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Management of Creative Business Processes (CBP) Master of social sciences

The Starving Artists

A quantitative examination of the relationships between money, social relations, happiness, and creativity for individuals in difficult financial situations.

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Abstract

This thesis aims to investigate if individuals in difficult financial situations are systematically impaired by their economic circumstances to be happy and ultimately more creative. Modern subjective well-being research has shown that happiness causes creativity. This causal relation implies that a major part of the global population which is disadvantaged socially, as well as economically, is deprived of its opportunity to develop its full creative potential. This would imply an extensive loss of ideation-power not only for the creative industries but society as a whole. Unless another predictor of happiness, like the degree to which an individual is embedded in social relationships, can counterbalance the impairment. To shine a light on this guestion, the relationships between personal happiness and those heavily discussed predictors (money and friends) need to be reassessed. This broad perspective is examined in detail based on the critical case of Cape Town, South Africa. Using a quantitative questionnaire, participants from impoverished townships as well as from the most affluent neighborhoods are questioned regarding their subjective well being, their financial situation, their degree of materialistic beliefs, and their social relationships. Besides answering the research question, this survey aims to test hypotheses from various publications as well as fill a geographic gap in the academic literature, that seems to underrepresent African countries as cases in happiness research.

The results do not provide reasons to be optimistic. The confirmed positive relationship between the financial situation and happiness solidifies that impoverished individuals are generally less happy. Believing in the value of acquiring money (materialism) appears to be a two-edged sword that is associated with an increase of the positive and negative dimension of happiness simultaneously (and hence not an advisable strategy to improve one's subjective well-being). And contrary to the hypothesis, financially disadvantaged individuals do not report higher scores on social relationship measures. This suggests that individuals in difficult financial situations are systematically impaired to be happy and ultimately more creative. Considering the amount of impoverished people, this constitutes an immense creative potential that, just like the people who convey it, is ignored and withers away in economic poverty - here, the artists actually starve.

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1. Introduction

Hemingway, Pollock, Faulkner, Plath, Woolf, Rothko, Van Gogh have more in common than being incredible artists and contributors to the creative industries; they all choose to end their lives through suicide, fueling the everlasting myth of the tortured artist. Even though those cases are extreme, common knowledge suggests the wounded artistic soul needs her misery as the source of creativity. Research in various fields on happiness and creativity have shown that this myth could not be further from the truth; that the opposite is the case. Happiness is not only strongly associated with creativity but appears to cause it. This makes happy individuals more creative and more eligible for the creative industries.

But what if an individual is born into an environment that obstructs her drive to become happy? Are those individuals systematically impaired in their opportunity to be happy and to profit from the enhanced creative skills that come with it? Of all the parameters that are perceived as sources of happiness two are discussed the most: *money* and *friends*. Both appear to have a positive relationship with happiness. Does the fact, that a major part of the world lives in extremely difficult financial situations mean, that those individuals are systematically impaired by their economic circumstances? Or do other sources, like the quality of their social networks, counterbalance the effect? A question, this thesis tries to shine a light on. To do so, a quantitative questionnaire was conducted to reassess the relationships of financial parameters and social relationships with the happiness of individuals in difficult economic situations. The survey took place in different townships surrounding, as well as affluent neighborhoods within the city of Cape Town, South Africa. The following introduction gives an overview of the thesis structure and content.

But what makes people happy? Money? Common knowledge is torn over pretty much every possible source of happiness. Should one believe the Evangelist Matthew when he says "it is easier for a camel to go through the eye of a needle than for someone who is rich to enter the kingdom of God" or the actress Bo Derek when she retaliates roughly 2000 years later that "whoever said that money can't buy happiness, simply didn't know where to shop"? In the academic literature, happiness is predicted by three groups of influencers: First, the genetically predisposed set point that encompasses character trait dispositions, and around which individual happiness appears to fluctuate. Second, the circumstances that make up a person's environment. Third, the voluntary activities that a person actively engages in (Lyubomirsky et al. 2005). Of the circumstantial conditions that can be influenced by voluntary activities, two receive a lot of attention in academic and popular conversation: the Financial Situation (and its psychological undercurrent Materialism as the value one attaches to the acquisition of money and possessions) and Social Relationships. While the Financial Situations and Social Relationships are supposed to have a positive relation with happiness, Materialism does not. Bo Derek appears to have the upper hand, but in Matthew's defense, shopping was not quite the same in first century Galilee. The best breeding ground for happiness induced creativity would therefore be a favorable financial situation, without too much focus on valuing the acquisition of it, and an extensive and supportive social network. Since we live in a world, where a large percentage of the population still lives in financial poverty, it is fair (and necessary) to ask the research question of this thesis:

Are individuals in difficult financial situations systematically impaired by their economic circumstances to be happy and ultimately more creative?

The literature review and research question lead to fourteen hypotheses that aim to reassess the relationships of the Financial Situation, Materialism, and Social Relationships as independent variables with the three components of happiness (Satisfaction with Life, Positive Affect, and Negative Affect) as dependent variables. Gender, age, and ethnicity were integrated as control variables in all analyses. A quantitative questionnaire proved to be the most relevant approach for the research objective and the different concepts were incorporated through previously validated measures.

From the 20th of November 2017 until Monday the 8th of January 2018, data was collected from participants living in and around the city of Cape Town, South Africa which according to the World Bank, is the country with the most unequal wealth distribution and some of the financially poorest individuals in the world (The World Bank, n.d.). Participants from the financially poorest corners of the area where purposely approached in the townships of Khayelitsha and Masiphumelele. For comparison reasons, more participants

were purposely approached on the University of Stellenbosch Business School campus as well as in the two most affluent neighborhoods of Cape Town: Clifton and Higgovale.

The survey resulted in 167 eligible observations for the intended linear regression analyses. The results cannot and do not aim to prove causality since the survey design and the research objective aim to discover relationships only. They did not indicate a statistically significant relationship between the Financial Situation and the components of the emotional happiness dimension. Neither did they indicate a significant relation between Materialism and the Financial Situation or Social Relationships; even though the direction of most relations was as anticipated. The Financial Situation did not play a significant role as a moderator in the regression models of Financial Situation and Happiness, or Materialism and Happiness.

The results however did show a significant positive association between the Financial Situation and Satisfaction with Life, suggesting that richer individuals on average evaluate their life better than poorer people do. Materialism appeared in the results as a two-edged sword. Contrary to comparable studies in the academic literature, in this sample Materialism was positively associated with all three components of Happiness, even though the relation was stronger with Negative Affect than with Positive Affect and Life Satisfaction. The more a person believes in the value of acquiring money, the more satisfied she reports to be and the more positive and negative emotions and moods she appears to have. Social relationships are significantly and strongly related to all three components of Happiness as well; positively with Satisfaction with Life and Positive Affect, negatively with Negative Affect. Having a better social network appears to be the strongest predictor of self-reported Happiness. In this sample individuals in favorable financial situations appear to rate the social dimension of their lives better than their poorer counterparts as indicated by the significant positive relation of Financial Situation and Social Relationships.

As this survey aimed to investigate if individuals in difficult financial situations are systematically impaired by their economic circumstances to be happy and to profit from the creativity it might cause, the results paint a grim picture. The worse the financial situation a person is in, the less happy she reports to be. Believing in the value of acquiring money and possessions might increase cognitive and emotional happiness, but it also raises negative emotions and moods more. Contrary to the hypotheses, that suggested that financially poorer individuals might, out of necessity, have a stronger social network and hence a counterbalancing source of happiness, the results suggested that the opposite is the case. Richer individuals report higher scores on the Social Relationship Scales. All in all it appears that, at least in the Western Cape region of South Africa, individuals who live in difficult financial situations are indeed systematically impaired in their ability to be happy, which in turn impairs their ability to develop their full creative potential.

How many artists, how much potential for the creative industries do we lose because we ignore the needs of the poor and deprive them of their ability to be happy? How many notyet-Picassos are unhappy in difficult financial situations around the globe? People, that never get to develop their full creative potential, because their economic circumstances forbid it? In the townships of South Africa, in the settlements of Mexico, in the slums of India? The creative industries and our society as a whole might excel greatly if we focus on improving the living situation of the bottom of the social pyramid and to examine ways to enhance the opportunities for the unprivileged to be happy and creative.

2. Theoretical Background

Modern research suggests that subjective well-being causes creativity. The following literature review will shine a light on the current state of happiness research regarding the relationship between creativity and happiness. Furthermore, this section investigates what appears to make individuals happy and ultimately more creative. The focus lays on three parameters: the individual's financial situation, the degree to which she believes in the value of acquiring money (materialism), and the extent of her social relationships. All of these parameters are related to happiness in one way or another and have a long history of research and dispute in multiple academic disciplines. In order to investigate, if individuals in difficult financial situations are systematically impaired in their ability to be happy and creative, those relationships need to be tested and reassessed.

2.1 Happiness and Creativity

Creativity is the ability to find new solutions to old problems. This skill is a precondition to succeed in the creative industries and to increase one's employability. But what increases creativity? In a meta-analysis of 25 years of mood-creativity research Baas, De Dreu, and Nijstad (2008) summarize that happiness, especially its dimension of positive affect enhances creative thinking. Ashby, Isen, and Turken already concluded a decade earlier that "it is now well recognized that positive affect leads to greater cognitive flexibility and facilitates creative problem solving across a broad range of settings" (1999, p.530). The positive relationship between positive affect and creativity has been proven again and again showing that creativity is correlated more strongly with positive than with negative affect (Cedi & Kumar, 2016) and that positive affect is a reliable facilitator of creativity (Runco, 2007). Happy individuals generate more new ideas (Gasper, 2004; Myers, 2002), are more independent in their thinking (Guilford, 1968), and show more perseverance at difficult tasks (Erez & Isen, 2002; Kavanagh, 1987). There is a "significant positive relationship between happiness and creative ideation" (Pannells & Claxton, 2008, p.68).

The most comprehensive meta-analysis was conducted by Lyubomirsky, King, and Diener (2005). In it, they summarize the findings on the happiness-creativity-relation from crosssectional studies, longitudinal studies, as well as experimental studies. Their review of correlational studies shows that happy people report higher scores on creativity measures (Cacha, 1976; Schuldberg, 1990; Shapiro & Weisberg, 1999). Individuals who rate their subjective well-being as high, are even described as more creative by their superiors in a workplace environment (Staw, Sutton, & Pelled, 1994). These individuals also excel at complex mental tasks (Barsade, Ward, Turner, & Sonnenfeld, 2000; Geier, Schwartz, & Brownell, 2003) suggesting that "happy people make better and more efficient decision makers" (Lyubomirsky et al., 2005, p.831). These studies show clearly that happiness is associated with creativity, but the causal relation can only be tested through experimental survey designs. A multitude of experimental studies has shown exactly that. If subjective well-being is raised in participants, they score higher on measures of originality, flexibility, and creativity than the control groups (Estrada, Isen, & Young, 1994; Hirt, Melton, McDonald, & Harackiewicz, 1996; Isen, Johnson, Mertz, & Robinson, 1985; Sinclair & Mark, 1995) suggesting a strong causal relation.

The academic consensus about happiness facilitating creativity is visualized in Figure 1. This model will be developed into the conceptual model of this thesis throughout the literature review section.



Figure 1 - Conceptual Model Part 1

Happy individuals, who experience frequent positive affect, are more creative than people in neutral and negative affective states. This makes happy people more eligible for the creative industries and their employability is high. To profit from those enhanced creative skills, a person needs to be able to be happy though. If an individual is born into a society or environmental circumstances which inhibit her ability to be happy, she might not be able to develop her full creative potential. Leaving us with two questions: What is happiness? And, what could influence peoples' happiness and ultimately make them more creative?

2.2 What is happiness?

The discourse of what constitutes happiness has probably been prevalent for a similar amount of time as human consciousness. Nevertheless, scientific and popular authors like to start their articles and books about happiness by citing the words of the ancient Greeks. As much truth as those quotes might bare, this thesis will spare the reader yet another Aristotle quote. The history of happiness has predominantly been anecdotal and most of the times normative. The ancient Greeks, the Hedonists, the Stoics, the Theologists, the Atheists, the Utilitarians, they all created a framework of how one ought to live a life worth living. All of these schools of thought have a variation of happiness as their ultimate goal; be it in this life or the next (Kesebir & Diener, 2008). Only recently have the social sciences (positive psychology in particular) paid specific attention to a scientifically sound approach to study what makes people happy. This goes beyond, what an elite group of individuals thinks ought to make people happy, towards the insight of what actually does. The source of this insight is no one other than every person themselves; supporting a subjective view of happiness.

To accept happiness as the final aim also settles an old dispute in the quest for a definition of happiness. The emotional/cognitive based definition of happiness and the eudaemonic or virtue-based definition of happiness. The latter defines happiness as a life lived righteously while the former proposes a life lived rightly. Prominent supporters of the virtue-based definition are for example Aristotle, Christianity, and Kant, all of which believe that only a life lived according to set virtues is desirable (even though which virtues, varies within those schools). But as Gilbert (2007) rightfully points out, this desirability simply means that the virtue is ultimately still aimed at the individual's bliss, in this case through virtue as opposed to more primitive pleasures. The eudaemonic approach to happiness, which claims to differ from the emotional/cognitive definition, should hence be subsumed under the emotional/cognitive definition as a way to achieve. It ultimately only differs in that dimension. Even though the dispute is carried on in the academic literature (Carlquist, Ulleberg, Fave, Nafstad, & Balker, 2017), the emotional/cognitive definition is the one used most commonly in academic research (Diener, Eunkook, Lucas, & Smith, 1999) and in this thesis as well.

In accordance with the latest research (Diener & Suh, 1997; Lyubomirsky, King, & Diener, 2005) emotional/cognitive happiness in this thesis is defined as: a complex construct consisting of an individual's satisfaction with life and her positive and negative affect states. Satisfaction with Life (SWL) represents the cognitive dimension, while Positive Affect (PA) and Negative Affect (NA) assess the appraisal of emotions and moods and represent the emotional dimension (Kesebir & Diener, 2008). This definition distinguishes happiness in two dimensions and three components as visualized in Figure 2.



Figure 2 - Conceptual Model Part 2

The pioneers in this academic field also proposed a less connotated term for the construct: subjective well-being (Diener, 1984). The terms happiness and subjective well-being (SWB) are used interchangeably throughout the thesis. To assess those three components research relies on the self-report of participants. This approach supports the subjectivist definition of happiness where only the individual can ultimately judge what makes her happy. This trust in the participants self-report is common in the field of happiness research (and uncommon in religions and philosophical schools). The routinely used measures to assess the subjective emotional/cognitive happiness have shown great validity and reliability (Myers & Diener, 1995; Diener, 1994).

The two dimensions of happiness (life satisfaction and affective states) are not entirely distinctive but appear to vary differently over time. They also have unique relationships with other parameters (DeHaes, Pennink, & Welvaart, 1987), which is why they deserve an individual exploration. Furthermore, the distinction is encouraged, because individuals

might be able to access their emotional and cognitive experiences differently. While a person might deny her emotional memory (especially negative ones), she might still cognitively acknowledge the resulting circumstances. That means, while she might (sub)consciously suppress the emotional side, she might still be capable to accurately evaluate the cognitive site. The time horizon constitutes another distinction. While affective reactions to emotional states are often immediate occurrences, the cognitive evaluation of one's life can represent long-term perspectives. Lastly, the level of consciousness differentiates the two components. While affective reactions might reflect unconscious values and are more heavily influenced by the immediate experience (especially sensual experiences), the cognitive evaluation is more likely based on conscious beliefs and goals (Pavot & Diener, 1993). In order to investigate what exactly is related to happiness and ultimately poses a possible source of enhanced creativity, the construct needs to be examined in all its components.

