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# Exploring relationships of trust within and between race groups: evidence from South Africa

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**2021**
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# Exploring relationships of trust within and between race groups: Evidence from South Africa

A Research Report submitted in partial fulfilment of the Degree of Master of Commerce CCA01 (Applied Development Economics: ECON7052A) in the School of Economic and Business Sciences, University of the Witwatersrand

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25 March 2021

Words: 14170

*I would like to dedicate this dissertation to my beloved grandmother, Sara Bheekoo.*

## Acknowledgements

*I would like to express my sincere gratitude to my supervisor Professor Dorrit Posel for providing her invaluable guidance, comments, and suggestions throughout the course of this research paper. I would also like to thank my family and friends for their constant motivation and support throughout my academic studies.*

## Abstract

This study investigates intra-racial and inter-racial trust in South Africa, more specifically, if relationships of trust between groups and within groups differ by race. Using the 2017 wave 5 National Income Dynamics Study (NIDS), which asked respondents to rank their trust levels towards people of the same race or of a different race; this research compares the responses for these two questions to analyse whether adults in South Africa are more likely to trust same race members than members of a different race. Probit regression estimations were also employed to assess the influence of socio-economic, individual demographic, household, and neighbourhood characteristics on intra-racial and inter-racial trust. The results showed that 1) trust levels in South Africa are generally low, 2) people tend to report higher trust levels towards their same race members than towards other race members, and 3) there is considerable racial variation in intra-racial and inter-racial trust in South Africa. In particular, compared to Whites, other race groups in South Africa are less likely to report trust towards both same race members and members of a different race. Although race differences in trust reduce once other correlates of trust are controlled for, and particularly when relative economic status is added in the analysis, they remain persistent and significant among Africans and Coloureds.



*Keywords: Intra-racial trust, Inter-racial trust, Particularised trust, Correlates of trust, South Africa*

# Table of Contents

1. Introduction ..... 7
2. Research Questions ..... 9
3. Literature review ..... 10
3.1 Previous research on race and trust ..... 10
3.2 The South African context ..... 14
3.3 Possible explanations for the racial-trust relationship ..... 16
4. Methodology ..... 18
4.1 Discussion of variables ..... 20
4.2 Descriptive statistics ..... 21
5. Results ..... 32
6. Discussion ..... 39
7. Conclusion ..... 42
7.1 Limitations of the study ..... 44
8. Bibliography ..... 45

# List of Tables

Table 1: Relationship between trust in own group and trust in another group ..... 22
Table 2: Racial variations in trust within race groups ..... 23
Table 3: Racial variations in trust towards other race groups ..... 24
Table 4: Summary statistics for trust in own race and in another race, by race group ..... 25
Table 5: Gender variations in intra-racial trust, by race group ..... 26
Table 6: Gender variations in inter-racial trust, by race group ..... 27
Table 7: Means and standard errors of all independent variables ..... 30
Table 8: Ordered probit regressions for trust in same race members ..... 36
Table 9: Ordered probit regressions for trust in other race members ..... 37

# 1. Introduction

This research investigates relationships of trust within and between race groups in post-Apartheid South Africa, otherwise referred to as the intra-racial and inter-racial relationships of trust. The reported measures of trust collected in the 2017 National Income Dynamics Study (NIDS) are analysed by comparing the responses from two questions in the wave 5 adult questionnaire, which asked respondents to identify how much they trust someone from their own race group and how much they trust someone from a different race group. These questions were included in the NIDS instrument under the section on wellbeing and social cohesion.

The topic of social cohesion has gained widespread interest across policymakers, governments, and development institutions since the beginning of the 18th century (Burns et al. 2018). The South African government has also begun to focus on measures, interventions and policies aimed to increase social cohesion, which is important given the South African context of growing poverty, inequality, unemployment, and a racially divided society (Burns et al. 2018). There is general agreement that to build a better and more equitable economy, developing social cohesion is necessary as it contributes to both economic and social development and creates a sense of belonging, trust, and respect amongst all citizens (SALDRU, 2019). However, little progress has been made to measure the determinates and development of social cohesion, and this poses a serious challenge in formulating efficient policies aimed at improving social cohesion and assessing whether it is progressing or not. Social cohesion includes the willingness to extend trust to others, and it may also be embodied by the well-known South African principle of 'Ubuntu' (Burns et al. 2018).[1]

Research has shown positive relationships between high levels of social cohesion and socio-economic outcomes such as economic growth and productivity (Beauvais and Jenson, 2002; Easterly, Ritzan and Woolcock, 2006; Dheret, 2015) and a general good quality of life for all (Pervaiz et al. 2013). Dheret (2015) additionally finds that social cohesion contributes to more inclusivity and tolerance of diversity and multiculturalism as well as better conflict management

[1] Ubuntu is a concept that is shared by many African cultures, and it represents the core values of a general moral nature. According to Kamwangamalu (1999) Ubuntu refers broadly to collective shared-ness, solidarity, and the importance of community and altruism. In the African context Ubuntu exhibits parallels with social cohesion, particularly in relation to the idea of shared beliefs and values and a good disposition towards others (Makhudu, 1993; Kamwangamalu, 1999; Lefko-Everett, 2016).

and resolution in general. The Organisation for Economic Cooperation and Development (OECD) (2012: 52–53) defines social cohesion as:

> A cohesive society that works towards the well-being of all of its members, minimising disparities and avoiding marginalisation. It entails three major dimensions: fostering cohesion by building networks of relationships, trust, and identity between different groups; fighting discrimination, exclusion and excessive inequalities; and enabling upward social mobility.[2]

This research aims to contribute to the literature on social cohesion in South Africa, by specifically looking at one of the key elements within the social cohesion framework, that is, trust. Paxton (2004) explains that trust acts as an adhesive that holds a social system together, and it is necessary for social cooperation and social order (Parsons, 1937; Arrow, 1974). In addition, it is a source of economic efficiency (Coleman, 1988), and it is an important characteristic underlying social capital (Putnam, 1993; Paxton, 2004). Trust has been shown to lower transaction costs in industries and businesses (Coleman, 1990), it restricts immoral behavior and could remedy social dilemmas and promote goodwill and wellbeing (Rotter, 1980; Kollock, 1994). When we consider trust at the macro level, studies have shown a positive relationship to economic development (Fukuyama, 1995); that it strengthens democracies (Putnam, 1993; Uslander, 1999; Putnam 2000; Paxton, 2004) and promotes increased levels of trade and entrepreneurial activity (Guiso et al. 2006; Guiso et al. 2009); it decreases government corruption (La Porta et.al, 2008) and stimulates financial development (Guiso et al. 2004). Trust is at the core of almost every interaction, be it social, economic, or political. We are often faced with decisions that require us to assess another individual's trustworthiness in various settings. Understanding the determinants of trust and the characteristics that build or hinder trust relations is useful and important in economic discourse concerned with fostering social cohesion as well as promoting economic and social development. This study explores whether the willingness to trust, by race, differs between groups and within groups in South Africa.

[2] It is important to note that although social cohesion is expanding in theory, research, and policy, there is no single universal definition of the concept to date (OECD, 2012). Other international institutions besides The Organisation for Economic Cooperation and Development (OECD) that have attempted to define social cohesion and incorporate it into its global development goals are The United Nations Development Programme (UNDP) and The World Bank.

Trust research has been carried out predominantly in the United States (US) and the United Kingdom (UK) and relatively little research has been done on trust in South Africa. The international research and a few South African studies on trust have often used experimental game designs or general survey questions to explore trusting relations. This study analyses trust questions specific to race collected in the NIDS wave 5 survey, and it uses empirical methods to explore differences in trust within and between race groups (the intra-racial and inter-racial relationships of trust) in South Africa.

The use of microdata from the NIDS dataset allows for the analysis of nationally representative respondents and their reported willingness to trust members of their own race group and members of a different group, alongside a range of other variables which capture demographic characteristics and socio-economic status. The questions of interest have not been analysed before in trust research on South Africa. Section 2 specifies the main research questions of the study, Section 3 presents a literature review on previous studies on race and trust, Section 4 describes the methodology and data, Section 5 presents the results of the estimations, Section 6 provides a discussion, and Section 7 concludes by addressing limitations of the study and summarising the key findings.

