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The relationship between marital status and wellbeing over the life course in South Africa

By

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DECLARATION

I **Samkelisiwe Mazibuko,** declare that

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The student has also satisfied the requirements of English language competency.

Prof Claire Vermaak

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Abstract

Marriage has historically been the key institution for household formation, and research has shown a strong relationship between marital status and subjective well-being (SWB). Married individuals have consistency reported having higher levels of SWB than non-married, with marriage providing both economic and emotional support. The objective of this study is to investigate how marital status is related to SWB within the South African context where marriage rates are low and declining, and to investigate if this relationship changes over the life course. This research analyses five waves of panel data from the National Income Dynamics Study (NIDS). The analysis of this dissertation is done using transition matrices to observe how individuals switch between the different marital statuses, ordered logit models for the regressions and the fixed effect ordered logit estimator as a test of robustness. Demographic variables such as age, importance of religion, number of children and education were controlled for. The results suggest that individuals do not frequently transition between the different marital statuses in SA, which adds to the body of literature that suggests that in SA marriage or cohabiting rates are on a decline. Results also suggest that fundamentally, there is a significant relationship between marital status and SWB with those who are married reporting higher levels SWB. The significance of this relationship varies across genders, age cohorts and races. The significance also varies according to methodology and regression analysis used. Different possible mechanisms for the observed results are discussed in this dissertation including discussions on matters marital quality.

Keywords: well-being; marital status; marriage dissolution

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Chapter 1: Introduction

The well-being of South Africans is essential to society as it influences its economic performance, the stability of the nation, overall development and their reactions to events (Street, 2023; Diener, 2000; Stevenson and Wolfers, 2008). South Africa, due to its history, has unique socioeconomic challenges that other countries might not face, making it is important to understand the determinants of subjective well-being (SWB) for this nation. Various researchers have studied well-being at the individual level in South Africa (Casale, 2015; Hinks and Gruen, 2007; Blauw and Pretorious, 2013). Some of the known predictors of SWB are income, temperament, social support relationships and thus marital status (Botha and Booysen, 2012; Diener et al., 2018). Literature suggests that the magnitude and direction of the relationship between marital status and life satisfaction differs across individuals of different backgrounds and life stages (Moss and Willoughby, 2016; Cao, 2015, Botha and Booysen, 2012). However, the role of marriage as an institution in South Africa is in flux, with marriage rates being low by international standards and falling further over time (Maharaj and Shangase, 2020; StatsSA, 2024a). Therefore, in this context, this dissertation investigates the relationship between marital status and SWB over the life course.

To better understand how marital status influences SWB it is vital to understand how well-being is generally defined and measured. SWB is a multidimensional construct that is defined and measured differently across the literature (Diener, 2000). Some researchers conceptualize SWB primarily in cognitive terms, meaning that they focus on an individual's overall life satisfaction (Galirha and Pais-Rileiro, 2012; Diener, 2000). Other researchers emphasize the affective dimension which captures the positive and negative emotional responses to life events (Galirha and Pais-Rileiro, 2012; Diener, 2000). A more holistic approach incorporates both components, which provides a comprehensive assessment of SWB (Diener, 2000; Kettlewell et al., 2020). Cultures and researchers can define SWB differently (Diener et al.,2018). In South Africa it is generally defined as individual's self-reported well-being, which has been directly correlated with happiness and life satisfaction (Hinks and Gruen, 2007; Diener et al., 2018; Pretorius et al., 2021). Following Diener (2000), this dissertation adopts the holistic definition as the individual's self-reported evaluation of their lives. This means that the conceptualization of SWB for this dissertation encompasses both the cognitive and affective components of SWB. This definition will be applied consistently throughout the dissertation, except in Chapter 2 when discussing other researchers' work. This is due to the fact that different researchers have their own conceptualisation of SWB and overall well-being.

An individual's marital status can influence their SWB, although the nature of this influence differs according to the marital status category in question. Marital status pertains to an individual's primary relationship, whether single, married, widowed, divorced or living with a partner (cohabiting). In South Africa, cohabitation differs from marriage because unlike marriage it is not a relationship that is recognised nor regulated by legislation. For an example, under the Intestate Succession Act in the South African Constitution, it is stated that married individuals have automatic inheritable rights but the same is not stated for cohabiting couples (Robinson, 2019).Individuals cohabit for different reasons, such as an alternative to marriage or to see if they are suitable (Viteckova, 2011). Cohabiting has been found to offer some of the benefits of marriage without the need for individuals to commit legally to each other, which might incentivise people to partake in it (Powell, 2021). The categories of widowed and divorced refer to individuals who were formerly married, but who have lost their spouses through death or have dissolved their marriage, while those who are single are not married nor belong to other categories of marital status.

Much research has investigated the relationship between marital status and life satisfaction among individuals of different groups (Botha and Booysen, 2013; Hinks and Gruen, 2007; Pengpid and Pelter, 2024). Prior belief about marriage is important when determining whether this relationship is significant (Naess et al., 2015). The group of individuals who believe marriage is advantageous report lower levels of life satisfaction when they are not married, whilst those who believe that marriage is not beneficial do not show significant levels of dissatisfaction when they are not married (Moss and Willoughby, 2018). Arrangements such as marriage are more beneficial in more collectivist communities than individualist ones (Diener et al., 2000). Regardless of the beliefs, a pattern observed internationally is that cohabitation and marriage improve life satisfaction as compared to other marital statuses.

However, it should be noted that these effects are not uniform across different groups, with variations reported particularly across genders (Thompson and Walker, 1989; Williams and Umberson, 2004). For example, cohabitating men tend to report higher life satisfaction levels than cohabitating women (Greenstein, 2016). Married women and men reported similar levels of life satisfaction, but separated men tend to report lower life satisfaction levels than separated women (Greenstein, 2016). Men who are widowed or divorced have been shown to suffer from depressive symptoms, but the same was not found to be true for women (Troe et al., 2007). In South Africa, married women report higher life satisfaction levels than other individuals (Booth and Booysen, 2013). When comparing married individuals of different races, White married

men reported the highest levels of life satisfaction, whilst married Black women reported the lowest levels (Ebrahim et al., 2013). These findings indicate that the effects of marital statuses are not uniform across the genders and races of individuals of different demographics (Greenstein, 2016).

This phenomenon of heterogeneity is most easily observed in developing nations (Greenstein, 2016). When a country has high levels of inequalities between genders, reported SWB also tends to differ significantly across genders (Tesch-Romer et al., 2008). In South Africa, despite efforts by institutions such government, civil society, private businesses and the public, gender inequalities are still prevalent (Singh and Naidoo, 2017). This then means that in South Africa, differences in reported SWB levels are influenced by the gender inequalities that exist within the country are likely. For this reason, this dissertation will study the relationship between marital status and SWB differently across genders.

Existing research that studies the relationship between marital status and SWB in South Africa has produced conflicting results. For example, Hinks and Gruen (2007) found no significant correlation between marital status and well-being after controlling for the different types of marriages that exist in South Africa, while Pretorius et al. (2021) also found no significant correlation. The findings from Hinks and Gruen (2007) and those of Pretorius et al. (2021) contradict the findings by Mahedea and Rawat (2008), who found that married individuals reported higher levels of SWB, and Botha and Booysen (2012) who found that married individuals in South Africa reported the highest satisfaction levels. This latter result was in accordance with most international studies on the relationship between marital status an SWB (Grundstrom et al., 2021). These studies are evidence that the local literature on the relationship between marital status and SWB presents a puzzle. Also, most of the research that has been conducted in South Africa assumes the relationship between marital status and SWB remains constant with age, whereas studies conducted internationally allude to the relationship between these two variables changing over the life course (Williams and Umberson, 2004; Ward, 1979). In addition, the studies that exist in the context of South Africa used mostly cross-sectional data (Botha and Booysen, 2012; Pengpid and Pelter, 2024; Blaauw and Pretorious, 2013) and therefore did not control for selection into marriage or unobserved heterogeneity.

The objective of this research is to therefore fill these gaps, by conducting a study on the relationship between marital status and SWB in South Africa across the life course, utilising recent panel data. The research aims of this dissertations are as follows:

I. To show how marital status differs across the life course and by gender in South Africa.

II. To analyse the channels through which marital status influences SWB in South Africa.

III. To estimate the relationship between marital status and SWB by gender.

IV. To investigate how the relationship between marital status and SWB changes across the individual's life course for each gender.

In order to achieve the aims above, this dissertation is structured as follows: the relevant review of the theoretical and empirical literature is discussed in Chapter 2. Chapter 3 presents the National Income Dynamics Study (NIDS) data used in the analysis and provides an overview of the marital status statistics in South Africa. Chapter 3 further includes descriptive analyses and presents transition matrices to examine how South Africans move between different marital statuses over time. Presented in Chapter 4 is the regression analysis alongside the tests of robustness for this dissertation. Chapter 5 then concludes this dissertation, reinforcing the key findings from this dissertation whilst also discussing the limitations and policy implications of the research.

Chapter 2: Literature Review

This dissertation seeks to investigate the relationship between marital status and SWB in South Africa and whether it varies over the life course, as differences in the levels of reported SWB amongst individuals with different marital statuses are observed in many contexts (Williams and Umberson, 2004). Married people report higher satisfaction levels than non-married people (Botha and Booysen, 2012), and there are other differences between statuses. However, the reasoning behind these differences is not known with certainty. This chapter is framed around two sociological theories developed by researchers to explain these differences. In the resource model, marriage is associated with social and economic resources, while in the crisis model, the ending of a marriage undermines well-being (Williams and Umberson, 2004). Whilst this dissertation uses SWB to conceptualise well-being, different conceptualisations will be adopted because this section discusses literature from scholars and researchers who have used different conceptualisations of well-being.

The literature review chapter is structured as follows: Section 2.1 provides the South African context for marital status patterns. In sections 2.2 and 2.3, respectively, the resource and crisis models, which form the conceptual framework for this study, are discussed. The three channels used to explain the effect of marital status on SWB, namely the emotional, physical health and financial channels, are discussed in detail. The empirical studies that previous researchers have conducted regarding well-being or SWB and marital status, both internationally and within South Africa, are discussed in section 2.4. Finally, section 2.5 concludes the chapter.

2.1. Marital status in the South African context

In 2024, research from Statistics South Africa (StatsSA) showed that less than 30% of all adults in South Africa were married (StatsSA, 2024b). Compared to 2023, marriage rates in South Africa had decreased, whilst the divorce rate had increased by 10.1% (StatsSA, 2024a). This decline in marriage rates in South Africa is observed across a long period of time, and across all races and genders, although it is most prevalent amongst African women (Maharaj and Shangase, 2020). The reason for this observed pattern differs amongst individuals, with some authors crediting it to changing patterns in how people choose their relationships (Posel and Rudwick, 2011). Other reasons for an increase in divorce and a decrease in marriage rates include rural-urban migration, unemployment, increased educational attainment, and lobola, amongst others (Casale and Posel, 2010; Maharaj and Shangase, 2020).

In addition, some researchers have suggested that the increase in divorce rates can also be attributed to nuanced reasons such as abuse and lack of communication (Douglas, 2022). South Africa has been found to suffer the most from depression and anxiety compared to other countries (Craig et al., 2022). With the rise of mental illnesses such as depression and anxiety, it can be even more difficult for people to communicate with each other (Gualasova et al., 2013) and therefore, indirectly, perhaps the reason there is a rise in divorce rates in South Africa can be traced back to the deterioration of mental health within the country. In South Africa, not only are divorce rates increasing, but the marriage rates are also decreasing. Although these trends are observed across all South Africans, their severity seems to be affected sharply by gender and race (Posel and Rudwick, 2013). Similar to other African countries, there seems to be a rise in cohabitation becoming a part of the family structure in South Africa (Odimegwu et al., 2018). Researchers have attributed the rise in cohabiting couples in South Africa to resource constraints (Casale and Posel, 2010).

Alongside the resource constraints, hypergamy might be another factor that is leading to falling marriage rates in South Africa. Research also shows that over 60% of those enrolled in universities within South Africa are female (DHE, 2021). This means that women within South Africa are more likely to get their bachelor's degrees than their male counterparts (DHE, 2021). Studies have found that women choose to 'match up and across', meaning they match with men who either have the same or above socio-economic status as compared to themselves, a concept known as hypergamy (Sain-Paul, 2015; Eseve et al.,2016; Maharaj and Shangase, 2020) Thus educational and employment gaps may result in women experiencing difficulties in finding suitable partner. Research suggests that hypergamous relationships are still currently common and stable, whilst hypogenous unions, which are unions where women marry down, are more vulnerable to factors such as depression and stress due to lower-quality relationships and financial issues (Potarca and Rossier, 2022). As a result of this phenomenon, educated women may face difficulties finding suitable partners, which might contribute to the declining marriage rates. Young African-educated women are also getting married later in life than previous generations (Maharaj and Shangase, 2020). Scholars have reported that this is due to this group desiring to be economically secure before transitioning into marriage (Maharaj and Shangase, 2020).

These constraints or changes in attitudes towards marriage make it harder for individuals to get married. Among African women, the quantity and quality of the unmarried men available in the community determined the probability of getting married (Posel and Casale, 2010). This

means that if a man is considered inferior, African women will likely not want to be in relation with him (Posel and Cosale, 2010). It was also found that ilobolo, which is usually a cultural requirement for African women, added a constraint to them getting married (Posel and Casale, 2010; Mahaj and Shangase, 2020). Due to constant worsening in indicators such as inflation, the gap between the rich and the poor in South Africa is widening (Meiring et al., 2018). This means that the number of men who can afford the bride wealth for African women is decreasing. Ilobola was found to be a significant constraint to marriage amongst African men in South Africa (Casela and Posela, 2010; Maharaj and Shangase, 2020). This could contribute to the falling marriage rates, meaning that if the country's economic well-being does not improve, we expect to see the marriage rates decrease even further. Hunter (2016) found a rise in legitimate cohabitation within South Africa because it allows men to pay a small amount of the ilobolo whilst allowing the couple to stay together. This innovative way to cohabit might lead to more and more individuals getting access to some of the positive benefits that are associated with marriage, especially since young South African women are reported to still value marriage (Maharaj and Shangase, 2020).

This, however, might lead to the marriage rates decreasing further within South Africa, especially for the African community. This is concerning as premarital birth rates are persistent, and women with children were reported to be less likely to get married, which can lead to them entering partnerships that are usually correlated with economic and social disadvantages (Smith-Greenway, 2016). This also means that the number of children growing up in single-parent households is predicted to increase. Madau et al. (2018) found that children raised in single-parent households, either with single fathers or mothers, were more vulnerable to substance abuse and destructive behaviour. These authors also found that raising children alone affected the parents negatively emotionally, financially, and physically (Amato, 2005). Research conducted by Mkhize and Msomi (2015) suggests that when children grow up in fatherless homes, their socio-economic and social statuses are affected negatively. In contrast, raising a child in a two-parent household could positively affect both the parents' and children's well-being.

2.2. The resource model

Two models developed in the sociology literature, the resource and crisis models, can be used to account for the SWB differences between married and unmarried individuals (Williams and Umberson, 2004). Most studies have found difficulties in explaining which of these models contributes the most to the differences observed in SWB amongst individuals of different

marital statuses, and this dissertation therefore treats them as complementary rather than competing conceptual frameworks. The resource model is discussed in this section, and the crisis model in 2.3. With these models as the foundation, this dissertation seeks to explain the differences among these marital statuses by exploring how the different marital statuses might affect the individual's physical health, emotional well-being, and financial well-being.

The resource model suggests that those who are married tend to report higher levels of well-being or happiness when compared to those who are unmarried due to the positive resources that marriages offer individuals, which makes it more likely for them to be more satisfied with their lives (Umberson et al., 1996). Married individuals have been reported to have higher incomes, greater emotional stability and enhanced interpersonal trust (DeMaris, 2022). These findings are consistent across genders and race, supporting the resource model as they imply that marriage offers individuals specific resources that impact their SWB positively (DeMaris, 2022). The specific resources suspected to account for differences in reported SWB amongst individuals of different marital statuses are discussed below.

2.2.1 The financial channel

The first channel that connects marital status and well-being consists of economic factors broadly grouped into what this study terms the financial channel. Researchers have found that marriage provides individuals with financial support (Williams and Umberson, 2004). The current trend internationally is that when individuals are married, they tend to both work (Fry et al., 2023). This then means that it is a rational expectation that households with married individuals tend to have multiple incomes (Fry et al., 2023). Households of individuals who are married or cohabitating tend to be better off financially compared to other households of individuals who are not. The economic stability that is enjoyed by couples who stay together or are married can result in them reporting higher levels of SWB (Shapiro and Keyes, 2008). Conversely, divorce has been shown to put economic strain on individuals; women were found to suffer more from this strain than men, due to men having higher pre-divorce assets (Shapiro and Keyes, 2008; Kapelle and Baxter, 2021).

The financial well-being of individuals was found to play a significant role in the health of the relationship, especially within marriage, where financial conflicts can often lead to marriage dissolutions (Copur and Eker, 2014). Women who were in their first marriage had a better perception of financial well-being than those in other marital statuses (Malone et al., 2010). Cohabiting women were found to have the greatest fear of becoming a financial burden on their

spouses (Malone et al., 2010). Women who are never married and never receive financial support from their family or friends also tend to face a higher risk of diseases such as hypertension (Jennings et al., 2018). It was also found that married men tend to feel less satisfied with their financial stability when compared to unmarried men. This might be due to the added pressure that married men face when they are responsible for taking care of their children and wives (Gorman, 2000). This added pressure is why married men tend to be more productive at their workplaces and thus earn more than their unmarried counterparts (McDonald, 2020). A study by McDonald (2020) found that married men earn almost 11% more than their single counterparts. Although selection accounted for some of the results from this study, it did not fully explain this pattern (McDoland, 2020). Dougherty (2006) found that similar results can be observed amongst married women, even if it is on a smaller scale. Korenman and Nuemark (1991) also found that married men tended to be in better job positions and received higher productivity ratings within the workplace. This increase in wages observed when individuals get married could be attributed to an increase in perceived support, resulting in individuals better reaching all their other goals, including financial (Molden et al., 2009). This then means that individuals who are married can be financially better off and report higher levels of SWB than the non-married.

2.2.2 The emotional channel

The second channel that connects marital status and well-being is the emotional channel. Human beings have a nature that draws them towards being social (Cacioppo and Patrick, 2008). The world's longest-running study on happiness, which Harvard University has conducted since the 19th century, has found that social connections are what make people happy (Waldinger and Schulz, 2023), especially the quality of an individual's social connections. Social connectedness can make people feel more supported and cared for (O'Rourke et al., 2018). When people are not socially connected, it can lead to them suffering from symptoms such as loneliness.

Loneliness is one of the most common side effects of a lack of social connectedness, which is why it is important to observe when measuring relationship quality (Abreu-Afonso et al., 2022). Relationship quality can be pinned down as the actual causation for why some relationships work whilst others do not (Joel et al., 2020), and relationship quality has an impact on how people transition between the different marital status categories (Murray et al., 2020). Poor marital or relationship quality can lead to loneliness, which has been shown to affect the emotional state negatively (Lucas, 2003). Individuals have reported loneliness to have adverse

effects on their mental health, with some associating it with depressive symptoms (Lucas, 2003). The effects of loneliness are not constant across genders, with men reporting being more vulnerable to factors such as substance abuse and overeating as compared to women (Junttila et al., 2015). Men experience greater loneliness as they tend to have smaller social groups (Dykstra and Fokkema, 2007). Older non-married men reported being lonelier than other groups (West et al., 1986).

To account for differences in marital status regarding loneliness, the importance that individuals place on relationships is key (Dykstra and Fokkema, 2007). Having a small social group does not necessarily expose individuals to the vulnerabilities of loneliness, as the perceived perspective on loneliness matters. Loneliness has the direst consequences if the individuals crave more social connections (Barton et al., 2024). When married or in a relationship, their social network tends to get larger. This can result in those in relationships being better off emotionally than those who are not (Bookwala and Fekela, 2009). Compared to married people, non-married individuals have lower social interactions, which leaves them more vulnerable to effects such as loneliness (Bookwala and Fekele, 2009).

2.2.3 The physical health channel

The third channel that connects marital status and well-being is physical health. Researchers have argued that well-being differences between the different marital statuses are due to the support for overall health provided by relationship arrangements such as marriage (Williams and Umberson, 2004). In South Africa, it is known that married older individuals have better walking paces and better grips when compared to older non-married individuals (Koyanagi et al., 2017). When compared to the non-married, the married tend to have lower levels of disabilities and chronic limitations than those who are unmarried (Verbrugge, 1979). When researching the behaviour of health and marital status, Umberson (1992) found that married individuals tend to have lower mortality rates than their unmarried counterparts. The author attributed this to the fact that when individuals are married, their partners tend to motivate them to make healthier choices, resulting in them being healthier overall (Umberson, 1992).

Married individuals also tend to make healthier food choices than their unmarried counterparts (Mata et al., 2015), which can lead to married individuals being healthier despite spending less time working out (Nomaguchi and. Bianchi, 2004). When diagnosed with diseases such as cancer, unmarried individuals face a higher risk of dying from these diseases when compared to their married counterparts (Han et al., 2014). However, it is important to note that married

individuals obtain these physical health benefits when their relationships are stable and they do not have too many conflicts (Schlomer et al., 2011). Conflicts have been shown to negatively affect not only the couple's health but also their children's health if they have them (Schlomer et al., 2011). The correlation between heightened health and marriage or cohabitation thus depends significantly on the stability and health of the union. A union that is unhealthy has been found to increase the effects of outside stress, which has been found to undermine both the emotional and physical health of individuals (Slatcher, 2010).