While this section describes the academic findings surrounding the two dimensions, the measures to assess these constructs in individuals on a quantitative level that are relevant to this thesis, are described in the methodology section in more detail.

2.2.1 Satisfaction with Life

Life satisfaction represents the cognitive component of SWB and has generally received the lesser attention from academic research (Diener, Emmons, Larsen, & Griffin, 1985). Its cognitive dimension describes the matter of individuals assessing their perceived life circumstances and measuring them against a subjective standard to evaluate how satisfied they are with those circumstances. This means that life satisfaction is a "conscious cognitive judgment of one's life in which the criteria for judging are up to the person" (Pavot & Diener, 1993, p.164). The subjectivity of this component is obvious since different people maintain different beliefs regarding what constitutes a good life (their standards) and how successful they currently perceive themselves to be at pursuing that good life. Therefore, a measure of life satisfaction needs to assess a person's general satisfaction rather than inquiring about specific domains that might have no importance to the individual asked. The Satisfaction with Life Scale (SWLS) by Diener, Emmons, Larsen,

& Griffin (1985) fulfills those preconditions and will be used in this thesis to assess the cognitive component.

2.2.2 Positive Affect and Negative Affect

An individual's moods and emotions are termed as affect (Diener et al., 1999) and can be distinguished between negative and positive variations. The first researchers to suggest that the two constructs should be assessed and handled separately were Bradburn and Caplovitz in 1965. They argued that the two affect states are independent of each other and even though this independence is still debated for short-term effects, it is widely accepted for long-term perspectives and that even though the two constructs are moderately inversely correlated, they are definitely separable (Diener & Emmons, 1984; Diener, Smith, & Fujita, 1995; Diener et al., 1999). A high positive affect translates to an individual who feels enthusiastic, active, alert, and pleased, while a low positive affect results in sadness and lethargy. A high negative affect, on the other hand, represents subjective distress, unpleasantness, and aversive states like disgust and fear, while low negative affect is accompanied by calmness and serenity (Watson, Clark, & Tellegen, 1988). Both perspectives can be assessed by the Positive Affect and Negative Affect Scale (Watson et al. 1988) which has been constantly tested and developed with a variety of different item amounts available.

Happiness or subjective well-being consists of the emotional and the cognitive dimension. Life satisfaction is a conscious evaluation on the cognitive level, while emotional states are distinguished between negative and positive affects. A happy individual is, therefore, someone who experiences frequent positive affect, a high life satisfaction, and infrequent negative affects. In the following, the use of *happy* will represent the described composition of the different components (while *unhappy* represents the opposite). A happy individual shows enhanced creative capabilities, while an unhappy person might lack the opportunity to develop those skills. In order to assess if some individuals are impaired in their ability to be happy and ultimately more creative, the different sources of happiness need to be examined.

2.3 What makes people happy?

After having defined happiness, the question of all questions is imminent: What makes people happy? The research on what possibly influences subjective well-being in individuals is extensive and summarizing it would exceed the frame of this thesis. The interested reader is referred to the still most comprehensive meta-analysis by Diener, Eunkook, Lucas, & Smith (1999) for an elaborate overview. Instead, this section will first provide a framework with which to assess the different origins of influence, and second, focus in the following sections on the three influencing parameters that are most relevant to this thesis.

In order to structure the assessment of parameters that influence individual happiness this thesis adopts a formula created by Lyubomirsky, Sheldon, and Schkade (2005):

$$H = S + C + V$$

The formula conceptualizes happiness (**H**) as the cumulative effect of a genetical set point (**S**) plus the influence of circumstances (**C**) and voluntary activities (**V**). The conceptual model of this thesis can, therefore, be extended by the parameters of the formula (Figure 3).



Figure 3 - Conceptual Model Part 3

The percentage represents the amount of happiness variance the different determinants are able to explain. This means that an individual's happiness represent the combination of enhancing or diminishing effects from these three origins weighted by the degree of how much variance they are able to explain. If people want to profit from enhanced SWB, which has shown to significantly increase creativity and ideation, they would have to focus their efforts on one or all of the above sources of happiness. While the genetic set point is easily distinguished, it appears to be difficult to classify certain parameters to be either a condition or voluntary activity (e.g. occupation (Diener et al., 1999)). The different areas will be described briefly in the following paragraphs.

2.3.1 Set Point

Based on a variety of twin studies it has been shown that the base level of happiness is rooted in our genes and hence to some degree inherited. Some researchers have claimed that the heritability accounts for as much as 80% of a person's happiness (Lykken & Tellegen, 1996). A more commonly expressed ratio of explanation is 50% (Braungart, Plomin, DeFries, & Fulker, 1992; Tellegen et al., 1988; Diener et al., 1999). Regardless of the degree of explanation, these findings frequently give a reason for pessimism regarding the ability to change one's level of happiness. Over time people retract back to or close to their genetically predisposed starting point. These findings have been replicated in longterm panel studies (Headey & Waring, 1989), as well as studies of life events (Brickman, Coates, & Janoff-Bulman, 1978), showing that accident victims and lottery winners eventually rise back to or fall back onto their original happiness set point. One reason for the genetically predisposed happiness stability might be that personality traits like extraversion and negative affectability are very hard to alternate. Those personality traits are significantly correlated with happiness, very inheritable, and stable over a person's lifespan (Ashby, Isen, & Turken, 1999; Davidson, 1999; Kagan, 2003; Robinson, Emde, & Corley, 2001).

2.3.2 Circumstances

The second determinant of a person's happiness are the circumstances. A person is also born into the circumstantial environments, but in contrast to the genetic set point, people have the ability to change these conditions to some extent. These circumstances include demographic factors (gender, age, ethnicity, nationality), environmental circumstance (geographic and cultural region), as well as status variables (financial situation, social relations, health) (Lyubomirsky et al., 2005). All of these parameters have an influence on SWB (with most of the causality direction experimentally proven; see Diener et al. 1999 for a review) but only account for 10% of the variance in happiness levels (Argyle, 1999; Diener et al. 1999). That means that even though moving to California or deciding to undergo a sex change might promise a significant increase in happiness, the final impact on happiness might be relatively small. This can be explained by a concept referred to as the hedonic treadmill (Brickman & Campbell, 1971) according to which people adapt to all change eventually (Kahneman, 1999; Tversky & Griffin, 1991; Paraducci, 1995). Circumstantial changes are usually constant (unless executed frequently and with a high variety) and are hence doomed to be adapted to. However, some circumstances like a person's financial situation or quality of social relations can be actively alternated and have demonstrated significant relationships with subjective well-being (Diener et al. 1999).

2.3.3 Voluntary Activities

Voluntary activities include a very broad spectrum of things that individuals do and think (Lyubomirsky et al., 2005). These activities are voluntary, meaning a person has the freedom to choose whether to engage in them or not. The difference to the previously described circumstances is that those activities are "ways that people act on their circumstances" (Lyubomirsky et al., 2005, p. 118). A variety of those activities have a significant effect on happiness. These include behavioral activities like expressing kindness (Magen & Aharoni, 1991) and gratitude (Emmons & McCullough, 2003), mindfulness and reframing (King, 2001; Seligman, 1991), working for valued personal goals (Sheldon & Houser-Marko, 2001), or pursuing meaningful causes (Snyder & Omoto, 2001). These changes in voluntary activities show less hedonic adaptation than

circumstantial changes (Lyubomirsky et al., 2005) and are hence the best contender to have long-lasting effects on individual happiness.

This thesis aims to investigate if individuals are systematically impaired in their ability to be happy and hence less likely to be creatively active. The focus of interest lays therefore on those parameters that a person is born into and that can pose a systematic influence on whole groups of people. Furthermore, those parameters ought to be changeable to some extent in order to possibly examine optimistic conclusions for the affected individuals. This rules out the genetic set point, since the genetic predisposition itself, cannot easily be changed (unless a society considers "happiness eugenics"). Instead, the following sections will present three predictors of subjective well-being which ought to be classified as an overlap of the circumstantial situation and voluntary activity, because they constitute a circumstance but can be influenced through engaged voluntary activity. To guarantee the relevance for this thesis, the presentation of the determinants are kept brief and primarily show the most recent results without capturing the historical discourse that preceded them. Firstly, the most controversially discussed source of happiness: money or rather the financial situation. Then, the relationship of subjective well-being and materialism as the belief in the value of acquiring money and hence the psychological undercurrent of the financial situation and most capitalistic societies as a whole. Finally, the social relationships an individual is embedded in as one of the strongest predictors of happiness.

2.4 Happiness and Financial Situation

Does money buy happiness? Before this section will attempt an answer to the best knowledge of current happiness research, the used terminology needs to be explained. Since this thesis conducts a survey to question people living in the most difficult financial circumstances as well as individuals who's financial circumstances can only be described as affluent, a neutral term that captures poverty and wealth was required.

Poverty has long ceased to be measured as a unidimensional construct (Bourguignon & Chakravarty, 2003). Instead, the number of determinants for poverty have grown constantly into a multidimensional measure that includes degrees of poverty in regards to

spiritual, educational, social, health, environment, economics, opportunities, and skills (Atkinson, 2003; Alkire & Foster, 2011; Bennett & Mitra, 2013). To stress that the thesis's focus lays on the financial dimension of poverty and the possible systematic impairment that comes with it, this thesis uses the term Financial Situation. Consequently, *difficult financial situation* describes economic poverty, while *favorable financial situation* represents economic wealth.

The relation between money and happiness has been disputed heavily not only in popular culture but scientific research as well, resulting in contradicting data and very different conclusions depending on the author (Lyubomirsky, 2013). Nonetheless, it is now commonly accepted that happiness and money are significantly correlated even though the relationship is not particularly strong (for an extensive review see Diener & Biswas-Diener, 2002) and the causal direction is not unanimously explained (Lyubomirsky, King, Diener & Cooper, 2005). Individuals report being happier, the better their financial situation is. However, this correlation appears to be only relevant for the cognitive dimension of subjective well-being. More money improves peoples' consciously evaluated life satisfaction but not their affect states and emotional dimension of happiness (Kahneman, & Deaton, 2010). What is particularly relevant for this thesis is that the correlation between happiness and money appears stronger for individuals living in difficult financial situations as opposed to those who live in favorable financial situations (Diener, Ng, Harter, Arora, & Simpson, 2010; Howell & Howell, 2008; Quoidbach, Dunn, Petrides, & Mikolajczak, 2010). This suggests that on the one hand the money/happiness relationship encounters diminishing marginal effects and on the other hand, that individuals living in difficult financial situations might experience devastating effects on their happiness resulting from even minor changes in their financial situation. Some authors have even suggested a satiation point for the relation between money and happiness, stating that beyond a certain annual income the relation nulls out. This satiation point varies across nations with wealthier nations reaching the point later than poorer nations. Globally, satiation effects appear to take place for life evaluation on average at \$95,000US and for emotional wellbeing at \$60,000US to \$75,000US (Diener, 1999; Jebb, Tay, Diener, & Oishi, 2018).

The aforementioned findings can be seen on a country based national level when a

country's GDP is compared with its national happiness level. Here the relationship between SWB and income is even stronger than when observed on a micro level (looking at individual people) (Inglehart & Klingemann, 2000). People living in richer countries are happier than those living in poorer countries, but the causal relationship between GDP and SWB has not been proven. Moderating variables like increased social welfare or individual freedom might be catalyzed through GDP growth and need to be considered when discussing the GDP/SWB relationship on a national level. The United Nations publishes an annual World Happiness Report ranking all countries according to their Gross National Happiness (GNH). In the 2018 report, South Africa is on place 105 of the 156 assessed countries (Helliwell, Layard, & Sachs, 2018).

The scientific findings appear paradoxical when a single country's GDP and its citizens' happiness is observed over time. Even though most western countries have experienced tremendous economic growth in the last decades, their happiness levels stay more or less the same. These findings are generally referred to as the Easterlin-Paradox and have sparked an ongoing discussion in the field since its beginning in 1974 (Easterlin, 1974; Easterlin, McVey, Switek, Sawangfa, & Zweig, 2010; Oswald, 1997). For a schematic overview of the Easterlin-Paradox and the most influential publications in reaction to its first publication, see Appendix A. One possible explanation for this apparent paradox is the already mentioned hedonic treadmill in which people simply get accustomed to their newly acquired wealth. A different set of theories suggest that income here is only valid in a relative sense. That means even though individuals do profit from growing GDP per capita, so does everybody else. In comparison, the individual might not be any richer than her neighbor and therefore the effect on her happiness is diminished (Ball & Chernova, 2008).

The presented findings show that money or the financial situation an individual is living in and her subjective well-being are related and that improving that situation is associated with increased happiness. However, while many studies suggest a direct correlation, few consider the plethora of moderating variables that could influence the relationship. South Africa currently has a GDP per capita of \$13,591US which is far off the average satiation point suggested by Diener et al. (2018). Considering that South Africa also has the highest wealth inequality in the world (The World Bank, n.d.), means that the relationship between

financial situation and happiness is expected to be significant. This begs the question if individuals living in difficult financial situations in South Africa are systemically impaired by their economic circumstances to be happy and creative, or if other predictors of subjective well-being can counterbalance the impairment.

2.5 Happiness and Materialism

While the Financial Situation constitutes the external circumstances of an individual, Materialism represents the internal perspective of that situation. In accordance with the academic literature (Dittmar 2008; Kasser & Kanner, 2004; Kasser et al. 2014) this thesis adopts the definition of Materialism as "individual differences in people's long-term endorsement of values, goals, and associated beliefs that center on the importance of acquiring money and possessions that convey status" (Dittmar, Bond, Hurst, & Kasser, 2014, p.880). In this regard, materialism describes the psychological undercurrent of an individual's relationship with money and possessions. The following paragraphs investigate its relation with subjective well-being.

Most societies follow a capitalistic approach to economics in one way or another. This results in marketing, advertising, and even societal common sense to promote that having more money, sports cars, new sneakers, and smartphones is a worthwhile endeavor and will ultimately increase one's happiness (Dittmar 2008). What most philosophers intuitively knew for thousands of years, became a scientific base in the early 90s when psychologists first started empirically exploring the relationship between materialism and happiness (Richins & Dawson, 1992; Kasser & Ryan, 1993). The results were unambivalent in showing that the more an individual attaches importance to money and possessions, the less happiness (on the emotional and cognitive level alike) she experiences. The findings also suggested a whole catalog of psychopathology (e.g. depression, anxiety) with significantly positive correlations to materialism (for an extensive overview on the negative effects of materialism see Kasser, 2002). These findings have been replicated in many studies using different research designs and materialism measures (Richins, 2004; Kasser & Ryan 1996; Solberg, Diener, & Robinson, 2004); all resulting in the same outcome: the

more materialistic a person, the less happy. Based on 258 samples, a recent metaanalysis suggest an average correlation coefficient of r = -0.19 for the relation between multifaceted materialism measures and happiness (Dittmar et al., 2014). The fact that materialism is negatively correlated with subjective well-being, and that money seems to be positively correlated, suggests that there are moderator variables influencing the relation between money and happiness.