## 2. Research Questions

This research investigates how the willingness to trust might change depending on whether the person to be trusted is a member of one's own race or a member of a different race. Additionally, the study assesses whether other social and economic factors mediate the willingness to trust others of the same or different race group.

In post-Apartheid South Africa, studies have found that Africans generally exhibited less trust compared to Whites (Burns, 2004; Ashraf et al. 2006; Burns, 2006; Burns, 2012). However, race differences in the willingness to trust have been found to fall considerably once socio-economic status is controlled for (Posel and Hinks 2012), although race differences in the willingness to trust remain significant (Smith, 1997; Robinson and Jackson, 2001; Alesina and La Ferrara, 2002). Gender differences have received relatively little attention in trust research, and especially not in studies of race and trust. This study also considers whether women and men differ in their intra- and inter-racial relationships of trust. This is important because women form part of a disadvantaged group with generally lower socio-economic status than their male counterparts. The

expectation is that African women would report the lowest levels of trust, especially towards members of a different racial group.

The main research question of this study is:

- Do relationships of trust within and between race groups differ by race?

Accompanying questions under consideration are:

- Are people in South Africa more likely to trust others of their own race group than of another race group?
- Do socio-economic factors mediate differences in trust relationships?
- Are there gender differences in inter and intra racial relationships of trust?

# 3. Literature review

## 3.1 Previous research on race and trust

Depending on the nature of the study, researchers have defined trust differently to reflect their sample composition, data, and method of analysis. Trust can be conceptualised in a general, strategic, or particularised framework. Generalised trust is the most used conception in trust research since surveys typically collect information on generalised trust. The traditional measure of generalised trust was first developed by Rosenberg (1956) as a 'most-people trust' survey question which asks: "Some people say that most people can be trusted. Others say you cannot be too careful in your dealings with people. How do you feel about it?" (Rosenberg, 1956: 690). Since its initial conceptualisation, the 'most-people trust' question has been used similarly in various surveys such as the General Social Survey (GSS), the World Values Survey (WVS), and the European Social Survey (ESS). For example, the standard trust question of the World Values Survey now asks: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?". It implies that in general, people will act according to an expectation that they have towards other people, or they act in a particular way when there is an incentive for them to potentially act differently (Rotter, 1980; Yamagishi and Yamagishi, 1994).

This conception of trust is widely viewed in a psychological and philosophical sense, where trust is seen as an individual property stemming from early childhood experiences (Erikson, 1964; King, 2002; Rotenberg, 1995; Weissman and LaRue 1998). Thus, the individual develops a general moral

understanding and a general expectation of trust towards other people (Uslaner, 2002). Studies have generally found that Africans exhibit the tendency to trust less than their White counterparts (Smith, 1997; Patterson, 1999; Putnam, 2000; Alesina and La Ferrara, 2002; Uslaner, 2002; Taylor et al. 2007). These studies have focused on the extent to which the willingness to trust varies by race and on the reasons why significant differences by race exist.

Smith (1997) found that respondents from minority groups in the US reported significantly higher accounts of misanthropy (less trust) than members from the majority group. Marschall and Stolle (2004) looked at data from the Detroit Area study (DAS) and found that Africans had significantly lower generalised trust compared to Whites. Uslaner (2011; 2012) investigated trust in various minority groups in the UK and concluded that 43% of Whites reported that 'most people can be trusted', in comparison to 29% for non-Whites: specifically, 28% of Africans and 26% of East Asians reported that 'most people can be trusted'. Uslaner (2011; 2012) noted that this pattern in the UK followed that of the US, that is, minorities tend to be less trusting than Whites.

Nunally (2012) analysed trust and race with the 2007 National Politics and Socialization Survey (NPSS) and found that when compared to White Americans, other race groups were less trusting in various environments viz., neighbourhoods and workplaces, and that African Americans exhibit particularly low accounts of trust. Wilkes (2011) made use of the General Social Survey (GSS) and highlighted that there is a considerable gap in the belief that 'most people can be trusted' between African and White Americans. Alesina and La Ferrara (2002) used data from the US GSS and found that some of the strongest factors linked to low trust were 1) being part of a previously disadvantaged/discriminated group like minorities (especially Africans and women), 2) having low socio-economic status (exhibiting low levels of income and education), and 3) residing in areas that have large income disparities and areas that are racially mixed. Alesina and La Ferrara (2002) also found that Africans were approximately 24% less likely than non-Africans to report a general willingness to trust others (see also Glaeser et al. 2000).

Wilkes and Wu (2018) presented a systemic review of the literature on 'ethnoracial differences in generalised trust' and noted that a pattern is evident, regardless of the country studied or the way in which minority groups are defined – people who identify as a minority group have lower accounts of generalised trust than people who do not identify as a minority group. The review of the literature also indicated that studies usually focus on African and White differences since the

disparity in trust between these two groups tend to be the largest and most significant (Wilkes and Wu, 2018).

Generalised trust has increasingly been recognised as an important characteristic for individual and overall societal well-being (Glanville and Shi, 2020). Studies have shown that people who report high levels of trust are generally healthier and happier (Helliwell and Putnam 2004). Higher levels of trust within communities are also associated with lower rates or crime and violence (Messner et al. 2004), and countries that exhibit higher trust levels also tend to have better economic development and stronger democratic stability (Knack and Keefer 1997; Paxton, 2002).

Although generalised trust research offers important insights into characteristics that may foster trust or are fostered by trust, the way generalised trust is measured in surveys has also come under scrutiny. The most important identified issue is that a respondent's perception of who are 'most people' (as stated in the General Social survey (GSS) and World Values Survey (WVS) for example), is subjective. Arguably, respondents would imagine 'most people' differently. With respect to race, either peoples personal reference category is the racial majority of the population (Simpson et al. 2007) or it could be in reference to members from their own racial group or members different from their group (Zucker, 1986). The subjectivity around generalised trust makes standard survey analysis vulnerable to bias since people would be reporting on trust with reference to a difference group. Simpson et al. (2007) refer to this as the 'reference category problem'. Apart from differences in racial references, perceptions of different groups could also be formed around gender (trust towards the same sex or difference sex), nationality, culture, ethnicity, and many other group identifiers.

Another issue with generalised trust is that it is somewhat unclear what 'the most people' question actually measures. For example, the standard survey question may imply (and therefore collect) information on trustworthy behaviour of the respondent (the ability to be trusted) instead of the willingness to trust others (Glaeser et al. 2000). In experimental game designs based on generalised trust questions, there is a further issue in the sample composition of these studies. For example, very homogenous samples produce different results to sample that are more mixed (Glaeser et al. 2000; Sapienza et al. 2007).

Even though the use of standard surveys exhibits flaws in the method of evaluating trust relations, the findings do give some indication of racial differences in trust. Race often comes up as a predictor of trusting decisions, behaviour, and responses. Race is a particularly important social category for people to refer to when reporting on particularised trust. Uslaner (2002:107) even argues that "race is the life experience that has the biggest impact on trust". The NIDS wave 5 questions used in this study specifically asked respondents to report on their levels of trust towards members of the same race and towards members of a different race. Exploring the intra-racial and inter-racial relationships of trust is best analysed under the particularised trust framework, where race serves as the explicit social category for respondents to refer to when making decisions around trust.

Particularised trust is focused towards a particular social category; it follows the notion that most people "like me" can be trusted (Smith, 2010). Findings show that people tend to exhibit more trust towards other people that they feel are like them (Glaser et al. 2000; Uslaner, 2002; Smith, 2010). People tend to cooperate more towards in-group members, they seem to have higher expectations of reciprocity and fairness from in-group members (Glaeser et al. 2000; Fershtman and Gneezy, 2001; Simpson et al. 2007) and they exhibit more trustworthiness and make more positive assessments towards in-group members (Platow et al. 2012).

People tend to draw from personal experiences to make inferences about generalised trust in others; particularised trust can be viewed as a strong foundation for generalised trust (Glanville and Shi, 2020). Although, it must be noted that the extent to which particularised trust serves as this foundation is influenced and shaped by a variety of individual and social characteristics (Freitag and Traunmüller 2009). In this study a variety of individual, neighborhood, household and socio-economic characteristics were considered when measuring the particularised intra-racial and inter-racial trust relationships.