2.3 The crisis model

In contrast to the resource model, the crisis model suggests that well-being differences observed across marital statuses are due to the crisis that individuals might experience as they transition out of marriage (Williams and Umberson, 2004). Research indicates that more than just the marital status affects well-being, the change of the marital status tends to undermine well-being the most (Williams and Umberson, 2004). When individuals change their marital status, regardless of whether they get married or separate, they face a heightened risk of experiencing suicidal behaviour (Roskar et el, 2011). The impact that the marital status transition has on individuals has also been found to be dependent on the age of the individuals, with most research finding that those who are older tend to be more vulnerable to experiencing negative behaviours due to their marital status changing (Robards et al., 2012). This undermining of well-being due to changes in marital status might be due to the rise of uncertainty associated with this change.

Transitions out of a marriage were found to be the most detrimental to overall well-being (Dupre, 2016). Examining the relationship between health and social well-being, Shapiro and Keyes (2008) found that when individuals get divorced, they tend to lose their social networks, which can result in emotional distress. When couples who were cohabiting broke up, their well-being was undermined in very similar ways to when couples experienced divorce (Dush, 2013). Lucas et al. (2003) also showed that individuals do not all respond similarly to events such as divorce or marriage. Lonely individuals tend to benefit more from marrying and are more disadvantaged by divorcing (Lucas et al., 2003). The crisis theory suggests that a research approach that investigates this relationship as individuals change their marital statuses, as employed in this dissertation, is appropriate and important.

The crisis and resource models explain why there might be differences in well-being when individuals belong to different categories of marital status or transition their marital status.

However, these two models do have a limitation in that they do not effectively explain the differences in well-being for individuals who never changed their marital status, for example, those who remain never-married their entire lives. These individuals' SWB still changes throughout their lives, but these two models cannot explain the possible reasons for these changes. This dissertation, therefore, includes age cohort analysis to account for the fact that well-being differs, and marital status may influence well-being differently, at different life course stages.

2.4 Empirical literature on the relationship between marital status and SWB

The theory discussed above shows that when studying the relationship between marital status and well-being, employing the life course perspective is valuable. Through the life course perspective, the well-being changes as individuals transition through different marital statuses at different life stages can be studied. Using panel data is also important in examining the role of transitions in marital status and whether this relationship changes among individuals of different ages. Examining this relationship using cross-sectional data and methodologies can impose constraints because it limits the relationship from being observed over time. Therefore, the use of panel data is deemed more appropriate for the study of this relationship. However, panel data are not always available for researchers to utilise, and therefore, the review of existing empirical studies below includes both cross-sectional and panel data studies. The discussion is grouped into international studies and studies conducted in the South African context.

2.4.1 International studies

There is a large body of international studies on this relationship, most conducted in Europe and North America. These studies differ in methods; some use cross-sectional data, while others use panel data. Most of the studies discussed below used panel data; this is due to the realisation by international researchers of the benefits of using panel data to study this relationship.

At the international level, several studies explore how age mediates the association between marital status and well-being. Generally, these studies show that marriage is associated with lower risks of depression, anxiety, substance abuse and physical deterioration (Scott et al., 2010; Anantanasuwong et al., 2024; Bulloch et al., 2017; Williams and Umberson, 2004; Ward 1979;Pretorius et al., 202; Nelson-Coffey, 2018). These studies also reveal that the associations are not constant over the life course, which investigating if this is true for South Africa too is

one of the aims for this study. It should be noted, though, that this protective effect of marriage is uneven.

For example, Scott et al. (2010) found that amongst the married, the risk reduction was not uniform, with men being more advantaged than women. When compared to the unmarried or separated, married men and women faced reduced risk in mental health disorders such as depression and anxiety, as well as less risk of substance abuse (Scott et al., 2010). Additionally, the adverse effects associated with different marital statuses do not affect women and men in the same manner. For example, Anantanasuwong et al. (2024) found that women who transitioned into a marriage were found to have a greater likelihood of starting to consume alcohol. Amongst both men and women, being single was associated with a greater likelihood of loneliness, with men being more likely to suffer from emotional disorders when they are single (Anantanasuwong et al., 2024). In all categories, the separated faced more risks of onset of mood disorders, mental disorders, and substance abuse than individuals belonging to other marital statuses (Scott et al.,2010; Anantanasuwong et al., 2024).

These authors found harmonious results despite using different methodologies and data sources. Scott et al. (2010) used cross-sectional data from 15 countries from the WHO World Health Survey, which had the data of 35,000 men and women. Scott et al. (2010) investigate the impacts of gender differences and marital status on various mental disorders, including anxiety and onset of mood disorders. Anantanasuwong et al. (2024) investigated the mental and behavioural outcomes associated with marital status and marital status transitioning, using data collected from Thailand. They analysed the data using three waves and generalised estimating equations (GEE) analysis.

The studies above show a broad association between marital status, general well-being, and behavioural outcomes. However, there has been a large body of work that has focused specifically on mental health as the outcome. While Scott et al. (2010) and Anantanasuwong et al. (2024) provide evidence that there is an association between mental disorders and marital status, Bulloch et al. (2017) deepen the understanding of this association as these researchers examined the relationship between depression and marital status, controlling for age and gender. These authors used cross-sectional data from Statistics Canada for individuals 18 and older from 1996 to 2013. Using logistic regressions and meta-analytic techniques, these authors found that there is a correlation between mental illness, such as depression, and marital status. The degree of correlation, however, was found to differ among genders and individuals of

different age groups. Unmarried men are more vulnerable to depression when compared with unmarried women. It was also seen that as individuals got older, their risk of experiencing depression declined for individuals who were divorced, widowed, and separated. This might be because individuals tend to recover and return to their baseline life satisfaction and well-being after a certain amount of time, even after their marital status changes (Williams and Umberson, 2004).

Therefore, Scott et al. (2010) and Bullock et al. (2017) found that marriage is often associated with better mental health and well-being. Ward's earlier study (1979) adds nuance by showing that these associations differ across life stages. Ward (1979) investigated whether never getting married affected individuals in later life. For this study only individuals older than 50 were of interest, using data from the NORC General Social Survey of 162 never-married men and women. This author found that those who were never married were less happy than those who were married and only slightly happier than those who were widowed. This phenomenon was observed in the older individuals, but the opposite was true for the younger ones. As individuals age, marital status becomes a stronger predictor of SWB. To some degree, Ward's (1979) study challenges the idea that individuals always return to their baseline levels of subjective well-being regardless of their marital status. In other research, the rate at which individuals return to their baseline subjective well-being level differed across genders (Umberson and Williams, 2004; Pretorius et al., 2021).

The studies above demonstrate the complexity of the relationship between marital status, age, gender and well-being. The studies discussed below use panel or panel-like data, which is advantageous as it controls for unobserved heterogeneity. In studies such as this one, it is important to control for unobserved factors such as selection effects, which states that individuals who are happier and healthier are more likely to get married; therefore, the differences that are observed are due to the type of person who would get married (Nelson-Coffey, 2018). The use of panel data along with analysis methods such as fixed effects can result in more consistent and unbiased results; this is why this dissertation uses this data.

When examining the relationship between marriage and psychological well-being using a sample from the National Survey of Families and Households panel data, marital status strongly impacts individuals' psychological well-being (Kim and McKenny, 2002). The quality of the relationship mattered when it came to its impacts on individuals' well-being. These authors also found that transitioning into a cohabiting relationship did not have the same

impacts as transitioning into a marriage. The researchers posited that marriage provided individuals a sense of safety that cohabitation did not (Kim and McKenny, 2002). This sense of safety provided by marriage has been described as perceived support (Soulsby and Bennet, 2015), based on a study to investigate the relationship between marriage and psychological well-being. These authors used data from 510 adult British men and women aged 18 to 91 collected through questionnaires. The results from this study suggested that perceived support is important for well-being and can help individuals better transition out of marriage (Soulsby and Bennet, 2015). This would suggest that individuals with big social networks are better off even if their marital status changes (Tilburg and Suanet, 2019).

Grundstrom et al. (2021) added more nuanced details to this relationship when they analysed the association between relationship status and mental well-being in life phases from young to middle adulthood, using data sourced from individuals residing in Finland. These authors found that at every age being single was associated with depressive symptoms in men. For women, being single as they were getting older was associated with lower levels of self-esteem. These authors also found that overall, married individuals reported higher levels of well-being than those who were unmarried.

Marital status does not just impact mental health but authors have also found it to impact physical health outcomes. For example, Sobal et al. (2003) investigated the effects of marital status changes on body weight, using data from the US National Health and Nutrition Epidemiological Follow-up Survey, where 9043 adults participated in this national longitudinal study, with the data collected across two waves, with a ten-year gap between these two waves. Using different variations of regressions, they found that transitioning into marriage was associated with weight gain, especially for women. For men it was found that transitioning out of a marriage was associated with weight loss.

The results from Sobal et al. (2003) are similar to the findings by Williams and Umberson (2004), who examined the relationship between marital status and physical health, using data that was collected by the American's Changing Lives survey from individuals 24 years of age and older were nationally representativity of the population of America. These authors transformed three waves of pooled data into panel-like data which they analysed using different variations of probit models. The results from this study indicate that transitioning into and out of marriage impacts all individuals' health. Those who transition into marriage see

improvements in their health, whilst transitioning out of marriage undermined health (Williams and Umberson, 2004).

Finally, Tilburg and Suanet (2019) investigated whether those individuals who are unmarried are socially better off today than in previous decades. To conduct these investigations, these authors used longitudinal data with observations ranging from the year 1999 to 2013. These data were collected from individuals who resided within Amsterdam, including Dutch individuals aged 55 years and above. Tilburg and Suanet (2019) employed general linear models to show that those who were unmarried due to divorce and being widowed were socially better off in 2013 when compared to 1999. These authors suggested that this is because widowed and divorced individuals have a larger social network today when compared to individuals belonging in the same marital status in 1999, meaning that they receive more emotional and social support from their non-romantic relationships. This suggests that the social support gap seen previously between those who are married and who are unmarried is diminishing over time.

The literature discussed above shows the complexity of marital status's effects on overall well-being. These studies reveal gender and age disparities in these effects; however, it remains unclear what this relationship looks like in South Africa, where unique cultural and socio-economic factors may shape how this relationship functions.

2.4.2 Studies from South Africa

The studies conducted in South Africa are more limited in number than the extensive international body of work and have primarily been conducted using cross-sectional data. This means there is no clear life course perspective on the relationship between marital status and well-being in South Africa. The empirical studies below are grouped into those that use various cross-sectional data sources and those that analyse data from NIDS as used in this dissertation.

Several studies analyse the determinants of subjective well-being in South Africa, with marital status as one of the factors included, but not the primary focus of the study. Using Quality-of-Life surveys, Hinks and Gruen (2007) investigate the happiness structure of South Africans, finding it to be different from that of most international countries. These authors found that age and marital status do not significantly impact South Africans' happiness levels. The variables found to be of great importance for happiness in South Africa were employment and income.

These results are contradicted by those produced by Mahedea and Rawat (2008). These authors conducted an explanatory study on economic growth, income, and happiness within South

Africa (Mahedea and Rawat, 2008). These authors used data from 200 individuals chosen from a random sample for their surveys. These authors used descriptive analysis to analyse the collected data, which indicates that married individuals reported higher levels of well-being in South Africa.

Furthermore, Mahadea and Ramroop (2015) found that employed individuals reported lower levels of subjective well-being when compared to entrepreneurs. These authors found these results when they studied what influenced subjective well-being amongst entrepreneurs and labourers in the KwaZulu-Natal province. These authors used data from 300 individuals, including men and women, who were selected through convenient sampling; these individuals were between 18 and 75 years old. When ordered logistic regression was used alongside the chi-square analysis, these authors also found that marital status, education level, and number of children significantly impacted the levels of reported well-being (Mahedea and Ramroop, 2015).

Marital status has an impact on overall well-being, as Pengpid and Pelter (2024) found that individuals over the age of 40 who are not married were more vulnerable to partaking in risky behaviour such as tobacco and heavy alcohol use. These researchers found these results when studying the relationship between psychological outcomes of marital status transitions using data collected by Health and Ageing in Africa: A Longitudinal Study of an INDEPTH Community in South Africa (HAALSI). These longitudinal data were collected over seven years in rural South Africa. Using generalised equation analysis (GEE), their findings suggest that the non-married tend to be associated with adverse psychological outcomes compared to the married. These findings correlated with most international studies, which have shown that married individuals tend to have higher levels of well-being.

Several further studies analyse subjective well-being using data from NIDS, similarly to this dissertation, but produce conflicting findings. Based on ordered probit estimations, Blaauw and Pretorious (2013) used the first wave of NIDS to show that the determinants of well-being for South Africans differed when compared to those of other countries. For example, in other countries, factors such as the individual's height affected their well-being, whereas in South Africa, that is not true (Habibov et al., 2019). Other variables such as education level, gender, age, and marital status explained the levels of well-being reported by individuals (Blauw and Pretorious, 2013).

Two South African studies found no significant relationship between marital status and well-being. Botha and Booysen (2013) investigated the relationship between life satisfaction amongst adults who were married versus those who were cohabiting in South Africa using data collected by the NIDS. These authors then used ordered probit regression analysis, also controlling for the selection factors associated with marriage and cohabitation. They found that when the selection factors are controlled for, there is no significant difference in life satisfaction between those who are married and cohabiting (Botha and Booysen, 2013).

Similarly, probit estimations again showed no significant correlation between marriage and reporting higher levels of well-being in South Africa. This was after these researchers controlled for the different types of marriages South Africa has which other researchers have not been able to do successfully (Hinks and Gruen, 2007). The findings of these two studies do not correlate with what most international studies examining the same relationship found, and they are also contradicted by other studies conducted in South Africa.

By contrast, Pretorius et al. (2021) investigated the dynamics of marriage and SWB more exhaustively using NIDS. These authors investigated the effects that the adaption and anticipation of marriage had on individuals' SWB. Using panel estimations methods these authors found that transitioning into marriage has a positive impact on SWB, with this effect of marriage being more observable amongst men than women. These authors then found that after marriage, both men and women tend to adapt and return to their baseline levels of SWB.

Taken together, these studies illustrate the mixed evidence in the South African context. For example, Botha and Booysen (2013) conducted a subsequent study where they found that married individuals reported higher satisfaction levels. These results differed from Hinks and Gruen (2012) even though the authors used the same data and similar methods, but Booysen and Booysen (2013) used more individual factors than Hinks and Gruen (2007). Adding these individual factors made the relationship between marital status and well-being less noticeable (Botha and Booysen, 2013). These authors further found that although married women were significantly more satisfied than women of other marital status categories, the same was not found for men. These results were more in accordance with most international studies about the relations between marital status and well-being.

The existing studies in South Africa are currently contradictory, which can be attributed to factors such as using different data and methods. Some studies have used cross-sectional data, whilst others have used panel data. The sample from which the data is drawn is also different

although there is a growing trend in using NIDS as a data source. This could result in outcomes conducted from future studies being more consistent. However, even when studies are conducted by the same authors using the exact data source, the results still differ (for example, Botha and Booysen, 2013 compared to Hinks and Gruen, 2012).

2.5 Conclusion

This chapter outlined the conceptual framework for studying the relationship between marital status and well-being and the results of existing empirical literature. The well-being differences observed between individuals of different marital statuses can be conceptualised using the resource or crisis model. The chapter grouped the effects of well-being into financial, emotional, and physical channels, showing how the resources provided by marriage and the crises precipitated by marital status transitions account for different changes in overall well-being.

The theory discussed within these models is in harmony with the results of some of the empirical studies discussed in this chapter, but not all. In general, married individuals are better off than the unmarried, although various empirical studies have examined the relationship between marital status and well-being that contradict each other. For example, some researchers who used South African data found that being non-marriage made individuals more vulnerable to adverse psychological effects, whilst others found there is no significant relationship between marital status and SWB in South Africa (Pengpid and Pelter, 2004; Botha and Booysen, 2012; Hinks and Gruen, 2007). This indicates that more studies need to be conducted within the South African context to bring clarity and thus better inform policy-making in this country.

Many studies done in South Africa reach different conclusions compared to internationally. This could be attributed to the fact that most studies studying the relationship between marital status and SWB in South Africa use cross-sectional data, whilst most studies use panel data internationally (Umberson and Williams, 2004; Kim and McKenny, 2002; Tilburg and Suanet, 2019). Unlike some other studies conducted in South Africa, this dissertation uses robust data methodologies whilst utilising a large sample size of about 28000 individuals, which will help clarify what this relationship looks like in South Africa over the life course, which is not clearly understood due to the use of cross-sectional data. This dissertation also uses transition matrices to see how marital statutes change over an individual's life, which has not been investigated thoroughly in South Africa.

In conclusion, being unmarried does not automatically make individuals worse off. Factors such as marital quality, attitudes, and local context matter in how the marital status category to which the individual belongs affects their SWB. Individuals do better when they are non-married than married but in low-quality relationships (Joel et al., 2020). These nuances, often overlooked in the South African context, are discussed and explored more in the following chapters.

Chapter 3: Data and Descriptive Analysis

The previous chapter highlighted that researchers have extensively explored the relationship between marital status and SWB in South Africa, yet crucial questions about this relationship remain unanswered. For example, whether the relationship between SWB and marital status is consistent over the life course remains unclear. Therefore, this chapter will present data used for the empirical investigations to address these questions.

This chapter follows the following structure: Section 3.1 explains where and how the data were collected; this section also justifies using this data for this dissertation. Section 3.2 identifies the dependent and independent variables as well as how these variables are measured. Section 3.3 explains this study's sample and how the cohorts are structured. Sections 3.4, 3.5 and 3.6 explore the marital status statistics in South Africa, the characteristics of the sample, and marital status transitions, respectively. After this section, there is a conclusion.

3.1 Data

The data for this study were sourced from the National Income Dynamics Study (NIDS). NIDS is a nationally representative panel survey established to understand South African households and the dynamics of the individuals within those households. The NIDS questionnaire design and data collection is implemented by the Southern Africa Labour and Development Research Unit (SALDRU) which is a research unit within the University of Cape Town (SALDRU, n.d). The same 28000 individuals are interviewed at intervals of approximately two years (Brophy et al., 2018). This is what makes it different from other South African datasets, as it is longitudinal and nationally representative unlike other South African datasets such as Census (Branson and Wittenberg, 2018; Moultrie and Dorrington, 2022). The NIDS include questions about different areas of the individual's life, such as their demographics, labour participation and health. This speaks to NIDS strategic purpose, which is to provide data on living conditions and wellbeing of South African individuals and households (SALDRU, n.d). For this dissertation, the existing five waves of the NIDS will be utilised. The first wave of interviews was conducted in 2008, and the last was conducted in 2017 (Zizzamia and Ranchhod, 2019). The data collection design of NIDS enables researchers to use it in panel data analysis, which is what will be done for this study.

The use of panel data analysis is preferred for this dissertation over a cross-sectional study as the objective is to study the relationship between marital status and SWB over the life course (Feldhaos and Preetz, 2021). A cross-sectional analysis would provide a picture of the

relationship between marital status and SWB at a point in time. However, it would not allow us to see how this relationship evolves as individuals transition between marital statuses (Burbridge, 1999). The use of panel data analysis also enables control for unobserved heterogeneity by accounting for the time-invariant characteristics, improving the accuracy of the results (Allison, 1994). Unobserved heterogeneity can arise from selection effects in this type of study. The selection effect suggests that it is often happier and healthier individuals who get married, so the difference between those who are married and their unmarried counterparts is about who chooses to get married (Stuzer and Frey, 2006). A study by Pretorious et al. (2021) suggests that the relationship between SWB and marital status can also be affected by the anticipation and adaption effects that individuals experience when they transition into marriage. This suggests that it is important to consider the impact of these phenomena when studying this relationship, therefore, the use panel data analysis is important in observing if the individual's SWB changes as they transition between the different marital statuses, and if so, how.

3.2 Variables

The two key variables for this study are SWB and marital status. The data needed to create these variables were collected in the NIDS adult questionnaire. Under section M5 of the questionnaire, individuals were asked how they felt about their overall lives on a scale of 1-10, with 1 being very dissatisfied and 10 being satisfied. The exact question asked under this variable is ‘Using a scale of 1 to 10 where 1 means very dissatisfied and 10 means very satisfied, how do you feel about your life as a whole right now’. SWB for this dissertation is measured using this life satisfaction scale and not the Cantril ladder. Individuals were also asked to self-report their current marital status with five response options: 'married', 'living with partner', 'widow/ widower', 'divorced or separated' and 'never married'.

Although most researchers who have done a similar study have opted to convert the marital variable into a dummy variable (married or not), this will not be done in this dissertation. The reason for this is that the categories of 'single', 'widowed' or 'divorced' are not equivalent, even though they can all be categorised as 'not married'. In addition, cohabitation is distinct from marriage. Kim et al. (2012) found that transitioning into a cohabitation arrangement did not offer individuals the benefits that individuals tend to enjoy when they transition into marriage (Kim et al., 2002). Cohabiting and marriage differ in their effects, even regarding the way children are affected by these arrangements. Studies found that although cohabitation meant that the children had a two-parent home, their level of well-being was significantly different

from those of married parents (Manning and Lamb, 2003). Although these differences exist, it has been reported that cohabiting people enjoy some of the benefits that marriage offers, even though these benefits are short-lived (Williams et al., 2008). These studies are a testament to the importance of marital status not being measured as a single dummy but rather multiple categorical dummies. This will ensure that important insights regarding each category are not lost which will offer a better understanding of what accounts for the differences in SWB observed within each category. Having marital status dummies as categorical dummies also allows for the use of detailed transition matrices, which will be used to understand the way individuals switch between different categories over the life course.

Due to South Africa's history of apartheid and owning to the systematic racial and socio-economic disparities, it is also important to consider the role that race has contributed to SWB. Although race is important for this study, some models will not be able to account for it as it is a time-invariant variable. It is, however, suspected that there will be differences across races in terms of SWB; however, this will not be explored in depth for this study.