Researchers have suggested that materialism might be a symptom of psychological insecurities like having been born in difficult economic situations which appears to cause an increased focus on believing in money and possessions as a source of happiness (Kasser, 2002; Kasser, Ryan, Zax, & Sameroff, 1995; Sheldon & Kasser, 1998). This raises the question, if the worse the financial circumstances are in which a person is born into, the more likely that person is to develop materialist beliefs and (almost tragically) the less happy she will be. A counterargument to this hypotheses is that in accordance with need satisfaction theories, people might be able to better satisfy their basic needs for food and shelter by putting greater emphasis on acquiring money and possessions (Maslow, 1954; Bilsky, & Schwartz, 1994). That would suggest a positive relationship between materialism and SWB for individuals in difficult financial situations until their financial situation has improved to a certain point at which the relation reverses. Surprisingly, the still most comprehensive meta-analysis (Dittmar et al., 2014) shows that only 1 out of the 258 studies about the relationship had been conducted in Africa; the continent that includes the poorest countries with some of the most unequal wealth distribution on earth (Coenders, Casas, Figuer, & González, 2005). This implies a geographic negligence within the academic conversation that this thesis also tries to address.

When considering moderator variables for the relationship between materialism and SWB, Dittmar et al. (2014) found that wealth inequality (as measured by the GINI coefficient) shows a significant influence. In countries with low GINI coefficients and hence more equal wealth distribution like Denmark the relationship was stronger negative (-.20) than in countries with higher GINI coefficients and wealth inequality like South Africa (-.12). These results are counterintuitive and should be reevaluated. Counterintuitive, because most theories suggested that in countries with high wealth inequality the relationship would be

stronger, not weaker. If wealth is distributed unequally in a country, then individuals in difficult financial situations are supposed to be more negatively affected by valuing money and possessions, since they would never be able to possess or earn as much as their affluent counterparts (Ordabayeva & Chandon, 2011). South Africa has the highest GINI coefficient in the world and hence constitutes a critical case and suitable country to reevaluate the relation.

Nonetheless, not a single study so far has shown a positive correlation between materialism and happiness (Dither et al., 2014); a fact that is even more surprising because most (western) societies tend to value and promote materialism in a variety of forms (Kasser & Kanner, 2004; Solberg, Diener, & Robinson, 2004). This thesis aims at testing this relationship with participants from difficult and favorable financial situations alike. If individuals in difficult financial situations are indeed systematically impaired by their economic circumstances to be happy and more creative, then valuing the acquisition of money and possessions might not be an advisable strategy to counterbalance that impairment.

2.6 Happiness and Social Relationships

If there is one circumstantial determinant for happiness that most social psychologists (and philosophers for that matter) can agree on, it is social relationships. The scientific evidence suggests that humans have an existential need for close social relationships (Baumeister & Leary, 1995) and Argyle concluded in his SWB meta-analysis that "social relationships have a powerful effect on happiness and other aspects of well-being, and are perhaps its greatest single cause" (2001, p.71). In fact, of all the factors a person actually has an influence on, pursuing and nurturing close social relationships appears to be the most powerful predictor for an individual's happiness (Myers, 1992; Myers, Fowler, Seligman, & Csikszentmihalyi, 2000). The more time a person spends in engaging social activities, the higher she reports her positive affect and life satisfaction (Watson, Clark, McIntyre, & Hamaker, 1992). These benefits of close social ties exceed the domain of happiness research and have been thoroughly examined for its beneficial effects on life expectancy,

depression, immune system, and other health-related issues (Case, Moss, Case, McDermott, & Eberly, 1992; Colon, Callies, Popkin, & McGlave, 1991; Williams et al., 1992). This positive relationship between social relationships and happiness appears to be more than a mere association. Some researchers have found a significant decrease in happiness right before and after the loss of a significant other through either death (Lucas, Clark, Georgellis, & Diene, 2003; Stroebe, Stroebe, Abakoumkin, & Schut, 1996) or divorce (Clark, Diener, Georgellis, & Lucas, 2004). This would suggest a causal connection, making social relationships not just beneficial for happiness but necessary (Diener, & Oishi, 2005).

What constitutes a social relation is commonly defined as "an enduring association between two persons" (Reis, 2001, p.61). In contrast to the generally agreed upon definition of a relation, different researchers have differentiated Social Relationships as a social and psychological concept in a variety of ways. These range from unidimensional assessments to the more commonly used multidimensional measures (Diener et al. 1999). An early separation of social relationships into 6 different dimensions (Wills, 1985) was used as the base to develop the six social relationship scales of the National Institute of Health (NIH) (Cyranowski et al., 2013). Following this separation, the most fundamental dimensions of social relationships are: Emotional Support, Instrumental Support, Friendship, Loneliness, Perceived Rejection, and Hostility. Four of those dimensions (Emotional Support, Instrumental Support, Friendship, Loneliness) have shown significant relations with life satisfaction and positive affect reports (Cyranowski et al., 2013).

The evolutionary explanations on why being social and engaging in a variety of social relationships might have been beneficial for human survival and hence psychologically rewarded by happiness, are not relevant for the research objective of this thesis. The interested reader is referred to the works of Deci and Ryan (2000) as well as Ryan and Deci (2002) on the evolutionary Need to Belong. For an overview of vital Infant Attachment Theories, see Reis and Patrick (1996). However, it should be noted that some researchers have argued, that the desire for relationships has been evolutionary passed on to the next generations in order to enable the individual to profit from the support they gain from those social relations. If the need for that support ceases, the individual would still strive for and

be happy about social relationships, even when they do not provide practical benefits anymore. The happiness increasing effect of social relationships would consequently be an atavism that could be compensated for through other happiness determinants.

Other than evolutionary arguments for engaging in social relationships and the reward theories, which promote the beneficial effects of those relationships, little research has gone into what environmental circumstances might foster peoples' sociability (Biswas-Diener, & Diener, 2001). A theoretical argument could be made for a correlation between the financial situation an individual is living in, and the extent of social relationships that individual engages in. Individuals who live in modern, affluent societies are able to emancipate themselves from the functional need of social networks by outsourcing certain need satisfaction to other institutions. Varying the source of need satisfaction in this way is impossible for people who live in difficult financial situations. Instead of being able to use money as a means to outsource certain satisfactions to institutions like restaurants (being hungry), hospitals (being sick), banks (needing a loan), these people would have to rely on their social relationships to fulfill these needs. This could possibly result in intensified social relationships for individuals in difficult financial situations, which in turn could counterbalance the impairment they might experience from their economic circumstances.

2.7 Summary

Despite the continuing common myth, that the most creative individuals in history also tend to be the most troubled, modern research has shown a significant relationship between creativity and happiness. This relationship appears to not only be a correlation, but that happiness is the cause for creative thinking and ideation (Ashby et al., 1999; De Dreu, & Nijstad, 2008; Lyubomirsky et al., 2005; Pannells & Claxton, 2008; Runco, 2007). The more happiness an individual reports, the more creative she tends to be. If individuals are unable to develop their full happiness potential, they would also experience diminished creativity. In order to assess if individuals in certain circumstances are systematically impaired in their ability to be happy, the literature review gives an overview of what happiness is considered to be, and which sources of happiness appear to have an influence on it.

Happiness or, as it is also referred to in the academic literature, subjective well-being (SWB), combines an emotional and a cognitive dimension and is defined as: a complex construct consisting of an individual's satisfaction with life (cognitive dimension) and her positive and negative affect states (emotional dimension) (Kesebir & Diener, 2008; Diener & Suh, 1997; Lyubomirsky et al., 2005). The two dimensions of happiness with their three components appear to have specific relationships with other influencing parameters (Diener & Emmons, 1984; Diener et al., 1995; Diener et al., 1999).

The parameter that influence a person's SWB can be organized in three major groups, where happiness (H) equals the cumulative effects of a genetically predisposed set point (S), plus the influence from circumstances the individual lives in (C) and voluntary activities that individual undertakes (V) (Lyubomirsky et al. 2005). Since the genetic predisposition itself is difficult to alternate, the remaining two groups of possible influencers pose the area that individuals are influenced by but also have an influence of. If one of those parameters appears to systematically impair an individual in her ability to be happy, there might be ways and sources to counterbalance the effect. The two most discussed predictors of happiness in the academic literature are *money* including the beliefs attached to it (*materialism*) and *social relationships*.

The findings show that the financial situation an individual is living in is significantly (but weakly) related to happiness. The more favorable a person's financial situation, the happier they tend to be (Lyubomirsky, 2013; Diener & Biswas-Diener, 2002; Diener et al., 2010; Howell & Howell, 2008; Quoidbach et al., 2010). This relation seems to follow the concept of diminishing marginal effects, with rising income resulting in smaller effect size up to a satiation point where the relation seems to vanish almost entirely (Diener, 1999; Jebb et al., 2018). Since people are born into certain financial situations, and often enough without many opportunities to enhance that situation, it should be investigated if that financial situation actually poses a systematic impairment for individuals to be happy and ultimately more creative.

The value people attach to the importance of acquiring money and possessions (materialism) however, has shown to be negatively related to a person's SWB (Dittmar 2008; Kasser & Kanner, 2004; Kasser et al. 2014; Kasser & Ryan, 1993). The negative association appears to be weaker for individuals who live or have been raised in financial distress (Kasser, 2002; Kasser et al., 1995; Sheldon & Kasser, 1998). Also, wealth inequality appears to have a moderation effect on the relation in the sense that the more unequal financial means are distributed in a country, the less negative the correlation between materialism and happiness is (Dittmar et al., 2014; Ordabayeva & Chandon, 2011). It would be reasonable to test that relationship in a critical case like South Africa, which has the highest wealth inequality in the world. If Materialism proves to have a negative relationship with SWB, then valuing the acquisition of money would not be an advisable approach for the majority in this country that lives in difficult financial situations (to say the least).

Social relationships, on the other hand, show a significant positive correlation with happiness and are seen as the single most important predictor of happiness (Argyle, 2001; Myers, 1992; Myers et al., 2000). The social circumstances an individual lives in might, therefore, be a promising candidate to counterbalance negative effects from other happiness predictors. This thesis will investigate if the overall degree of social relations is associated with the financial situation an individual lives in.

Richer people are happier and happier people are more creative. Does the fact that a major part of the people in the world lives in extremely difficult financial situations mean, that those individuals are systematically impaired by their economic circumstances to be happy and to develop their full creative potential? Is valuing the acquisition of money and possessions an advisable strategy to counterbalance that impairment? Or is it possible that financially poor individuals benefit from enhanced social relationships as a substitute and source for their happiness and creativity? Those questions are derived from the presented literature review and will be operationalized in more detail by the hypotheses in the next chapter.

3 Hypotheses and Conceptual Model

Drawn from the research objective and the literature review the following hypotheses ought to be tested to investigate the relationships between the three happiness predictors and three happiness components. The three predictors in focus to address the research objective are the Financial Situation as assessed through Living Standard Measures (FS), Materialism as assessed through the Materialism Value Scale (MVS), and Social Relationships as assessed through a combination of NIH Social Relationship Scales (SRS). Those predictors constitute circumstances an individual is born into, that can be alternated to some extent by voluntary activities. The conceptual model for this thesis can consequently be extended in the following way (Figure 4):



Figure 4 - Conceptual Model Part 4

The hypotheses are separated into three groups, one for each predicting parameter:

1. Individuals living in extremely difficult economic situations, who can not rely on income as a source of their happiness, will report lower satisfaction with their lives as well as experiencing more frequent negative than positive emotions, suggesting a positive relationship between happiness and the financial situation. The literature suggests further that this relationship might be more positive for poorer individuals. This translates to the following hypotheses: **H1.1** Participants in difficult financial situation (FS) report lower scores on the Satisfaction with Life Scale (SWL) than participants who are better off financially, suggesting a positive relationship between SWL and FS.

H1.2 Participants in difficult FS report lower scores on the Positive Affect Scale (PA) than participants who are better off financially, suggesting a positive relationship between PA and FS.

H1.3 Participants in difficult financial situation report higher scores on the Negative Affect Scale (NA) than participants who are better off financially, suggesting a negative relationship between NA and FS.

H1.4 The relationship between FS and happiness (SWL, PA, NA) is stronger for poorer individuals than for richer individuals.



Figure 5 - Conceptual Model Hypotheses Group 1

2. The extent to which participants value materialism displays a significantly negative relationship with subjective well-being, which appears not to be moderated by participant financial situation, a hypothesis this thesis wants to challenge. Furthermore, believing in materialism and the value of money might increase how much individuals strive for and obtain it. **H2.1** Participants who score high on the MVS report lower scores on the Satisfaction with Life Scale (SWL) than participants with lower scores on the MVS, suggesting a negative relationship between SWL and MVS.

H2.2 Participants who score high on the MVS report lower scores on the Positive Affect Scale (PA) than participants with lower scores on the MVS, suggesting a negative relationship between SWL and PA.

H2.3 Participants who score high on the MVS report higher scores on the Negative Affect Scale (NA) than participants with lower scores on the MVS, suggesting a positive relationship between SWL and NA.

H2.4 The relationship between MVS and happiness (SWL, PA, NA) is weaker for poorer individuals than for richer individuals.

H2.5 The higher participants score on the MVS the better their FS is, suggesting a positive relationship between MVS and FS.



Figure 6 - Conceptual Model Hypotheses Group 2

3. As shown in the literature review, social relations are one of the strongest predictors of individual happiness. Difficult financial situations might bring people together and influence the extent of their social relationships positively. In contrast, valuing materialistic beliefs might diminish the quality of social relationships. **H3.1** Participants who score high on the SRS report higher scores on the Satisfaction with Life Scale (SWL) than participants with lower scores on the SRS, suggesting a positive relationship between SRS and SWL.

H3.2 Participants who score high on the SRS report higher scores on the Positive Affect Scale (PA) than participants with lower scores on the SRS, suggesting a positive relationship between SRS and PAS.

H3.3 Participants who score high on the SRS report lower scores on the Negative Affect Scale (NA) than participants with lower scores on the SRS, suggesting a negative relationship between SRS and NA.

H3.4 Participants in more difficult FS score higher an the SRS than participants who are better off financially, suggesting a negative relationship between SRS and FS.

H3.5 Participants who score high on the MVS display lower scores on the SRS, suggesting a negative relationship between MVS and SRS.



Figure 7 - Conceptual Model Hypotheses Group 3

4 Methodology

The research question has been differentiated and operationalized in the hypotheses and conceptual model of chapter 3. To assess if individuals in difficult financial situations are systematically impaired in their ability to be happy and creative, the relationships of the Financial Situation, Materialism, and Social Relationships with the three happiness components of Satisfaction with Life, Positive Affect, and Negative Affect. This chapter presents the reasons why a quantitative questionnaire is the most relevant research design for this thesis.

4.1 Research Approach

To investigate the effect the financial situation has on the subjective well-being of the financially poor and if their social relationships pose a significant source of happiness for those individuals, an adequate research approach was chosen.

The discussion whether either qualitative or quantitative approaches are superior in their technical applicability or philosophical basis has been part of the academic conversation for decades with no absolute agreement (Bryman, 1984) and most solutions to this discussion are technical in nature and do not actually resolve the underlying philosophical disparity of differing assumptions about epistemology and what constitutes knowledge (Black,1999; Flemming, 2010). It is commonly practiced that "the problem under investigation properly dictates the methods of investigation" (Trow, 1957, p.33) which in this case lead to a quantitative research approach for the following reasons.