Instead of analysing trust by asking people about their willingness to trust, a sizeable body of research on trust uses experimental games, where people are required to demonstrate their willingness to trust others in a game setting. This research also identifies substantial differences in the willingness to trust, according to both the race of the people who are doing the trusting and the race of the person to be trusted. For example, Glaeser et al. (2000) ran an experimental trust game on a group of Harvard students and found that in the instances where a sender sent back fewer

resources to their partner, the participants were of different races compared to the cases where partners had the same race. Approximately 92% of the instances when no resources were sent back occurred when partners were of different races even though the sample pairings were 60% racially diverse (Glaeser et al. 2000). The results suggested that racial heterogeneity may reduce trustworthiness in social groups (Glaeser et al. 2000). Simpson et al. (2007) observed that in their trust game, trust was higher between same-race partners compared to different-race partners. Uslaner (2002) found in an experimental setting that Africans tended to trust other Africans more than Africans trusted Whites. Similarly, Fershtman and Gneezy (2001) and Barr (2004) found evidence that people are more likely to trust other people from the same ethnic/race group.

## 3.2 The South African context

South Africa is characterised by high levels of poverty, inequality, and unemployment (Casale et al. 2004; Burns et al. 2018) stemming from a deep legacy of racial divide and discrimination during the Apartheid regime. The consequences of Apartheid are still evident today as communities and individuals tend to be segregated by race in neighbourhoods and schools; poverty and inequality in the country is still concentrated among previously disadvantaged groups and there are persistent racial divisions in the access to resources (Posel and Hinks, 2012). Despite the fall of the Apartheid regime, racial inequalities affecting various parts of people's livelihoods continue in South Africa today. The degree to which the legacy of Apartheid continues to affect the social, economic, and political underpinnings of the wider society motivates the investigation into the racial differences in trust relationship in South Africa.

South Africa is a special case as the previously disadvantaged African citizens comprise the majority of the population, and are the most affected by Apartheid institutions, in contrast to international findings where the disadvantaged African group historically were racial minorities in the population. Given the country's history, we would expect significant racial differences in the willingness to trust in the South African context. More specifically, we would expect people to be more trusting towards members of their own race group (in which they have shared experiences and similar livelihoods) than members of a different race group. We would also expect that overall trust levels for the previously disadvantaged African majority in South Africa will be lower compared to the other race groups. In other words, we predict that particularised trust would be stronger within groups and that generalised trust will be fairly low.

In post-Apartheid South Africa, studies have found that African participants exhibited less trust compared to White participants (Burns, 2004; Ashraf et al. 2006; Burns, 2012). Burns (2012) ran a trust game on a group of South African public-school students and found that non-African participants were less likely to engage when the partner was African while African participants mostly engaged but at a lower rate when their partner was of a different race (Burns, 2012). Evidence from Burns (2006) revealed that African students were the least likely to report generalised trust (that most people can be trusted), compared to students from other race groups. Burns (2006) used photographs of participants to examine how the racial identity of participants might affect trusting behaviour in strategic settings. This study indicated a pattern of distrust towards African participants, not only by other races but surprisingly, also by other African participants.

The experimental work of Burns offers the most extensive research on trust and race in South Africa and on how the willingness to trust differs according to the racial identity of the person to be trusted (Burns 2004, 2006, 2012). However, the use of data collected in strategic settings also has limitations. The sample often lacks representative groups and other correlates of trust are not easily accounted for. Few other studies have investigated race and trust in South Africa, but the ones that have, have corroborated Burns' findings of significant racial variation in trust. In general, consistent with the international research, trust is lower amongst Africans and they are the least trusted group compared to other South Africans, especially Whites (Ashraf et al. 2006; Posel and Hinks 2012).

Ashraf et al. (2006) ran a trust game on a group of South African university students and found significant racial differences in the exchanges made, specifically that Africans made lower offers than White participants. However, the findings by Ashraf et al. (2006) were limited to generalised accounts of trust (that Africans are less likely to trust than Whites) and hardly any focus was given to particularised accounts of within group trust. Posel and Hinks (2012) explored racial variations in trust using trust data collected in wave 1 of the NIDS survey and estimated probit regressions on the willingness to trust. Their study was specifically concerned with trust in neighbours and trust in strangers in South Africa. They found that people were more likely to trust neighbours than strangers and that compared to Whites, other population groups were less likely to report trust in people who live near them. Interestingly, Posel and Hinks (2012) also found that Africans were

more willing to trust strangers than any other race group. We can assume that 'people who live close by' may possibly be within group members owing to the literature that finds that neighbourhoods are typically made up of people with similar ethnic, racial, and socio-economic statuses. Posel and Hinks (2012) found that the race differences in trust are substantially reduced once socio-economic factors (like income) are controlled for.

This research draws on the methods by Posel and Hinks (2012) in using ordered probit regression analysis and responses from a nationally representative survey (NIDS) to explore the inter and intra race relationships of trust. The advantage of analysing survey data is that the analysis can control for a range of individual, socio-economic, neighbourhood and family characteristics and investigate how these factors might mediate race differences in the willingness to trust. The survey questions are also based on particularised trust questions, which asked espondents to report on their levels of trust towards same-race members and different-race members. Unlike the generalised trust questions used in many survey studies, this research can therefore explore questions of particularised trust in reference to race as a particular social category.

## 3.3 Possible explanations for the racial-trust relationship

Key explanations for the racial differences in trust that have been identified in the literature are 1) the exposure hypothesis 2) the disadvantaged group hypothesis and 3) the heterogeneity hypothesis.

The exposure hypothesis is linked to a person's individual and social characteristics. Dinsen and Sonderskov (2015) explain that there are a variety of factors such as schools, workplaces, public institutions, and neighbourhoods that facilitate the exposure of people from one group to other groups of people. The idea that physical proximity creates a radius of exposure to members of different racial/ethnic groups seems to partially underlie the effect of trust and trustworthiness towards other people. Neighbourhoods and residential areas have been a common factor used to investigate racial/ethnic trust differences according to people's exposure of trust. Posel and Hinks (2012) explained that neighbourhoods act as a mechanism by which continuous social interactions occur. Given that neighbourhoods tend to comprise of people with similar socio-economic statuses, ethnicities, and other characteristics, then greater trust in neighbours compared to trust in strangers suggests higher levels of trust towards within-groups. Residential patterns also highlight racial differences in socio-economic status and exposure, and Africans and Whites particularly live-in

different contexts. Marschall and Stolle (2004) found that in the US, Africans were less likely to live in urban areas and more likely to live in segregated, racially homogeneous and under resourced areas. We would expect the same residential patterns in South Africa, given the country's history of geographical segregation on the basis of race that tends to persist even post-Apartheid.

The disadvantaged group hypothesis is implicit in the finding that racial-trust differences are reduced but seem to remain persistent even after controlling for socio-economic confounders related to trust i.e., level of education, income, neighbourhood characteristics, community size, marital status, class, and age (Smith, 1997; Patterson, 1999; Robinson and Jackson, 2001; Alesina and La Ferrara, 2002; Uslaner, 2002;). Posel and Hinks (2012) highlight that a possible reason for the persistent racial differences in trust is that people from a disadvantaged group tend to be less trusting towards people from another group owing to past experiences of discrimination (see also, Demaris and Yang, 1994; Brehm and Rahn, 1997; Alesina and La Ferrara, 2002). Internationally, differences in trust also seem to be underlined by claims from groups expressing that they have experienced systematic and institutional discrimination which is especially common amongst women and racial minorities (specifically Africans) (Alesina and La Ferrara, 2002).

The heterogeneity hypothesis is based on the notion that interpersonal trust decreases in communities that are more racially heterogeneous (Alesina and La Ferrara, 2002). Communities with more heterogeneity exhibit higher inequalities in income, opportunities, access to resources and the heterogeneity around trust implies that people tend to trust other people that experience similar conditions to them (Alesina and La Ferrara, 2002). Studies show that people find it easier to infer or assess other people's intentions and trustworthiness if they belong to the same ethnic/race group than of a different group (Paxton, 2004). Freitag and Traunmüller (2009) explain that when people have positive experiences with trust in specific group members then this affects future evaluations of trust towards specific others and creates a 'spill over' effect on to social trust. The ability to infer other's actions seems to be an important factor in building overall trust towards other people and this is easier to do for people with similar racial, social and neighbourhood characteristics.

