (2-tailed)	.000
	N	91

		Stakeholder Empathy	
Spearman's rho	Stakeholder Empathy	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
		N	91
	When someone else is feeling excited, I tend to get excited too	Correlation Coefficient	.558**
		Sig. (2-tailed)	.000
		N	91
	Other people's misfortunes do not disturb me a great deal	Correlation Coefficient	.463**
		Sig. (2-tailed)	.000
		N	91
	It upsets me to see someone being treated disrespectfully	Correlation Coefficient	.564**
		Sig. (2-tailed)	.000
		N	91
	I remain unaffected when someone close to me is happy	Correlation Coefficient	.643**
		Sig. (2-tailed)	.000
		N	91
	I enjoy making other people feel better	Correlation Coefficient	.535**
		Sig. (2-tailed)	.000
		N	91
	I have tender, concerned	Correlation Coefficient	.564**

feelings for people less fortunate than me	Sig. (2-tailed)	.000
	N	91
When a friend starts to talk about his\her problems, I try to steer the conversation towards something else	Correlation Coefficient	.658**
	Sig. (2-tailed)	.000
	N	91
I can tell when others are sad even when they do not say anything	Correlation Coefficient	.511**
	Sig. (2-tailed)	.000
	N	91
I find that I am "in tune" with other people's moods	Correlation Coefficient	.427**
	Sig. (2-tailed)	.000
	N	91
I do not feel sympathy for people who cause their own serious illnesses	Correlation Coefficient	.392**
	Sig. (2-tailed)	.000
	N	91
I become irritated when someone cries	Correlation Coefficient	.700**
	Sig. (2-tailed)	.000
	N	91
I am not really interested in how other people feel	Correlation Coefficient	.613**
	Sig. (2-tailed)	.000
	N	91
I get a strong urge to help when I see someone who is upset	Correlation Coefficient	.511**
	Sig. (2-tailed)	.000
	N	91
When I see someone being treated unfairly, I do not feel very much pity for them	Correlation Coefficient	.687**
	Sig. (2-tailed)	.000
	N	91
I find it silly for people to cry out of happiness	Correlation Coefficient	.725**
	Sig. (2-tailed)	.000
	N	91
When I see someone being taken advantage of, I feel kind of protective towards him/her	Correlation Coefficient	.394**
	Sig. (2-tailed)	.000
	N	91

9.4.2 C.2 Factor Analysis Variance Explained

Total Variance Explained						
Component	Total	Initial Eigenvalues		Extraction Total	Sums of Squared Loadings	
		% of Variance	Cumulative %		% of Variance	Cumulative %
1	2.230	37.175	37.175	2.230	37.175	37.175
2	1.341	22.349	59.524	1.341	22.349	59.524
3	.892	14.868	74.392			
4	.667	11.121	85.512			
5	.540	9.002	94.514			
6	.329	5.486	100.000			

Extraction Method: Principal Component Analysis.

Total Variance Explained						
Component	Total	Initial Eigenvalues		Extraction Total	Sums of Squared Loadings	
		% of Variance	Cumulative %		% of Variance	Cumulative %
1	3.973	33.112	33.112	3.973	33.112	33.112
2	1.376	11.463	44.575	1.376	11.463	44.575
3	1.123	9.358	53.933	1.123	9.358	53.933
4	1.040	8.665	62.598	1.040	8.665	62.598
5	.886	7.387	69.985			
6	.693	5.778	75.763			
7	.625	5.208	80.971			
8	.614	5.116	86.087			
9	.555	4.623	90.710			
10	.499	4.158	94.867			
11	.354	2.953	97.821			
12	.262	2.179	100.000			

Extraction Method: Principal Component Analysis.