The quantitative approach works in close relation to the natural sciences with its underlying philosophy of Positivism and Empiricism (Bryman, 1984). Kothari defines it as the "scientific generation of data in quantitative form, which can be subjected to rigorous quantitative analysis in a formal and rigid fashion" (2004, p. 5). By that, it concerns itself with operational measures, that strive for objectivity, reliability, and validity. Since the objective of this research is to find generalizable conclusions for a greater population by

using previously validated quantitative measures, it is the approach with the best fit (Silverman 2005). Furthermore, part of the survey takes place in the townships of the Western Cape region, an area that suggests major interviewer bias because the interviewer had little cultural or phenotypical proximity with the interviewees. Using a quantitative questionnaire makes the distance between the observer and the observed possible that ought to ultimately result in increased objectivity (Bryman, 1984) and tries to reduce the influence the interviewer has on the participants. The concepts that were introduced in Chapter 2 will be assessed through quantitative measures that have been extensively researched in different populations and require a similar research approach. In order to join the academic conversation surrounding the relationship of happiness, financial situation, materialism, and social relations, a quantitative questionnaire is the most applicable for the research objective of this study and has consequently been chosen.

4.2 Constructs and Measures

To test the research objective the following established and validated constructs and measures where used in the questionnaire:

4.2.1 Happiness

In accordance with the literature review, the emotional-cognitive definition of happiness has been used. The concept consists of two major dimensions: positive and negative affect (emotional dimension), and life satisfaction (cognitive dimension) (Diener, 1984, 1994; Diener et al., 1999, Lyubomirsky et al., 2005). A group of three different measures is needed to assess happiness in all its components. This group of measures will be referred to in this thesis as subjective well-being (SWB) or happiness interchangeably. These measures are typically grouped together and their interpretation as happiness might even suggest unidimensionality, but this thesis is also interested in the individual relation of the three different happiness components with other constructs since some parameters might influence a particular aspect of overall happiness more than the other. Furthermore, this

thesis adopts the subjectivist approach to happiness that relies on people's self-reports as it is most common in the relevant literature (Myers & Diener, 1995; Diener, 1994). The following measures will be used to assess the different components of subjective wellbeing.

4.2.1.1 Satisfaction with Life Scale

The most commonly used measure for the participant's satisfaction with her life is the Satisfaction with Life Scale (SWL) originally developed by Diener et al. (1985; validated by Pavot, Diener, Colvin, & Sandvik, 1991; and further reviewed by Pavot & Diener, 1993). It addresses life satisfaction from a general perspective, independent of specific sources like for example health, social life, or income. The measure has been reported as having high internal consistency and reliability. It is suited for "global use" with a "wide range of age groups and applications" (Pavot et al., 1991, p.149) and is less time-consuming than other life satisfaction measures. This is important to the thesis since the target group will be very broad and resources are limited. Furthermore, its validity is reported to be high especially in regards to focussing on the cognitive dimension of happiness and not measuring affect related aspects of the participant's satisfaction (Pavot & Diener, 1993). The SWL consists of five items that are anchored on a 7-point scale. Participants indicate how much they agree with the different items on a scale from *strongly disagree* (1) to *strongly agree* (7) that ought to be summed up for a total life satisfaction score.

4.2.1.2 International Positive Affect and Negative Affect Schedule Short Form

Positive and negative affect are separate phenomena and ought not to be considered opposites on the same scale (Watson, Clark, & Tellegen, 1988; Diener et al., 1999). To measure those affects the Positive and Negative Affect Schedule (PANAS) was originally developed by Watson, Clark, and Tellegen (1988) and included a collection of 20 items anchored on a 5-point scale with individual scores for the two different moods. Since the questionnaire needed to be accessible for participants not generally exposed to academic research, a shorter version was implemented. Furthermore, some items on the original scale might exceed participants language sufficiency or their ability to access their

emotions in such a differentiated way (e.g. "*jittery*"). The PANAS was further developed into an internationally validated and shortened form with the captivating name: international Positive and Negative Affect Schedule Short Form (I-PANAS-SF) (Thompson, 2007). The I-PANAS-SF uses the 10 most reliable items from the original scale while keeping the 5-point scale from *never* (1) to *always* (5) for measurement. The I-PANAS-SF is particularly suited for this questionnaire since it is said to produce reliable results regardless of the participant's cultural background (Karima, Weisz, & Rehman, 2011).

4.2.2 Social Relationships

The academic literature is somewhat pessimistic regarding the ability to influence one's happiness. However, of the few things that individuals appear to be able to influence, Social Relationships are perceived as the holy grail of happiness associates (Argyle, 2001; Myers et al. 2000). In order to access the relationship of an individual's social life with subjective well-being, a suitable measure for the construct was needed. Some common measures for social relations were discarded because they did not fit the research objective and constraints. The Interpersonal Support Evaluation List (Cohen & Hoberman, 1983) is unpractically long (40 items), its shorter version, the Interpersonal Support Evaluation List-12 (Merz et al. 2014), focuses on only one dimension of social relation, the Social Support Questionnaire (Sarason, Levine, & Basham, 1983) is not specific to social relations (it also accesses individual satisfaction with that relation), and the Evaluation of Social Systems Scale (Arguilar-Raab, Grevenstein, & Schweitzer, 2015) does not focus on the individual but rather the network effects of those relations. The most suited measures were the National Institute of Health Toolbox Social Relationship Scales.

4.2.2.1 NIH Toolbox Social Relationship Scales

As part of the National Institute of Health (NIH), Cyranowski and her colleagues (2013) developed and tested brief social relationship scales to access six fundament dimensions of social relationships: Emotional Support, Instrumental Support, Friendship, Loneliness, Perceived Rejection, and Hostility (Cyranowski et al., 2013). The individual scales show
high internal reliability (with all Cronbach's Alphas above .93) and validity. The scales were designed to "maximize conceptual coverage, optimize relevance across a range of respondents, and simplify language" (Cyranowski et al., 2013, p.295). These qualities are relevant to this questionnaire since the target population covers a diverse array of individuals, including participants living in financial poverty; likely without extensive education. Furthermore, the maximized conceptual coverage enables the thesis to examine the associates of Social Relationships as a broad concept without neglecting vital aspects of it. All sub-scales combined, this very comprehensive toolbox counts 45 items rated on a 5-point scale from strongly disagree (1), disagree (2), neutral (3), agree (4), to strongly agree (5). Since this guestionnaire is relying on volunteering participants and participants that live in poverty and might not have been part of an academic study before, the necessary time frame to complete the guestionnaire needs to be minimized to encourage and enable participants to finish the questionnaire. For that reason, even though the Social Relationship Scales (SRS) conceptual coverage is a great strength, they need to be shortened. Unfortunately, no previously validated short version is available as for now, which is why the following paragraph argues the delimitation used in this thesis.

Of the 6 dimensions the scales assess, only four were integrated into the questionnaire. The conceptual pair and sub-scales for Perceived Rejection and Hostility were rejected because there has not been a primary focus in the scientific literature regarding this dimension (Cyranowski, 2013). Furthermore, the remaining items were reduced in amount by 50% based on relevance for and inclusiveness of the target group. Items for the dimension *Instrumental Support* like "I can get help cleaning up around my home if I need it" were rejected because a person living in poverty might rate this item with *strongly disagree* (1) because she does not have a house, not because she lacks instrumental support. After reducing the number of items, the remaining 13 items were used for the final questionnaire. Since this thesis is interested in the overall degree of social relationships the different unidimensional sub-scales were not assessed individually, but computed together.

4.2.3 Materialism

In accordance with Richins and Dawson materialism in this thesis is defined as "the importance a person places on possessions and their acquisition as a necessary or desirable form of conduct to reach desired end states, including happiness." (1992, p.307). It can be perceived as the psychological undercurrent of an individual's financial situation. The generally negative relationship between materialism and subjective well-being has been discussed in the literature review. This thesis adopts the materialism measure that has been most commonly used in other surveys.

4.2.3.1 Materialism Value Scale

The Materialism Value Scale (MVS) was originally developed by Richins and Dawson (1993). The original version consists of 18 items asking participants to rate sentences according to how much they agree with them on a 5-point scale from *strongly disagree* to *strongly agree*. Richins (2004a) later developed a variety of short version of the MVS to be integrated in questionnaires without taking up to much space. Of the five different versions (item count: 18, 15, 9, 6, 3) the 9-item scale was chosen. The shorter versions (6, 3) were rejected on behalf of questionable or poor internal consistency (Cronbach's alpha .71 and . 63 respectively), the longer versions (18, 15) were rejected on behalf of unpracticable amount of items. As suggested by the author the items of the MVS are meant to be mixed with items from other scales to reduce answer bias through hypotheses guessing and social desirability effects (Richins, 2004b).

4.2.4 Financial Situation

Assessing the financial situation of individuals with and without official incomes alike is a difficult endeavor (Klaxon, 2000). The participants in favorable financial situations might have regular jobs, but some of the poor participants might support themselves through unaccountable activities and barter, or have to rely on the bonhomie of others. While

participants with a numerically assessable income can be asked directly, those who do not have a regular income need to be assessed through proxy questions.

4.2.4.1 Living Standard Measurement

The Living Standard Measurement (LSM) is a population segmentation tool developed by the South African Advertising Research Foundation (SAARF) in 1989 with the objective to measure the social class and living standard of an individual without relying on income as a segmentation measure (Truter, 2007). The original test included 13 items referring to different possessions (e.g. TV set, sewing machine) which asked the participant to evaluate if she owns the different things (ves or no). The item list was developed and updated over the years and the current LSM list of 2011 includes 29 items. The answers are used to divide the population into 10 individual groups of living standards (LSM groups). The different items have specific weights that influence the overall LSM score (e.g. hot running water has a weight of 0.176697) (South African Audience Research Foundation, 2012). The measure fits the research objective of this thesis well, especially since it has been developed and tested in South Africa. However, the amount of items is diametrical to the aim of the questionnaire to be easily processable for participants unaccustomed to academic research. Therefore, some items were not included in the questionnaire. The items concerning geographic location (e.g. urban or rural) were rejected since they are not in the focus of the research objective. Additionally, the items with the lowest weights were eliminated, thereby reducing the total item count to 12 items. The participant's answers regarding the ownership of those items are computed together to represent an estimate of the individual's Financial Situation.

4.2.4.2 Direct Self-Report Income Assessment

Additionally to the LSM items, two items were integrated into the questionnaire for direct self-report income assessment. According to the South African Audience Research Foundation (2012), the lowest LSM groups (LSM 1-4) translate to an average income of less than 3,000ZAR. The highest LSM groups (LSM 7-10) suggest an average income of over 10,000ZAR, leaving the middle groups (LSM 5-6) with an average income between

the two. In case the item reduction of the LSM measure distorts the segmentation, the two integrated items income over 10,000ZAR and income under 3,000ZAR function as a backup measure to segment the population according to the reported SAARF income distribution.

4.2.5 Demographic Measures

Age, gender, and ethnicity were integrated as demographic measures to evaluate if there are significant variations in the results depending on how old participants are and if they are male or female. South Africa as a whole and the Western Cape region in particular show that wealth is very unevenly distributed between ethnicities from rich to poor in the following order: Anglophone Whites, Afrikaners, Indians, Coloureds, and Black Africans (Neff, 2007). All three demographic variables will be integrated as control variables in the data analysis.

The following table displays an overview of the used concepts, measures, and their abbreviations:

Concepts	Measures	Abbr.
Life Satisfaction	Satisfaction with Life Scale	SWL
Positive Affect	International Positive Affect and Negative Affect Schedule Short Form	PA
Negative Affect	International Positive Affect and Negative Affect Schedule Short Form	NA
Financial Situation	Living Standard Measurement	FS
Materialism	Materialism Value Scale	MVS
Social Relationships	NIH Toolbox Social Relationship Scales	SRS

Table 1 - Overview of Used Concepts, Measures, and Abbreviations

4.3 Survey Design

In order to investigate the relationships between the three happiness component (SWL, PA, NA) and the Financial Situation, Materialism, and Social Relationships, the described concepts and measures were integrated in a quantitative questionnaire. A complete copy of the used questionnaire in English and Xhosa can be found in Appendix B and C respectively.

4.3.1 Layout and Sequence

The first section of the questionnaire is a welcome text communicating important characteristics of the survey. After the acknowledgment of participation and brief topic delimitation, the participants are informed about the average time it requires to complete the test. Furthermore, the participant is reassured that the test is anonymous and encouraged to answer the questions honestly. The introduction is followed by the items that operationalize the concepts of interest.

The total item count of the questionnaire equals 54 as the sum of the following individual item counts of the integrated measures: Satisfaction with Life Scale [5], International Positive and Negative Affect Schedule Short Form [10], NIH Toolbox Social Relationship Scales [13], Materialism Value Scale [9], Living Standard Measurement [12], Direct Self-Report Income Assessment [2], and the Demographic Measures [3].

The items to assess the three happiness components (SWL, PA, NA) are placed at the very beginning of the questionnaire in order to minimize any bias that might stem from other questions. They are followed by the items for materialistic beliefs (MVS) and social relationships (SRS). As suggested by the author, the items of the MVS are meant to be mixed with items from other scales to reduce answer bias through hypotheses guessing and social desirability effects (Richins, 2004a). For that reason MVS and SRS items are mixed and grouped into three sets of two 7-items and one 8-items collectives. These items are followed by those regarding the participant's financial situation (LSM and Income Group). The interactive part of the questionnaire ends with the demographic items.

The last section of the questionnaire is the acknowledgment of completion as well as the author's contact details in case the participant has any further questions.

4.3.2 Format and Tools

The questionnaire was originally designed as a closed online questionnaire. In order to reach a wide spectrum of relevant participants, the online format was chosen since online survey research has the advantage of reaching people who might be difficult to access through other means (Jones, 1999). Another reason was that this thesis had to consider time and resource constraints and online surveys enable considerable savings in both regards since participants accumulate while other tasks can be attended to (Llieva, Baron, & Healey, 2002) and the costs of printing the questionnaire is reduced through the electronic alternative (Yun & Trumbo, 2000). An advantage especially relevant for this thesis was that since no interviewer is present during the online questionnaire, interviewer-biases are minimized, and participants might be more willing to share their honest opinions.

However, it was anticipated that some participants are likely unable to be reached through an online survey, especially those participants who live in difficult financial situations. Participating in an academic survey in this situation was also anticipated to require a different form of incentivizing than an online survey would allow. Therefore, half of the participants were suspected to be acquired through a pen an paper version of the questionnaire. And even though, some of the online survey advantages (time, cost, true anonymity) might be diminished, they are still relevant for the participants that can be reached through the online channel.

To execute the survey the *SoSci Survey* tool (www.soscisurvey.de) was used. This tool provides all the necessary means for the data collection including the required scales and measures. It provides a dashboard for continuous process monitoring and enables effective data export for analyzing purposes with relevant statistic software (SPSS). Additionally, it is free of charge for academic purposes. It also provides the option to print

the questionnaire which guaranteed the same layout of the questionnaire for the online and printed versions.

4.3.3 Pre-Test and Revision

To pre-test the questionnaire three MBA students from the Stellenbosch University Business School were asked to complete the test while screening for inconsistencies or errors. They were also told that they were being timed while completing the test.

Resulting from the pre-test, some minor spelling mistakes were corrected. Also, the LSM item *household helpers* was extended by an explanation in parentheses "(e.g. gardener, cleaner)" to clarify what kind of helpers were intended. Two of the pre-testers ask what the LSM item *sewage system* meant. On the basis that they were nonnative English speakers (German and French), the item was kept as suggested by the SAARF, since native English speakers are expected to know the word's meaning. They finished the questionnaire in 5 minutes and 49 seconds on average (5:53; 5:13; 6:22) which was partly due to the very diligent reading of the questions.