In the literature reviewed in Chapter 2, the differences in SWB across marital statuses were attributed to three primary channels: financial, emotional and physical. The empirical analysis in this dissertation explores the roles of these channels, including in the estimating equation in Chapter 4. Therefore, this study's control variables will be grouped under the appropriate channel. The financial channel component is captured using a range of economic status indicators. These include the highest level of education that individuals have completed and the employment status of individuals. Household ownership of assets is used as an indicator of wealth. Following Posel et al. (2016), an assets index is created using principal component analysis and categorised into five quintiles.

For the emotional channel, in the NIDS, individuals were asked 10 questions that were related to their emotional health, including questions about the frequency of experiencing loneliness, fear and hopelessness, amongst others. The responses to these questions are summed to create the Centre for Epidemiologic Studies Depression Scale, 10-item version (CES-D-10) depression score, ranging from 0 to 30, which is used for the emotional channel component. For this channel also included is the number of children under the age of 15 in the household, which has also been shown to affect SWB of individuals within South Africa (Casale, 2015). Finally for this channel, a dummy variable is also included, which measures how much importance individuals place on religion. Religion is coded as a dummy variable; those

individuals who indicated that religious activities are important are given the value of 1, and 0 is given to respondents who do not.

The physical health channel component will be created using the health section of the questionnaire, particularly the J1 variable, where participants were asked to rate their perceived health with poor, fair, good, very good or excellent choices. For simplicity, a health indicator was created to show poor, moderate and excellent health by grouping the lowest two, middle and highest two responses, respectively. This variable is used as a proxy for overall health.

Other variables that influence SWB but cannot be put into the three channels are also included. Location is an important determinant of SWB in South Africa (Fisher et al., 2022) and is captured here using a dummy for urban or rural location.

3.3 Definition of the sample

The primary analysis for this chapter consists of all adults aged 18 years and older who were at least surveyed for one wave. For later panel analysis, individuals must have been surveyed at least twice to allow for comparisons over the life course. The analysis is conducted in a manner that is disaggregated by gender, as literature has shown that the relationship between marital status and SWB differs across genders. The analysis is also disaggregated by birth year age cohorts. This is done as the main objective for this dissertation is to assess the relationship between marital status and SWB over the life course, meaning that there is a need to make comparisons across age. However, since an individual's age changes across the waves, it is important to disaggregate the sample into birth cohorts so as to analyse consistent groups of individuals. This approach attempts to capture differences relating to the person's life stage and general changes in attitudes over time.

The sample is divided into four categories according to birth dates. These cohorts were structured according to the ages the individuals would have been turning in the year 2017, with those who would have been 18-35 were placed in the 1st cohort, this cohort represents early adulthood which is when individuals typically complete education and enter the labour market. The second cohort consists of those who would have been 36-49, this cohort typically consists of those in their mid-life with this group typically having more stability and responsibilities such as raising children. The third cohort consists of those who would have been aged 50-59, in this age cohort individuals are typically approaching retirement which is when the financial and physical health component starts to become more important. Those 60 years and older are in the 4th cohort, which represents the post-retirement age. Grouping these cohorts in this

manner allows for a clearer analysis of how SWB relates marital status at the individuals' key transition points. Rather than treating age as a continuous variable, it is essential to group the data into birth cohorts so that it can be observed whether the relationship between SWB and marital status is constant across the life course or not. This then will allow for the main aim of this dissertation to be investigated and achieved. The estimates in this dissertation are weighted using survey weights to present the analysis at the level of population and minimise the effects of panel attrition.

3.4 Marital status statistics in South Africa

Before presenting information on the sample characteristics more broadly, Table 3.1 provides insight into the distribution of South African adults according to marital status in the NIDS data. This table illustrates that marriage rates are considerably low, with only 25,71% of the sample being married. It can also be seen from the table that those who are African have the lowest marriage rates, with the White population having the highest marriage rates at 60,78%. When compared to the White and Indian population, African and Coloured individuals are more likely never to have been married. The African and Coloured individuals are also more likely to live with their partners than the Indian and White individuals in this sample. There are no significant differences amongst the races in the 'widow/widower' category. The White individuals in this sample have the highest divorce rates when compared to the other races, which is expected as divorce follows from marriage, and they have the highest marriage rates.

Table 3.1 Percentage of adults belonging to each marital status category according to race

	Total population	African	Coloured	Indian	White
Married	25.31%	21.14%	31.82%	54.34%	60.78%
Living with partner	6.610%	6.28%	9.83%	2.20%	3.95%
Widow/Widower	8.64%	8.92%	6.83%	9.30%	9.06%
Divorced/ Separated	2.43%	1.93%	2.91%	2.90%	6.62%
Never married	57.11%	61.72%	48.60%	31.27%	19.60%
	100%	100%	100%	100%	100%
Observations	86137	67700	12510	1452	4502

Source: Own calculations from the National Income Dynamics Study (2008-2017).
Note: The five waves are pooled. The estimates are unweighted.

Table 3.2 provides more insight by depicting how the distribution of South African adults according to marital status differs according to birth cohorts. From this table it can be seen that those in the youngest birth cohort have the lowest marriage rates. This supports the literature

that states that in South Africa individuals are getting married later than before (Maharaj and Shangase, 2020). It can also be seen that the highest percentage of widowed individuals belongs to the oldest cohort which is seen also in literature.

Table 3.2 Percentage of adults belonging to each marital status category according to birth cohort

	Youngest	Cohort 2	Cohort 3	Oldest
Married	4.75%	34.03%	50.89%	42.54%
Living with partner	4.2%	12.42%	8.54%	2.94%
Widow/Widower	0.13%	2.79%	13.24%	39.75%
Divorced/ Separated	0.32%	2.77%	5.68%	3.38%
Never married	90.59%	47.99%	2.66%	11.40%
	100%	100%	100%	100%
Observations	37288	18538	17337	11504

Source: Own calculations from the National Income Dynamics Study (2008-2017).
Note: The five waves are pooled. The estimates are unweighted.

In summary, Table 3.1 confirms that the low marriage rates observed for South Africa in the literature are present in the NIDS sample. This could be explained by cultural and attitude differences towards marriage between different races (Greenstein, 2016). Since these cultural and attitude differences may change over time, the subsequent tables present statistics by birth cohort. Table 3.2 then adds more nuance by showing that the distribution of South African adults according to marital status in the NIDS data differs substantially by birth cohort. This provides the motivation for the study's focus on how the relationship between marital status and SWB may differ across cohorts. Subsequent tables are also weighted to the level of the population, using panel weights provided by NIDS, to mitigate the effects of sample non-response and attrition.

3.5 Characteristics of the sample

The descriptive tables below summarise the average characteristics of the analysis sample. Regarding the structure for Tables 3.2 and 3.3, women and men are represented in different tables as literature has shown that the relationship between marital status and SWB differs by gender (Chipperfield and Havens, 2001). Within these tables, each column represents a different birth cohort. The weighted mean values within those samples are presented in the table for the continuous variables, with proportions for the categorical variables.

The results from Tables 3.2 and 3.3 suggest that the proportion of married people increases across birth cohorts for both men and women. The youngest cohort has the smallest share of

individuals who are married compared to other cohorts. For men in the youngest cohort only 3,4% are married and only 8,95% of women in the same birth cohort are married. When comparing the birth cohorts, the oldest cohort is least likely to cohabit for both women and men. The highest proportion of men and women who are divorced or separated are those who are in the third cohort. These tables also suggest that for both women and men the proportion of individuals who have never been married decreases as individuals age. The marriage pattern increasing across birth cohorts is observed for men and women until the oldest birth cohort. Almost half of women in this birth cohort are windows, compared to 12.6% of men who have lost their spouse, suggesting that men tend to be married until death whereas women become widows.

Table 3.2 Characteristics analysis for women (Weighted)

VARIABLES	Youngest Mean	Cohort 2 Mean	Cohort 3 Mean	Oldest Mean
SWB	5.246	5.214	5.234	5.439
	(0.031)	(0.046)	(0.055)	(0.074)
Married	0.089	0.390	0.482	0.333
	(0.007)	(0.015)	(0.016)	(0.019)
Living with Partner	0.055	0.107	0.058	0.020
	(0.004)	(0.008)	(0.006)	(0.006)
Widow/Widower	0.002	0.045	0.186	0.484
	(0.001)	(0.006)	(0.011)	(0.019)
Divorced/Separated	0.007	0.038	0.078	0.044
	(0.002)	(0.006)	(0.009)	(0.010)
Never Married	0.846	0.420	0.196	0.118
	(0.008)	(0.015)	(0.011)	(0.010)
Age	22.705	37.222	51.891	69.583
	(0.094)	(0.129)	(0.161)	(0.324)
Age square	540.837	1,410.843	2,723.800	4,901.378
	(4.512)	(9.626)	(16.913)	(46.935)
African	0.881	0.820	0.765	0.692
	(0.009)	(0.014)	(0.017)	(0.025)
Coloured	0.072	0.101	0.091	0.087
	(0.006)	(0.009)	(0.009)	(0.013)
Indian	0.018	0.022	0.032	0.020
	(0.004)	(0.007)	(0.009)	(0.007)
White	0.029	0.058	0.111	0.201
	(0.005)	(0.010)	(0.014)	(0.025)
Poorest Asset Quintile	0.153	0.143	0.146	0.134
	(0.005)	(0.008)	(0.008)	(0.009)
Asset Quintile 2	0.216	0.185	0.160	0.161
	(0.005)	(0.008)	(0.007)	(0.009)
Asset Quintile 3	0.227	0.200	0.195	0.209
	(0.006)	(0.007)	(0.007)	(0.011)

VARIABLES	Youngest Mean	Cohort 2 Mean	Cohort 3 Mean	Oldest Mean
Asset Quintile 4	0.215	0.217	0.207	0.202
	(0.005)	(0.008)	(0.008)	(0.012)
Richest Asset Quintile	0.189	0.254	0.293	0.294
	(0.007)	(0.013)	(0.014)	(0.022)
No Schooling	0.003	0.036	0.125	0.343
	(0.001)	(0.005)	(0.009)	(0.019)
Primary School	0.063	0.128	0.340	0.310
	(0.004)	(0.009)	(0.015)	(0.018)
Incomplete Secondary	0.569	0.467	0.314	0.186
	(0.010)	(0.016)	(0.015)	(0.017)
Matric	0.233	0.164	0.075	0.090
	(0.008)	(0.011)	(0.010)	(0.020)
Tertiary	0.132	0.205	0.145	0.072
	(0.007)	(0.013)	(0.013)	(0.016)
Employed	0.255	0.546	0.448	0.110
	(0.007)	(0.012)	(0.013)	(0.010)
Economically Inactive	0.538	0.249	0.451	0.872
	(0.008)	(0.009)	(0.012)	(0.011)
Unemployed	0.206	0.205	0.101	0.019
	(0.005)	(0.008)	(0.006)	(0.004)
Depression	6.652	7.328	7.753	7.781
	(0.051)	(0.079)	(0.096)	(0.126)
No of Children	2.158	1.916	1.567	1.465
	(0.035)	(0.042)	(0.049)	(0.067)
Religious	0.940	0.951	0.959	0.927
	(0.003)	(0.004)	(0.003)	(0.010)
Excellent Health	0.750	0.628	0.439	0.301
	(0.006)	(0.009)	(0.010)	(0.015)
Moderate Health	0.209	0.264	0.324	0.348
	(0.005)	(0.008)	(0.007)	(0.011)
Poor Health	0.041	0.108	0.237	0.352
	(0.003)	(0.006)	(0.009)	(0.013)
Urban	0.577	0.649	0.603	0.522
	(0.010)	(0.014)	(0.015)	(0.022)
Observations	16,116	9,091	8,995	6,110

Source: National Income Dynamics Study (2008-2017).
Note: The estimates are weighted. Robust standard errors in parentheses. Each column represents a different age cohort.

For both women and men, their health tends to depreciate as individuals age, as the proportion of individuals with 'excellent health' decreases across cohorts whilst the opposite is observed for 'poor health'. The average depression score increases with age for both genders with women experiencing a larger increase in depression score compared to men. Literature suggests this pattern is more prevalent amongst unmarried older women (Carayanni et al., 2012).

The asset quantiles, which are used as a proxy for wealth, depict that the proportion of women who are deemed in the poorest group decreases as they age. While the same pattern is not observed for men, the proportion of men in the wealthiest group increases across the birth cohorts. The proportion of women who are in the wealthiest group also increases across the birth cohorts too, but the magnitude of the increase is smaller when compared to that of men. This is suggestive of wealth being unevenly distributed across genders.

Table 3.3 Characteristics analysis for men (Weighted)

VARIABLES	Youngest Mean	Cohort 2 Mean	Cohort 3 Mean	Oldest Mean
SWB	5.230	5.265	5.308	5.625
	(0.035)	(0.057)	(0.073)	(0.097)
Married	0.034	0.367	0.648	0.730
	(0.004)	(0.017)	(0.019)	(0.028)
Living with Partner	0.037	0.145	0.090	0.023
	(0.003)	(0.010)	(0.010)	(0.004)
Widow/Widower	0.000	0.010	0.051	0.126
	(0.000)	(0.002)	(0.007)	(0.017)
Divorced/Separated	0.002	0.029	0.057	0.043
	(0.001)	(0.006)	(0.009)	(0.011)
Never Married	0.927	0.449	0.154	0.077
	(0.005)	(0.016)	(0.014)	(0.022)
Age	22.461	37.095	51.774	68.109
	(0.097)	(0.164)	(0.204)	(0.346)
Age square	528.731	1,401.819	2,710.184	4,680.301
	(4.623)	(12.245)	(21.445)	(48.951)
African	0.872	0.819	0.766	0.657
	(0.009)	(0.016)	(0.020)	(0.034)
Coloured	0.073	0.098	0.104	0.074
	(0.006)	(0.011)	(0.013)	(0.013)
Indian	0.017	0.033	0.024	0.023
	(0.004)	(0.009)	(0.008)	(0.011)
White	0.038	0.050	0.106	0.246
	(0.006)	(0.009)	(0.017)	(0.034)
Poorest Asset Quintile	0.152	0.161	0.181	0.121
	(0.006)	(0.010)	(0.014)	(0.012)
Asset Quintile 2	0.208	0.202	0.170	0.151
	(0.006)	(0.010)	(0.010)	(0.013)
Asset Quintile 3	0.225	0.217	0.163	0.190
	(0.006)	(0.009)	(0.010)	(0.014)
Asset Quintile 4	0.216	0.184	0.181	0.182
	(0.006)	(0.009)	(0.011)	(0.014)
Richest Asset Quintile	0.200	0.236	0.304	0.356
	(0.008)	(0.014)	(0.019)	(0.027)
No Schooling	0.005	0.029	0.094	0.226
	(0.002)	(0.005)	(0.010)	(0.021)

VARIABLES	Youngest Mean	Cohort 2 Mean	Cohort 3 Mean	Oldest Mean
Primary School	0.108	0.130	0.327	0.291
	(0.006)	(0.012)	(0.020)	(0.026)
Incomplete Secondary	0.571	0.439	0.351	0.305
	(0.010)	(0.019)	(0.020)	(0.031)
Matric	0.210	0.207	0.085	0.089
	(0.008)	(0.015)	(0.011)	(0.024)
Tertiary	0.106	0.195	0.143	0.090
	(0.007)	(0.014)	(0.018)	(0.020)
Employed	0.382	0.751	0.666	0.248
	(0.008)	(0.011)	(0.015)	(0.019)
Economically Inactive	0.455	0.126	0.238	0.722
	(0.008)	(0.008)	(0.013)	(0.020)
Unemployed	0.163	0.123	0.096	0.030
	(0.005)	(0.007)	(0.008)	(0.006)
Depression	6.453	6.773	6.950	6.615
	(0.058)	(0.102)	(0.106)	(0.154)
No of Children	1.470	1.116	1.028	1.115
	(0.032)	(0.044)	(0.048)	(0.080)
Religious	0.843	0.863	0.889	0.875
	(0.005)	(0.008)	(0.007)	(0.015)
Excellent Health	0.782	0.693	0.538	0.374
	(0.005)	(0.011)	(0.013)	(0.017)
Moderate Health	0.192	0.223	0.300	0.345
	(0.005)	(0.008)	(0.011)	(0.016)
Poor Health	0.025	0.084	0.162	0.281
	(0.002)	(0.007)	(0.009)	(0.015)
Urban	0.588	0.681	0.696	0.558
	(0.010)	(0.016)	(0.017)	(0.028)
Observations	14,239	5,822	5,147	2,923

Source: National Income Dynamics Study (2008-2017).
Note: The estimates are weighted. Robust standard errors in parentheses. Each column represents a different age cohort.

The average number of children under the age of 15 living in the households decreases for women across the cohorts but is smaller and changes little for men. What is similarly observed for both men and women is that the second and third cohort has the highest proportion of individuals who are employed, although. Employment is generally higher for men than for women across all cohorts. These birth cohorts are also the one with the highest proportion of individuals who are tertiary educated. The highest proportion for individuals who reside in the urban area are also those in the second and third cohort. The proportion of individuals who deem religion as being important is stable across the cohort for both women and men, with the results suggesting that women deem religion more important when compared to men.

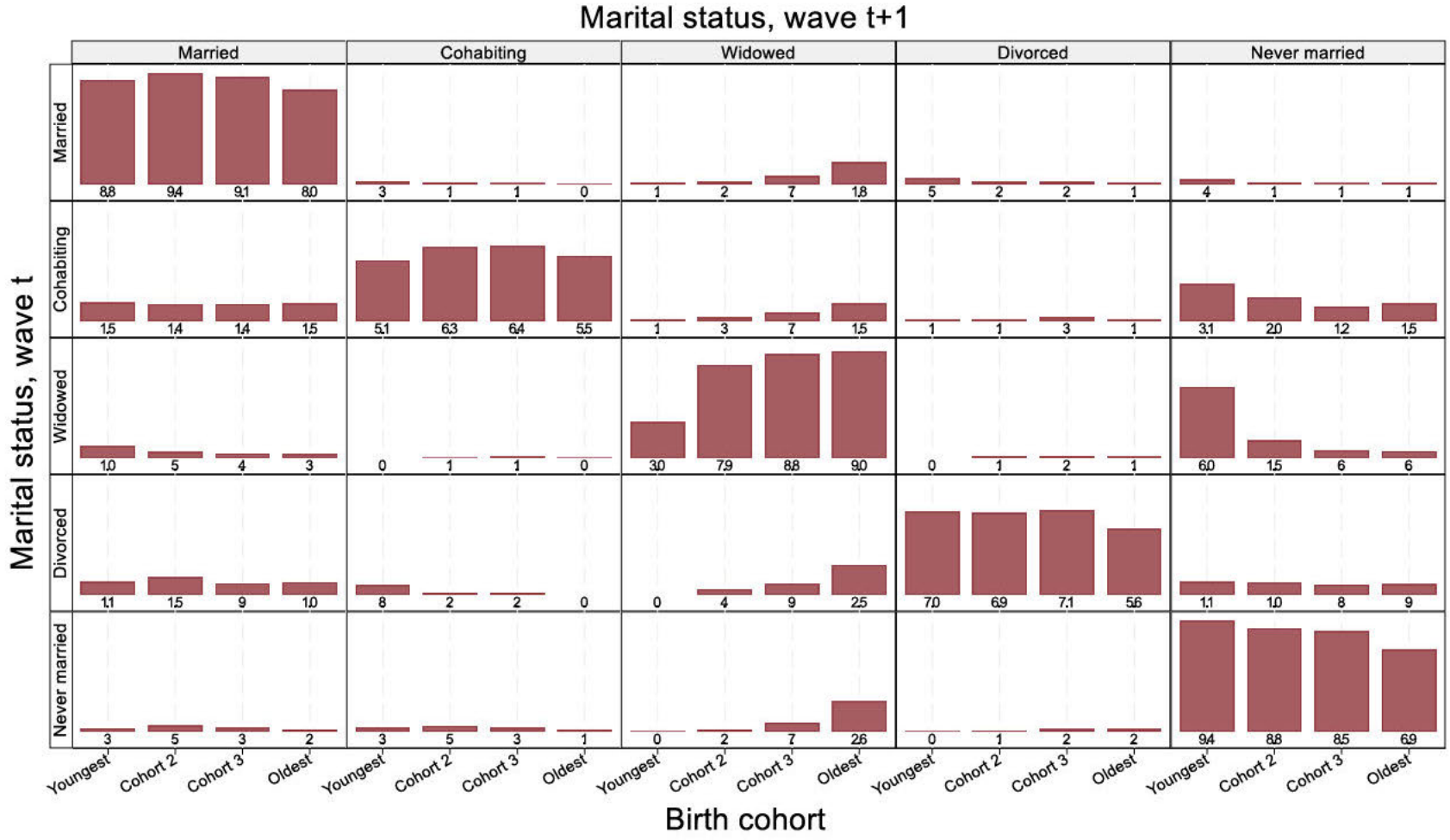
3.6 Marital status transitions by gender and age cohort

The tables shown in section 3.5 are produced using a pooled sample of data from the five NIDS waves. Consequently, it means that they do not account for how the individual's characteristics change over time. This is an advantage of using the panel data for this study, as it allows for the individual's changes in marital status to be linked to their SWB, which is advantageous in finding the true nature of the relationship between marital status and SWB. This advantage of panel data allows for using transition matrices within this study. Marital status transitions show how much individuals change between the marital statuses over time. The way individuals switch between the marital statuses has been shown to be affected by factors such as education and age (Kaufaman and Goldscheider, 2007). For this reason, the figures below show marital transitions according to the different age cohorts. These figures are presented separately for men and women as Tables 3.3 and 3.4 show that the distribution across marital statuses is different between genders; therefore, the transitions are expected to differ too.