The analysis of these three hypotheses gives a few probable explanations for trust differences within and between race groups. The comparisons of the differences in inter-racial and intra-racial relationships of trust that this research seeks to investigate could provide more information on the

dynamics of trust and race. In doing so, a clearer framework could be developed for social and economic theory and policy concerned with building social cohesion, social capital, and a more equal society.

# 4. Methodology

To explore intra-racial and inter-racial relationships of trust, wave 5 (2017) of the National Income Dynamics Survey (NIDS) was used. NIDS is conducted by the Southern Africa Labour and Development Research Unit (SALDRU) situated at the University of Cape Town's School of Economics. NIDS collects data that can be used to examine the characteristics of individuals and their households' livelihoods over time, and it was useful for this research since the instrument collected information on trust in the adult questionnaire (in the section on wellbeing and social cohesion).

Only wave 5 was used in this study because the specific questions on the scope of trust were not asked in the earlier waves. The wave 5 dataset also included a 'top-up' sample that aimed to increase the number of White, Indian, and high-income respondents, who had been under-sampled in previous waves, and which undermined the representativeness of the sample. Since the collection of trust data is limited in South Africa, NIDS currently contains the most detailed micro-data on relations on trust, which has been collected at a national level and which can be used to investigate the association between race and trusting behavior.

This research involved an empirical cross-sectional study which sought to measure, describe, and analyse patterns in inter-racial and intra-racial relations of trust in South Africa. The sample for the analysis was restricted to adults in wave 5 of NIDS -that is all resident participants aged 15 years and older for whom there is complete information on trust and the additional covariates. This study predicted that respondents would report higher levels of trust towards members of the same racial group and lower levels of trust towards members of a different racial group. An additional hypothesis was that Africans would be the least trusting towards other racial groups, and the least trusting in general, given the positive relationship found between trust and socio-economic status and their generally lower socio-economic status (Uslaner, 2000; Fershtman and Gneezy, 2001; Simpson et al. 2007; Barr 2004; Posel and Hinks, 2012).

The NIDS wave 5 (2017) questions used in this study specifically asked respondents to report on their levels of trust towards members of the same race and towards members of a different race:

- How much do you trust people from your race group?
- How much do you trust people from other race groups?

*Source: SALDRU, 2017., "National Income Dynamics Study Wave 5 2017 Adult (15+) Questionnaire". Question M14 and M15, pp.49*.

The four response options of interest, ranked from 1-4, are: "not at all", "just a little", "I trust them somewhat" and "I trust them a lot". Ordered probit regressions are employed to estimate the intra (towards members of the same race group) and inter (towards members of a different race group) racial variations in the willingness to trust. Since this study made use of NIDS attitudinal data and responses from the trust questions represent levels of trust, the ordered probit regression method was appropriate. This model allowed for the trust data to be used as ordinal outcome variables. To estimate changes in levels of trust relative to changes in the covariates, the marginal effects of the independent variables were reported. The ordered probit model was specified as:

$$Y_{i1} = X_i B_i + E \qquad (1)$$

$$Y_{i2} = X_i B_i + E \qquad (2)$$

Where $Y_{i1}$ denotes the unobserved outcome variable for trust of individual i towards members of the same race group and $Y_{i2}$ denotes the unobserved outcome variable for trust of individual i towards members of a different race group. The response rankings are in ascending order (i.e., increasing in trust). $X_i$ is a vector of independent variables for each individual i, which will be the same for both ordered probit regressions. The independent variables comprise a set of individual demographics, neighborhood, socio-economic and family/household characteristics. $B_i$ is a vector of estimated regression coefficients used to predict marginal effects and E is the error term. The statistical program used is Stata which is appropriate for the analysis of microdata in this research. The data was also weighted to produce survey statistics and make inferences about the South African population.

## 4.1 Discussion of variables

The key individual characteristics of the estimations were dummy variables for race (African, Coloured, Indian/Asian with White as the omitted category) and gender (with male as the omitted category). In addition, the regressions controlled for age and age squared to model possible non-linear age effects. A series of binary variables were also included to capture the respondents' marital status, representing married, no longer married (which is inclusive of being divorced, widowed, or separated), and never married as the omitted category. Socio-economic status was further measured by dummy variables for education inclusive of matric (grade 12), post-matric qualification (any certificates, diplomas or higher degrees obtained after matric), and no schooling. The primary-school (grade 1 to 7) and high-school (grade 8 to 11) categories were omitted. A variable capturing whether an individual is not economically active was also included (with being economically active –that includes employment or searching unemployment – as the omitted category).

Studies have shown that people who report higher levels of trust are generally healthier and happier (Helliwell and Putnam 2004). Health status was captured with a dummy variable representing self-assessed health as 'poor' with the omitted categories including self-reported health that is fair or very good. Alesina and La Ferrara (2002) found that the importance of religion to an individual has a positive relationship with trust, as religious practices typically promote trust in others. A dummy variable measuring how important religion is to an individual was included in the regression and reflected both the 'very important' and 'important' responses.

The socio-economic status of the household was captured partly by the log of per capita household income, which was constructed by dividing the total monthly household income by the number of household residents. Dummy variables for the perceived income status of the household were also included, which captured how the respondent perceived the income of their household compared to 'average income' of other households in their suburb (with below average income as the omitted category).

Neighborhood characteristics were captured by dummy variables for reported common frequencies of neighborhood violence and neighborhood crime, where the omitted categories represent responses which identified uncommon or no violence or crime in the neighborhood. A dummy variable denoting a person's preference to stay in their current area was included, with a preference

to leave or being indifferent between staying or leaving as the omitted category. Geographic area variables that consist of the categories 'tribal', 'urban formal', 'urban informal' and 'rural formal' (omitted), derived from the Statistics South Africa (Stats SA) 2011 census data, were also included in the estimations.

## 4.2 Descriptive statistics

The following section presents descriptive statistics for the main dependent variables of interest (trust towards own race and towards other race) alongside the independent variables of the study. First, the descriptive relationship between reported levels of trust for the entire sample is presented, followed by a description of racial differences in the trust responses and gender variations in trust responses. Finally, the summary statistics are presented for all independent variables in the entire sample and for all independent variables by each race group.

Table 1 describes the relationship between inter-racial and intra-racial trust. The bivariate comparisons suggest that trust towards people of one's own race and trust towards people of other races are related. For example, 91% of those who report that they do not trust people from their own race group at all also do not trust people from other race groups. The relationship is weaker at higher levels of trust. For example, only 53% of those who reported that they trust people from other race groups a lot also trust members of their own race group a lot. Considerably larger shares of adult's report distrust than trust and people who report distrust usually exhibit low trust levels towards both in-group and out-group members. In other words, people who report that they do not trust members of their own group at all are also more likely to report that they do not trust members of a different group at all.

The relationship of trust depicted in table 1 indicates that particularised trust may very well be a foundation for generalised trust as discussed in the literature review of this paper. If people draw from personal experiences to make decisions about their general trust in others, then we can assume that those who are more trusting have had more positive experiences with trusting others. The same logic can be followed for people who are more distrusting. These results are aligned with the findings by Posel and Hinks (2012), who found that a positive relationship between trusting neighbours and trusting strangers suggests that people are more willing to expand or widen their radius of trust to people they do not know if they have had good experiences with people that they are more familiar with. In this case, race is the particular social category under consideration in the

analysis of trust and so people would be more likely to trust members of a different race group if they have had positive experiences with people in their own race group.

Since table 1 indicates that adults are more likely to distrust than to trust (and that trust is therefore generally low in South Africa), this suggests that South African citizens may not have had many positive experiences with trusting others. This could be owing to the socio-economic characteristics of a racially divided society, high unemployment, widening inequality and poverty, and high crime rates that may influence the willingness to trust others. Mmotlan et al. (2010) investigated social cohesion and interpersonal trust in South Africa using the South African Social Attitudes Survey (SASAS) and found that South Africans generally score low on the trust measure and this trait was shared with many other developing countries in Latin America and Africa. The authors also found that people with low living standards are relatively more distrustful than those with medium and high living standards, and persistent social inequalities underlies this link (Mmotlan et al. 2010).