The pre-testers were acquaintances of the thesis author and accustomed to academic research which is why the revisioned questionnaire was presented to an additional two individuals entirely unaccustomed to those methods. They finished the test in under 5 minutes and the only comment was that they felt as if some questions were repeated. The translation from English into Xhosa functioned as an extended pre-test for the participants in the townships. It is described in more detail in the following section.

4.3.4 Translation

The questionnaire was designed in English. Since a majority of the individuals living in the intended study areas do not use English as their first language, the questionnaire was provided in a version using the most prevalent local language: Xhosa. The English version was incrementally translated into Xhosa with the help of two staff members from the University of Stellenbosch Business School whose first language is Xhosa and who are

fluent in English. After the first staff member translated the questionnaire, this version was brought to the second staff member who corrected apparent mistakes and suggested minor variations for smoothness of comprehension. This second version of the translation was then presented to three facility management staff members who's first language is Xhosa and who only have limited English language proficiency. They indicated which items forbade comprehension in their current form. With this information and in collaboration with the second staff member the third and final version of the questionnaire translation was prepared.

4.3.5 Ethical considerations

Besides the obvious and general ethical considerations every researcher should apply to any scientific endeavor like allowing for privacy and not asking questions which may offend, as well as asking for data that is not essential, some specific conditions applied to this survey. This mainly concerned the interaction with the participants who live in difficult financial situation. The author of this thesis is a Caucasian male and hence likely to be better off financially than most individuals in the target group. For him to go into the poorest corners of the Western Cape townships to inquire about happiness might be seen as inappropriate or unconsidered. This fact was acknowledged by the author, urging him to show the utmost respect and understanding for the participants he set out to survey.

4.4 Data Analysis

The used measures were measured on different scales. In order to make the comparison between the different measures possible and interpreting the results more intuitive, the collected observations will be computed to standardize the values on a scale from 0 to 100. All used measures will first be analyzed descriptively. Then the associations between the different measures as hypothesized in Chapter 3 will be assessed using linear regression analysis. The collected data will be tested if it fulfills all requirements to be eligible for linear regression analyses. The results of the different regression analyses will be reported in order to accept or not accept the established hypotheses. Since this

descriptive survey aims at assessing associations it is clear that the analyses cannot suggest causality between the different independent and dependent variables. All regression models controlled for the demographic variables age, gender, and ethnicity.

4.5 Study areas

The study was carried out in South Africa. In order to investigate the research question if individuals in difficult financial situations, are systematically impaired by their economic circumstances to be happy and ultimately more creative, South Africa constituted a well fit case. The country was chosen as a critical case of very unequal financial situations of its population. The World Bank reports South Africa as the country with the highest GINI coefficient (63,4 in 2011) in the world, meaning the worldwide highest inequality of wealth distribution (The World Bank, n.d.). This immense discrepancy between the rich and poor makes South Africa a suitable case when looking at the association between financial situations and happiness, because it provides access to very unequal participants to compare. If the relationships cannot be found in this extreme case, it might be unlikely to find them anywhere else. The survey was carried out in two main locations in the Western Cape region of South Africa. The Western Cape region was chosen because the location provided the most accessible network of participants for the survey.

Approximately one half of the participants were approached in cafés and on the streets of the two suburbs Clifton and Higgovale, as well as on campus of the University of Stellenbosch Business School (USB) in Belville. The two suburbs were chosen based on a study by the real estate company Seeff, which places the two suburbs in a ranking of the richest suburbs in all of South Africa on 1st and 8th place respectively (Meintjes, 2017). The USB campus was chosen because it enabled the survey to gain a diverse group of participants of MBA students who live in the Western Cape region. With an MBA program at the USB costing as much as 289,000 ZAR (equivalent to 142,790 DKK or 19,178 EUR) (Fees and Financing, 2018) it was likely to gain further participants in better financial situations.

The second half of the sample was sourced in the two townships Khayelitsha and Masiphumelele. The former is with an estimated population of 400,000 people one of the largest townships in South Africa and the largest one in the Western Cape region (Dorrington, 2002). Situated approximately 35 kilometers outside the city center, Khayelitsha accommodates the "impoverished, landless, and under-educated African population" (Toit, A. & Neves, D., 2007) and hence constitute the poorest part of Cape Town. Most individuals living in this township qualify as living in an very difficult financial situations. Due to pre-established connections between a variety of small businesses within the township and the Small Business Academy of the USB, the survey was originally focused on the area around the train station and the retail shop of the Department of Coffee (158 Ntlazane Street, 7784 Khayelitsha). The study later spread further into the surrounding parts of the township.

The second township, Masiphumelele, is a smaller township with an estimate of 16,000 inhabitants according to the Statistic South Africa population census from 2011 (Frith, 2011) and is situated 38 kilometers south of Cape Town's city center. Due to personal preestablished relations with the founder and manager of 'H.O.K.I.S.A - Home for Kids in South Africa', it was possible to effectively approach participants around the orphanage in this township as well (1576 Skina Road, Fish Hoek, Masiphumelele, Cape Town).

4.6 Target Population

To assess the relationship between the concepts in focus and the components of subjective well-being for individuals in difficult financial situations and to compare those associations with those of individuals living in favorable financial situations in the Western Cape region of South Africa, the target population included every individual living in this geographic location. Subjective well-being is something that concerns every person after all. Generally, studies would focus on either one of these groups (Knight, Song & Gunatilaka, 2009; Reyes-García et al. 2016), while this survey also tries to extract insights from the relation between the two. Within the aforementioned geographic locations, the target group was defined as individuals from all genders, all ethnicities, all educational

backgrounds, and all financial situations. The age minimum was defined at 18 years because it was impossible, given the resource and time constraints, to engage with younger participants and their legal guardians as well as explain the reasoning behind academic research. This is particularly true for the younger population living in the selected townships. Furthermore, even though children and teenagers are affected by the financial situations of their parents they are limited in the extent to which they can actively alter that situation. From this target group, a survey sample was selected as described in the following section.

4.7 Sampling Methodology

Since the target population includes all people above the age of eighteen, an investigation of every single individual would have neither been possible nor necessary (Grove, 2009). Costs and resource constraints were taken into consideration when the estimated sample size was decided (Kothari, 2004). In this regard, a sample size of at least 100 participants from difficult and favorable financial situations is being strived for (N > 200).

When choosing a sampling method one needs to consider two major causes of incorrect inference: systematic bias and sampling error. The systematic bias arises from flaws in the sampling procedure, a threat that cannot be reduced by increasing the sample size. The sampling error, on the other hand, results from random variations regarding the population parameters and can be reduced by increasing the sample size (Kothari, 2004).

Causes for systematic errors that needed to be considered in this survey especially are non-response bias, response bias, and indeterminacy bias. The non-response bias means that the participants who are not responding to the survey request might bias the data in the sense that the "the likelihood of [...] receiving a response from an individual is often correlated with the measure of what is to be estimated" (Kothari, 2004, p.57). This is especially important for the township sub-group where a representative sample might be difficult to obtain if only the individuals respond to the survey who have interacted with researchers before. Since this sample is not based on complete random sampling a

certain degree of bias is inherent and anticipated in the sampling methodology though. The indeterminacy bias describes the alteration of participants' answers depending if an observer is present or not. This includes the interviewer bias which is the effect that different interviewers might evoke different responses from participants depending on personality, social style or in the case of this survey, cultural and phenotypical proximity. The majorities of people living in the township identify with the ethnicity Black African and speak Xhosa as their first language. The researcher is European white Caucasian and speaks English. This obvious and visual contrast might cause an increased interviewer effect and should, as far as possible, be mitigated. Finally, the response bias entails that participants might give wrong or untruthful answers to particular or all guestions. This can relate to hypothesis guessing where the participant would give the answer she imagines the researcher to seek, instead of disclosing how she really feels. This includes the social desirability bias where participants might deviate from their personal beliefs in favor of what they think is 'correct' from a normative point of view. This applies to the used measures for Materialism and possibly even Social Relationships since items asking for a gradual agreement like "I admire people who own expensive homes, cars, and clothes" or "I feel lonely" can cause participants to alter their answers according to the described bias. The latter is also related to the common-methods bias which describes the variations in the observed responses due to the used instrument instead of the participants' disposition towards the construct the instrument tries to measure.

With the aim to source half the sample's participants from the selected townships, this survey had to deal with an immense informal population. Most individuals living in the townships are not registered anywhere, making it impossible to select from a population database in form of probability sampling. Since there was no source list, there was no practical way to select participants for the sample on a non-zero probability basis. Since the probability could not be accurately determined and due to resource constraints a non-probability sampling was chosen. That means that participants for the sample are purposely selected by the researcher on the principle that they ought to be typical or representative of the entire population and if the survey is executed accurately the results would be tolerably reliable (Kothari, 2004). However, it needs to be considered that with purpose sampling the survey relies heavily on the researcher's judgment.

This survey used a combination of purpose sampling and snowball sampling. To find participants outside of the townships the survey was conducted by actively approaching individuals in the aforementioned suburbs of Cape Town and on the USB campus. In order to reach participants within the townships, the original approach was also purpose sampling but soon transitioned into snowball sampling where an initial small group of participants was utilized to help acquire more participants.

4.8 Research Process

The survey was executed over the time frame from Monday the 20th of November 2017 until Monday the 8th of January 2018. Even though this time frame describes the time the online survey was active, the main data collection took place between 20.11.2017 and 10.12.2017.

As described in the study area section, the data was collected from a variety of locations to acquire participants living in difficult financial situations and those with a suspected more favorable financial situation. For the purpose of readability, the research process will be divided into two sections. First, the data collection from the affluent areas, followed by the one that took place in the townships.

Once the questionnaire was online, the access link was shared with the staff of the Stellenbosch University Business School and sent to all relevant South African MBA students enrolled at the time (if they disclosed their email on the enrollment list). They were encouraged to forward the link and get their peers outside of the university to participate as well. Even though the questionnaire was left active until the 8th of January 2018, the response rate was disappointingly low considering the promising reach the survey had. To increase heterogeneity in this portion of the sample, the researcher went out to the identified neighborhoods and approached individuals on the streets and in cafés. After a brief and incentivizing summary of the survey's topic, participants could choose if they preferred filling out a pen and paper version of the questionnaire or complete it online

(the access link was also printed out on smaller pamphlets to be distributed). The researcher was able to acquire approximately 10 completed pen and paper questionnaires a day. Surprisingly, most participants preferred the pen and paper version leading to an extensive amount of copying and time-consuming acquisition phase that was originally tried to be avoided by setting up a digital version. Judging from the few data-sets that were not manually inserted by the researcher, most of the printed access links were not followed up on. Most of the participants involved the researcher in an engaged discussion about the questions and topics after they finished the questionnaire, supporting the relevance of the discussed topics and how little structure and non-anecdotal basis the happiness debate has in common conversation.

Finding participants within the townships proved to be considerably more difficult. The first attempts to approach possible participants were utterly fruitless. Since there are less than 1% white people living in the townships, the researcher drew unwanted attention wherever he went, which obstructed the data collection. Even the participants who were willing to speak to the researcher rarely spoke English and the Xhosa translation of the questionnaire was not self-explanatory enough for the individuals to know what to do with it. After two days of failed attempts to collect observations, a lecturer from USB agreed to introduce the researcher to the owner of a small coffee shop business within the township who had previously worked with the university. The local businessman employs people to walk the township in order to sell coffee to the locals. He agreed to help with the data collection. The research objective, as well as questionnaire instructions, were communicated. After ensuring he acknowledged that only high-quality datasets are relevant to the survey, he agreed to distribute and collect pen and paper questionnaires in the township, charging the researcher the wholesale price of one cup of coffee for every unique participant (6ZAR; 0,4EUR; 3DKK). Integrating local residents in the participant sourcing process mitigated the (previous) interviewer bias risk. After an initial test phase, the process appeared promising. Every three days the researcher drove into the township to collect the new data sets and reevaluate the acquisition process.

4.9 Summary

To investigate if individuals are systematically impaired by their economic circumstances to be happy and ultimately more creative, a quantitative research approach appeared the most relevant. In order to test the hypothesized relationships of the Financial Situation, Materialism, and Social Relationships with the cognitive and emotional dimensions of subjective well-being, previously validated measures were implemented in a quantitative questionnaire.

Life satisfaction was operationalized through the 5-item Satisfaction with Life Scale (SWL) originally developed by one of the pioneers in happiness research, Ed Diener in 1985. It proved to be time efficient, easy to integrate and suited for global use. The two emotional components Positive Affect and Negative Affect were operationalized through the 10-item International Positive and Negative Affect Schedule Short Form (I-PANAS-SF) (Thompson, 2007), a shortened version of the original Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). The quality and scope of a person's social relations were assessed using 13 items from four unidimensional sub-scales of the National Institute of Health Toolbox Social Relationships Scales (SRS) (Cyranowski et al., 2013). Since this survey is interested in the overall degree of social relationships, the unidimensional subscales were computed together as one variable. Materialism was operationalized through the shortened 9-item Materialism Value Scale (MVS) (Richins, 2004a) and, as suggested by the author, mixed with other items to prevent hypothesis guessing and social desirability effects in the empirical observations. The Financial Situation (FS) was assessed through 12 items of the Living Standard Measurement developed by the South African Advertising Research Foundation to measure financial well being without relying on income as a segmentation parameter (Truter, 2007). Additionally, 2 income self-report items were integrated (which later proved to be deconstructive for the analysis). Including the three demographic items (gender, age, and ethnicity) the total item count of the survey was 54. Those items were integrated into a questionnaire which complied with the ethical standards of privacy and decency and was pre-tested by individuals with and without

academic backgrounds. The data collection took place from the 20th of November 2017 until Monday the 8th of January 2018 in and around the city of Cape Town, South Africa. The target population included everyone over the age of 18. A sample population was purposely approached in the two most affluent neighborhoods Clifton and Higgovale, the University of Stellenbosch Business School campus, as well as in the two townships Khayelitsha and Masiphumelele. A total of 207 observations were collected from individuals in difficult and favorable financial situations, of which 167 observations proved eligible for the analysis.

5 Data Analysis and Empirical Results

The following chapter presents the statistical analysis and results from the 167 valid observations according to the established hypotheses. First, the data set of the observed population sample is presented, the exclusion of certain participants explained, and the valid observations descriptively analyzed. Then, the used measures for the presented constructs are tested for reliability. Finally, the linear regression models to test the hypotheses are presented.

5.1 Sample Description

5.1.1 Data Set

The survey resulted in 207 observations in total. The data collection within the townships was pen and paper based due to practicability. Surprisingly, most of the participants who were approached in the more affluent areas preferred filling out an analog version of the questionnaire as well. This resulted in a majority of questionnaires in paper form. The online survey was kept open until Monday the 8th of January 2018. On that last day the collected paper questionnaires were manually inserted online. Hence it is safe to assume that only observations that were completed before that date, were organic participants of the online version of the questionnaire. The online participation was very low with only 32 (15.5%) entries between the 20.11.2017 and 7.1.2018. This was partly due to the fact that the research process showed that the pen and paper version promised to be more successful and hence the effort was focussed on involving participants that way. Of those 32 organic online observations, 7 were rejected because the questionnaire was not started (online view only), and 9 participants discontinued the questionnaire (online drop-out). From the pen and paper group, 24 questionnaires were rejected because they were either incomplete or of obvious low quality¹ (ineligible). After eliminating the unsuitable

¹ Low quality, in this case, included that all questions were answered with 'strongly agree' even though many questions were reversed versions of previous ones. Also, if the items for whole measures were not answered at all, the observation was rejected.

observations (and before statistical outlier analysis) the total valid collected observations equal N=167 (eligible). The following figure visualizes the data set.