Total Variance Explained						
Component	Total	Initial Eigenvalues		Extraction Total	Sums of Squared Loadings	
		% of Variance	Cumulative %		% of Variance	Cumulative %
1	2.973	24.778	24.778	2.973	24.778	24.778
2	1.426	11.883	36.661	1.426	11.883	36.661

3	1.337	11.145	47.806	1.337	11.145	47.806
4	1.147	9.562	57.368	1.147	9.562	57.368
5	1.080	9.002	66.370	1.080	9.002	66.370
6	.956	7.970	74.340			
7	.696	5.804	80.144			
8	.625	5.208	85.352			
9	.554	4.617	89.969			
10	.473	3.943	93.912			
11	.385	3.211	97.123			
12	.345	2.877	100.000			

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Total	Initial Eigenvalues		Extraction Total	Sums of Squared Loadings	
		% of Variance	Cumulative %		% of Variance	Cumulative %
1	2.588	21.570	21.570	2.588	21.570	21.570
2	1.453	12.106	33.676	1.453	12.106	33.676
3	1.247	10.395	44.070	1.247	10.395	44.070
4	1.222	10.181	54.251	1.222	10.181	54.251
5	1.015	8.462	62.714	1.015	8.462	62.714
6	.896	7.467	70.180			
7	.735	6.128	76.308			
8	.695	5.791	82.100			
9	.630	5.254	87.354			
10	.594	4.953	92.306			
11	.467	3.895	96.201			
12	.456	3.799	100.000			

Extraction Method: Principal Component Analysis.