**Table 1: Relationship between trust in own group and trust in another group**

| How much do you trust people from your race group? | How much do you trust people from other race groups? | | | |
|---|---|---|---|---|
| | Not at all | Just a little | I trust them somewhat | I trust them a lot |
| Not at all | 27.1 | 1.6 | 0.7 | 0.2 |
| | 91.4 | 5.5 | 2.3 | 0.8 |
| | 65.4 | 4.6 | 3.5 | 5.8 |
| Just a little | 11.0 | 27.4 | 2.6 | 0.5 |
| | 26.6 | 66.1 | 6.3 | 1.1 |
| | 26.5 | 77.4 | 13.6 | 11.3 |
| I trust them somewhat | 2.8 | 5.6 | 14.9 | 0.9 |
| | 11.6 | 23.2 | 61.6 | 3.6 |
| | 6.7 | 15.9 | 78.0 | 21.5 |
| I trust them a lot | 0.6 | 0.7 | 0.9 | 2.5 |
| | 12.1 | 15.4 | 19.7 | 52.8 |
| | 1.4 | 2.1 | 4.9 | 61.4 |

Source: Own calculations, NIDS 2017

Notes: First row has cell percentages, second row has row percentages, and third row has column percentages. Data is weighted to represent population estimates.

Tables 2 and 3 summarise the racial variations in trust towards the adult's own race group and other race groups, respectively. The Pearson Chi squared statistic was computed for both racial-trust relationships and it was found to be statistically significant, that is, there is some relationship

between race and the willingness to trust others according to their racial identity. Each race group reported higher trust levels for their own race group compared to other race groups, but White respondents were the only group that reported that they trust members of their own race group 'a lot' more often than 'not at all' (about 11% of Whites trust other Whites 'a lot' compared to about 9% who trust other Whites 'not at all'). This contrasts with other groups who had higher levels of distrust (not at all) even towards their own group members and lower levels of trusting members a lot, even for their own groups. Consistent with research by Burns (2006), Africans seem to exhibit the highest levels of distrust in general: 32% of Africans reported that they do not trust members of their own group at all and 45% reported that they do not trust members of other groups at all, percentages which are the highest of all the race groups. These descriptive findings therefore suggest that people are even more conservative in their willingness to trust others of a different race group and that trust levels in South Africa are particularly low among Africans.

**Table 2: Racial variations in trust within race groups**

| How much do you trust people from your race group? | Race group | | | |
|---|---|---|---|---|
| | African | Coloured | Indian/Asian | White |
| Not at all | 32.6 | 22.0 | 14.0 | 9.6 |
| | (0.6) | (1.5) | (2.2) | (1.2) |
| Just a little | 42.7 | 41.9 | 32.6 | 28.2 |
| | (0.6) | (1.8) | (3.1) | (1.9) |
| I trust them somewhat | 20.6 | 32.4 | 42.5 | 50.6 |
| | (0.5) | (1.6) | (3.5) | (2.1) |
| I trust them a lot | 4.1 | 3.8 | 10.9 | 11.5 |
| | (0.2) | (0.4) | (2.5) | (1.3) |

Source: Own calculations, NIDS 2017
Pearson Chi2 = 1293.3199 Prob = 0.0000
Notes: First row has column percentages, and second row has standard errors in brackets. Data is weighted to represent population estimates.

**Table 3: Racial variations in trust towards other race groups**

| How much do you trust people from other race groups? | Race group | | | |
|---|---|---|---|---|
| | African | Coloured | Indian/Asian | White |
| Not at all | 45.8 | 29.4 | 18.1 | 13.1 |
| | (0.6) | (1.6) | (2.4) | (1.5) |
| Just a little | 35.6 | 38.0 | 29.8 | 30.2 |
| | (0.6) | (1.8) | (3.1) | (2.0) |
| I trust them somewhat | 15.2 | 29.2 | 40.2 | 46.7 |
| | (0.4) | (1.6) | (3.5) | (2.1) |
| I trust them a lot | 3.4 | 3.4 | 11.9 | 10.0 |
| | (0.2) | (0.5) | (2.6) | (1.2) |

Source: Own calculations, NIDS 2017
Pearson Chi2 = 1733.6342 Prob = 0.0000
Notes: First row has column percentages, and second row has standard errors in brackets. Data is weighted to represent population estimates.

Table 4 presents the means and 95% confidence intervals for both trust questions grouped by race. Since trust is measured as a ranked ordinal variable in this study, the mean values and confidence intervals are assessed only to highlight differences by race. The average values again confirm that intra-racial trust (trust towards members of the same race group) is generally higher than inter-racial trust (trust towards members of a different race group) although this difference is not statistically significant for all race groups. Africans exhibit the lowest average levels of trust in general for both intra-racial and inter-racial trust of 1.96 and 1.76, respectively. In contrast to Whites and Indians, the average for intra-racial and inter-racial trust among Africans and Coloureds centers around the first and second ranked response options (not at all and just a little). For Indians and particularly Whites, average responses are closer to the third ranked option (somewhat trusting). This pattern of trust observed in the average trust levels by race coincide with a racial hierarchy in socio-economic status that has persisted beyond the Apartheid regime. The groups that exhibit higher willingness to trust (Whites and Indian/Asians) would be expected to have far higher socio-economic status than the groups that have a lower willingness to trust (Coloureds and Africans).

In sum, the results from the descriptive statistics suggest that people are more willing to trust members of their own race group rather than another race group, but that trust levels are low on average. Furthermore, Africans exhibit the lowest levels of trust, and even towards members of

their own race group, trust levels are low. A legacy of racial discrimination and Apartheid could explain low levels of trust, especially for Africans. Whites tend to have a greater willingness to trust, which is higher towards their own race group. Coloured and African adults exhibit a relatively large and significant gap between intra-racial and inter-racial trust levels, where they tend to trust members of their own group a lot more than other members of other races. This suggests a potential in-group bias particularly among Coloureds and Africans, while differences in trust levels by race are small and not significant for Indian/Asians.

**Table 4: Summary statistics for trust in own race and in another race, by race group**

| | Mean | Confidence intervals |
|---|---|---|
| **Intra-racial trust** | | |
| African | 1.962** | [1.942,1.982] |
| Coloured | 2.179** | [2.126,2.233] |
| Indian/Asian | 2.503 | [2.384,2.623] |
| White | 2.641 | [2.575,2.707] |
| **Inter-racial trust** | | |
| African | 1.762 | [1.743,1.783] |
| Coloured | 2.065 | [2.010,2.122] |
| Indian/Asian | 2.459 | [2.332,2.587] |
| White | 2.536 | [2.465,2.607] |

Source: Own calculations, NIDS 2017

Notes: ** Average trust levels by scope of trust are significantly different at the 95% level within each race group. Data is weighted to represent population estimates.

Table 5 and 6 report the gender variations in intra-racial and inter-racial trust and further describe the interaction between gender and race. Both women and men report more distrust than trust in general, and although women are less trusting than males, differences by gender are not significant. These descriptive findings are consistent across the race groups.

**Table 5: Gender variations in intra-racial trust, by race group**

| How much do you trust people from your own race group? | Race Group | | | | |
|---|---|---|---|---|---|
| | **African** | **Coloured** | **Indian/ Asian** | **White** | **Overall** |
| **Not at all** | | | | | |
| Males | 31.2 | 20.7 | 14.4 | 10.4 | 28.6 |
| | (0.9) | (2.3) | (3.5) | (1.7) | (0.8) |
| Females | 33.9 | 22.9 | 13.6 | 8.9 | 30.7 |
| | (0.7) | (2.0) | (2.8) | (1.6) | (0.6) |
| **Just a little** | | | | | |
| Males | 42.8 | 40.5 | 24.5 | 28.3 | 41.3 |
| | (1.0) | (2.8) | (4.0) | (3.0) | (0.9) |
| Females | 42.5 | 43.0 | 39.5 | 28.1 | 41.5 |
| | (0.8) | (2.3) | (4.3) | (2.4) | (0.7) |
| **I trust them somewhat** | | | | | |
| Males | 21.0 | 35.1 | 43.3 | 49.3 | 24.5 |
| | (0.8) | (2.6) | (5.7) | (3.3) | (0.7) |
| Females | 20.2 | 30.3 | 41.8 | 51.8 | 23.8 |
| | (0.6) | (2.0) | (4.4) | (2.8) | (0.6) |
| **I trust them a lot** | | | | | |
| Males | 5.0 | 3.7 | 17.8 | 12.0 | 5.6 |
| | (0.4) | (0.6) | (4.8) | (2.3) | (0.4) |
| Females | 3.3 | 3.8 | 5.0 | 11.1 | 4.0 |
| | (0.3) | (0.6) | (1.5) | (1.6) | (0.2) |

Source: Own calculations, NIDS 2017

Notes: First rows are column percentages, and second rows are standard errors in brackets. Data is weighted to represent population estimates.