5.1.2 Demographic Distribution

The total valid observations consist of 87 female (52%) and 80 (48%) male participants of which 62.9% identify as Black Africans, 29.9% as White, 5.4% as Coloured, and 1.8% as Indian or Asian. The distribution of observations by ethnicity is shown in Graph 2. The mean age of the sample is 33.9 years. The youngest participants are 18 and the oldest is 73 years old. The interquartile range spans from age 28 to 39.





5.2 Used Measures

5.2.1 Reliability of Constructs

Before assessing the relationships indicated by the conceptual hypotheses model, the reliability of the used measures ought to be tested. The Cronbach's alpha test is one common way of measuring the reliability of multiple item measures by testing the average inter-item correlation. The Cronbach's alpha does neither measure the dimensionality nor the validity of the used measure, but since only previously validated and tested measures are integrated into the questionnaire one can assume validity. Even though the level of what constitutes a sufficient Cronbach's alpha is arbitrary and very much dependent on the used measure, a Cronbach's alpha of at least 0.7 is commonly required to qualify a multi item measure as reliable with high internal consistency (Bland & Altman, 1997; Pallant, 2005).

First, the three components of the two dimensions that constitute subjective well-being are tested. These include the *Satisfaction with Life Scale* (SWLS) and the *International Positive Affect and Negative Affect Schedule Short Form* (I-PANAS-SF). Then, the parameters that are ought to be tested in regards to their relationship with happiness are assessed. These include the *NIH Toolbox Social Relationship Scales* (SRS) as one overall measure of the dimensions *Emotional Support, Instrumental Support, Friendship, and Loneliness* as well as the *Materialism Value Scale* (MVS).

The SWLS consists of 5 items with a Cronbach's alpha of 0.814. The analysis suggests that deleting the 5th item would increase the internal consistency to 0.828 (for a table of the items and the changes in Cronbach's alpha if they were deleted, see Appendix D). The item remains as part of the construct though, because it has been tested, validated and more importantly, used in a multitude of studies that assess life satisfaction (Ball & Chernova, 2008; Diener et al., 1985; Pavot et al., 1991; Pavot & Diener, 1993).

The I-PANAS-SF consists of 10 items addressing the emotional component of happiness, with each 5 items assessing Positive Affect (PA) and Negative Affect (NA) respectively.

The Cronbach's alpha for the Positive Affect items is 0.556, while the Cronbach's alpha for the Negative Affect items is only 0.399. Neither of the measures reaches the standard of 0.7 suggested by the academic literature. This is a surprisingly low result, since cross-cultural testing reported a mean Cronbach's alpha of 0.76 for NA and 0.75 for PA (Thompson, 2007). The Cronbach's alpha for the items measuring Negative Affect can be increased to 0.457 if the item *Upset* is deleted. It can further be increased to 0.493 if the item *Ashamed* is deleted. The Cronbach's alpha for the items measuring Positive Affect can be increased to 0.588 if the item *Inspired* is deleted. After this deletion, no further increase in internal consistency can be achieved by deleting PA items. The measures (after deletion) remain as part of the analyses despite the low Cronbach's alpha. When interpreting the results, it needs to be considered that significant relationships might be harder to detect. The results of the reliability analysis for NA are displayed in Table 2, for PA in Table 3.

NA Items	Cronbach's α if item deleted	Cronbach's α if item deleted	Cronbach's α if item deleted
Upset	0.457	-	-
Hostile	0.419	0.429	0.500
Ashamed	0.367	0.493	-
Nervous	0.240	0.350	0.492
Afraid	0.197	0.248	0.145
	·		
N of items	5	4	3

Table 2 - Negative Affect Scale Reliability Analysis

0.457

0.493

0.399

NA Cronbach's **a**

PA Items	Cronbach's α if item deleted	Cronbach's α if item deleted
Alert	0.530	0.572
Inspired	0.588	-
Attentive	0.471	0.544
Active	0.453	0.446
Determined	0.442	0.498
N of items	5	4
PA Cronbach's $oldsymbol{lpha}$	0.556	0.588

Table 3 - Positive Affect Scale Reliability Analysis

The Materialism Value Scale (MVS) consists of 9 items and a Cronbach's Alpha of 0.703 can be reported. Even though the internal consistency could be increased by deleting certain items, all items were kept because the MVS is a previously validated and used measure to assess materialistic beliefs.

The NIH Toolbox Social Relationship Scales (SRS) measures a multidimensional construct in its unidimensional aspects of Emotional Support, Instrumental Support, Friendship, and Loneliness. The research objective of this thesis is mainly interested in the overall extension of the participants' social relationships. For that reason, the different unidimensional constructs are combined in this thesis as one overall Social Relationship Scale (SRS) to represent the participant's social relationships across the four domains. The Cronbach's alpha for the combined SRS scale across its 13 items is 0.886 which cannot be increased through deleting any of the items.

The following table lists the used measures, the number of items and their reliability expressed through the Cronbach's alpha (Table 4).

Measure	N of items	Cronbach's α
Satisfaction With Life Scale	5	0.814
Positive Affect (after item deletion)	4	0.588
Negative Affect (after item deletion)	3	0.493
Materialism Value Scale	9	0.703
Social Relationship Scale	13	0.886

Table 4 - Overview Used Measures and Cronbach's Alphas

5.2.2 Descriptive Analysis

From the 167 valid observations, the different measures allow for a variety of descriptive indicators as shown in the following table. In order to make the interpretation of the numeric results more accessible, the values for all used measures are recoded to a scale of 0 to 100. This makes it also possible to compare measures that were originally measured on different scales by inspecting the unstandardized regression coefficient. The results from the descriptive analysis of the used measures is displayed in Table 5.

Measure	Mean	Median	SD	Min	Max	IQR
Satisfaction with Life Scale	53.01	50.00	21.66	6.67	96.67	36.67 - 73.33
Positive Affect Scale	64.86	68.75	20.98	0	100	50 - 82.25
Negative Affect Scale	48.15	50.00	24.31	0	100	33.33 - 66.66
Materialism Value Scale	50.07	50.00	15.07	2.78	97.22	38.89 - 58.33
Financial Situation	56.79	58.33	28.51	0	100	33.33 - 83.33
Social Relationship Scale	60.56	59.62	19.15	11.54	100	46.15 - 75

Table 5 - Overview Descriptive Measure Analysis

When assessing the central tendency, one can see that all of the used measures display a mean value that is very close to the median value indicating a symmetric distribution of the observation with no considerable skewness. The variability can be assessed by examining the dispersion indicators. As suggested by the standard deviation (SD) and the interquartile range (IQR) the values for the Financial Situation are the most spread out of all the observed measures, closely followed by the Social Relationship Scale values. The descriptive analysis shows that the participants in this sample display on average more positive affect than negative affect. Their satisfaction with life is on average in the middle values of the scale.

5.3 Regression Analyses

The following part of the analysis assesses whether or not, and to what extent, the established measures can predict each other according to the hypotheses presented in

Chapter 3. The conducted regression analyses assess the association between the different independent and dependent variables without making statements about the causal relation possible since it simply implies an estimate of the dependent variable's value in relation to the independent variable's value. In order to execute a linear regression analysis, the underlying variables and data were tested if they meet the following assumptions: eligible type of variables, linear relationship between the variables, independence of observations, absence of strong heteroscedasticity, absence of significant outliers, and normal distribution of regression residuals (Laerd Statistics, 2015). A detailed test and report of those assumptions for the first regression analyses between the Financial Situation (independent variable) and the Satisfaction with Life (dependent variable) can be found in Appendix E. The same assumption tests were completed for all linear regression models as well but since the results were very similar, a detailed description for the other regressions was desisted from.

The following sections present the results from the regression analyses. They are separated into three different groups according to the hypotheses sets. All regression models are controlled for the participant's age, gender, and ethnicity, but since this thesis is only interested in the main effects, are not individually reported. Each section includes a table displaying the regression results with the unstandardized beta and asterixis indicating its statistical significance (* = $p \le 0.05$; ** = $p \le 0.01$; *** = $p \le 0.001$), followed by the standard errors in parentheses. The adjusted R², whether the control variables were used in the analysis, and the number of included observations are displayed in the bottom rows of each table.

5.3.1 Group 1 - Financial Situation and Happiness

In the first section, the different regression models investigate the relationship between the financial situation that an individual lives in (independent variable) and that individual's self reported happiness in its three components (dependent variables).

In order to assess the influence that the financial situation has on the strength of the relationship, an interaction variable was created as the centered Financial Situation values to the power of two. Its strength in the regression model is reported below.

Hypotheses 1.1 - 1.4	Satisfaction with Life		Positiv	e Affect	Negative Affect	
Financial Situation	0.242*** (0.069)	0.290*** (0.070)	0.182 (0.068)	0.189* (0.072)	0.045 (0.08)	-0.029 (0.083)
Financial Situation X Financial Situation	-	0.004* (0.002)	-	0.001 (0.002)	-	-0.006 (0.002)
R ² adjusted	0.177	0.194	0.108	0.103	0.081	0.144
Control Variables	yes	yes	yes	yes	yes	yes
N	167	167	167	167	167	167

Table 6 - Regression Analysis Results Hypotheses Group 1

* = $p \le 0.05 / ** = p \le 0.01 / *** = p \le 0.001$

Control Variables: Age, Gender, and Ethnicity.

When the relationship of the Financial Situation and the happiness components were assessed, only the relationship with Satisfaction with Life was significant, while the relationship with Positive Affect and Negative Affect showed no statistical significance. An increasing of the Financial Situation value by one is associated with an increase of the Satisfaction with Life value by 0.242, suggesting that a person is generally more satisfied with life when she lives in a more favorable financial situation. The same increase in the Financial Situation appears to be related to an increase of the Positive Affect value by 0.182 while the Negative Affect value increases by 0.045. It indicates that a more favorable Financial Situation coincides with an increase of positive and negative emotions and moods. The positive direction of the relation with Negative Affect was not anticipated and neither relation is statistically significant. When the effect strength is compared through the unstandardized beta, it appears that the Financial Situation has a stronger association with Satisfaction with Life (0.242) than with Positive Affect (0.182) and Negative Affect (0.045). While the Financial Situation explains 17.7% of the variance in Satisfaction with Life, it only explains 10.8% of the variance in Positive Affect and just 0.8% of Negative Affect. This supports hypothesis 1.1, while hypotheses 1.2 and 1.3 cannot be accepted since the

underlying relationships are not statistically significant.

Assessing the interaction variable shows the effect the Financial Situation has on the association between the Financial Situation and the happiness components.

The interaction term is only significant in the regression model of the relationship between Financial Situation and Satisfaction with Life, and its effect within all three models is very small. While the association between Financial Situation and Satisfaction with Life as well as Positive Affect increases with higher Financial Situation values, the relation with Negative Affect appears to decrease. That would suggest that the Financial Situation is marginally stronger associated with the happiness of those individuals who live in more favorable financial situations.

This supports that hypothesis 1.4 cannot be accepted, since only one of the three regression models indicated a significant interaction effect and all effects were trivially small.

5.3.2 Group 2 - Materialism and Happiness

The second section investigates the regression models for the relationship between the participant's degree of materialistic beliefs as assessed by the Materialistic Value Scale and its relationship with the three happiness components as well as the Financial Situation. To test if the Financial Situation has a moderating role in those relationships, an interaction term as the product of the centered Materialism and Financial Situation values was created and tested within the model. The results are displayed in the below table.

Hypotheses 2.1 - 2.5	Satisfactic	sfaction with Life Positive Affect		Negative Affect		Financial Situation	
Materialism	0.278* (0.112)	0.279* (0.111)	0.259* (0.111)	0.275* (0.112)	0.405** (0.126)	0.383** (0.130)	0.144 (0.128)
Financial Situation	-	0.220*** (0.067)	-	0.159* (0.067)	-	0.028 (0.078)	-
Materialism X Financial Situation	-	-0.006 (0.004)	-	-0.007 (0.004)	-	0.003 (0.004)	-
R ² adjusted	0.144	0.204	0.099	0.139	0.134	0.126	0.357
Control Variables	yes	yes	yes	yes	yes	yes	yes
N	167	167	167	167	167	167	167

 Table 7 - Regression Analysis Results Hypotheses Group 2

* = $p \le 0.05 / ** = p \le 0.01 / *** = p \le 0.001$

Control Variables: Age, Gender, and Ethnicity.

Materialism appears to have a positive and significant relationship with all three components of happiness. That means that individuals who strongly believe in materialistic

values, report on average higher life satisfaction and positive emotional experiences, but also more frequent negative emotions. The strongest relationship is the one between Materialism and Negative Affect. As indicated by the adjusted R square about 13.4% of the variance in Negative Affect can be explained by Materialism while it can explain 14.4% and 9.9% of the variance in Satisfaction with Life and Positive Affect respectively.

The positive relation between Materialism and Negative Affect supports the hypothesis H2.3. The observed positive relationship between Satisfaction with Life and Positive Affect rejects the anticipated negative relationships and suggests that the hypotheses H2.1 and H2.2 cannot be accepted.

The effect the Financial Situation has on the relationship between Materialism and the happiness components is assessed through the interaction variable *Materialism X Financial Situation*. Its effect in any of the three regression models is not significant and even in this sample, the effects appear very low. This discards the hypothesis H2.4 which suspected that individuals who live in difficult financial situations might experience a stronger relationship between materialistic beliefs and happiness.

Materialism has a positive relation with Financial Situation in this sample but is not statistically significant. This would suggest that a person with more beliefs in materialistic values is generally also better off financially. Even though the direction of the association is as expected, the statistic insignificance still means the hypothesis H2.5 cannot be accepted.

5.3.3 Group 3 - Social Relationships and Happiness

The third and last section presents the regression models reporting the relationship between the Social Relationships and the three happiness components as well as the association between Materialism and Financial Situation with Social Relationships. The following table summarizes the results.

Hypotheses 3.1 - 3.5	Satisfaction with Life	Positive Affect	Negative Affect	Social Relationship
Social Relationship	0.617*** (0.087)	0.259** (0.096)	-0.389*** (0.109)	-
Materialism	-	-	-	0.067 (0.087)
Financial Situation	-	-	-	0.186*** (0.054)
R ² adjusted	0.324	0.109	0.146	0.337
N	167	167	167	167

Table 8 - Regression Analysis Results Hypotheses Group 3

* = $p \le 0.05 / ** = p \le 0.01 / *** = p \le 0.001$ Control Variables: Age, Gender, and Ethnicity.

The associations between Social Relationships and all three happiness components are statistically significant. If the Social Relationships value increases by one, the Satisfaction with life also generally increases by 0.617 and Positive Affect by 0.259, while Negative Affect decreases by 0.389. That means individuals with well established social relations generally report higher satisfaction with life, more frequent positive and lesser negative emotional states. The strongest relation appears to be between Social Relationships and Satisfaction with Life, followed by Negative Affect and lastly Positive Affect. 32.4% of the Variance in Satisfaction with Life can be explained by Social Relationships. That equals approximately three times the amount it can explain in the variance of Positive Affect (10.9%) and more than two times the variance it can explain in Negative Affect (14.6%). This supports the hypotheses that supposed positive relations between Social

Relationships and Satisfaction with Life (H3.1), as well as Positive Affect (H3.2). It also accepts hypothesis about the negative relation with Negative Affect (H3.3).