Figures 3.1 and 3.2 illustrate the marital status transition patterns for women and men, respectively, by age cohorts, displaying the transitions between the marital statuses over the life course. The height of each vertical bar represents, out of the individuals who start in the given row in one wave, the percentage who will transition to the given column in the next wave in which they are surveyed. The values represented down the main diagonal display the percentage of individuals who remain in that category over time, that is, the persistence of each marital status. The transitions between the different marital statuses are displayed in the off-diagonal values. In each cell, the four bars represent the transitions for the four age cohorts, from youngest (most recently born) to the oldest.

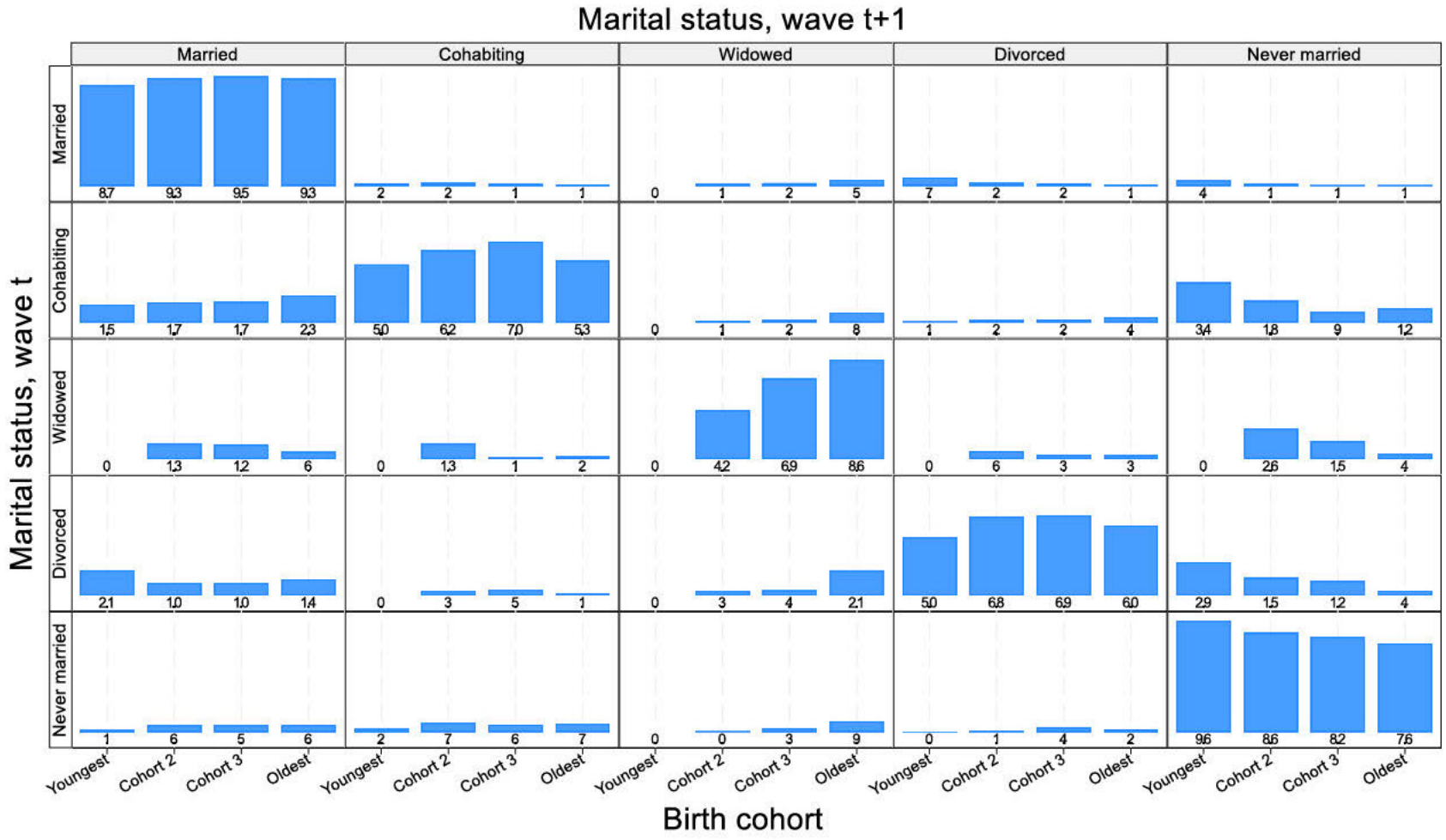
Figures 3.1 and 3.2 show that most individuals tend not to switch their marital status frequently across waves. These figures also show that a high percentage of those who are married are likely to remain married.

Figure 3.1 Marital transition patterns for women by age cohorts



Source: National Income Dynamics Study (2008-2017).

Figure 3.2 Marital status transition patterns for men by age cohorts



Source: National Income Dynamics Study (2008-2017).

The percentage of women and men who are under the category of 'never married' decreases as men age. Although both men and women who remain single diminish over time, older men change their marital status more frequently compared to women of the same age cohort. These figures also show that those individuals who initially stay with their partners rarely ever switch to being married.

Figures 3.1 and 3.2 show a limitation of the data, in that there is some evidence of measurement error and misreporting in the reporting of marital statuses. For example, some individuals transition from 'divorced' to 'never married'. If there were no mismeasurements in the data, then transitions to 'never married' should be possible from 'cohabiting', but no other statuses as observed. These unusual transitions can arise due to stigmas associated with certain marital statuses, for example, divorced individuals might be devalued by society; therefore, they might have misreported their marital status in some waves (Konstam et al., 2016). These mismeasurements in reported marital status are not ideal as they can result in biased estimates from fixed effects regressions, which can result in attenuation and statistically insignificant results DeHaan, 2021).

3.7 Conclusion

This chapter described the data used for the empirical analysis and presented descriptive statistics on the sample of interest. The data is sourced from the NIDS because of its ability to be used as panel data of five waves. The use of panel data will allow for the heterogeneity that exists within studies of this type to be controlled for, as will be discussed further in Chapter 4. Overall marriage rates in South Africa are considerably low, with only about 25% of the sample being married. As the sample of adults was grouped into different birth cohorts, SWB is similar across the cohorts. However, there is considerable variation in marital status across birth cohorts, which suggests that the role of different marital statuses might differ across the life stages. This is further supported by differences in depression scores, as depression is seen to increase with age, undermining overall SWB which increases with age. Patterns pertaining to marital status are changing in South Africa, which is also observed in other countries.

The results from this chapter also show that South African individuals are increasingly delaying marriage, with most getting married after the age of 35. Racial and gender differences are also evident in the chapter, suggesting that cultural attitudes and social expectations might impact marital status decisions. Therefore, it can be concluded that observing individuals separately according to age and gender is appropriate. The transition matrices revealed some marital status

transitions between the different marital status categories, although these are fairly limited. Since there was slight variation of SWB but large variation in marital status across birth cohorts, more investigation is needed into whether the relationship between marital status and SWB differs by cohort. This issue, and the anticipated consequences of the limited marital status transitions, will be further and more rigorously investigated in Chapter 4.

Chapter 4: Regression Analysis

The previous chapter exhibited gender, age and race disparities the marital status category that an individual belongs to and their SWB. This was observed through the use of calculations, descriptive analysis and transition matrix graphs. This chapter then seeks to investigate the relationship between SWB and marital status in South Africa controls for other variables such as education and assets, by applying regression analysis. Should there be a relationship between SWB and marital status this chapter will then investigate if this relationship changes over the life course, or it remains constant. Consistent with the literature discussed in Chapter 2, this chapter will analyse the relationship through three SWB channels (financial, emotional and emotional), and it will split the regression analysis by gender and birth cohorts as indicated in Chapter 3.

This chapter is structured as follows: section 4.1 presents an outline and discussion on the econometric methods used. Section 4.2 presents the results from the regression analysis conducted to investigate the relationship between marital status and SWB over the life course in South Africa. The discussion of the results follows in section. 4.3, thereafter a short conclusion to the chapter follows.

4.1. Methods

SWB in how it is measured for this dissertation is ordinal, which enables people to understand the difference between an individual who is dissatisfied and one who is very well regarding their well-being. Although it is ordinal, SWB does not however have any cardinal value attached to it meaning the numerical difference between dissatisfied and very well cannot be quantified. As SWB is the dependent variable for this dissertation, ordered categorical outcome models are the appropriate regression tool.

Ordinal logit models are the most commonly used models in this area of research (Mahadea and Ramroop, 2015; Bulloch et al., 2017) and they are valid to use when their assumptions are met. The key assumptions are that within the model the dependent variable must be ordered, there must be no multi-collinearity and there must be proportional odds (Williams, 2006). All these assumptions impose strict restrictions on the data and if these restrictions are not met then it can result in the model producing biased and inconsistent estimates (Williams, 2006). Of all the assumptions of the ordered logit, the proportional odds assumption has been argued to be the most difficult one to meet. This assumption states that the relationship between the predictors and the outcome categories must be constant for all variables in the model, and when

this assumption is violated then it leads to biased and inconsistent estimates (Erkan and Yildiz, 2014). Some researchers have attempted to use other forms of logit models such as the generalized ordered logit model of relaxes the proportional odds assumption of the ordered logit whilst considering the ordinal nature of the dependent variable. However, this study uses the standard ordered logit model to ensure comparability with existing literature in this research area (Milovanska-Farrington and Farrington, 2022).

The estimating equation for this dissertation is as follows:

$$SWB_{it} = \beta_1 + \beta_2 MS_{it} + \beta_3 EM_{it} + \beta_4 H_{it} + \beta_5 F_{it} + \beta_6 X_{it} + \alpha_i + \varepsilon_{it}$$

Where SWB_{it} represents the dependent variable which is self-reported subjective well-being, which is ordinal in how it is measured for this dissertation. The intercept when the other predictors of SWB are zero is represented by β_1. MS_{it} represents the marital status that individuals have at time *t*, categorized into five categories which have been previously discussed, with the vector β_2 representing the key parameters of interest for this dissertation. The emotional well-being channel is represented by $\beta_3 EM_{it}$, in which EM_{it} is a vector of characteristics comprising the individual's emotional health. $\beta_4 H_{it}$ represents the physical health channel and $\beta_5 F_{it}$ represents the financial channel, with H_{it} and F_{it} containing vectors of variables that make up the individual's health and financial status respectively. Other control variables that are not categorised under the three channels, but nonetheless have an influence on the SWB, namely race and location are represented under the X vector ($\beta_6 X_{it}$). Each variable was categorized accordingly to literature as discussed in Chapter 2. Finally, time-invariant unobserved factors are represented by α_i, while ε_{it} is the random error term.

This equation is estimated using a series of unfolding model specifications to compare how the relationship between marital status and SWB changes when different factors are controlled for, which allows the assessment of how much of the relationship between these two variables can be attributed to factors in each channel. This equation is also estimated for samples disaggregated by gender and age-cohort to assess how the relationship differs across different groups. Estimating this equation in this manner will analyse the channels and show how this relationship differs across genders and the life course.

In addition to standard ordered logit estimation described previously, which will be conducted using pooled data, the analysis will also be conducted using the fixed effects ordered logit (feologit) analysis. The feologit analysis will serve as a robustness analysis compared to the pooled estimation. Fixed effects estimation is used as random effects logit models assume that the error term is not correlated with the independent variables which is difficult to assume for causal-effects models (Baestschman et al., 2020). Alongside relaxing this assumption, fixed effects estimation controls for the unobserved time invariant heterogeneity, meaning that it will control for all the unobserved factors that affect SWB, such as personality and background (Pforr, 2015). In examining the relationship between SWB and marital status across the life course in SA, the unobserved heterogeneity could include personality, cultural factor and selection into marriage (DeMaris, 2022). Ignoring the unobserved heterogeneity can lead to biased and inconsistent estimates. Fixed effects estimation has also been shown to reduce omitted variable bias, thus leading to better and more accurate estimates (Pforr, 2015).

Due to the dependent variable for this study being measured in a way that makes it ordinal, the fixed effects ordered logit estimator developed by Baetschmann et al. (2020) is used. Prior to this method being developed, researchers would need to collapse the dependent variable into a binary variable, then proceed to apply the conditional maximum likelihood to get consistent estimators, which would then result in information lost on other levels of well-being that did not fall under the binary conditions (Crisman-Cox, 2021). The use of the feologit analysis then eliminates all these steps which is why it is used in the following analysis. These authors were able to achieve this using the BUC (Blow up and cluster) estimator. Researchers have shown the BUC estimator is effective and almost as efficient as other complex estimating methods (Baestschman et al., 2015). The estimations are conducted using the community-contributed Stata command, feologit (Baestchman et al., 2020).

The feologit model is advantageous over the other models of the logit models as it allows for the relaxation of the unobserved time-invariant heterogeneity usually observed in fixed effects (Cyrenne, 2022). Feologit analysis also allows for the relaxation of the proportional odds assumption, which makes for a more efficient and more straightforward method. In the following sections, the initial estimations will use data from the five waves of NIDS and utilise the pooled ordered logit estimation method. However, later in the section some results are produced using the feologit analysis. Using the feologit model in conjunction with the pooled ordered logit models is advantageous to offer more insight into what factors affect well-being

over time. Is it important to note that due to the nature of the fixed effects analysis, time invariant factors such as race cannot be included in such models.

4.2 Results

Table 4.1 shows the results from the pooled ordered logit regression analysis. Marital status and basic demographic controls (age, gender and race) are included in all models. For this table, the variables representing each channel were entered into the pooled model separately, before the final specification includes all channels. This method investigates whether the relationship between the variables in the basic model changes with the addition of each new group of variables, and if so, in what direction. This section provides a brief interpretation of each of the models. The results' economic meaning and alignment with the literature are discussed in more detail in Section 4.3.

The results from Table 4.1 suggest a positive and significant relationship between marriage and SWB. When compared to those who are married, those people who are 'living with a partner', 'widowed or widower', 'divorced' and 'never married' have a significantly lower level of well-being. For example, in the basic model, which controls only for other demographic factors, the log-odds of being in a higher SWB category for those who have never been married are 0.361 lower than those who are currently married. These results suggest that married individuals in South Africa are more likely to report higher levels of well-being when compared to any other marital status. Compared to those who are married, all the other marital statuses report lower statistically significant levels of SWB.

Table 4.1 Pooled ordered logit regression results for well-being by channel

VARIABLES	Basic Model	Financial wellbeing	Emotional wellbeing	Physical wellbeing	Final Model
Living with Partner	-0.410***	-0.196***	-0.331***	-0.383***	-0.144***
	(0.0493)	(0.0490)	(0.0489)	(0.0489)	(0.0492)
Widow/Widower	-0.326***	-0.191***	-0.217***	-0.304***	-0.103**
	(0.0486)	(0.0465)	(0.0469)	(0.0479)	(0.0459)
Divorced/Separated	-0.215***	-0.188***	-0.155**	-0.218***	-0.121**
	(0.0699)	(0.0622)	(0.0642)	(0.0692)	(0.0587)
Never Married	-0.361***	-0.250***	-0.268***	-0.345***	-0.165***
	(0.0336)	(0.0329)	(0.0327)	(0.0333)	(0.0326)
Age	-0.0241***	-0.0470***	-0.0160***	-0.0220***	-0.0339***
	(0.00346)	(0.00381)	(0.00336)	(0.00347)	(0.00377)
Age squared	0.000205***	0.000500***	0.000144***	0.000223***	0.000385***
	(3.86e-05)	(4.35e-05)	(3.74e-05)	(3.89e-05)	(4.28e-05)
Female	-0.00858	0.0242	0.0185	0.0102	0.0414*
	(0.0228)	(0.0219)	(0.0227)	(0.0226)	(0.0223)
African	-1.352***	-0.755***	-1.171***	-1.320***	-0.671***
	(0.0545)	(0.0548)	(0.0525)	(0.0537)	(0.0545)
Coloured	-0.632***	-0.223***	-0.542***	-0.603***	-0.210***
	(0.0636)	(0.0618)	(0.0614)	(0.0630)	(0.0612)
Indian	-0.192	0.0538	-0.193*	-0.151	0.0227
	(0.118)	(0.113)	(0.104)	(0.115)	(0.101)
Asset Quintile 2		0.198***			0.157***
		(0.0346)			(0.0347)
Asset Quintile 3		0.356***			0.293***
		(0.0336)			(0.0338)
Asset Quintile 4		0.549***			0.481***
		(0.0351)			(0.0359)
Richest Asset Quintile		0.931***			0.832***
		(0.0391)			(0.0394)
Primary School		0.0353			-0.00124
		(0.0455)			(0.0448)
Incomplete Secondary		0.169***			0.0658
		(0.0470)			(0.0461)
Matric		0.258***			0.127**
		(0.0546)			(0.0534)
Tertiary		0.495***			0.318***
		(0.0574)			(0.0573)
Economically Inactive		-0.280***			-0.228***
		(0.0274)			(0.0273)
Unemployed		-0.329***			-0.271***
		(0.0318)			(0.0319)
No of Children			-0.0475***		-0.0280***
			(0.00558)		(0.00573)
Religious			0.520***		0.448***
			(0.0384)		(0.0379)
Depression			-0.0978***		-0.0884***
			(0.00256)		(0.00259)

VARIABLES	Basic Model	Financial wellbeing	Emotional wellbeing	Physical wellbeing	Final Model
Moderate health				-0.215***	-0.131***
				(0.0238)	(0.0242)
Poor health				-0.453***	-0.169***
				(0.0362)	(0.0364)
Urban					0.0375*
					(0.0224)
/cut1	-4.682***	-4.009***	-4.645***	-4.636***	-4.084***
	(0.0943)	(0.116)	(0.0987)	(0.0941)	(0.120)
/cut2	-3.867***	-3.177***	-3.805***	-3.820***	-3.230***
	(0.0927)	(0.115)	(0.0970)	(0.0926)	(0.119)
/cut3	-3.133***	-2.423***	-3.038***	-3.083***	-2.447***
	(0.0922)	(0.115)	(0.0962)	(0.0920)	(0.119)
/cut4	-2.468***	-1.733***	-2.339***	-2.415***	-1.729***
	(0.0919)	(0.115)	(0.0958)	(0.0916)	(0.118)
/cut5	-1.668***	-0.903***	-1.497***	-1.612***	-0.864***
	(0.0917)	(0.115)	(0.0957)	(0.0915)	(0.118)
/cut6	-1.106***	-0.319***	-0.911***	-1.047***	-0.261**
	(0.0914)	(0.114)	(0.0955)	(0.0912)	(0.118)
/cut7	-0.510***	0.294***	-0.292***	-0.449***	0.373***
	(0.0909)	(0.114)	(0.0947)	(0.0907)	(0.118)
/cut8	0.237***	1.055***	0.479***	0.300***	1.157***
	(0.0913)	(0.114)	(0.0950)	(0.0912)	(0.118)
/cut9	0.686***	1.507***	0.935***	0.750***	1.615***
	(0.0909)	(0.114)	(0.0943)	(0.0908)	(0.118)
Observations	71,914	71,056	70,616	71,837	69,645

Source: Own calculations from the National Income Dynamics Study (2008-2017).
Note: The estimates are weighted. Robust standard errors in parentheses. Each column represents a different channel that might explain the differences observed amongst different marital statuses. The asterisk indicates statistically significant variables where *** p<0.01, ** p<0.05, * p<0.1.

When variables that represent the channels are added into the model, the marital status coefficients decrease; however, they remain significant. The decrease in magnitude occurs because some of the relationships between marital status and SWB observed in the basic model can be attributed to differences in financial, emotional, and physical well-being between individuals in different marital status categories. Therefore, accounting for these characteristics by including the variables that make up each channel reduces the remaining association between marital status and SWB. The magnitude of the decrease seen as the channels are added varies according to the channel in question. Across most marital statuses, it is controlling for the financial channel that has the most effect on an individual's reported SWB. For example, the SWB disadvantage of living with a partner, compared to being married, declines by more than half, from -0.410 to -0.196, but remains statistically significant when controlling for

education, employment status, and household assets. This suggests that most but not all of the negative associations between not being married and SWB observed in the basic model can be explained by the more limited financial resources among those who are not married.

The physical and emotional channels also explain some of the negative associations but typically not to the same extent as the financial channel. However, it should be noted that the negative association between being divorced or separated and SWB is mostly explained by the emotional channel as compared to other channels in the model. Across all marital statuses after the financial channel, it is the emotional channel explains most of the negative associations seen in the basic model. In contrast, the physical channel is seen to have the least effect in terms of explaining these associations. Since different marital status coefficients are affected differently by the factors included in the channels, the non-married categories need to be discussed and estimated separately as done in this dissertation, rather than grouping them together. This disaggregation offers more insight as to the heterogeneity in how this relationship works.

In the final model specification, the variables from all channels are included. The marital status coefficients are typically one third to half of the magnitude compared to the basic model and smaller than in any model that controls only for an individual channel. Therefore the channels chosen explain a substantial portion of the differences in reported SWB amongst the different marital status categories. However, the marital status coefficients remain negative and statistically significant even in the full model specification. This suggests that further reasons for the relationship between marital status and SWB have not been accounted for in the models presented thus far.

The control variables included in the models in Table 4.1 indicate that SWB differs across a range of demographic and socioeconomic characteristics. In all specifications, SWB is U-shaped with age and there is a significant relationship between race and SWB, with White individuals being more likely to report higher levels SWB than individuals of other races. In the final model specification, gender has a significant with SWB, with women having significantly higher SWB when compared to men. In terms of financial factors, wealth, education and employment are positively and significantly associated with higher levels of SWB reported. In the emotional well-being channel, there is a negative association between living with children under 15 and well-being, which is statistically significant. Those who indicate that religious activities are important report significantly higher levels of SWB than

those who deem religion unimportant. There is also an association between undermined mental and physical health and lower levels of SWB being reported, with higher depression scores and poorer self-reported physical health and significantly lowering SWB. In terms of dwelling location, the results indicate a positive association between SWB and staying in an urban area compared to staying in the rural area.