**Table 6: Gender variations in inter-racial trust, by race group**

| How much do you trust people from other race groups? | Race Group | | | | |
|---|---|---|---|---|---|
| | **African** | **Coloured** | **Indian/ Asian** | **White** | **Overall** |
| **Not at all** | | | | | |
| Males | 45.2 | 28.6 | 16.9 | 13.1 | 41.1 |
| | (1.0) | (2.5) | (3.6) | (2.1) | (0.9) |
| Females | 46.3 | 30.0 | 19.0 | 13.1 | 41.9 |
| | (0.8) | (2.1) | (3.3) | (2.1) | (0.7) |
| **Just a little** | | | | | |
| Males | 35.1 | 37.3 | 28.0 | 30.8 | 34.9 |
| | (1.0) | (2.8) | (4.7) | (3.2) | (0.9) |
| Females | 36.0 | 38.5 | 31.4 | 29.8 | 35.7 |
| | (0.7) | (2.3) | (3.9) | (2.3) | (0.7) |
| **I trust them somewhat** | | | | | |
| Males | 15.8 | 31.0 | 39.0 | 47.6 | 19.6 |
| | (0.7) | (2.5) | (5.6) | (3.3) | (0.7) |
| Females | 14.7 | 27.8 | 41.2 | 45.9 | 18.9 |
| | (0.5) | (2.0) | (4.4) | (2.8) | (0.5) |
| **I trust them a lot** | | | | | |
| Males | 3.9 | 3.1 | 16.1 | 8.5 | 4.4 |
| | (0.4) | (0.6) | (4.7) | (1.8) | (0.4) |
| Females | 3.0 | 3.6 | 8.4 | 11.3 | 3.8 |
| | (0.3) | (0.8) | (2.5) | (1.6) | (0.3) |

Source: Own calculations, NIDS 2017
Notes: First rows are column percentages, and second rows are standard errors in brackets. Data is weighted to represent population estimates.

Table 7 reports the weighted means and standard errors of the entire adult sample. Since there are considerable differences in the characteristics of adults by race, which may influence trusting behavior, the summary statistics are also presented for each adult race group. The average age group of respondents is 37 years. The means also indicate that on average there are slightly more females than males who had complete information on the trust questions and additional covariates, about 47% of the respondents are male while 53% are female. In the marital status category, the highest proportion is for the 'never been married' response, and this is particularly high for Africans (about 62% of Africans reported that they have never been married) (see e.g., Posel and Rudwick 2013).

People generally perceive their household income to be in the average income category, particularly Indians/Asians and Whites whose responses for perceived average income exceeded 60%. Very few people reported having income much above average income, but Whites do exhibit the highest mean response in the 'much above average income' category compared to other races. Average per capita household income is lowest for Africans and highest for Whites, with a

statistically significant difference between the two (7.395, se = 0.01 for Africans and 9.360, se = 0.04 for Whites). This mirrors the pattern observed in the responses for perceived household income, where considerably more Africans reported that their income was below average income category; compared to Whites who were the least likely to assess this as their income status and the most likely to view their income as being above average. These findings highlight the persistent income differences by race in South Africa, and particularly between Whites and Africans. Indian/Asians exhibit the second highest average per capita household income followed by Coloureds, which once again emphasises the racial hierarchy in average socio-economic status notable in South African society and observed in this paper's descriptive statistics thus far.

Except for Whites, each race group reported that crime is generally common in their neighbourhood (responses are above 50% for all other races besides Whites). Coloureds also exhibited the highest proportion for violence being common in their neighbourhoods. Approximately 40% of Coloureds reported that violence amongst different households in the area was common, compared to only 5% of Whites who reported ever experiencing violence in their neighbourhoods. This could indicate that more Whites (compared to the other race groups) tend to live in safer neighbourhoods where crime and violence are less likely to occur, possibly due to better access to security measures (including gated areas and alarm systems), which is another indicator of higher socio-economic status among Whites.

Regardless of the findings on reported crime and violence, there is also a generally strong preference to stay in one's current area for all races (and especially for Whites, 86% of whom reported a preference to stay). Posel and Hinks (2012) explain that people tend to live in areas where socio-economic status amongst different households is similar, and despite the removal of Apartheid regulations on where people of difference races can live, neighbours still tend to be of the same race. This may indicate a sense of community and familiarity and shared characteristics that encourage people to stay in their neighbourhoods (which is perhaps surprising given the relatively low levels of trust among adults). Most people lived in an urban formal area; however, the responses are highest amongst White adults (approximately 95%) and lowest for Africans (about 46% of Africans). Almost no Indians/Asians and Whites lived in tribal or urban informal areas while 35% of Africans were observed to live in a tribal area. These statistics highlight the geographical legacy of Apartheid's spatial planning.

More adults reported having completed high school, but a very small share reported having a post-matric qualification. Among Africans and Coloureds, their highest education level achieved is high school (excluding matric) and very few reported having a post-matric qualification. No Whites reported not having any schooling and they also were the most likely to have completed a post-matric qualification (about 50%) in comparison to other race groups.

Whites are the least likely to report not being economically active, while Indians/Asians have the highest proportion (almost 50%) for not being economically active, followed by Africans, 41% of whom were not economically active in 2017.[3] The shares of all races who reported not being economically active are considerably high, either close to or above 40%, which highlights the extensive problem of joblessness in South Africa. Religion seems to be important for all races, as the responses exceeded 80% for each group; but religiousness is slightly lower for Whites compared to other races. In terms of self-assessed health, Africans and Coloureds were the most likely to report having poor health compared to Whites and Indians/Asians.

According to NIDS wave 5, adults in South Africa in 2017 were therefore most likely to be single, middle-aged, average income earners who had at least completed high school, lived in urban areas, and had a strong preference to stay in their current neighborhood. The results from the summary statistics reaffirmed that there are not only race differences in the reported willingness to trust, but further, considerable differences in socio-economic factors, especially important livelihood characteristics like employment, income, and education. It therefore seems plausible that socio-economic status may be relevant in accounting for at least some of the race differences in trust, and more specifically, that trust would increase as socio-economic status increases. The descriptive statistics therefore highlight race differences in the willingness to trust, but also race differences in a range of individual and household characteristics. Consequently, the study explores relations of trust further in a multivariate context by estimating ordered probit regressions that make it possible to compare trust among adults with the same observable characteristics.

[3] In a cross tabulation of employment statuses and race by gender, not illustrated in the paper, the highest proportion amongst the not economically active were Indian/Asian females. Approximately 60% of Indian females reported not being economically active and they were also the least likely to report being employed compared to other races and their male counterparts.