In the regression model that assesses the relation that Materialism and Financial Situation have with Social Relationships, only the latter produced a significant result. While the relation between Materialism and Social Relationships in this sample appears to be small and positive, the relation between Financial Situation and Social Relationships is stronger and statistically significant. Individuals in favorable financial situations appear to have better social relationships as well. Together the two variables explain 33.7% of the variance in Social Relationships.

Materialism shows no statistical significance in this regression model and even the direction of the relationship in this sample is contrary to the one suggested by hypothesis 3.5 which means it cannot be accepted. The results, however, reject the proposed negative association between Financial Situation and Social Relationships and the hypothesis can therefore not be accepted (H3.4).

5.4 Summary

The conducted regression analyses made an assessment of the proposed hypotheses possible. Based on the collected data from this survey it appears that there is a significant positive relation between the financial situation an individual is living in and the cognitive evaluation of her life (H1.1). Believing in materialistic values showed a positive relation with the frequency of negative emotional affect states (H2.3). As expected are Social Relationships positively associated with life satisfaction and positive affect states, and negatively with negative affect states (H3.1 - H3.3). Contrary to the hypothesis, the financial situation also showed a positive association with Social Relationships (H3.5). All other hypotheses could not be accepted on the ground of insignificant statistical results even though most showed at least the same direction as anticipated by the hypotheses. An overview of the results regarding the acceptance of each hypothesis is provided in Table 9 (for readability reasons, Table 9 is displayed on the following page). In the next

section, the implications of those results are discussed in more detail.

	Hypotheses	Result
H1.1	Positive relationship between FS and SWL.	Accepted
H1.2	Positive relationship between FS and PA.	Not Accepted
H1.3	Negative relationship between FS and NA.	Not Accepted
H1.4	Moderating effect of FS on Relationship between FS and SWL, PA, NA.	Not Accepted
H2.1	Negative relationship between MVS and SWL.	Not Accepted
H2.2	Negative relationship between MVS and PA.	Not Accepted
H2.3	Positive relationship between MVS and NA.	Accepted
H2.4	Moderating effect of FS on Relationship between MVS and SWL, PA, NA.	Not Accepted
H2.5	Positive relationship between FS and MVS.	Not Accepted
H3.1	Positive relationship between SRS and SWL.	Accepted
H3.2	Positive relationship between SRS and PA.	Accepted
H3.3	Negative relationship between SRS and NA.	Accepted
H3.4	Negative relationship between FS and SRS	Not Accepted
H3.5	Negative relationship between MVS and SRS	Not Accepted

Table 9 - Overview Hypothesis Tests

6 Discussion

The research objective of this thesis was to investigate if individuals in difficult financial situations are systematically impaired in their ability to be happy and ultimately creative. The empiric results and data analysis of the previous chapter will be discussed in regards to the theoretical framework from Chapter 2 which helped to differentiate the hypotheses in Chapter 3.

Happiness causes creativity (Estrada et al., 1994; Hirt et al., 1996; Isen et al., 1985; Lyubomirsky et al., 2005; Sinclair & Mark, 1995). It enhances the ability to think more freely and create new ideas. Happiness in this thesis is defined as a complex construct consisting of an individual's satisfaction with life and her positive and negative affect states. The satisfaction with life constitutes the cognitive and conscious dimension, while the two affect states represent the emotional and often immediate dimension. Even though those two dimensions are closely related, they differ over time and can be influenced by various parameters differently. Generally, the academic literature as reviewed in Chapter 2, distinguishes between three sources of influence on an individual's happiness (Lyubomirsky et al., 2005). First, the genetic set point predicts a great amount of happiness variance as the predisposition for character traits and the psychological ability to experience happiness in different degrees. Then, environmental circumstances and voluntary activities are the remaining two sources to influence the different components of happiness. This thesis investigated the two most heavily discussed influencing parameters: money and friends. Money as the current Financial Situation (FS) and Materialism as its psychological undercurrent (MVS); and *friends* as the extent of an individual's Social Relationships (SRS). The different associations between the parameters and the happiness components were operationalized in the hypotheses in Chapter 3, analyzed in Chapter 4, and the results discussed in this chapter. Figure 8 visualizes the conceptual model of this thesis again:



Figure 8 - Conceptual Model Part 4

Financial Situation and Happiness

The relation between subjective well-being and the financial situation has been discussed heavily in the academic literature but is now generally accepted as a weak positive correlation with varying explanations for the causality between the two concepts (Lyubomirsky, 2013). The empirical results of this survey, however, were only able to show a weak significant positive relation between the Financial Situation and the cognitive dimension of happiness as expressed through the Satisfaction with Life. No significant relation was found between the Financial Situation and the emotional dimension of happiness. That means wealthier individuals evaluate their lives more favorably than people in difficult economic situations but do not necessarily experience more frequent positive or negative emotions. This would support the idea that individuals who are born into those difficult economic situations, like many of the participants from the townships of this survey, with limited opportunities to engage in voluntary activities to advance their financial situation, are indeed systematically impaired to be happy; at least on the cognitive level. Those individuals would have a more difficult time to profit from the positive causal relationship between happiness and creativity, making them less likely to engage in the creative industries. This thesis hypothesized that the relationship between the Financial Situation and happiness might vary in strength depending on where the individual stands on the economic ladder. Meaning that the positive relationship could be stronger for financially poorer individuals who might need to satisfy their basic needs for food and

shelter where every small bit of financial enhancement could cause great benefits and consequently might influence their happiness more than an increase in the Financial Situation of an already wealthy individual. This could have suggested the argument that even though poor individuals are systematically impaired by the economic circumstances they live in, they gain more increase in happiness through advances in their Financial Situation which could have counterbalanced the impairment. However, this survey was unable to find significant results to support this idea of the diminishing marginal effects the Financial Situation could have on an individual's subjective well-being. This further supports the case that individuals in difficult economic situations are very much challenged in their opportunity to profit from the creativity that is fostered by happiness. Since this relationship has been shown in the empirical results, future research could investigate the causal relationship to further support the impairment claim.

Materialism and Happiness

Materialism is defined here as the endorsement of values, goals, and associated beliefs that center on the importance of acquiring money and possessions that convey status (Dittmar et al., 2014). One could, therefore, perceive Materialism as the psychological undercurrent of a person's Financial Situation and, as hypothesized, could suspect a significant positive relationship between the two concepts. If a person values the importance of money and possessions, that person might dedicate more time to acquiring what she values and might ultimately be more likely to do so. However, the current data set was unable to show any such relation. Even though the results suggested a positive relationship between Materialism and Financial Situation in this sample, the results were not significant. This could either be due to the collected observations or that not just the simple belief in money and possessions increases the likelihood of wealth, but that other factors have a more relevant influence on an individual's financial situation. For people living in difficult Financial Situations, it appears not to be significantly beneficial to center one's attention on the acquisition of money and possessions. If one wanted to derive implications for individuals who want to enhance their Financial Situation in order to enhance their happiness levels, other factors might be more promising. A field that would benefit from further research.

Nonetheless, Materialism appears to have a significant relationship with all three components of happiness. The more materialistic a person is, the more favorable she evaluates her satisfaction with life and the more frequent positive emotions she experiences. The data shows that an increase in Materialism coincides with increases of the frequency (roughly one and a half times as much as with the other two components) with which that person would experience negative emotions as well. While the latter result can be seen in different variations in other academic literature, the positive association with Satisfaction with Life and Positive Affect is an unusual result compared to the academic conversation. Why the relationship in this sample is positive cannot be derived from the current data, but it could be possible that another parameter that is unique to the geographic location of the survey and that has not been assessed, influences the relationship as a moderator. The Financial Situation was examined as a moderator in this relationship but showed no significant association. If Materialism showed a positive association with the Financial Situation it could have been argued that individuals in difficult financial situations would report a stronger relationship between materialistic beliefs and happiness. This could have been due to a similar argument as mentioned before, that in order to satisfy their basic needs, believing in the value of money and possessions could make financial health more likely, which in turn would be beneficial to satisfy those needs and ultimately go together with higher happiness ratings. The regression analyses, however, showed no significant effect of such kind.

Social Relationships and Happiness

The empirical results show that Social Relationships is indeed a very strong predictor of happiness. The higher and individual scores on the Social Relationships Scales, the higher she evaluates her Satisfaction with Life, the more positive emotions, and the less negative emotions she experiences. While an increase in Materialism appears to coincide with an increase of the positive as well as the negative components of happiness simultaneously, an increase in Social Relationships is related to an increase of the positive and decrease of the negative aspects. Those results are in line with the current academic conversation on parameters that significantly influence subjective well-being (Myers, 1992; Myers et al., 2000; Diener, & Oishi, 2005). Social Relationships are therefore perceived as one of the

most powerful sources for happiness even though the causal direction has not been experimentally proven; a proposed association this thesis can support.

So far, the results showed that individuals in favorable financial situations report on average higher satisfaction with their lives. If they value the acquisition of money and status conveying possessions, they also report slightly higher life satisfaction, as well as more frequent positive and negative affect. Lastly, the degree of social relationships showed a significant positive relationship with life satisfaction and positive affect, while displaying a negative relation with the frequency of negative emotions and moods. Individuals that are born into difficult financial situations seem to be cut off from the financial sources of happiness. Unless they counterbalance those relations by gaining happiness from other sources exactly because they are in a difficult financial situation. Social Relationships were hypothesized to be one of those counterbalancing sources.

Maybe their financial hardship makes it impossible for them to satisfy certain needs the way a more affluent individual would, by using money and institutions. When a rich person is hungry she might go to a restaurant, if she is sick, she goes to the hospital, if she needs money, she asks the bank for a loan. If none of those solutions are available for someone in a difficult financial situation, then out of necessity, they might have to rely on their social network to help satisfy their needs. As a byproduct, a person in difficult financial circumstances might hence create social relationships that are far greater in guality and scope than those of affluent individuals who do not have to rely on them. This would give individuals in difficult financial situations a possible source of happiness that could counterbalance the impairment they experience on the economic level. However, the current observations show that there appears to be a positive relationship between Financial Situation and Social Relationships. This implies, contrary to the hypothesis, that people in difficult financial situations actually report lower levels of Social Relationships than individuals living in favorable financial situations. This supports the idea that individuals in difficult financial situations are indeed impaired in their ability to be happy and that Social Relationships cannot be considered a counterbalancing source of happiness since it appears positively associated with how well off an individual is.

7. Conclusion

This thesis set to out to investigate the following research question:

Are individuals in difficult financial situations systematically impaired by their economic circumstances to be happy and ultimately more creative?

In order to shine a light on the question, three heavily discussed happiness predictors were reassessed. The financial situation, the belief in the value of acquiring money and possessions (materialism), and social relationships. In order to find out if there is an association between these parameters and one or all of the three happiness components, a quantitative questionnaire was designed and people in the financially poorest parts of South Africa, as well as some of the most affluent areas, were interviewed. The eligible observations (N=167) were analyzed to investigate the research objective by testing the derived hypotheses.

It appears that if an individual is born into a difficult financial situation like those participants in the South African townships, they are challenged in their ability to be happy because the financial situation appears positively associated with the conscious evaluation of an individual's life satisfaction. Having more money generally means that individuals report more happiness on the cognitive level. Believing in the value of acquiring money and possessions, as most capitalistic societies do, appears to also have a positive relation with both, the cognitive and emotional dimension of happiness. Being materialistic suggests higher Satisfaction with Life, more frequent Positive Affect, and greatly more frequent negative emotions and moods. This makes Materialism a two-edged sword in the quest for happiness. The strength of this relationship appears to be the same for people in favorable and difficult financial situations alike which is contrary to what other surveys have suggested. Furthermore, no significant association could be found between the participant's degree of Materialism and the Financial Situation she reports, meaning that valuing the acquisition of money does not make it more likely to actually do so. Since individuals in difficult financial situations are cut off from the financial facilitators of happiness, this survey tested if another source of happiness could be counterbalancing

the loss. Social Relationships proved to be the strongest predictor of happiness in the form of greater Satisfaction with Life, more frequent positive emotions and moods, and less frequent Negative Affect. It was hypothesized that individuals in difficult financial situations engage in more Social Relationships than their affluent counterparts in order to satisfy their individual needs. The collected data, however, showed, that the opposite is the case, that there appears to be a positive relation between money and friends, between the Financial Situation and the participant's Social Relationships. The better off financially a participant was, the better they rated their social connections.

These results support the idea that individuals in difficult financial situations are systematically impaired by the economic circumstances. It is less likely for a poor individual to report high scores on the emotional or cognitive happiness dimensions. It also appears to be less likely for a poor individual to report high scores on the used Social Relationship measures, suggesting that poorer people have less social support. The theory that individuals in a difficult financial situation might have greater social relationships in quality and scope that could counterbalance the lower happiness level associated with financial hardship, cannot be supported by this survey.

This survey only aimed at identifying possible associations between the independent and dependent variables. This quest would benefit from future research investigating the causal relationship between Financial Situations, Materialism, and Social Relationships with Happiness. Even though it appears that there is a positive association between all independent variables and the dependent happiness components, it would be necessary to investigate if poorer people are less happy because of their financial situation or if being unhappy promotes less financial success. The same question applies to the other two relationships as well. Without the causal direction, it is difficult to derive relevant implications and suggestions on how to enhance the happiness levels of the poor. Furthermore, the surprising positive relation between Materialism and Satisfaction with Life, as well as Positive Affect, would benefit from further research regarding possible moderator effects.

The analyzed relationships were controlled for gender, age, and ethnicity. While gender and age only had a marginal effect size as control variables in the regression models.,
ethnicity, on the other hand, was a very strong predictor. This might be due to the special case of South Africa as the geographic location. Many of the social structures that are current today stem from the apartheid era of the countries history. This translates into various advantages and disadvantages depending on a person's ethnicity. Having been born a Black African meant hardship and limited opportunities in almost every aspect of life in the time of apartheid. This lack of opportunity persisted long after apartheid was broken in the early 1990s, leaving most Black Africans in financial poverty. This means that in this particular survey ethnicity might have an inflated effect on the relationship between Financial Situation and subjective well-being. Therefore, it would be beneficial to collect cross-cultural data in different geographic locations to test if the observed relationships can be found across different cultural heritages and to better understand the limitations of the thesis framework.

Generalizability, validity, and reliability were strived for by using previously tested and applied measures to assess the relevant concepts in this thesis (MVS, SRS, I-PANAS-SF, SWLS, LSM). Given that systematic errors are minimized, these scales are meant to measure what they are supposed to measure, can theoretically be reproduced by any number of researchers and ought to produce similar results, and would be generalizable to some extent since most of the measures were cross-culturally tested. However, some measures were shortened for practicability reasons which might have affected their reliability and validity. In order to use those measures and to address the research objective in a relevant way, it was most reasonable to choose a guantitative approach. A gualitative approach, on the other hand, would have produced very different kind of data. Instead of focussing on reliability, validity, and generalizability, a gualitative guestionnaire would have collected deep data and possibly allowed for findings that were not necessarily anticipated. This approach could be utilized for further research to investigate what reasons there could be in the case of South Africa for individuals in difficult financial situations to report lower scores on Social Relationship measures. Due to resource constraints, this survey was only able to investigate a modest sample of participants. Even though the careful execution of the questionnaire aimed at minimizing systematic errors, collecting similar data on a larger scale would increase the generalizability of the results.