The results displayed in Table 4.1 allow for an average difference in SWB between men and women, by including a gender dummy variable, but assume that marital status and all other factors have the same association with SWB for both genders. However, the literature reviewed in Chapter 2 showed widespread gender differences in the determinants of well-being (Williams and Umberson, 2004; Blauw and Pretorious, 2013) with the descriptive analysis in Chapter 3 also suggesting gender differences. Table 4.2 therefore disaggregates the final pooled ordered model from Table 4.1 by gender to examine if there would be gender differences in the results as seen in Chapter 3. In addition, the table also presents fixed effects ordered logit model estimates, by gender, which account for time invariant unobserved heterogeneity in the model.

In Table 4.2 the relationship between marital status and SWB differs by gender and by model type. In the pooled ordered logit model, living with a partner is usually associated with lower levels of well-being when compared to those who are married. However, the coefficients of this association are more significant among men than women. Being widowed significantly and negatively affects SWB for women. In the pooled model, when men are widowed, their SWB is negatively but not significantly affected, however this is not observed in the fixed effects model. In the pooled model, women are seen to be significantly negatively affected by divorce. In the women's fixed effects model, similarly to men's pooled model, divorce is negatively associated with SWB but not significantly. In the men's fixed effects model, it is seen that there is a positive but insignificant association between divorce and SWB. Being 'never married' significantly lowers women's SWB, a pattern that is also seen in the men's pooled model but not in the men's fixed effects model.

Table 4.2 Ordered logit regression results for well-being by gender and estimation method

	Male		Female	
VARIABLES	Pooled Wellbeing	Fixed effects Wellbeing	Pooled Wellbeing	Fixed effects Wellbeing
Living with Partner	-0.230***	0.0359	-0.0546	-0.0516
	(0.0740)	(0.137)	(0.0661)	(0.101)
Widow/Widower	0.00140	0.146	-0.133***	-0.0379
	(0.139)	(0.187)	(0.0488)	(0.0944)
Divorced/Separated	-0.0103	0.0134	-0.174***	-0.0963
	(0.113)	(0.202)	(0.0666)	(0.126)
Never Married	-0.113*	0.0833	-0.201***	-0.294***
	(0.0583)	(0.120)	(0.0388)	(0.0876)
Age	-0.0408***	-0.0496***	-0.0314***	-0.0395***
	(0.00672)	(0.0182)	(0.00459)	(0.0143)
Age square	0.000465***	0.000599***	0.000362***	0.000453***
	(8.02e-05)	(0.000226)	(5.03e-05)	(0.000159)
Asset Quintile 2	0.148***	0.142**	0.171***	0.171***
	(0.0555)	(0.0717)	(0.0433)	(0.0583)
Asset Quintile 3	0.242***	0.227***	0.343***	0.282***
	(0.0537)	(0.0801)	(0.0424)	(0.0639)
Asset Quintile 4	0.440***	0.324***	0.523***	0.343***
	(0.0573)	(0.0875)	(0.0449)	(0.0737)
Richest Asset Quintile	0.845***	0.507***	0.831***	0.497***
	(0.0622)	(0.1000)	(0.0496)	(0.0850)
Primary School	-0.1000	-0.0702	0.0525	0.132
	(0.0730)	(0.229)	(0.0565)	(0.246)
Incomplete Secondary	-0.0498	0.0566	0.146**	0.0185
	(0.0751)	(0.241)	(0.0580)	(0.266)
Matric	-0.0206	0.0141	0.236***	0.111
	(0.0851)	(0.259)	(0.0680)	(0.275)
Tertiary	0.211**	0.119	0.407***	0.190
	(0.0932)	(0.274)	(0.0724)	(0.283)
Economically Inactive	-0.314***	-0.314***	-0.176***	-0.194***
	(0.0458)	(0.0614)	(0.0339)	(0.0491)
Unemployed	-0.324***	-0.228***	-0.241***	-0.176***
	(0.0478)	(0.0657)	(0.0427)	(0.0561)
No of Children	-0.0370***	-0.0128	-0.0194***	-0.0160
	(0.00966)	(0.0177)	(0.00711)	(0.0141)
Religious	0.430***	0.411***	0.485***	0.469***
	(0.0471)	(0.0581)	(0.0636)	(0.0766)
Depression	-0.0889***	-0.0736***	-0.0884***	-0.0760***
	(0.00419)	(0.00543)	(0.00327)	(0.00395)
Moderate health	-0.170***	-0.135***	-0.0990***	-0.150***
	(0.0390)	(0.0482)	(0.0305)	(0.0375)
Poor health	-0.173***	-0.0393	-0.160***	-0.128**
	(0.0636)	(0.0794)	(0.0441)	(0.0551)
Urban	0.0549	0.195**	0.0210	0.107
	(0.0345)	(0.0870)	(0.0291)	(0.0854)

	Male		Female	
VARIABLES	Pooled Wellbeing	Fixed effects Wellbeing	Pooled Wellbeing	Fixed effects Wellbeing
African	-0.639***		-0.684***	
	(0.0885)		(0.0676)	
Coloured	-0.231**		-0.176**	
	(0.0983)		(0.0768)	
Indian	-0.0550		0.1000	
	(0.144)		(0.140)	
/cut1	-4.314***		-3.946***	
	(0.198)		(0.159)	
/cut2	-3.472***		-3.082***	
	(0.196)		(0.157)	
/cut3	-2.722***		-2.272***	
	(0.195)		(0.156)	
/cut4	-1.988***		-1.566***	
	(0.195)		(0.155)	
/cut5	-1.129***		-0.694***	
	(0.196)		(0.155)	
/cut6	-0.541***		-0.0778	
	(0.196)		(0.155)	
/cut7	0.0887		0.561***	
	(0.195)		(0.153)	
/cut8	0.906***		1.317***	
	(0.195)		(0.155)	
/cut9	1.365***		1.776***	
	(0.195)		(0.154)	
Observations	28,737		40,908	
Groups		7673		10253

Source: Own calculations from the National Income Dynamics Study (2007-2018).
Note: The estimates are weighted. Robust standard errors in parentheses. Each column represents a different methodology in order to observed if this relationship changes when a different method is used. The asterisk indicates statistically significant variables where *** p<0.01, ** p<0.05, * p<0.1.

Overall, while the pooled results in this table generally confirm that in South Africa those who are married report higher levels of SWB when compared to individuals belonging to other marital status categories, they show some subtle but important differences when the models are disaggregated by gender. In the pooled analysis, men's SWB is significantly lower when they have not been married, that is, among those who are cohabiting or never married. For women, SWB is lower both before and after marriage, among those who are widowed or divorced or never married, compared to the currently married.

The fixed effects results are suggestive that some of the negative association between marital status and SWB observed in the pooled model might be influenced by unobserved

heterogeneity. It can be seen that in the feologit models, many of the associations between marital status and SWB become insignificant. The literature finds there is positive selection into marriage, in which unobserved factors that predict being married also predict higher levels of SWB (DeMaris, 2022). Under such circumstances, removing unobserved heterogeneity through the fixed effects transformation would reduce the magnitude and significance of the marital status estimates., However, these results could also be due to that in South Africa individuals do not transition frequently across marital status categories, as observed in Chapter 3. Therefore, there is limited within-individual variation in marital status in the fixed effects model with which to estimate its association with SWB. However, marriage is usually associated with higher reported SWB levels as compared to alternative marital status categories, especially for women. Compared to Table 4.1, most of the variables within the different channels behave similarly, and therefore they are not discussed here for the sake of brevity.

The final aim of the research is to investigate how the relationship between marital status and SWB changes across the individual's life course for each gender, as the literature has suggested that this relationship varies with age (Williams and Umberson, 2004). The gender-pooled ordered logit regression analysis done was separately for the different birth cohorts in order to observe how relationship between SWB and marital status differs across the life course. In order to if there were differences within genders and across the birth cohort, logit regression analysis disaggregated gender and age were estimated. The results from these regressions showed significant gender differences in the marital status coefficients. In Tables 4.3 and 4.4, the first column displays the gender pooled versions of the results, reproduced from Table 4.2 for comparison purposes for understanding how the relationship between marital status and SWB changes when the age cohorts are taken into account. Although some associations between marital status and SWB are not statistically significant in the gender pooled column, when the results are disaggregated by age cohort then the association becomes significant.

Table 4.3 Ordered logit model for well-being for males by age cohort

VARIABLES	Pooled Model	Youngest cohort	Cohort 2	Cohort 3	Oldest cohort
Living with Partner	-0.230***	-0.0244	-0.190	-0.421***	0.204
	(0.0740)	(0.159)	(0.122)	(0.127)	(0.296)
Widow/Widower	0.00140	0.833***	-0.0620	-0.189	0.155
	(0.139)	(0.178)	(0.327)	(0.251)	(0.198)
Divorced/Separated	-0.0103	0.540	0.0681	-0.168	-0.236
	(0.113)	(0.634)	(0.216)	(0.157)	(0.284)
Never Married	-0.113*	0.0292	-0.0800	-0.277**	0.0242
	(0.0583)	(0.130)	(0.0946)	(0.118)	(0.209)
Age	-0.0408***	-0.124***	-0.207**	-0.197	-0.165
	(0.00672)	(0.0475)	(0.0928)	(0.131)	(0.169)
Age square	0.000465***	0.00196**	0.00294**	0.00204*	0.00112
	(8.02e-05)	(0.000997)	(0.00124)	(0.00124)	(0.00120)
African	-0.639***	-0.665***	-0.379**	-0.849***	-0.763***
	(0.0885)	(0.154)	(0.173)	(0.205)	(0.209)
Coloured	-0.231**	-0.291*	0.0468	-0.379	-0.192
	(0.0983)	(0.164)	(0.196)	(0.237)	(0.242)
Indian	-0.0550	-0.202	0.431*	-0.391	-0.185
	(0.144)	(0.228)	(0.261)	(0.367)	(0.310)
Asset Quintile 2	0.148***	0.160**	0.169	0.204	-0.102
	(0.0555)	(0.0744)	(0.123)	(0.129)	(0.231)
Asset Quintile 3	0.242***	0.245***	0.247**	0.201	0.248
	(0.0537)	(0.0693)	(0.120)	(0.144)	(0.202)
Asset Quintile 4	0.440***	0.552***	0.200	0.376***	0.429*
	(0.0573)	(0.0740)	(0.133)	(0.143)	(0.228)
Richest Asset Quintile	0.845***	0.913***	0.712***	0.777***	0.809***
	(0.0622)	(0.0788)	(0.146)	(0.164)	(0.233)
Primary School	-0.1000	-0.238	-0.256	0.110	-0.223*
	(0.0730)	(0.185)	(0.212)	(0.129)	(0.127)
Incomplete Secondary	-0.0498	-0.0895	-0.208	0.135	-0.170
	(0.0751)	(0.177)	(0.203)	(0.144)	(0.150)
Matric	-0.0206	-0.0715	-0.0660	0.199	0.0234
	(0.0851)	(0.182)	(0.217)	(0.193)	(0.279)
Tertiary	0.211**	0.214	0.145	0.513**	-0.214
	(0.0932)	(0.192)	(0.220)	(0.210)	(0.321)
Economically Inactive	-0.314***	-0.352***	-0.623***	-0.335***	-0.157
	(0.0458)	(0.0661)	(0.122)	(0.100)	(0.150)
Unemployed	-0.324***	-0.270***	-0.286***	-0.554***	-0.433
	(0.0478)	(0.0611)	(0.100)	(0.130)	(0.299)
No of Children	-0.0370***	-0.0223*	-0.0465*	-0.0769***	-0.0189
	(0.00966)	(0.0117)	(0.0248)	(0.0278)	(0.0259)
Religious	0.430***	0.471***	0.454***	0.295**	0.197
	(0.0471)	(0.0593)	(0.111)	(0.118)	(0.180)
Depression	-0.0889***	-0.0894***	-0.0759***	-0.0894***	-0.107***
	(0.00419)	(0.00605)	(0.00883)	(0.00971)	(0.0145)

VARIABLES	Pooled Model	Youngest cohort	Cohort 2	Cohort 3	Oldest cohort
Moderate health	-0.170***	-0.121**	-0.330***	-0.0904	-0.261*
	(0.0390)	(0.0579)	(0.0795)	(0.0835)	(0.144)
Poor health	-0.173***	-0.0493	-0.337**	-0.0529	-0.301*
	(0.0636)	(0.138)	(0.141)	(0.110)	(0.158)
Urban	0.0549	0.0821*	0.0792	-0.123	-0.00267
	(0.0345)	(0.0451)	(0.0749)	(0.0917)	(0.139)
/cut1	-4.314***	-5.242***	-6.832***	-8.521**	-10.30*
	(0.198)	(0.615)	(1.744)	(3.463)	(5.887)
/cut2	-3.472***	-4.361***	-6.039***	-7.673**	-9.536
	(0.196)	(0.613)	(1.740)	(3.461)	(5.891)
/cut3	-2.722***	-3.547***	-5.392***	-6.958**	-8.699
	(0.195)	(0.612)	(1.738)	(3.458)	(5.900)
/cut4	-1.988***	-2.842***	-4.598***	-6.183*	-7.987
	(0.195)	(0.613)	(1.736)	(3.459)	(5.894)
/cut5	-1.129***	-2.025***	-3.695**	-5.292	-7.027
	(0.196)	(0.611)	(1.739)	(3.465)	(5.882)
/cut6	-0.541***	-1.463**	-3.056*	-4.702	-6.399
	(0.196)	(0.612)	(1.735)	(3.462)	(5.888)
/cut7	0.0887	-0.823	-2.449	-4.032	-5.832
	(0.195)	(0.613)	(1.738)	(3.458)	(5.885)
/cut8	0.906***	-0.0933	-1.580	-3.092	-4.857
	(0.195)	(0.613)	(1.751)	(3.459)	(5.891)
/cut9	1.365***	0.338	-1.145	-2.557	-4.336
	(0.195)	(0.615)	(1.754)	(3.453)	(5.879)
Observations	28,737	14,239	5,822	5,147	2,923

Source: Own calculations from the National Income Dynamics Study (2008-2017).
Note: The estimates are weighted. Robust standard errors in parentheses. Each column represents a different age cohort in order to see if this relationship changes across the life course. The asterisk indicates statistically significant variables where *** p<0.01, ** p<0.05, * p<0.1.

From these results it can be seen that generally those men and women who are living with a partner report lower levels of SWB as compared with those who are married. However, it should be noted that this negative association is only statistically insignificant for the 3rd cohort for both women and men. Table 4.3 depicts that men's SWB is generally negatively affected by a loss of a spouse, except for the youngest cohort as widowed men report higher levels of SWB as compared to married men in the same cohort.

Unlike men, women are negatively affected by losing a spouse, however this association is only significant for the 2nd and 3rd cohort. In Table 4.3 it can also be seen that divorced men in the youngest two cohorts report higher SWB than those in the same cohort who are married, this is not observed among men in the oldest cohort, it should be noted though that the coefficients for these associations are statistically insignificant. Divorce is associated with

lower levels of SWB for women in the pooled sample compared to their married counterpart, however, this association is only statistically significant for the 2nd cohort. Table 4.1 and 4.2 showed that those who are 'never married' report lower levels of SWB compared to the married. In Tables 4.3 and 4.4, however, this is not observed across all cohorts, with the oldest cohort of women and men who are 'never married' reporting higher SWB than the married, although not significantly so.

Table 4.4 Ordered logit model for well-being for females by age cohort

VARIABLES	Pooled Model	Youngest	Cohort 2	Cohort 3	Oldest
Living with Partner	-0.0546	0.156	-0.127	-0.302**	-0.265
	(0.0661)	(0.117)	(0.111)	(0.151)	(0.317)
Widow/Widower	-0.133***	-0.101	-0.301**	-0.151**	0.0390
	(0.0488)	(0.279)	(0.125)	(0.0698)	(0.0983)
Divorced/Separated	-0.174***	-0.168	-0.365***	-0.128	-0.0639
	(0.0666)	(0.251)	(0.111)	(0.116)	(0.153)
Never Married	-0.201***	-0.167*	-0.325***	-0.137**	0.128
	(0.0388)	(0.0877)	(0.0636)	(0.0682)	(0.139)
Age	-0.0314***	-0.180***	-0.187**	-0.169**	0.0208
	(0.00459)	(0.0382)	(0.0734)	(0.0849)	(0.0684)
Age square	0.000362***	0.00316***	0.00247**	0.00175**	-0.000189
	(5.03e-05)	(0.000795)	(0.000977)	(0.000817)	(0.000466)
African	-0.684***	-0.869***	-0.470***	-0.732***	-0.961***
	(0.0676)	(0.141)	(0.126)	(0.108)	(0.184)
Coloured	-0.176**	-0.554***	0.120	-0.0229	-0.133
	(0.0768)	(0.158)	(0.133)	(0.142)	(0.202)
Indian	0.1000	-0.120	-0.0876	0.614**	-0.357
	(0.140)	(0.253)	(0.188)	(0.297)	(0.251)
Asset Quintile 2	0.171***	0.149**	0.130	0.129	0.425***
	(0.0433)	(0.0648)	(0.0916)	(0.0996)	(0.105)
Asset Quintile 3	0.343***	0.292***	0.303***	0.361***	0.528***
	(0.0424)	(0.0653)	(0.0911)	(0.0983)	(0.0954)
Asset Quintile 4	0.523***	0.430***	0.555***	0.451***	0.795***
	(0.0449)	(0.0713)	(0.0890)	(0.105)	(0.105)
Richest Asset Quintile	0.831***	0.740***	0.733***	0.887***	0.912***
	(0.0496)	(0.0783)	(0.105)	(0.107)	(0.124)
Primary School	0.0525	-0.274	-0.246*	0.0367	0.156*
	(0.0565)	(0.289)	(0.145)	(0.0889)	(0.0931)
Incomplete Secondary	0.146**	-0.102	-0.0771	0.154*	0.274**
	(0.0580)	(0.279)	(0.141)	(0.0928)	(0.120)
Matric	0.236***	-0.00180	0.220	0.0895	0.296
	(0.0680)	(0.281)	(0.153)	(0.135)	(0.281)
Tertiary	0.407***	0.230	0.220	0.516***	0.341
	(0.0724)	(0.286)	(0.160)	(0.140)	(0.259)
Economically Inactive	-0.176***	-0.203***	-0.249***	-0.285***	-0.0595
	(0.0339)	(0.0576)	(0.0640)	(0.0651)	(0.148)

VARIABLES	Pooled Model	Youngest	Cohort 2	Cohort 3	Oldest
Unemployed	-0.241***	-0.168***	-0.328***	-0.256**	-0.343
	(0.0427)	(0.0612)	(0.0798)	(0.100)	(0.329)
No of Children	-0.0194***	-0.0208**	-0.0182	0.0167	-0.0135
	(0.00711)	(0.0102)	(0.0165)	(0.0170)	(0.0185)
Religious	0.485***	0.371***	0.509***	0.719***	0.533***
	(0.0636)	(0.0902)	(0.133)	(0.151)	(0.174)
Depression	-0.0884***	-0.0857***	-0.0848***	-0.0867***	-0.0992***
	(0.00327)	(0.00525)	(0.00656)	(0.00668)	(0.00934)
Moderate health	-0.0990***	-0.111**	-0.104	-0.154**	-0.0776
	(0.0305)	(0.0466)	(0.0636)	(0.0666)	(0.0918)
Poor health	-0.160***	-0.0970	-0.0469	-0.299***	-0.142
	(0.0441)	(0.115)	(0.0901)	(0.0771)	(0.0908)
Urban	0.0210	0.0940**	0.00775	-0.0570	-0.0790
	(0.0291)	(0.0437)	(0.0594)	(0.0642)	(0.0961)
/cut1	-3.946***	-6.320***	-6.746***	-7.250***	-3.022
	(0.159)	(0.569)	(1.395)	(2.226)	(2.555)
/cut2	-3.082***	-5.415***	-5.998***	-6.369***	-2.049
	(0.157)	(0.568)	(1.394)	(2.222)	(2.557)
/cut3	-2.272***	-4.577***	-5.207***	-5.573**	-1.201
	(0.156)	(0.567)	(1.393)	(2.223)	(2.556)
/cut4	-1.566***	-3.895***	-4.478***	-4.839**	-0.477
	(0.155)	(0.566)	(1.392)	(2.223)	(2.553)
/cut5	-0.694***	-3.045***	-3.569**	-3.904*	0.326
	(0.155)	(0.567)	(1.394)	(2.222)	(2.558)
/cut6	-0.0778	-2.473***	-2.894**	-3.257	0.976
	(0.155)	(0.566)	(1.392)	(2.221)	(2.564)
/cut7	0.561***	-1.813***	-2.272	-2.606	1.609
	(0.153)	(0.564)	(1.392)	(2.220)	(2.564)
/cut8	1.317***	-1.122**	-1.509	-1.731	2.445
	(0.155)	(0.564)	(1.391)	(2.223)	(2.570)
/cut9	1.776***	-0.649	-1.060	-1.330	3.034
	(0.154)	(0.564)	(1.388)	(2.226)	(2.580)
Observations	40,908	16,116	9,091	8,995	6,110

Source: Own calculations from the National Income Dynamics Study (2008-2017).
Note: The estimates are weighted. Robust standard errors in parentheses. Each column represents a different age cohort in order to see if this relationship changes across the life course. The asterisk indicates statistically significant variables where *** p<0.01, ** p<0.05, * p<0.1.

Table 4.3 and 4.4 also add more nuances to some of the control variables. For men in the older two age cohorts, there is no significant relationship between wealth and SWB except for in the two highest asset quintiles. Table 4.4 reveals that for women higher wealth is associated with higher SWB, and that this association increases in magnitude and is observed more significantly across birth cohorts when compared to men. Besides this, changes to other control variables are mostly minor and will be discussed in more in Section 4.3 where relevant.