**Table 7: Means and standard errors of all independent variables**

| | All | African | Coloured | Indian/Asian | White |
|---|---|---|---|---|---|
| African | 0.822 | - | - | - | - |
| | (0.004) | - | - | - | - |
| Coloured | 0.088 | - | - | - | - |
| | (0.003) | - | - | - | - |
| Asian/Indian | 0.020 | - | - | - | - |
| | (0.001) | - | - | - | - |
| White* | 0.068 | - | - | - | - |
| | (0.002) | - | - | - | - |
| Age | 37.221 | 36.095 | 38.764 | 40.449 | 47.776 |
| | (0.155) | (0.162) | (0.534) | (1.027) | (0.816) |
| Female | 0.535 | 0.531 | 0.564 | 0.539 | 0.548 |
| | (0.005) | (0.006) | (0.018) | (0.035) | (0.021) |
| Married | 0.334 | 0.290 | 0.471 | 0.572 | 0.615 |
| | (0.005) | (0.005) | (0.018) | (0.034) | (0.021) |
| No longer married | 0.102 | 0.0947 | 0.106 | 0.110 | 0.185 |
| | (0.003) | (0.003) | (0.010) | (0.019) | (0.016) |
| Never been married* | 0.564 | 0.615 | 0.423 | 0.318 | 0.200 |
| | (0.005) | (0.006) | (0.017) | (0.032) | (0.018) |
| Below average income* | 0.382 | 0.411 | 0.324 | 0.266 | 0.147 |
| | (0.005) | (0.006) | (0.017) | (0.032) | (0.015) |
| Average income | 0.485 | 0.462 | 0.552 | 0.628 | 0.625 |
| | (0.005) | (0.006) | (0.018) | (0.034) | (0.021) |
| Above average income | 0.133 | 0.127 | 0.124 | 0.106 | 0.227 |
| | (0.003) | (0.004) | (0.012) | (0.022) | (0.018) |
| log (per capita hh income) | 7.569 | 7.395 | 7.623 | 8.323 | 9.360 |
| | (0.013) | (0.014) | (0.038) | (0.062) | (0.041) |
| Neighbourhood crime is common | 0.526 | 0.529 | 0.595 | 0.526 | 0.395 |
| | (0.005) | (0.006) | (0.016) | (0.035) | (0.020) |
| Neighbourhood violence is common | 0.267 | 0.268 | 0.405 | 0.337 | 0.051 |
| | (0.005) | (0.005) | (0.018) | (0.031) | (0.008) |
| Stay | 0.739 | 0.731 | 0.751 | 0.602 | 0.864 |
| | (0.005) | (0.005) | (0.016) | (0.033) | (0.016) |
| Rural Formal* | 0.076 | 0.075 | 0.100 | 0.122 | 0.049 |
| | (0.002) | (0.003) | (0.006) | (0.017) | (0.009) |
| Tribal | 0.291 | 0.353 | 0.004 | 0 | 0.003 |
| | (0.004) | (0.005) | (0.001) | - | (0.001) |
| Urban Formal | 0.535 | 0.456 | 0.872 | 0.878 | 0.946 |
| | (0.005) | (0.006) | (0.007) | (0.017) | (0.009) |
| Urban Informal | 0.097 | 0.116 | 0.023 | 0 | 0 |
| | (0.003) | (0.004) | (0.004) | - | - |
| Poor health | 0.023 | 0.023 | 0.022 | 0.013 | 0.018 |
| | (0.001) | (0.001) | (0.004) | (0.005) | (0.005) |
| No schooling | 0.043 | 0.048 | 0.040 | 0.012 | 0 |
| | (0.001) | (0.002) | (0.007) | (0.006) | - |

| | | | | | |
|---|---|---|---|---|---|
| Primary school* | 0.128 | 0.133 | 0.168 | 0.132 | 0.005 |
| | (0.003) | (0.003) | (0.012) | (0.023) | (0.002) |
| High school* | 0.402 | 0.416 | 0.435 | 0.309 | 0.224 |
| | (0.005) | (0.006) | (0.017) | (0.029) | (0.018) |
| Matric | 0.187 | 0.177 | 0.174 | 0.365 | 0.268 |
| | (0.004) | (0.005) | (0.014) | (0.035) | (0.019) |
| Post-Matric | 0.240 | 0.226 | 0.184 | 0.181 | 0.503 |
| | (0.005) | (0.005) | (0.014) | (0.027) | (0.021) |
| Not economically active | 0.409 | 0.410 | 0.392 | 0.474 | 0.388 |
| | (0.005) | (0.005) | (0.017) | (0.034) | (0.020) |
| Religious | 0.888 | 0.891 | 0.894 | 0.888 | 0.848 |
| | (0.004) | (0.004) | (0.014) | (0.023) | (0.015) |

Source: Own calculations, NIDS 2017
Notes: First rows are means, and second rows are standard errors in brackets. Data is weighted to represent population estimates.
*Omitted variables in the regressions.

# 5. Results

Table 8 shows the results for the ordered probit regression estimates for intra-racial trust, and table 9 shows the estimates for inter-racial trust. Both tables present three separate regressions, regression I only includes the race dummies (with White as the omitted category) to compare unadjusted race differences in trust. Regression II considers the changes in race differences in trust once income is added (this includes the log of per capita household income as well as perceptions of income relative to other households in the same suburb). Regression III includes all the other socio-economic factors and the other individual, household, and neighbourhood characteristics.

These estimations first explore the extent to which socio-economic factors might mediate race differences in trust. In particular, the differences in trust between Africans and Whites are compared controlling for socio-economic differences to assess whether Africans remain less trusting than Whites even when large differences socio-economic status are taken into account. Second, race differences in trust according to the race of the person to be trusted are compared. The literature and descriptive statistics so far suggest that we can expect people to be more willing to trust members of their own race than members of a different race since same race members tend to have shared characteristics (some of which are included in the regressions). Results within each table are discussed separately before finally comparing differences across the tables.

In the first regression of table 8, the results confirm the descriptive findings: in comparison to Whites, the other race groups in South Africa were significantly less likely to trust others of their same race group. In the second regression when per capita household income and perceptions of average income is added, the negative effect of race on trust falls quite considerably. For Africans, the coefficient falls by almost 10 percent, for Coloureds, by 12 percent, and the coefficient for the Indian/Asian category is no longer significant. Per capita household income is a positive and significant correlate of intra-racial trust. However, the results indicate that race differences in trust remain negative and significant (except for Indians/Asians).

In the third regression, when all other covariates are included, the coefficients on the race variables are largely unchanged. Most of the individual social characteristics are significant in the context of intra-racial trust. For example, being married has a positive relationship with intra-racial trust. In contrast to the descriptive findings, trust levels are significantly lower among women than men in a multivariate context. The relationship between intra-racial trust and age is non-linear as intra-

racial trust first decreases significantly with age but then increases. Being religious has a positive and weakly significant relationship with trust towards same race members.

These findings are consistent with other studies on the correlates of trust. For example, Boyas and Sharpe (2010) investigated ethnic trust and found that it could be predicted by many individual demographic factors and past discriminatory experiences related to race, gender, age, religion, and marital status. Similarly, the coefficients for race and gender in the regressions in Table 8 suggest that groups who have been discriminated against trust less, even towards members of their own race group. Other studies have also found that men generally report higher levels of trust than women (Delhey and Newton, 2002; Patterson, 1999) and marital status has often been found to have a significant and positive influence on of trust, with married respondents typically reporting higher levels of trust than those who are not married (Brehm and Rahn, 1997; Patterson, 1999). However, it should be recognised that causality may also run in the opposite direction. Alesina and La Ferrara (2002), for example, explain that people who have an easier ability to trust may tend to marry more easily. Attitudes towards trust has been found to increase with religiousness, specifically religious practices and beliefs that emphasize basic moral principles like trustworthiness and trusting others (Knack and Keefer, 1997; Uslaner, 2000; Alesina and La Ferrara, 2002; Newton, 2004).

None of the education variables were significantly correlated with intra-racial trust. The literature on race and trust has often identified education as a correlate of trust, where studies have found that trust tends to increase with education and that educated individuals would be more likely to trust other educated individuals (Glaeser et al. 2000). A possible explanation for why education is not significantly related to intra-racial trust might be that the regression controls for several other variables that are correlated with education, thus diluting the relationship between education and trust.

Not being economically active has a significantly negative relationship with intra-racial trust compared to being economically active (employed or searching unemployed). Not being economically active could imply that an individual might not experience as much exposure to social interactions that involve exercising trust of others, or they are more distrusting owing to the difficulty and discouragement around finding work. This is as opposed to someone who is employed and working closely with other people daily or someone who is unemployed but still

open to finding work eventually. The economically inactive includes students, homemakers, people who are ill or retired, but a substantial share of the economically inactive remains adults who have completely given up looking for work (Statistics South Africa, 2020) possibly due to South Africa's high rates of unemployment and lack of job creation.

Experiences of crime being common in the neighborhood is not significant, but violence is a weakly significant and negative correlate of intra-racial trust. This is broadly consistent with Newton's (2004) finding that distrust tends to be expressed by victims of violence. Living in an urban formal or an urban informal area, is negatively and significantly related to intra-racial trust relative to living in a rural formal area (which represent commercial farms). Posel and Hinks (2012) also found that trust was significantly higher for rural formal dwellers possibly due to the high degree of racial homogeneity in these areas and shared characteristics that have a positive influence on intra-racial trust (Alesina and La Ferrara, 2002).