All in all, the results from this survey suggest that individuals who live in difficult financial situations are indeed systematically impaired in their opportunity to be happy. They do not have more or better friends as a potential source of happiness to counterbalance the impairment. They will, therefore, be less likely to benefit from enhanced creativity caused by happiness than happier individuals in more affluent living situations. This promotes the idea that the world we live in deprives itself of unmeasurable creative potential. Our capitalistic societies with their Darwinesque survival-of-the-fittest allure create systematic impairment for countless people and let unpublished Hemingways wither away in poverty; taking the term *starving artists* to a whole new level.

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Appendix A Overview of Easterlin-Paradox Discussion

Appendix B Copy of Questionnaire - English

Page 1

Welcome to the life satisfaction survey

Thank you very much for agreeing to take part in this survey measuring life satisfaction. Today we will be gaining your personal thoughts and opinions in order to better understand what influences individual **happiness**.

This survey will only take **4-5 minutes** to complete. All answers you provide will be kept completely **anonymous**. We would like to ask you to answer the questions honestly.

Please read the following statements and indicate how much you personally agree or disagree.								
	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree	
In most ways my life is close to my ideal.	0	0	0	0	0	0	0	
The conditions of my life are excellent.	0	0	0	0	0	0	0	
I am satisfied with my life.	0	0	0	0	0	0	0	
So far I have gotten the important things I want in life.	0	0	0	0	0	0	0	
If I could live my life over, I would change almost nothing.	0	0	0	0	0	0	0	

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Thinking about yourself and how you normally feel, to what extent do you generally feel:		
	Never	Always
Upset	000	00
Hostile	000	00
Alert	000	00
Ashamed	000	00
Inspired	000	00
Nervous	000	00
Determined	000	00
Attentive	000	00
Afraid	000	00
Active	000	00

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If you think about yourself and your life, how much do you personally agree or disagree with the following statements?						
	strongly disagree	disagree	neutral	agree	strongly agree	
I admire people who own expensive homes, cars, and clothes.	0	0	0	0	0	
I have someone who will listen to me when I need to talk.	0	0	0	0	0	
I have someone to help me if I'm sick in bed.	0	0	0	0	0	
The things I own say a lot about how well I'm doing in life.	0	\circ	0	0	0	
I can find a friend when I need one.					•	
I feel alone and apart from others.	0	0	0	0	0	
Buying things gives me a lot of pleasure.	0	0	0	0	0	

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If you think about yourself and your life, how much do you personally agree or disagree with the following statements?

	strongly disagree	disagree	neutral	agree	strongly agree
I have someone I trust to talk with about my problems.	0	0	0	0	0
I like to own things that impress people.	0	0	0	0	0
I feel like I have lots of friends.	0	0	0	0	0
I have someone to pick up medicine for me if I need it.	0	0	0	0	0
I like a lot of luxury in my life.		0			0
I feel lonely.	0	0	0	0	0
I'd be happier if I could afford to buy more things.	0	0	0	0	0

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If you think about yourself and your life, how much do you personally agree or disagree with the following statements?						
	strongly disagree	disagree	neutral	agree	strongly agree	
I try to keep my life simple, as far as possessions are concerned.	0	0	•	•	•	
There is someone around to help me if I need it.	0	\bigcirc	\circ	0	0	
I feel close to my friends.		0	0	•	•	
It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.	0	0	0	0	0	
I have someone I trust to talk with about my feelings.	0	0	0	0	0	
My life would be better if I owned certain things I don't have.	0	0	0	0	0	
I can get helpful advice from others when dealing with a problem.	0	0	0	0	0	
I feel that I am no longer close to anyone.	0	0	\circ	0	0	

Think about the things you own. Do you have any of the following?						
	No	Yes				
Own house	0	0				
Computer	\bigcirc	\circ				
Washing machine	\circ	0				
Smartphone	\bigcirc	0				
Car	\circ	0				
Houshold helpers (e.g. gardener, cleaner)	\circ	\circ				
Hot running water	\circ	0				
Sewage system	\circ	0				
Air conditioning (excluding fans)	0	0				
Monthly income over 3.000 ZAR	\circ	0				
Monthly income over 10.000 ZAR	\circ	0				
Swimming pool	\circ	0				
Health insurance	0	0				
Bank account	\bigcirc	0				

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How old are you?	,				
Gender?					
0	0				
Female	Male				
What ethnicity or	race do you ident	ify best with?			
0	0	0	0	0	
Black African	Coloured	Indian or Asian	White	Other	

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Thank you for completing this questionnaire! Thank you very much for taking the time to help us better understand what influences life satisfaction. If you have any further questions do not hesitate to contact: M.Sc. René Martens rema16ag@student.cbs.dk Department of Creative Business Processes Copenhagen Business School

Appendix C Copy of Questionnaire - Xhosa

Page 1

Siyakwamkelwa kwi-survey

Ndiyabulela kakhulu ngokuvuma ukuthatha inxaxheba kulolu vavanyo olulinganisayo ukwaneliseka. Namhlanje siza kufumana iingcamango zakho kunye nemibono ukuze uqondisise kangcono into echaphazela ulonwabo.

Olu phando luza kuthatha imizuzu engama-4 ukuya ku-5 ukugqiba. Zonke iimpendulo ozibonelayo ziya kugcinwa ngokupheleleyo. Sithanda ukukubuza ukuba uphendule imibuzo ngokunyanisekileyo.

Nceda ufunde ezi nkcazo zilandelayo kwaye ubonise ukuba uvuma kangakanani okanye awuvumelani.								
	Andivumela kakhulu	ni Andivumelar	Vumelani ni kancinci	Andivumelar	Vumelana ni kancinci	Ndiyavuma	Ndivuma kakhulu	
Ngeendlela ezininzi ubomi bam bufuphi kum.	0	0	0	0	0	0	0	
Limeko zobomi bam zihamba kakuhle.	0	0	0	0	0	0	0	
Ndinalisekile ngobomi bam.	0	0	0	0	0	0	0	
Okwangoku ndifumene izinto ezibalulekileyo endizifunayo ebomini.	0	0	0	0	0	0	0	
Ukuba ndingahlala ubomi bam, ndingatshintsha nto into.	0	0	0	0	0	0	0	

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Ukucinga ngawe kunye nendlela ovakalelwa ngayo ngokuqhelekileyo, uvakalelwa njani ngokubanzi:							
	Akukho	Njalo					
Khathazekile	000	00					
Ulutshaba	000	00					
Isaziso	000	00					
Ihlazo	000	00					
Uphefumlelweyo	000	00					
Ndinovalo	000	00					
Zigqibo	000	00					
Ukunyamekela	000	00					
Ukoyika	000	00					
Esebenzayo	000	00					

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Ukuba ucinga ngawe kunye nobomi bakho, ubuninzi bakho buyavuma okanye awuvumelani nale nkcazo?							
	andivumelani engathathi kakhulu andivumelani hlangothi ndiyavuma			ndivuma kakhulu			
Ndiyamhlonela abantu abanezindlu ezibiza, iimoto kunye neempahla ezixabisekileyo.	0	0	0	0	0		
Ndinomntu ondiphulaphulayo xa ndifuna ukuthetha.	\circ	0	\circ	0	\circ		
Ndinomntu ondinceda ukuba ndigula ebhedini.	0	0	0		0		
lzinto endizenzayo zithetha kakhulu malunga nendlela endiyenza ngayo ebomini.	0	0	0	0	0		
Ndiyifumana umhlobo xa ndifuna enye.	0	0	0		0		
Ndiziva ndedwa ndingekho kwabanye.	0	0	0	0	0		
Ukuthenga izinto kukundinwabisa kakhulu.	0	0	0	0	0		

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Ukuba ucinga ngawe kunye nobomi bakho, ubuninzi bakho buyavuma okanye awuvumelani nale nkcazo?						
	andivumelani engathathi kakhulu andivumelani hlangothi ndiyavuma				ndivuma kakhulu	
Ndinomntu endimthembayo ukuba ndithethe ngeengxaki zam.	0	0	0	0	0	
Ndiyakuthanda ukuba nezinto ezakha abantu.	0	0	0	0	0	
Ndiziva ngathi ndinabalingani abaninzi.	0	0	0	0	0	
Ndinomntu onokuyifumana unyango kum ukuba ndiyayifuna.	0	0	0	0	0	
Ndiyathanda ezininzi zokunethezeka ebomini bam.	0	0	0	0	0	
Ndiziva ndedwa.	0	0	0	0	0	
Ndiya kuvuya ngakumbi xa ndikwazi ukuthenga izinto ezininzi.	0	0	0	0	•	

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Ukuba ucinga ngawe kunye nobomi bakho, ubuninzi bakho buyavuma okanye awuvumelani nale nkcazo?					
	andivumela kakhulu	ani andivumela	engathathi ni hlangothi	ndiyavuma	ndivuma kakhulu
Ndizama ukugcina ubomi bam bulula, ngokubhekiselele kwizinto eziphathekayo.	0	0	0	0	0
Kukhona umntu oza kumnceda ukuba ndiyifunayo.	0	0	0	0	0
Ndiziva ndisandele kwi tshomi.	0	0	0	0	0
Ngamanye amaxesha ndikhathaza kakhulu ukuba andinakukwazi ukuthenga zonke izinto endingathanda.	0	0	0	0	0
Ndinomntu endimthembayo ukuba uthethe ngeemvakalelo zam.	0	0	0	0	0
Ubomi bam buya kuba ngcono xa ndinezinto ezithile ezingenayo.	0	0	0	0	0
Ndingafumana iingcebiso ezincedo kwabanye xa ndijongene nengxaki.	0	0	0	0	0
Ndivakalelwa kukuba andisisondele nakumntu.	0	0	0	0	0

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Cinga ngezinto ozenzayo. Ingaba unazo ezilandelayo?				
	Hayi	Ewe		
Indiu	0	0		
Ikhompyutha	0	0		
Umshini wovasa Impahla	0	0		
I-Smartphone	0	0		
Imoto	0	0		
Abancedisi bezindlu (e.g. wegadi, kucoca)	0	0		
Aphuma etapini		0		
Inkqubo yokuthuthwa kwamanzi	0	0		
Into yokufaka umoya endlini (ngaphandle kwamalungu)	0	0		
Ipuli yokuqubha	0	0		
I-inshorensi yempilo	0	0		
I-akhawunti yebhanki	0	0		
Ingeniso yenyanga ngaphezu kwe-3.000 ZAR	0	0		
Ingeniso yenyanga ngaphezu kwe-10.000 ZAR	0	0		



Ingaha umngakar	nani?				
ingaba uningakai	ian:				
Ngesini?					
0	0				
ibhinqa	yindoda				
Luphi uhlobo lobu	ihlanga okanye ul	hlanga oluthetha r	ngalo ngakumbi?		
0	0	0	0	0	
Umntu omnyama	Amabala	AmaNdiya okanye amaAsia	Mhlophe	Okunye	





Appendix D Cronbach's Alpha Item Table

The following table displays the possible Conrbach's alphas for the Satisfaction with Life Scale, if certain items were deleted.

SWLS Items	Cronbach's α if item deleted
In most ways my life is close to my ideal.	0.773
The conditions of my life are excellent.	0.742
I am satisfied with my life.	0.745
So far I have gotten the important things I want in life.	0.792
If I could live my life over, I would change almost nothing.	0.828
N of items	5
SWLS Cronbach's a	0.814

Appendix E Regression Analysis Assumption Test

The following repots the detailed assumption tests for the regression analysis between the Financial Situation (independent variable) and the Satisfaction with Life (dependent variable)

Variable Measurement

In order to conduct a linear regression the dependent and the independent variable need to be measured at the continuous level. Life satisfaction was assessed using the SWLS measure consisting of 5 items each rated on 5 grade Likert scale. The different values were combined into a new variable which represents the total life satisfaction score. This variable acts as the dependent variable in this regression model and can be treated as an interval variable. The independent variable in this regression model is the financial situation. A combined variable has been computed representing the total score for the

financial situation and can be treated as an interval variable as well. Therefore the first two assumptions about the measurement of the variables are met.

Linearity of Association

A linear relationship between the independent and dependent variable is necessary to conduct a valid linear regression analysis. For this purpose a scatterplot (Figure___) of the Satisfaction with Life (Y-Axis) against the Financial Situation (X-Axis) was plotted and visual inspection of the scatterplot indicates linearity between the variables.



Figure E1 - Scatterplot of SWL and FS

Independence of observations

Another requirement is the independence of observations. Even though it appears unlikely for the individual observations to be non-independent with the applied survey design, a Durbin-Watson test is applied to test the assumption. The Durbin-Watson value for the current model is 1.780. Since this value is close to the complete independence value of 2, the assumption regarding independence of residuals can be accepted.

Casewise Diagnostics

There should be no significant outliers in the data set for the regression model. Outliers describe observations with an observed value of the dependent variable that is significantly different from the predicted value in the regression model. To avoid a reduction in the accuracy of prediction through corrupting effects of the outliers on the variability of residuals, it is necessary to test for outliers and transform the data if needed. One way to detect outliers is a visual inspection of the variables's scatterplot (Figure__).

Even though the scatterplot might imply outliers, the assumption should be double checked through casewise diagnostics. The casewise diagnostics table for this regression shows no cases with a standardized residual of greater than ± 3 standard deviation.

Homoscedasticity

If the variance of errors is constant across all observations of the independent variable, the assumption of homoscedasticity is met. The violation of this assumption is referred to as heteroscedasticity and would suggest that the standard errors are biased (Kutner, Nachtsheim, Neter, & Li, 2005). One way of assessing if this assumption is met, is by visually inspecting the scatterplot of standardized residuals against standardized



predicted values. If the residuals are equal across the standardized predicted values, the observations visualized in the scatterplot would show no identifiable pattern but instead are randomly scattered around zero. The scatterplot for this regression shows not a very strong pattern and is displayed above (Figure E2). Since there is not strong pattern to be detected, one can assume that the standard error bias is still acceptable.

Normality of Residuals

In order to perform a valid linear regression analysis the distribution of residuals in the model ought to be normal. One can test for this normality by visually inspecting the histogram, and to conform the assessment the Normal P-P Plot should also be inspected since the histogram can be deceptive depending on its column width (Weisberg, 2014). Presented in Figure E3, the Histogram on the left and the Normal P-P Plot on the right show the distribution of residuals for this regression. Judging from the histogram the

residuals are distributed normally. This assessment can be confirmed by investigating the normal probability plot. Therefore, the assumption that the residuals are distributed

normally is met. This assumption test is particularly important in smaller samples. With larger samples (current sample: N=167), the influencing effect from the violation goes towards zero.



Figure E3 - Histogram and Normal P-P-Plot for Regression Analysis

The variables and data for the first linear regression analysis between Satisfaction with Life (dependent variable) and Financial Situation (independent variable) meet all required assumptions and enable a valid analysis. These condition tests were conducted for all further regressions as well but since the results were very similar, they were not reported in detail.

Declaration of Authorship

I, René Martens, hereby certify that this thesis has been composed by me and is based on my own work, unless stated otherwise. No other person's work has been used without due acknowledgement in this thesis. All references and verbatim extracts have been quoted, and all sources of information, including graphs and data sets, have been specifically acknowledged.

This thesis was not previously presented to another examination board and has not been published.

Copenhagen, May 14th, 2018 Place and Date

 $2 L_s$ Signature