Finally, Table 4.5 displays the feologit regression analysis disaggregated by age cohort, to assess the relationship across the life course when controlling for unobserved heterogeneity. There is limited within-individual variation within each gender and age cohort group, and thus regressions are gender-pooled to maximize the sample size. As a result, these estimates should be primarily interpreted as differences across marital status groups, for example, married vs unmarried, rather than as within-person causal effects. To account for this, the gender-disaggregated feologit results by age cohort are displayed in appendix tables A4.1 and A4.2.

The results from this section reveal that the differences in the relationship between marital status and SWB across the life course are affected by some unobserved heterogeneity as outlined previously. When this unobserved heterogeneity is controlled for using fixed effects estimation, the most significant part of this relationship disappears. Only two marital status coefficients remain significant. Compared to those who are married, the never married have significantly lower SWB in the 3rd cohort and significantly higher SWB in the oldest cohort. For other cohorts and marital status categories, the results suggest that there is no definite relationship between marital status and SWB. These results are different than when the unobserved heterogeneity was not controlled for in Tables 4.3 and 4.4.

Table 4.5 Gender-pooled fixed effects ordered logit regression results, by age cohort

VARIABLES	Youngest cohort	Cohort 2	Cohort 3	Oldest cohort
Living with Partner	0.0557	0.0282	-0.224	0.00694
	(0.142)	(0.142)	(0.144)	(0.405)
Widow/Widower	-0.0342	0.0505	0.0247	0.185
	(0.461)	(0.203)	(0.140)	(0.152)
Divorced/Separated	-0.0595	0.0904	-0.111	-0.172
	(0.337)	(0.197)	(0.173)	(0.262)
Never Married	-0.191	0.00822	-0.363**	0.528**
	(0.121)	(0.126)	(0.154)	(0.233)
Age	-0.160***	-0.226***	-0.292***	-0.0683
	(0.0420)	(0.0691)	(0.0898)	(0.116)
Age square	0.00285***	0.00320***	0.00287***	0.000449
	(0.000861)	(0.000926)	(0.000872)	(0.000827)
Asset Quintile 2	0.119*	0.177*	0.178*	0.282**
	(0.0645)	(0.0992)	(0.104)	(0.135)
Asset Quintile 3	0.219***	0.333***	0.202*	0.422***
	(0.0697)	(0.110)	(0.116)	(0.146)
Asset Quintile 4	0.312***	0.377***	0.314**	0.447**
	(0.0790)	(0.121)	(0.133)	(0.175)
Richest Asset Quintile	0.481***	0.448***	0.542***	0.706***
	(0.0925)	(0.136)	(0.151)	(0.205)

VARIABLES	Youngest cohort	Cohort 2	Cohort 3	Oldest cohort
Primary School	0.132	-0.600	0.0638	0.474*
	(0.316)	(0.433)	(0.268)	(0.247)
Incomplete Secondary	0.302	-0.671	0.0815	0.240
	(0.312)	(0.455)	(0.362)	(0.375)
Matric	0.356	-0.454	0.392	0.708
	(0.319)	(0.475)	(0.476)	(0.829)
Tertiary	0.511	-0.521	0.566	-0.0759
	(0.326)	(0.475)	(0.461)	(0.745)
Economically Inactive	-0.233***	-0.357***	-0.266***	-0.140
	(0.0577)	(0.0822)	(0.0807)	(0.116)
Unemployed	-0.171***	-0.179**	-0.331***	0.0273
	(0.0591)	(0.0797)	(0.107)	(0.240)
No of Children	-0.0161	-0.0221	0.00565	-0.0468
	(0.0145)	(0.0256)	(0.0300)	(0.0305)
Religious	0.468***	0.410***	0.367***	0.458***
	(0.0644)	(0.0948)	(0.121)	(0.156)
Depression	-0.0722***	-0.0725***	-0.0729***	-0.0935***
	(0.00500)	(0.00646)	(0.00680)	(0.00892)
Moderate Health	-0.122***	-0.222***	-0.118*	-0.133
	(0.0464)	(0.0570)	(0.0648)	(0.0972)
Poor Health	-0.0153	-0.0281	-0.104	-0.196*
	(0.110)	(0.0893)	(0.0842)	(0.102)
Urban	0.210***	0.196	-0.0284	-0.294
	(0.0726)	(0.147)	(0.192)	(0.384)
Groups	8453	3695	3437	2284

Source: Own calculations from the National Income Dynamics Study (2008-2017).
Note: The estimates are weighted. Robust standard errors in parentheses. Each column represents a different age cohort in order to see if this relationship changes across the life course. This sample includes both women and men The asterisk indicates statistically significant variables where *** p<0.01, ** p<0.05, * p<0.1.

The changes in the findings suggest that the feologit analysis is an important method to use in order to understand this relationship and the contribution of unobserved factors.The use of fixed effects analysis also changes the direction of this relationship for some cohorts, although this might be due to the fact that for this section, the regression analyses were gender pooled due to sample size limitations.

Using the feologit analyses has little effect on the coefficient of the control variables. This indicates that the chosen control variables robustly and significantly predict SWB in South Africa. The direction and magnitude of most of these variables' coefficient were as expected from the literature regarding their relationship with SWB.

4.3 Discussion

4.3.1 Marital status discussion

The results observed in some of the specifications contradict those of Hinks and Gruen (2007), who, when using yearly cross-sectional models, unlike this dissertation, which uses panel models, found no significant relationship between marriage and well-being in South Africa. In South Africa, the pattern of married individuals reporting higher levels of SWB compared to other groups is still prevalent. However, this is not always the case. As the analysis of the chapter unfolded, the relationship was estimated within gender and age cohort groups and using different estimation methods. In doing so, the significance of many marital status categories relative to being married lessened, and some marital statuses were observed to have higher well-being than being married.

Table 4.5 unexpectedly reveals that, although insignificantly, those who are cohabiting tend to report higher levels of SWB compared to the married. In the appendix tables, which are the gender-disaggregated versions of Table 4.5, Table A4.1 shows that for most men, living with a partner has a positive association with SWB when compared to those who are married. Table A4.2 reveals that for women, cohabiting is only negatively associated with SWB for the youngest two birth cohorts when compared to the married. This might be explained by the fact that older couples who cohabit report having higher quality and more stable relationships when compared to cohabiting younger individuals (King and Scott, 2005). These positive associations observed between cohabitation and SWB might therefore be explained by the fact that cohabiting tends to offer couples benefits which are similar to those of marriage in the beginning, as it serves as a practical experience on how the couple are to conduct themselves within marriage (Rosenfeld and Roesler, 2019). King and Scott (2015) found that older couples view cohabiting as an alternative to marriage. However, these benefits can be short-lived, as Rosenfed and Roesler (2019) found an inverse relationship between premarital cohabitation and stable long-term marriages. The relationship between premarital cohabitation and marriage stability also depends on the couple and their cultural values (Willoughby et al., 2015)

Consistently throughout the results, there is a pattern of SWB being undermined by losing a partner. Women are observed to be consistently negatively affected by the loss of a spouse, which might be explained by the fact that widowhood affects individuals emotionally and mentally; however, for women, it has also been reported that it affects them financially too (Streeter, 2020). Widowhood affects women more negatively, perhaps because men tend to transition quickly into romantic relationships after the passing of a partner. Within 25 months

after the passing of a partner, it was found that 61% of widowed men were in new romantic relationships (Schneider, 1996). This could explain why widowhood does not always have the expected negative coefficients for men. Although this could be the explanation, it is difficult to draw a definite conclusion from these results, as it was seen in Chapter 3 that individuals do not usually transition much between marital statuses in South Africa.

Divorce has been shown to undermine people's emotional, mental and physical health (Damota, 2019). Table 4.1 shows that being divorced significantly lowers the overall well-being of most individuals. When the analysis is done separately by gender and analysis methods, it can be seen that divorce in South Africa tends to affect women more negatively than men. Table 4.2 depicts that for men, when the unobserved heterogeneity is controlled, divorced men report higher levels of SWB than married men, but this pattern is not observed for women. The positive association seen between divorce and higher levels of SWB that seems to exist especially amongst men could be explained by the fact that divorce can offer relief from marital issues (Kalmijn and Monden, 2006). This association is not uniform amongst women, as it has been shown that they are not affected equally or in the same direction by divorce, as family size and childlessness have been shown to bring about some differences (Winkle and Leopold, 2021). The results from this section also suggest that there might be gender disparities in the effects of divorce, with women being more significantly negatively impacted by it than men. This finding is consistent with women losing access to economic resources after divorce, since the dissertation shows that the financial channel is the most important in explaining the relationship between marital status and SWB in South Africa.

In most of the specifications, those who are unmarried report lower levels of SWB when compared to those who are married. It should be noted, though, that there are cases where the 'never married' individuals report higher levels of well-being when compared to their married counterparts. Although some of these coefficients are not statistically significant, they might be suggestive that those individuals who are 'never married' are self-sufficient (Neyland and Shadbolt, 1987). Those who are married in the oldest cohorts are also more likely to be transitioning into widowhood, which undermines SWB (Williams and Umberson, 2004). This could explain why the negative association between being 'never married' and SWB is only observed in the first three cohorts for women, but in the fourth cohort, they do not experience a loss of a spouse like their married counterparts. Table 4.4 shows that those women who are 'never married' report significantly lower levels of SWB across the first three cohorts when

compared to those who are married. This pattern is not explicitly observed for men, suggesting that women might benefit more from marriage when compared to men in South Africa.

In conclusion, there is no definite relationship between SWB and marital status in South Africa that is consistent across all subgroups and robust to all estimation approaches. Those who are unmarried at times report higher levels of SWB compared to those who are married, which was not expected. The direction of the relationship between these variables seems to be affected by factors such as age and gender, as other researchers have found, as well as culture and attitudes (Willoughby et al., 2015). When the unobserved heterogeneity was controlled for in the fixed effects analysis, the results started aligning more closely with the results found by Hinks and Gruen (2007), that there is no relationship between life satisfaction and marital status in South Africa. Therefore, the findings in this chapter help to explain why existing South African studies have produced contradictory results.

4.3.2 Channels discussions

4.3.2.1 Financial channel

Across all results, it can be seen that higher levels of wealth are associated with higher levels of SWB, which suggests that a higher socioeconomic status tends to be associated with a higher level of satisfaction for both women and men (Vera-Villarroel et al., 2012; Kim et al., 2012). For men, however, the only education group that shows a positive and significant association with SWB is the group that has a tertiary education. These unexpected results are also observed in Table 4.3 when the regressions are split across cohorts, in that education does not seem to be a significant predictor of well-being for men. A similar conclusion could be made for women, as in Table 4.4, when the regressions are split up according to cohorts, most of the coefficients are insignificant, but not to the extent shown in the results for men. These results suggest that education in South Africa does not necessarily predict social status or SWB. Khan and Javed (2016) alluded that education has a positive association with well-being when it comes to outcomes such as employment and social status. This suggests that education in South Africa might not meet individuals' expectations of its returns (Krisoffersen, 2018). However, the models control for employment status as an independent factor. Thus the results indicate that, after controlling for employment, education has an additional association with well-being only at the tertiary level.

The employment status of the head of the household is one of the determinants of well-being (Muzindutsi and Sekhu, 2014). Compared to the employed those who are not employed reported significantly lower levels of SWB. These results are observed throughout all the tables

in this chapter. These results, however, were expected to show more gender disparities as men are more negatively affected by being unemployed than women. This is said as employment plays a larger role in men's ability to be socially approved when compared to women (Meer, 2014).

4.3.2.2 The emotional channel

All tables in this chapter show that depression has a negative and significant association with well-being. These findings are similar to those of other researchers such as Amha et al. (2020). Tables 4.3 and 4.4 reveal that the depression coefficient is the largest for those in the oldest cohorts. This is expected as depression is more prevalent in old age (Snowdon, 2001). Another factor that has been shown to affect emotional well-being of individuals is the presence of children in the household. The number of children in the house is statistically significant, confirming other literature showing that children in the house affects well-being (McLanahan and Adams, 1987). Although the number of children in the house does not necessarily translate to parenthood, it can be used as a proxy for it and also as a proxy for more responsibility generally. Parenthood has been shown to negatively affect SWB, with the results suggesting that is true for most men and women. This might be explained by that it brings about more emotional, social and financial pressures (McLanahan and Adams, 1987). This is unexpected as the effects of parenthood have been shown to differ across genders with women who are economically inactive being the most negatively affected by it (Casale, 2015; Bennett and Waterhouse, 2018). In Table 4.5, the number of children under the age of 15 has a negative association with well-being, but these results, unlike those in Tables 4.3 and 4.4, are insignificant. Across all the results shown in this chapter being religious has a positive and significant relationship with well-being. This is suggestive the fact that those individuals who deem religion important generally report higher levels of well-being, which has been found by other researchers (Sharma and Singh, 2019).

4.3.2.3 The physical health channel

From Tables 4.3, 4.4 and 4.5, it can be seen that the association between health and SWB changes as individuals age. In Chapter 3, it was seen that as individuals age, their health tends to get poorer. This is suggestive that a deteriorating health undermines SWB (Cross et al., 2018). Alongside biological ageing, this might be explained by the fact that women and men transitioning into marriage tend to gain more weight over time compared to those whose marital status does not change (Rauschenbach et al., 1995). Weight gain is associated with the greater risks of physical diseases such as cancer, but it also affects the mental health of individuals

(Kawachi, 1999). As the cohorts age, it was seen in Chapter 3 that the likelihood of transitioning into marriage increased amongst both genders, which could mean that the likelihood of individuals gaining weight increases too. This, amongst other factors, might be one of the reasons why health decreases across cohorts as seen in Chapter 3.

4.4 Conclusion and limitations

This chapter estimated the relationship between the different marital statuses and SWB using a variety of econometric approaches, model specifications and sample disaggregation. These results suggest that the relationship between SWB and marital status varies between genders and over the individual's life course. The regression analysis methods utilised also affected the significance, magnitude and direction of this relationship.

However, regardless of the methods used and across all birth cohorts, the results for 'never married' women are negative and significant which indicates that being unmarried for women tends to undermine SWB. The results within the chapter indicate that even after controlling for how never being married may undermine women's physical, emotional and financial health, such women still have lower levels of perceived well-being. The ordered logit regressions on the pooled sample of five waves of NIDS indicated that fundamentally, there is a relationship between marital status and SWB in South Africa. These results are, however, not concurred by those from the fixed effects regression analysis. This makes it elusive to draw a definitive conclusion on whether there is a relationship between marital status and SWB. These results could also suggest that marital status matters in determining SWB but not when the unobserved heterogeneity is accounted for. This could suggest that it is not marriage that leads to an increase in SWB but rather the type of individuals who get married who also report higher levels of SWB. Researchers have found that married individuals tend to appear better off because the type of individuals who usually get married are healthier, wealthier, and more emotionally stable. This would suggest that it is not marriage that offers benefits but instead that those who are married tend to appear better off because those who are better off tend to choose marriage (Mastekaasa, 1992). This means that in studies about well-being, it is important to account for the pre-existing differences that individuals have to reach accurate conclusions, which this dissertation did by using fixed effects analysis.

From the results of the pooled regressions, those who are married tend to report higher levels of SWB than those who are unmarried. However, this does not necessarily mean that marriage benefits SWB is an empirically supported conclusion. In addition to the marriage selection

issue, there are other significant factors, such as 'marital quality', that this dissertation could not consider. Relationship or marital quality plays a role in how partners transition between the different marital statuses (Rhoades et al., 2011). Hawkins and Booth (2005) suggest that those in low-quality marriages are better off dissolving those unions, as their reported SWB tends not to differ from those who are divorced, whilst remaining unhappily married significantly undermines their life satisfaction.

Most of the international studies discussed in Chapter 2 concluded that there is a significant relationship between marital status and SWB. However, in this chapter, it is seen that this conclusion is only met for specific subsamples and specifications of regression approaches. This suggests that the assumptions underlying the different estimation approaches really matter. When studying this relationship, this chapter showed the importance of considering unobserved covariates, such as marital quality and selection effect into marriage. Despite the unanticipated results found, this chapter plays a vital role in showing how complex this relationship is, which motivates using more nuanced methods to study this relationship, which may go beyond the scope of a master's dissertation.

Chapter 5: Conclusion

Existing studies show marital status is a crucial determinant of SWB (Mahedea and Rawat, 2008; Botha and Booysen, 2012). However, marriage rates in South Africa are low by international standards, they continue to fall further (Maharaj and Shangase, 2020), calling into question whether marriage benefits SWB in the local social and economic context. Studies investigating the relationship between marital status and SWB in South Africa have produced contradictory findings and have failed to account for how the role of marital status may change over the life course, or for unobserved factors. Therefore, the objective of this dissertation was to study the relationship between marital status and SWB in South Africa across the life course, using panel data.

The first aim of this dissertation was to show how marital status differs across the life course and by gender in South Africa. This dissertation addresses this in Chapter 3 by using NIDS data to present descriptive statistics for women and men according to the different age cohorts. The results in Chapter 3 show age and gender disparities, where a larger proportion of women are widowed as compared to men in each cohort. Individuals in South Africa are getting married later in life, with the likelihood of marriage increasing across age cohorts, with the youngest cohort having the lowest marriage rates. This might be due to individuals, especially African women, choosing to transition into marriage later than previous generations (Maharaj and Shangase, 2020).

The second aim of this dissertation was to analyse the channels through which marital status influence SWB in South Africa, which is addressed in Chapter 4. The results in Chapter 4 suggest that a higher socioeconomic status is correlated with higher levels of SWB, which might explain why married individuals might report higher levels of SWB. Literature states that married individuals have higher incomes than their single counterparts (Pollmann-Schult, 2011). In Chapter 2, the literature suggests that married individuals are healthier, but this benefit may weaken across birth cohorts, as seen in the latter chapters. As individuals transition into marriage, their physical health tends to deteriorate, which undermines SWB. However, this can also be because individuals transition into marriage when they are older. As individuals age, they tend to get unhealthier, which might explain this pattern. Within the emotional channel, there was also evidence of gender disparities. Even when all channels were controlled for, significant differences in SWB remained on the basis of marital status, suggesting that there

are further reasons for the relationship that had not been accounted for in the models presented thus far.

The third aim of this dissertation was to estimate the relationship between marital status and SWB by gender, which is an aim that is addressed in Chapter 4. The results show that there are gender disparities in the effects of marital status on SWB. For example, cohabiting benefits men's SWB more when compared to cohabiting women. There are also gender disparities in the effects of divorce, with women's SWB being undermined by it more than men's. Unmarried men's SWB tends to be lower than that of men from other marital statuses. This does not necessarily mean that men benefit more from transitioning into marriage. Pretorius et al. (2021) add more nuance to these results by suggesting that marriage anticipation leads to happier individuals. Men's anticipation for marriage lingers more than that of women, which might explain some of the gender disparities seen in the effects of marital status on SWB (Pretorious et al, 2021).

Lastly, the final aim of this dissertation was to investigate how the relationship between marital status and SWB changes across the individual's life course for each gender. This aim was addressed in Chapter 4 by disaggregating the estimation across age cohort groups. The results suggest that the relationship between marital status and SWB in South Africa is not constant across the life course. For example, in the younger cohorts, married individuals report higher levels of SWB than their unmarried counterparts. In contrast, in older cohorts, individuals who are 'never married' report higher levels of SWB than those who are married in the same cohort, indicating a pattern reversal. Additionally, findings from this part of the chapter show that being unmarried undermines women's SWB more than men's, suggesting a gendered dimension to the effects of marital status on SWB.

The contribution to knowledge of this research is that marital status is related to the SWB levels that individuals report in varying ways throughout their lifetime in South Africa. In the South African context, it is those individuals who are married who typically report higher levels of SWB than individuals belonging to other categories. The channels used in this dissertation offer explanations for how marital status can account for differences observed in SWB, with the results indicating that the financial channel plays a significant role in the South African context. However, this does not necessarily mean that marriage itself makes individuals well-off, but rather that the environment it provides contributes to a higher SWB. It must be noted, though,

that this heavily depends on marital or relationship quality, which this dissertation could not control due to limited data. This is one of the limitations of this dissertation.

A further contribution of this dissertation was to investigate whether the relationship between marital status and SWB is consistent when different analysis methodologies are utilised. This is done as the previous studies in South Africa that studied this relationship had contradicting conclusions and used different methodological approaches. Chapter 3 found that on average, married individuals tend to report higher levels SWB. However, in Chapter 4, although the same conclusions as in Chapter 3 could be made when using the pooled model analysis, they could not be made as definitively. When the analysis was disaggregated by gender and birth cohorts, it was evident that the relationship between marital status and SWB varies across these groups. The second part of Chapter 4 revealed that when the unobserved heterogeneity was controlled for, being married was no longer a consistent predictor of higher SWB. This section also revealed that most marital statuses have no significant association with SWB, except for the 'never married' category for women, which was negatively associated with SWB. These findings show the complexity of studying marital status effects and indicate that when studying such relationships, it is important to be cautious of the group dynamics being considered. The research, therefore, helps to explain why previous South African studies produced contradictory results. However, the findings must also be treated with some caution as the fixed effects estimates are founded on changes over time in marital status. Chapter 3 revealed that marital transitions are somewhat limited within the duration of the NIDS panel and that there is some measurement error in marital status. Therefore, the results may come from some attenuation.

A key limitation of this study is that it explores the relationship between marital status and SWB without taking into account marital or relationship quality. Previous studies have shown that marital quality is essential in determining physical and psychological well-being (Holt-Lunstad et al., 2008; Sayehmiri et al., 2020). Unfortunately, this dissertation could not capture the emotional and health-related nuances arising from low-quality relationships due to a lack of data on such aspects. It is then suggested that future researchers consider including marital quality metrics in their studies to understand this relationship better. Future researchers are also encouraged to structure their methodologies in a manner that considers the anticipation and adaptation effects of marriage.