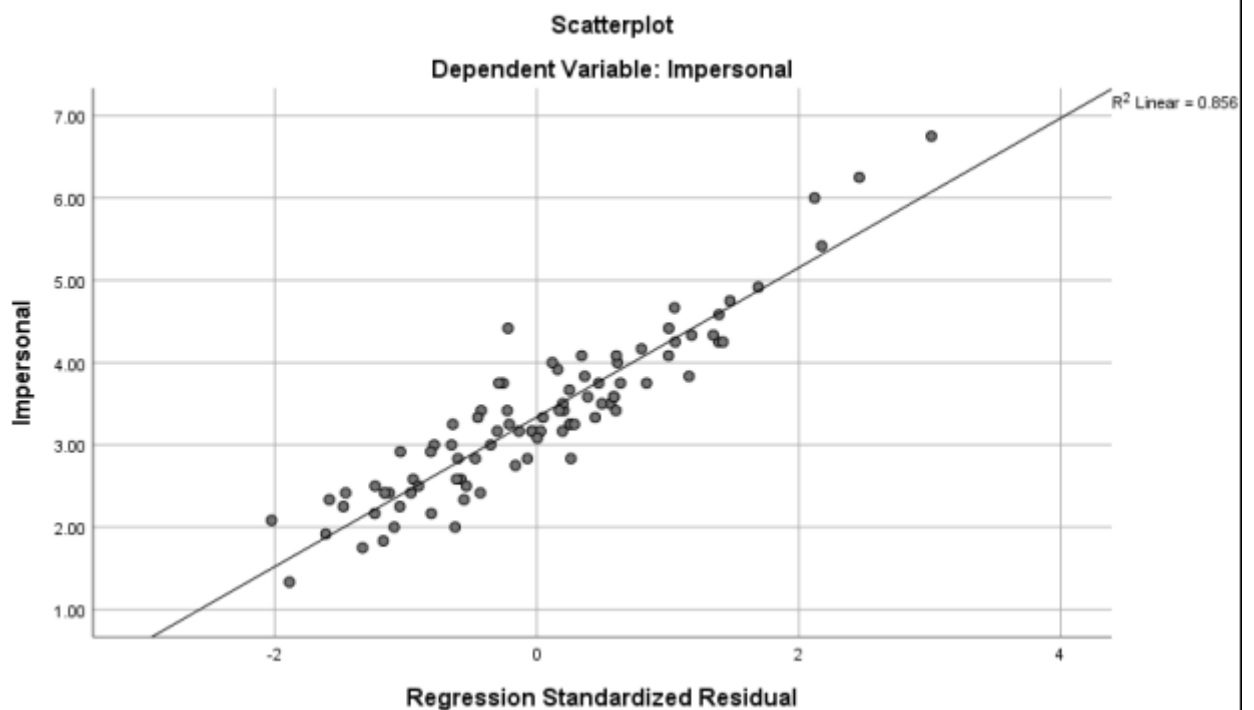
Total Variance Explained

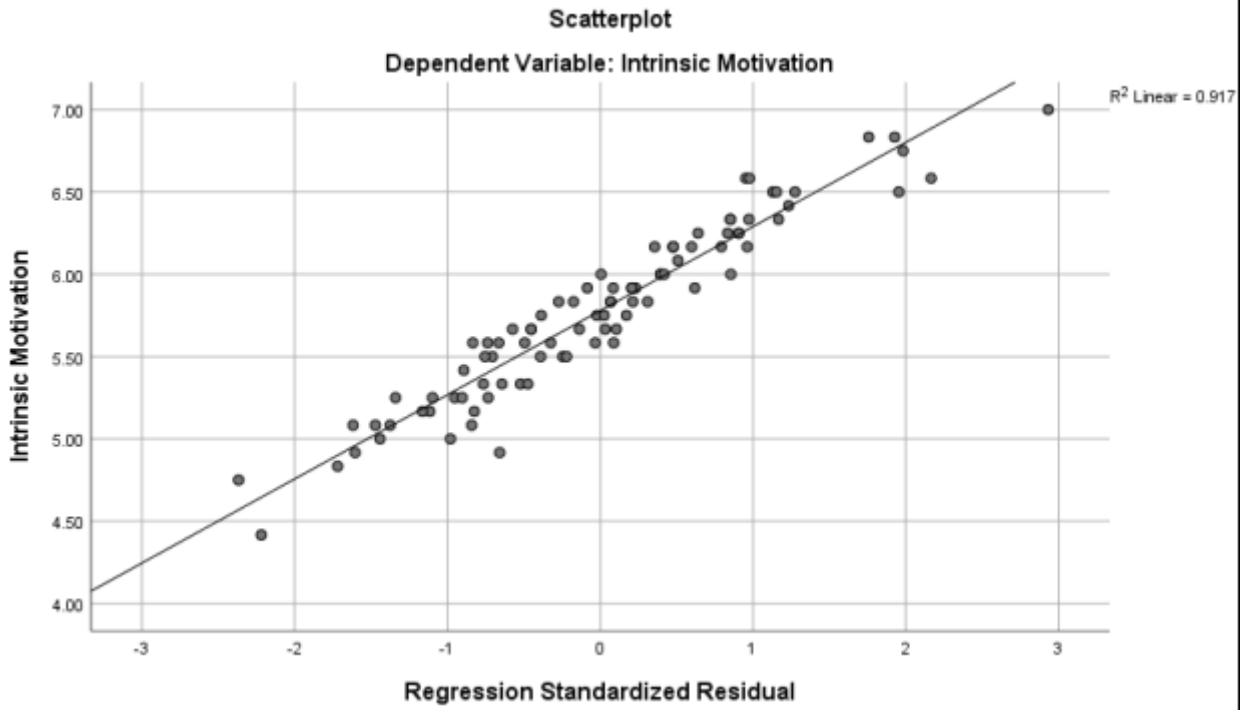
Component	Total	Initial Eigenvalues		Extraction Total	Sums of Squared Loadings	
		% of Variance	Cumulative %		% of Variance	Cumulative %
1	4.683	29.266	29.266	4.683	29.266	29.266
2	2.045	12.781	42.047	2.045	12.781	42.047
3	1.295	8.096	50.143	1.295	8.096	50.143

4	1.090	6.810	56.954	1.090	6.810	56.954
5	1.000	6.247	63.201			
6	.894	5.587	68.787			
7	.826	5.164	73.952			
8	.726	4.536	78.487			
9	.641	4.005	82.492			
10	.590	3.685	86.177			
11	.478	2.990	89.167			
12	.460	2.876	92.043			
13	.390	2.435	94.479			
14	.359	2.242	96.721			
15	.279	1.741	98.462			
16	.246	1.538	100.000			

Extraction Method: Principal Component Analysis.

9.4.3 C.3 Scatter Plots testing Homoscedasticity





9.5 Appendix D: Ethical clearance



Dear Albertus Stoop,

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

[Ethical Clearance Form](#)

Kind Regards