Furthermore, future researchers are encouraged to use data and methodologies that track changes within individuals over time. This would be valuable as it will lead to a stronger establishment of causal evidence beyond the group-level differences identified in this dissertation. This dissertation is limited in addressing these limitations due to factors such as data availability and also methodologies required, which go beyond the scope of a Master's dissertation.

From the results of this study and previous literature, it is clear that marriage has properties conducive to social connections and well-being, especially when it is of good quality. This means that ideas can be borrowed from good-quality marriages to enable all individuals to have good-quality social connections even outside of marriage. This could mean more emphasis is placed on catering to people's social needs throughout society, especially those of single women. This would require coordinated action by the government, firms, and individuals to cater to these needs. Social needs are challenging to fulfil, but not impossible. High-quality interactions are important in supporting social cohesion, so researchers must deepen the understanding of the relationship between marital status and SWB across various groups. This dissertation found that the financial channel is the primary way marriage influences SWB. Burstein (2007) suggested that marriage reduces incidences of poverty; this means that the decrease in marriage rates might have dire economic consequences for South Africans. Based on the findings from this dissertation, policymakers are encouraged to develop more accessible policies that strengthen financial security outside of marriage. An example of such a policy could be the introduction of a comprehensive unemployment insurance, which would help mitigate financial risks associated with unemployment. Policies that strengthen financial security will benefit those who are never married and those who are married. Although financial security will not automatically lead to individuals' SWB increasing, research suggests that across multiple countries, higher financial security is associated with lower levels of depression and anxiety (Wollburg et al., 2023).

This dissertation showed the complexity of this relationship. The benefits of marriage are not universal across individuals of different ages and genders. The relationship between marital status and well-being differs across groups and with different estimation methods. Although the research explored several of these angles, multiple areas remain worthy of future research. Researchers could investigate if the relationship between marital status and SWB is the same for individuals in same-sex relationships, as social norms continue to evolve. Although studying same-sex relationships would offer insights, the data source used for this study does

not have enough data to serve as conclusive evidence. Another approach that could clarify how this relationship works is to follow international studies that have started including more categories under marital status, such as dating, and to measure relationship quality, to improve understanding of such relationships within the South African context. The insights from this dissertation are important in guiding researchers and policymakers in making more inclusive and supportive structures for SWB in South Africa, which could then positively impact the country's economic health.

References

Abreu-Afonso, J., Ramos, M.M., Queiroz-Garcia, I. and Leal, I., 2022. How couple's relationship lasts over time? A model for marital satisfaction. *Psychological reports*, *125*(3), pp.1601-1627.

Allison, P.D., 1994. Using panel data to estimate the effects of events. *Sociological Methods & Research*, *23*(2), pp.174-199.

Amato, P.R., 2005. The impact of family formation change on the cognitive, social, and emotional well-being of the next generation. *The future of children*, pp.75-96.

Amha, H., Fente, W., Sintayehu, M., Tesfaye, B. and Yitayih, M., 2020. Depression and associated factors among old age population in Dega damot district, North West Ethiopia. A cross-sectional study. *Journal of Affective Disorders Reports*, *2*, p.100034.

Anantanasuwong, D., Pengpid, S. and Peltzer, K., 2024. Time-varying lifestyle and mental-ill health risk factors for the longitudinal development of daily activity limitations among middle-aged and older adults in Thailand. *Translational Medicine of Aging*, *8*, pp.20-24.

Baetschmann, G. Ballantyne, A.Staub, K. Winkelmann, R. 2020. 'Feologit: A new command for fitting fixed effects ordered logit models. *The Stata Journal.* 20. pp253-275

Barton, S., Zovko, A., Müller, C., Krabichler, Q., Schulze, J., Wagner, S., Grinevich, V., Shamay-Tsoory, S. and Hurlemann, R., 2024. A translational neuroscience perspective on loneliness: Narrative review focusing on social interaction, illness and oxytocin. *Neuroscience & Biobehavioral Reviews*, p.105734.

Batigun, D., 2005. Suicide probability: a study on reasons for living, hopelessness and loneliness. *Turk Psikiyatri Derg*, *16*(1), pp.113-23.

Bennett, R. and Waterhouse, P., 2018. Work and family transitions and the self-rated health of young women in South Africa. *Social Science & Medicine*, *203*, pp.9-18.

Blaauw, D. and Pretorius, A., 2013. The determinants of subjective well-being in South Africa-an exploratory enquiry. *Journal of Economic and Financial Sciences*, *6*(1), pp.179-194.

Blanchflower, D.G., 2021. Is happiness U-shaped everywhere? Age and subjective well-being in 145 countries. *Journal of Population Economics*, *34*(2), pp.575-624.

Bookwala, J. and Fekete, E., 2009. The role of psychological resources in the affective well-being of never-married adults. *Journal of Social and Personal Relationships*, *26*(4), pp.411-428.

Botha, F. and Booysen, F., 2013. The relationship between marital status and life satisfaction among South African adults. *Acta Academica*, *45*(2), pp.150-178.

Branson, N. and Wittenberg, M., 2018. Longitudinal and cross-sectional weights in the NIDS data 1-5. *Cape Town: SALDRU.(NIDS Technical Paper 8)*, pp.2-21.

Brophy, T., Branson, N., Daniels, R.C., Leibbrandt, M., Mlatsheni, C., & Woolard, I., 2018. *National Income Dynamics Study panel user manual*. Release 2018. Version 1. Cape Town: Southern Africa Labour and Development Research Unit, pp.1-83.

Bulloch, A.G., Williams, J.V., Lavorato, D.H. and Patten, S.B., 2017. The depression and marital status relationship is modified by both age and gender. *Journal of affective disorders*, *223*, pp.65-68.

Burbridge, L., 1999. Cross-sectional, longitudinal, and time-series data: Uses and limitations. *Handbook of research methods in public administration*, pp.283-300.

Burstein, N.R., 2007. Economic influences on marriage and divorce. *Journal of Policy Analysis and Management*, *26*(2), pp.387-429.

Cacioppo, J.T. and Patrick, W., 2008. *Loneliness: Human nature and the need for social connection*. WW Norton & Company.

Cao, Y., Krause, J.S., Saunders, L.L. and Clark, J.M., 2015. Impact of marital status on 20-year subjective well-being trajectories. *Topics in spinal cord injury rehabilitation*, *21*(3), pp.208-217.

Carayanni, V., Stylianopoulou, C., Koulierakis, G., Babatsikou, F. and Koutis, C., 2012. Sex differences in depression among older adults: are older women more vulnerable than men in social risk factors? The case of open care centers for older people in Greece. *European Journal of Ageing*, *9*, pp.177-186.

Casale, D. and Posel, D., 2010. The male marital earnings premium in the context of bride wealth payments: Evidence from South Africa. *Economic Development and Cultural Change*, *58*(2), pp.211-230.

Casale, D., 2015. Differences in subjective well-being within households: an analysis of married and cohabiting couples in South Africa. *African Review of Economics and Finance*, *7*(1), pp.32-52.

Chipperfield, J.G. and Havens, B., 2001. Gender differences in the relationship between marital status transitions and life satisfaction in later life. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *56*(3), pp.P176-P186.

Copur, Z. and Eker, I., 2014. The relationship between financial issues and marital relationship. *International Journal of Arts & Sciences*, *7*(5), p.683.

Craig, A., Rochat, T., Naicker, S.N., Mapanga, W., Mtintsilana, A., Dlamini, S.N., Ware, L.J., Du Toit, J., Draper, C.E., Richter, L. and Norris, S.A., 2022. The prevalence of probable depression and probable anxiety, and associations with adverse childhood experiences and socio-demographics: A national survey in South Africa. *Frontiers in Public Health*, *10*, p.986531.

Crisman-Cox, C., 2021. Estimating substantive effects in binary outcome panel models: a comparison. *The Journal of Politics*, *83*(2), pp.532-546.

Cross, M.P., Hofschneider, L., Grimm, M. and Pressman, S.D., 2018. Subjective well-being and physical health. *Handbook of well-being*, pp.472-489.

Cyrenne, P. and Chan, A., 2022. The Determinants of Student Success in University: A Generalized Ordered Logit Approach. *Canadian Journal of Higher Education*, *52*(1), pp.83-107.

Damota, M.D., 2019. The effect of divorce on families' life. *Journal of Culture, Society and Development*, *48*, pp.25-31.

DeHaan, E., 2021. Using and interpreting fixed effects models. *Available at SSRN 3699777*, pp.1-39.

DeMaris, A. and Oates, G., 2022. The trajectory of subjective well-being: A partial explanation of the marriage advantage. *Journal of Family Issues*, *43*(6), pp.1650-1668.

DHE,2021. 'Factsheet on gender for students in pset institutions'. Available at https://www.dhet.gov.za/Planning%20Monitoring%20and%20Evaluation%20Coordination/FACTSHEET%20ON%20GENDER%20FOR%20STUDENTS%20IN%20PSET%20INSTITUTIONS,2021%20(1).pdf [Accessed 20 May 2025]

Diener, E., 1984. Subjective well-being. *Psychological bulletin*, *95*(3), p.542.

Diener, E., 2000. Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist*, *55*(1), p.34.

Diener, E., Gohm, C.L., Suh, E. and Oishi, S., 2000. Similarity of the relations between marital status and subjective well-being across cultures. *Journal of cross-cultural psychology*, *31*(4), pp.419-436.

Diener, E., Oishi, S. and Tay, L., 2018. Advances in subjective well-being research. *Nature human behaviour*, *2*(4), pp.253-260.

Dippenaar, S. 2012. 'Death and marital regime'. Sourced Online. Available from https://divorceattorneycapetown.co.za/death-marital-regime-south-africa/ Accessed 15 December 2023

Dupre, M.E., 2016. Race, marital history, and risks for stroke in US older adults. *Social Forces*, *95*(1), pp.439-468.

Dykstra, P.A. and Fokkema, T., 2007. Social and emotional loneliness among divorced and married men and women: Comparing the deficit and cognitive perspectives. *Basic and applied social psychology*, *29*(1), pp.1-12.

Ebrahim, A., Botha, F. and Snowball, J., 2013. Determinants of life satisfaction among race groups in South Africa. *Development Southern Africa*, *30*(2), pp.168-185.

Erkan, A.R.I. and Yildiz, Z., 2014. Parallel lines assumption in ordinal logistic regression and analysis approaches. *International Interdisciplinary Journal of Scientific Research*, *1*(3), pp.8-23.

Esteve, A., Schwartz, C.R., Van Bavel, J., Permanyer, I., Klesment, M. and Garcia, J., 2016. The end of hypergamy: Global trends and implications. *Population and development review*, *42*(4), p.615.

Feldhaus, M. and Preetz, R., 2021. Analysing transitions in intimate relationships with panel data. *Comparative Population Studies*, *46*.

Fisher, B., Kirsten, F., Biyase, M. and Pretorius, M., 2022. Perceptions of Crime and Subjective Well-Being: Urban-Rural Differences in South Africa. *The Journal of Developing Areas*, *56*(3), pp.81-91.

Frijters, P. and Beatton, T., 2012. The mystery of the U-shaped relationship between happiness and age. *Journal of Economic Behavior & Organization*, *82*(2-3), pp.525-542.

Fry, J.M., Farrell, L. and Temple, J.B., 2023. Energy poverty and food insecurity: Is there an energy or food trade-off among low-income Australians?. *Energy Economics*, *123*, p.106731.

Galinha, I.C. and Pais-Ribeiro, J.L., 2012. Cognitive, affective and contextual predictors of subjective well-being. *International Journal of Wellbeing*, *2*(1), pp.35-50.

Gorman, E.H., 2000. Marriage and money: The effect of marital status on attitudes toward pay and finances. *Work and Occupations*, *27*(1), pp.64-88.

Greenstein, T.N., 2016. Gender, marital status and life satisfaction. Paper presented at the American Sociological Association annual meeting. Available at https://doi.org/10.31235/osf.io/ah5ty [Accessed 20 June 2025]

Grundström, J., Konttinen, H., Berg, N. and Kiviruusu, O., 2021. Associations between relationship status and mental well-being in different life phases from young to middle adulthood. *SSM-population health*, *14*, p.100774.

Gulášová, I., Breza, jr, J., Breza, J. and Görnerová, L., 2013. Communication with depressive patient. *Humanum. Międzynarodowe Studia Społeczno-Humanistyczne*, (2 (11), pp.77-89.

Habibov, N., Luo, R., Auchynnikava, A. and Fan, L., 2020. Height and life satisfaction: Evidence from 27 nations. *American Journal of Human Biology*, *32*(3), p.e23351.

Han, K.T., Kim, S.J., Song, H., Chun, S.Y., Kim, C.O., Kim, J.S. and Park, E.C., 2014. Associations between quality of life and marital status in cancer patients and survivors. *Asian Pacific Journal of Cancer Prevention*, *15*(13), pp.5287-5291.

Han, K.T., Park, E.C., Kim, J.H., Kim, S.J. and Park, S., 2014. Is marital status associated with quality of life?. *Health and quality of life outcomes*, *12*, pp.1-10.

Hawkins, D.N. and Booth, A., 2005. Unhappily ever after: Effects of long-term, low-quality marriages on well-being. *Social Forces*, *84*(1), pp.451-471.

Hinks, T. and Gruen, C., 2007. What is the structure of South African happiness equations? Evidence from quality of life surveys. *Social Indicators Research*, *82*, pp.311-336.

Holt-Lunstad, J., Birmingham, W. and Jones, B.Q., 2008. Is there something unique about marriage? The relative impact of marital status, relationship quality, and network social support on ambulatory blood pressure and mental health. *Annals of behavioral medicine*, *35*(2), pp.239-244.

Hunter, M., 2016. Is it enough to talk of marriage as a process? Legitimate co-habitation in Umlazi, South Africa. *Anthropology Southern Africa*, *39*(4), pp.281-296.

Huntington, C., Stanley, S.M., Doss, B.D. and Rhoades, G.K., 2022. Happy, healthy, and wedded? How the transition to marriage affects mental and physical health. *Journal of Family Psychology*, *36*(4), p.608.

Javed, S., Javed, S. and Khan, A., 2016. Effect of education on quality of life and wellbeing. *The International Journal of Indian Psychology*, *3*(3), pp.119-128.

Jennings, J.R., Muldoon, M.F., Allen, B., Ginty, A.T. and Gianaros, P.J., 2021. Cerebrovascular function in hypertension: Does high blood pressure make you old?. *Psychophysiology*, *58*(7), p.e13654.

Joel, S., Eastwick, P.W., Allison, C.J., Arriaga, X.B., Baker, Z.G., Bar-Kalifa, E., Bergeron, S., Birnbaum, G.E., Brock, R.L., Brumbaugh, C.C. and Carmichael, C.L., 2020. Machine learning uncovers the most robust self-report predictors of relationship quality across 43 longitudinal couples studies. *Proceedings of the National Academy of Sciences*, *117*(32), pp.19061-19071.

Kalmijn, M. and Monden, C.W., 2006. Are the negative effects of divorce on well-being dependent on marital quality?. *Journal of marriage and family*, *68*(5), pp.1197-1213.

Kamp Dush, C.M., 2013. Marital and cohabitation dissolution and parental depressive symptoms in fragile families. *Journal of marriage and family*, *75*(1), pp.91-109.

Kapelle, N. and Baxter, J., 2021. Marital dissolution and personal wealth: Examining gendered trends across the dissolution process. *Journal of Marriage and Family*, *83*(1), pp.243-259.

Kaufman, G. and Goldscheider, F., 2007. Do men “need” a spouse more than women?: Perceptions of the importance of marriage for men and women. *The Sociological Quarterly*, *48*(1), pp.29-46.

Kettlewell, N., Morris, R.W., Ho, N., Cobb-Clark, D.A., Cripps, S. and Glozier, N., 2020. The differential impact of major life events on cognitive and affective wellbeing. *SSM-population health*, *10*, p.100533.

Kim, H.K. and McKenry, P.C., 2002. The relationship between marriage and psychological well-being: A longitudinal analysis. *Journal of family Issues*, *23*(8), pp.885-911.

Kim, S., Sargent-Cox, K.A., French, D.J., Kendig, H.A.L. and Anstey, K.J., 2012. Cross-national insights into the relationship between wealth and wellbeing: a comparison between Australia, the United States of America and South Korea. *Ageing & Society*, *32*(1), pp.41-59.

Konstam, V., Karwin, S., Curran, T., Lyons, M. and Celen-Demirtas, S., 2016. Stigma and divorce: A relevant lens for emerging and young adult women?. *Journal of Divorce & Remarriage*, *57*(3), pp.173-194.

Korenman, S. and Neumark, D., 1991. Does marriage really make men more productive?. *Journal of Human resources*, pp.282-307.

Koyanagi, A., Stubbs, B., Smith, L., Gardner, B. and Vancampfort, D., 2017. Correlates of physical activity among community-dwelling adults aged 50 or over in six low-and middle-income countries. *PLoS One*, *12*(10), p.e0186992.

Kristoffersen, I., 2018. Great expectations: Education and subjective wellbeing. *Journal of Economic Psychology*, *66*, pp.64-78.

Lucas, R.E., Clark, A.E., Georgellis, Y. and Diener, E., 2003. Reexamining adaptation and the set point model of happiness: reactions to changes in marital status. *Journal of personality and social psychology*, *84*(3), p.527.

Mahadea, D. and Ramroop, S., 2015. Influences on happiness and subjective well-being of entrepreneurs and labour: Kwazulu-Natal case study. *South African Journal of Economic and Management Sciences*, *18*(2), pp.245-259.

Mahadea, D. and Rawat, T., 2008. Economic growth, income and happiness: An exploratory study. *South African Journal of Economics*, *76*(2), pp.276-290.

Maharaj, P. and Shangase, T., 2020. Reasons for delaying marriage: Attitudes of young, educated women in South Africa. *Journal of Comparative Family Studies*, *51*(1), pp.3-17.

Malone, K., Stewart, S.D., Wilson, J. and Korsching, P.F., 2010. Perceptions of financial well-being among American women in diverse families. *Journal of Family and Economic Issues*, *31*, pp.63-81.

Manning, W.D. and Lamb, K.A., 2003. Adolescent well-being in cohabiting, married, and single-parent families. *Journal of marriage and family*, *65*(4), pp.876-893.

Mastekaasa, A., 1992. Marriage and psychological well-being: Some evidence on selection into marriage. *Journal of Marriage and the Family*, pp.901-911.

Mata, J., Frank, R. and Hertwig, R., 2015. Higher body mass index, less exercise, but healthier eating in married adults: Nine representative surveys across Europe. *Social Science & Medicine*, *138*, pp.119-127.

Matthews, G.A. and Tye, K.M., 2019. Neural mechanisms of social homeostasis. *Annals of the New York Academy of Sciences*, *1457*(1), pp.5-25.

McDonald, P., 2020. The male marriage premium: selection, productivity, or employer preferences?. *Journal of Marriage and Family*, *82*(5), pp.1553-1570.

McLanahan, S. and Adams, J., 1987. Parenthood and psychological well-being. *Annual review of sociology*, *13*(1), pp.237-257.

Meiring, T., Kannemeyer, C. and Potgieter, E., 2018. The gap between rich and poor: South African society's biggest divide depends on where you think you fit in, pp.1-24.

Milovanska-Farrington, S. and Farrington, S., 2022. Happiness, domains of life satisfaction, perceptions, and valuation differences across genders. *Acta Psychologica*, *230*, p.103720.

Mkhize, N. and Msomi, R., 2016. African single mothers' experiences of work and career in South Africa. *Journal of Comparative Family Studies*, *47*(3), pp.323-342

Molden, D.C., Lucas, G.M., Finkel, E.J., Kumashiro, M. and Rusbult, C., 2009. Perceived support for promotion-focused and prevention-focused goals: Associations with well-being in unmarried and married couples. *Psychological Science*, *20*(7), pp.787-793.

Morton, D., van Rooyen, D., Venter, D. and Andersson, L., 2018. Social determinants of subjective well-being among young adults living in the Eastern Cape, South Africa. *Journal of Psychology in Africa*, *28*(4), pp.284-290.

Moss, E. and Willoughby, B.J., 2018. Associations between beliefs about marriage and life satisfaction: The moderating role of relationship status and gender. *Journal of Family Studies*, *24*(3), pp.274-290.

Moultrie, T.A. and Dorrington, R.E., 2024. Problems and concerns with the 2022 South African census. *South African Journal of Science*, *120*(7-8), pp.1-6.

Muzindutsi, P.F. and Sekhu, T.J., 2014. Determinants of wellbeing in a South African township. *International Journal of Social Sciences and Humanity Studies*, *6*(1), pp.47-57.

Næss, S., Blekesaune, M. and Jakobsson, N., 2015. Marital transitions and life satisfaction: Evidence from longitudinal data from Norway. *Acta Sociologica*, *58*(1), pp.63-78.

Nelson-Coffey, S. K. (2018). Married...with children: The science of well-being in marriage and family life. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. Salt Lake City, UT: DEF Publishers. DOI:nobascholar.com, pp.1-9.

Neyland, B. and Shadbolt, B., 1987. A Comparison of the Psychological Well-Being of Never-Married and Married Aged Living in Urban Australia. *Australian Journal on Ageing*, *6*(1), pp.24-29.

Nomaguchi, K.M. and Bianchi, S.M., 2004. Exercise time: Gender differences in the effects of marriage, parenthood, and employment. *Journal of Marriage and Family*, *66*(2), pp.413-430.

O'Rourke, H.M., Collins, L. and Sidani, S., 2018. Interventions to address social connectedness and loneliness for older adults: a scoping review. *BMC geriatrics*, *18*(1), pp.1-13.

Odimegwu, C., Ndagurwa, P., Singini, M.G. and Baruwa, O.J., 2018. Cohabitation in sub-Saharan Africa: A regional analysis. *Southern African Journal of Demography*, *18*(1), pp.111-170.

Palamuleni, M.E., 2010. Recent Marriage patterns in South Africa 1996-2007. *Bangladesh e-Journal of Sociology*, *7*(1), pp.47-65.

Pengpid, S., Peltzer, K. and Anantanasuwong, D., 2024. Marital status, marital transition and health behaviour and mental health outcomes among middle-aged and older adults in Thailand: A national longitudinal study. *Archives of Gerontology and Geriatrics*, *117*, p.105196.

Pforr, K., 2015. Multinomial logistic regression with fixed effects. *Stata. J.*, *14*(4), pp.847-862.

Pollmann-Schult, M., 2011. Marriage and earnings: Why do married men earn more than single men?. *European Sociological Review*, *27*(2), pp.147-163.

Posel, D. and Rudwick, S., 2013. Changing patterns of marriage and cohabitation in South Africa. *Acta Juridica*, *2013*(1), pp.169-180.

Posel, D., Casale, D. and Grapsa, E., 2016. Re-estimating gender differences in income in South Africa: The implications of equivalence scales. *Development Southern Africa*, *33*(4), pp.425-441.

Posel, D., Rudwick, S. and Casale, D., 2011. Is marriage a dying institution in South Africa? Exploring changes in marriage in the context of ilobolo payments. *Agenda*, *25*(1), pp.102-111.

Potarca, G. and Rossier, C., 2022. Are Women in Hypogamous Unions More Depressed? A Cross-National Comparison among the Highly Educated. *European Sociological Review*, *38*(1), pp.103-123.

Powell, W.A., 2021. *The Phenomenon of Cohabitation: The Young Adults' Perspective*. Northcentral University, pp.10-160.

Pretorius, M., Biyase, M.E. and Fisher, B., 2021. Anticipation and adaptation of subjective well-being to marriage in South Africa. *Journal of Economic and Financial Sciences*, *14*(1), p.9.

Rauschenbach, B., Sobal, J. and Frongillo Jr, E.A., 1995. The influence of change in marital status on weight change over one year. *Obesity research*, *3*(4), pp.319-327.

Rhoades, G.K., Kamp Dush, C.M., Atkins, D.C., Stanley, S.M. and Markman, H.J., 2011. Breaking up is hard to do: the impact of unmarried relationship dissolution on mental health and life satisfaction. *Journal of family psychology*, *25*(3), p.366.

Robards, J., Evandrou, M., Falkingham, J. and Vlachantoni, A., 2012. Marital status, health and mortality. *Maturitas*, *73*(4), pp.295-299.

Robinson, G.R., 2019. *Heterosexual Life Partners and their Right to Inherit Intestate* (Master's thesis, University of Pretoria (South Africa), pp.3-74.

Rosenfeld, M.J. and Roesler, K., 2019. Cohabitation experience and cohabitation's association with marital dissolution. *Journal of Marriage and Family*, *81*(1), pp.42-58.

Roškar, S., Podlesek, A., Kuzmanić, M., Demšar, L.O., Zaletel, M. and Marušič, A., 2011. Suicide risk and its relationship to change in marital status. *Crisis*.

Saint-Paul, G., 2015. Genes, legitimacy and hypergamy: another look at the economics of marriage. *Journal of Demographic Economics*, *81*(4), pp.331-377.

Sayehmiri, K., Kareem, K.I., Abdi, K., Dalvand, S. and Gheshlagh, R.G., 2020. The relationship between personality traits and marital satisfaction: a systematic review and meta-analysis. *BMC psychology*, *8*(1), pp.1-8.

Schlomer, G.L., Del Giudice, M. and Ellis, B.J., 2011. Parent–offspring conflict theory: An evolutionary framework for understanding conflict within human families. *Psychological review*, *118*(3), p.496.

Schneider, D.S., Sledge, P.A., Shuchter, S.R. and Zisook, S., 1996. Dating and remarriage over the first two years of widowhood. *Annals of clinical psychiatry*, *8*(2), pp.51-57.

Scott, K.M., Wells, J.E., Angermeyer, M., Brugha, T.S., Bromet, E., Demyttenaere, K., de Girolamo, G., Gureje, O., Haro, J.M., Jin, R. and Karam, A.N., 2010. Gender and the relationship between marital status and first onset of mood, anxiety and substance use disorders. *Psychological medicine*, *40*(9), pp.1495-1505.

Shapiro, A. and Keyes, C.L.M., 2008. Marital status and social well-being: Are the married always better off?. *Social Indicators Research*, *88*, pp.329-346.

Sharmaa, N. and Singh, R.K., 2021. Workplace spirituality and organizational effectiveness: exploration of relationship and moderators. *Journal of Management, Spirituality & Religion*, *18*(1), pp.15-34.

Singh, T.L. and Naidoo, L.D., 2017. Assessing gender inequality in South Africa: A case study of women in sports management. *Journal of Research in Business, Economics and Management*, *8*(2), pp.1407-1428.

Slatcher, R.B., 2010. Marital functioning and physical health: Implications for social and personality psychology. *Social and Personality Psychology Compass*, *4*(7), pp.455-469.

Smith-Greenaway, E., 2016. Premarital childbearing in sub-Saharan Africa: Can investing in women's education offset disadvantages for children?. *SSM-Population Health*, *2*, pp.164-174.

Sobal, J., Rauschenbach, B. and Frongillo, E.A., 2003. Marital status changes and body weight changes: a US longitudinal analysis. *Social Science & Medicine*, *56*(7), pp.1543-1555.

Soulsby, L.K. and Bennett, K.M., 2015. Marriage and psychological wellbeing: The role of social support. *Psychology*, *6*(11), pp.1349-1359.

South Africa Labour and Development Research Unit, n.d. National Income Dynamics Study (NIDS). [Online] Available at: https://saldru.uct.ac.za/surveys/national-income-dynamics-study-nids [Accessed 20 September 2025].

Stats SA, 2024a. "The Rise of Late Marriages: A New Era of Commitment'. Statistics South Africa. Available at https://www.statssa.gov.za/?p=18313 [Accessed 16 June 2025]

Stats SA, 2024b. General Household Survey 2024 Statistical Release P0318. Statistics South Africa. Available at https://www.statssa.gov.za/publications/P0318/P03182024.pdf [Accessed 11 July 2025]

Stevenson, B. and Wolfers, J., 2008. *Economic growth and subjective well-being: Reassessing the Easterlin paradox* (No. w14282). National Bureau of Economic Research, pp.1-30.

Street, K. 2023. "Sustainable Development Goals. Country Report 2023". Statistics South Africa. Available at https://www.statssa.gov.za/MDG/SDG_Country_report.pdf Accessed 20 May 2025]

Streeter, J.L., 2020. Gender differences in widowhood in the short-run and long-run: Financial, emotional, and mental wellbeing. *The Journal of the Economics of Ageing*, *17*, p.100258.

Stutzer, A. and Frey, B.S., 2006. Does marriage make people happy, or do happy people get married?. *The Journal of Socio-Economics*, *35*(2), pp.326-347.

Tatangelo, G., McCabe, M., Campbell, S. and Szoeke, C., 2017. Gender, marital status and longevity. *Maturitas*, *100*, pp.64-69.

Tesch-Römer, C., Motel-Klingebiel, A. and Tomasik, M.J., 2008. Gender differences in subjective well-being: Comparing societies with respect to gender equality. *Social Indicators Research*, *85*, pp.329-349.

Thompson, L. and Walker, A.J., 1989. Gender in families: Women and men in marriage, work, and parenthood. *Journal of Marriage and the Family*, pp.845-871.

Troe, E.J.W., Kunst, A.E., Bos, V., Deerenberg, I.M., Joung, I.M. and Mackenbach, J.P., 2007. The effect of age at immigration and generational status of the mother on infant mortality in ethnic minority populations in The Netherlands. *The European Journal of Public Health*, *17*(2), pp.134-138

Umberson, D., 1992. Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and the Family*, pp.664-674.

Umberson, D., Chen, M.D., House, J.S., Hopkins, K. and Slaten, E., 1996. The effect of social relationships on psychological well-being: Are men and women really so different?. *American sociological review*, pp.837-857.

Van Tilburg, T.G. and Suanet, B., 2019. Unmarried older people: Are they socially better off today?. *The Journals of Gerontology: Series B*, *74*(8), pp.1463-1473.

Van Winkle, Z. and Leopold, T., 2021. Family size and economic wellbeing following divorce: The United States in comparative perspective. *Social Science Research*, *96*, p.102541.

Vera-Villarroel, P., Celis-Atenas, K., Pavez, P., Lillo, S., Bello, F., Díaz, N. and López, W., 2012. Money, age and happiness: association of subjective wellbeing with socio-demographic variables. *Artículos desde 2007 hasta 2013. Desde 2020 visítenos en http://revistalatinoamericanadepsicologia. konradlorenz. edu. co/*, *44*(2), pp.155-163.

Verbrugge, L.M., 1979. Marital status and health. *Journal of Marriage and the Family*, pp.267-285.

Vítečková, M., 2011. Choosing Unmarried Cohabitation as an Alternative to Marriage. University of South Bohemia, Pedagogic Faculty, České Budějovice, Czech Republic, p.45-57.

Waldinger, R. and Schulz, M., 2023. *The Good Life: Lessons from the World's Longest Scientific Study of Happiness*. Simon and Schuster, pp.1-50.

Waldron, I., Hughes, M.E. and Brooks, T.L., 1996. Marriage protection and marriage selection—prospective evidence for reciprocal effects of marital status and health. *Social science & medicine*, *43*(1), pp.113-123.

Ward, R.A., 1979. The never-married in later life. *Journal of Gerontology*, *34*(6), pp.861-869.

West, D.A., Kellner, R. and Moore-West, M., 1986. The effects of loneliness: a review of the literature. *Comprehensive psychiatry*, *27*(4), pp.351-363

Williams, K. and Umberson, D., 2004. Marital status, marital transitions, and health: A gendered life course perspective. *Journal of Health and Social behavior*, *45*(1), pp.81-98.

Williams, R., 2006. Generalized ordered logit/partial proportional odds models for ordinal dependent variables. *The stata journal*, *6*(1), pp.58-82.

Willoughby, B.J., Hall, S.S. and Luczak, H.P., 2015. Marital paradigms: A conceptual framework for marital attitudes, values, and beliefs. *Journal of Family Issues*, *36*(2), pp.188-211.

Zizzamia, R., Ranchhod, V. (2019). Measuring employment volatility in South Africa using NIDS: 2008–2017. SALDRU Working Paper Number 246 Version 1/ NIDS Discussion Paper 2019/13. Cape Town: SALDRU, UCT, pp.1-27.

Appendix

Appendix 1: Fixed effects ordered logit regression results for men

Table A4.1 Fixed effects ordered logit regression results for well-being by age cohort, for men

VARIABLES	Youngest wellbeing	Cohort 2 wellbeing	Cohort 3 wellbeing	Oldest wellbeing
Living with Partner	0.00350	0.158	-0.323	0.847**
	(0.241)	(0.219)	(0.238)	(0.402)
Widow/Widower	-20.17***	0.295	-0.0693	0.144
	(1.042)	(0.303)	(0.318)	(0.309)
Divorced/Separated	0.153	0.350	-0.213	-0.537
	(0.662)	(0.380)	(0.306)	(0.467)
Never Married	0.0215	0.294	-0.340	0.486
	(0.212)	(0.185)	(0.249)	(0.498)
Age	-0.115*	-0.293***	-0.299*	-0.511*
	(0.0683)	(0.110)	(0.154)	(0.272)
Age square	0.00187	0.00423***	0.00289*	0.00379*
	(0.00143)	(0.00150)	(0.00150)	(0.00199)
Asset Quintile 2	0.181*	0.117	0.152	-0.109
	(0.0932)	(0.161)	(0.165)	(0.267)
Asset Quintile 3	0.252**	0.314*	0.0222	0.157
	(0.101)	(0.178)	(0.212)	(0.279)
Asset Quintile 4	0.450***	0.155	0.221	0.184
	(0.110)	(0.196)	(0.210)	(0.341)
Richest Asset Quintile	0.625***	0.366*	0.299	0.580
	(0.131)	(0.214)	(0.245)	(0.370)
Primary School	-0.127	0.0463	0.0866	-0.639
	(0.516)	(0.406)	(0.365)	(0.425)
Incomplete Secondary	0.0700	-0.0153	0.449	-1.131**
	(0.518)	(0.488)	(0.480)	(0.575)
Matric	-0.0277	0.233	0.760	-0.522
	(0.528)	(0.548)	(0.693)	(1.080)
Tertiary	0.126	0.258	0.756	-1.361
	(0.538)	(0.571)	(0.617)	(1.005)
Economically Inactive	-0.361***	-0.446***	-0.291**	-0.0627
	(0.0863)	(0.157)	(0.130)	(0.166)
Unemployed	-0.282***	-0.0497	-0.353**	0.118
	(0.0868)	(0.133)	(0.171)	(0.374)
No of Children	-0.00427	-0.00393	-0.0630	-0.0556
	(0.0227)	(0.0393)	(0.0511)	(0.0577)
Religious	0.496***	0.407***	0.163	0.396*
	(0.0795)	(0.116)	(0.152)	(0.209)
Depression	-0.0722***	-0.0678***	-0.0774***	-0.0941***
	(0.00817)	(0.0109)	(0.0113)	(0.0169)
Moderate Health	-0.110	-0.242***	-0.110	-0.155
	(0.0717)	(0.0936)	(0.104)	(0.178)

VARIABLES	Youngest wellbeing	Cohort 2 wellbeing	Cohort 3 wellbeing	Oldest wellbeing
Poor Health	0.0147	-0.154	0.0927	-0.172
	(0.160)	(0.162)	(0.141)	(0.199)
Urban	0.203**	0.397*	0.00884	-0.0776
	(0.0996)	(0.213)	(0.319)	(0.433)
Groups	4049	1507	1318	768

Source: Own calculations from the National Income Dynamics Study (2008-2017).
Note: Each column represents a different age cohort in order to see if this relationship changes across the life course. The asterisk indicates statistically significant variables where *** p<0.01, ** p<0.05, * p<0.1.

Appendix 2: Fixed effects ordered logit regression results for women

Table A4.2 Fixed effects ordered logit regression results for well-being by age cohort, for women

VARIABLES	Youngest wellbeing	Cohort 2 wellbeing	Cohort3 wellbeing	Oldest wellbeing
Living with Partner	0.122	-0.0854	-0.142	-0.659
	(0.175)	(0.168)	(0.174)	(0.554)
Widow/Widower	-0.0745	-0.145	0.0209	0.174
	(0.464)	(0.249)	(0.150)	(0.172)
Divorced/Separated	-0.113	-0.0883	-0.0978	-0.000305
	(0.384)	(0.222)	(0.202)	(0.289)
Never Married	-0.317**	-0.319**	-0.418**	0.480**
	(0.148)	(0.160)	(0.192)	(0.236)
Age	-0.207***	-0.180**	-0.304***	0.0594
	(0.0521)	(0.0886)	(0.110)	(0.124)
Age square	0.00388***	0.00251**	0.00299***	-0.000517
	(0.00105)	(0.00117)	(0.00107)	(0.000859)
Asset Quintile 2	0.0717	0.242**	0.206	0.517***
	(0.0879)	(0.118)	(0.135)	(0.138)
Asset Quintile 3	0.197**	0.359***	0.343**	0.627***
	(0.0947)	(0.135)	(0.138)	(0.154)
Asset Quintile 4	0.195*	0.542***	0.400**	0.627***
	(0.111)	(0.146)	(0.170)	(0.180)
Richest Asset Quintile	0.354***	0.518***	0.737***	0.807***
	(0.129)	(0.172)	(0.189)	(0.229)
Primary School	0.367	-0.905	0.0752	0.872***
	(0.389)	(0.560)	(0.417)	(0.277)
Incomplete Secondary	0.458	-0.990*	-0.383	0.946*
	(0.371)	(0.567)	(0.528)	(0.496)
Matric	0.642*	-0.750	-0.0721	1.141
	(0.380)	(0.582)	(0.656)	(0.812)
Tertiary	0.807**	-0.947*	0.207	0.488
	(0.391)	(0.574)	(0.670)	(0.884)
Economically Inactive	-0.106	-0.352***	-0.243**	-0.148
	(0.0774)	(0.0956)	(0.102)	(0.162)

VARIABLES	Youngest wellbeing	Cohort 2 wellbeing	Cohort3 wellbeing	Oldest wellbeing
Unemployed	-0.0571	-0.245**	-0.307**	0.0635
	(0.0806)	(0.102)	(0.137)	(0.323)
No of Children	-0.0159	-0.0268	0.0363	-0.0385
	(0.0191)	(0.0332)	(0.0367)	(0.0357)
Religious	0.397***	0.447***	0.712***	0.530**
	(0.105)	(0.159)	(0.193)	(0.221)
Depression	-0.0727***	-0.0763***	-0.0699***	-0.0947***
	(0.00614)	(0.00793)	(0.00849)	(0.0103)
Moderate Health	-0.133**	-0.219***	-0.136*	-0.138
	(0.0587)	(0.0715)	(0.0807)	(0.106)
Poor Health	-0.0348	0.0439	-0.215**	-0.216**
	(0.146)	(0.107)	(0.103)	(0.105)
Urban	0.237**	-0.00901	-0.125	-1.219**
	(0.105)	(0.201)	(0.230)	(0.593)
Groups	4404	2188	2119	1516

Source: Own calculations from the National Income Dynamics Study (2008-2017).
Note: Each column represents a different age cohort in order to see if this relationship changes across the life course. The asterisk indicates statistically significant variables where *** p<0.01, ** p<0.05, * p<0.1.

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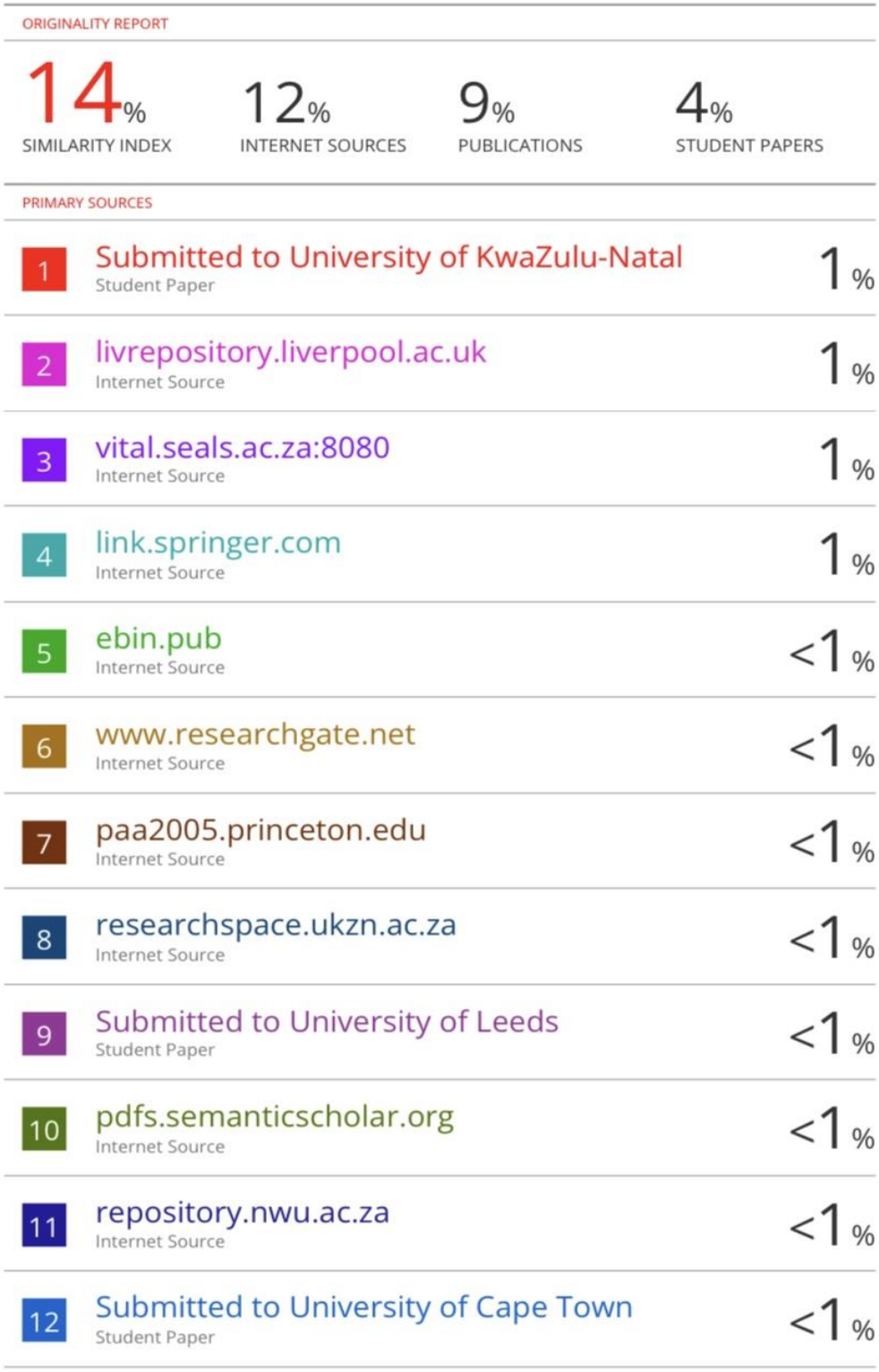

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Ethical Clearance

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

30-08-2024
Miss Samkelisiwe Mazibuko (217000528)
School Of Acc Economics&Fin
Westville

Dear Miss Samkelisiwe Mazibuko,

Original application number: 00017758
Project title: The relationship between marital status and wellbeing over the life course in South Africa

Exemption from Ethics Review

In response to your application received on 29 August 2024, your school has indicated that the protocol has been granted **EXEMPTION FROM ETHICS REVIEW.**

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

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

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

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

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

Yours sincerely,

[redacted]

Dr Christian Kakese Tipoy
Academic Leader Research
School Of Acc Economics&Fin