Turning to the results from table 9 for inter-racial trust, we see that other races are also less likely to trust other race members compared to White South Africans. As with intra-racial trust, the coefficients in the first regression are negative and significant for Africans and Coloureds. Some of these race differences again reflect differences in economic resources, as controlling for socio-economic status reduces the size of the negative coefficients on the race categories. The coefficients fall even further in the last regression, but those for African and Coloureds remain negative and significant. In contrast to the previous results in table 8, perceptions of average income are significant for inter-racial trust and those who perceive their income to be above average (relative to being below average) have a particularly strong positive correlation to trust in other race members. This could indicate that people who have positive perceptions of their income also have a positive willingness to extend trust to other race members. Unlike the previous estimation, per capita household income is no longer significant in the third regression of table 9.

With regards to individual social characteristics and inter-racial trust, age and being married are still positive and significant correlates of trust. However, in contrast to the estimations for intra-racial trust, being female or religious are no longer significant (although the signs of the coefficients are the same). Religion being positive and significant in the intra-race estimation could indicate that many same-race members are also members of the same religion and stay in the same or similar communities and attend the same religious institutions. Racial segregation by area in

South Africa might also mean that people are more exposed to people who have the same or similar religious beliefs and the insignificance of religion in inter-racial trust suggests that the decision to trust a different race member (and a member of a different religion) is not adequately predicted by the trustor's own religion. These results also indicate a potential in-group bias in the context of religion.

As in the case of intra-racial trust, being in poor health is also a negative correlate of inter-racial trust, although it is only weakly significant in this regression. Individuals who have poor perceptions of health relative to fair and very good perceptions of health are less likely to trust other race members. The education variables are still insignificant as with the previous estimation. Perhaps education is a predictor of general trust and those who are educated rather than not would have an easier willingness to trust others who are also educated with less of an influence of race. Since the dependent variables of the study are in reference to trust towards same race members or different race members, the effect of education on trusting someone based specifically on race might be insignificant, but that does not imply that education is not an important predictor of trust in general. Not being economically active remains negative, but in contrast to intra-racial trust, it is strongly significant, and the effect is much larger. People who are not economically active are more distrusting especially of other race groups with whom they may not have much exposure to.

In contrast to the regression for intra-racial trust, both common neighbourhood crime and violence are significantly and negatively related to inter-racial trust. A possible explanation is that experiences of crime and violence make it less likely for people to extend trust towards other race members. Newton (2004) explains that social trust is made up of adult life experiences; people who experience kindness, safety and generosity are more likely to trust than those who experience violence, discrimination, and exploitation. Living in an urban formal or urban informal area is still negative and significant although the negative effect is more pronounced in the inter-racial trust regression.

**Table 8: Ordered probit regressions for trust in same race members**

| | I | II | III |
|---|---|---|---|
| White[a] | - | - | - |
| African | -0.841*** | -0.764*** | -0.773*** |
| | (0.044) | (0.051) | (0.053) |
| Coloured | -0.563*** | -0.496*** | -0.445*** |
| | (0.053) | (0.057) | (0.059) |
| Asian/Indian | -0.165* | -0.125 | -0.096 |
| | (0.085) | (0.086) | (0.086) |
| Log (per capita household income) | | 0.036*** | 0.036** |
| | | (0.012) | (0.014) |
| Percieved below average income[a] | | - | - |
| Perceived average income | | 0.030 | 0.031 |
| | | (0.026) | (0.027) |
| Perceived above average income | | 0.027 | 0.034 |
| | | (0.039) | (0.039) |
| Age | | | -0.015*** |
| | | | (0.004) |
| Age squared | | | 0.000*** |
| | | | (0.000) |
| Male[a] | | | - |
| Female | | | -0.080*** |
| | | | (0.025) |
| Never Married[a] | | | - |
| Married | | | 0.069** |
| | | | (0.033) |
| No longer married | | | 0.050 |
| | | | (0.048) |
| Neighbourhood crime is none/uncommon[a] | | | - |
| Neighbourhood crime is common | | | -0.035 |
| | | | (0.025) |
| Neighbourhood violence is none/uncommon[a] | | | - |
| Neighbourhood violence is common | | | -0.050* |
| | | | (0.030) |
| Leave/Indifferent[a] | | | - |
| Stay | | | -0.056* |
| | | | (0.029) |
| Rural Formal[a] | | | - |
| Tribal | | | -0.008 |
| | | | (0.043) |
| Urban Formal | | | -0.195*** |
| | | | (0.044) |
| Urban Informal | | | -0.220*** |
| | | | (0.058) |
| Fair health/Good health[a] | | | - |
| Poor health | | | -0.014 |
| | | | (0.076) |
| Primary school[a] | | | - |

| | | |
|---|---|---|
| High school[a] | | - |
| No schooling | | -0.050 |
| | | (0.045) |
| Matric | | 0.008 |
| | | (0.035) |
| Post-matric | | 0.028 |
| | | (0.035) |
| Economically active[a] | | - |
| Not economically active | | -0.047* |
| | | (0.027) |
| Religious | | 0.066* |
| | | (0.039) |

Source: Own calculations, NIDS 2017
Notes: First rows are regression coefficients, and second rows are standard errors in brackets. Data is weighted to represent population estimates.
[a] Omitted variables in the regression
*Significant at 10% level, **Significant at 5% level, ***Significant at 1% level.

**Table 9: Ordered probit regressions for trust in other race members**

| | I | II | III |
|---|---|---|---|
| White[a] | - | - | - |
| African | -0.927*** | -0.853*** | -0.839*** |
| | (0.044) | (0.052) | (0.054) |
| Coloured | -0.540*** | -0.477*** | -0.430*** |
| | (0.053) | (0.058) | (0.059) |
| Asian/Indian | -0.084 | -0.042 | -0.008 |
| | (0.085) | (0.086) | (0.087) |
| Log (per capita household income) | | 0.027** | 0.012 |
| | | (0.013) | (0.015) |
| Percieved below average income[a] | | - | - |
| Perceived average income | | 0.060** | 0.060** |
| | | (0.027) | (0.027) |
| Perceived above average income | | 0.119*** | 0.124*** |
| | | (0.042) | (0.042) |
| Age | | | -0.009** |
| | | | (0.004) |
| Age squared | | | 0.000*** |
| | | | (0.000) |
| Male[a] | | | - |
| Female | | | -0.033 |
| | | | (0.026) |
| Never Married[a] | | | - |
| Married | | | 0.057* |
| | | | (0.034) |
| No longer married | | | -0.003 |

| | |
|---|---|
| | (0.049) |
| Neighbourhood crime is none/uncommon[a] | - |
| Neighbourhood crime is common | -0.061** |
| | (0.026) |
| Neighbourhood violence is none/uncommon[a] | - |
| Neighbourhood violence is common | -0.062** |
| | (0.030) |
| Leave/Indifferent[a] | - |
| Stay | -0.030 |
| | (0.029) |
| Rural Formal[a] | - |
| Tribal | -0.033 |
| | (0.044) |
| Urban Formal | -0.134*** |
| | (0.045) |
| Urban Informal | -0.178*** |
| | (0.058) |
| Fair health/Good health[a] | - |
| Poor health | -0.117* |
| | (0.071) |
| Primary school[a] | - |
| High school[a] | - |
| No schooling | -0.032 |
| | (0.051) |
| Matric | 0.030 |
| | (0.035) |
| Post-matric | 0.037 |
| | (0.036) |
| Economically active[a] | - |
| Not economically active | -0.078*** |
| | (0.028) |
| Religious | 0.038 |
| | (0.043) |

Source: Own calculations, NIDS 2017

Notes: First rows are regression coefficients, and second rows are standard errors in brackets. Data is weighted to represent population estimates.

[a] Omitted variables in the regression

*Significant at 10% level, **Significant at 5% level, ***Significant at 1% level.

# 6. Discussion

There is evidence in the literature and in this research that race differences in trust exist, and that differences in socioeconomic status can influence trust. Based on the hypotheses discussed, and the results shown in this study, there are underlying factors such as exposure to different groups, perceptions of being part of a disadvantaged group, and heterogeneity amongst groups that underlie the racial-trust relationship. Drawing from these findings, policies and programmes can be used to address situations and environments that are not conducive to building trust between people with various backgrounds. It seems that a collaborative effort is needed between the state, and the public and private sector to address the issue of racial-trust discrepancies, and more broadly, the goal of social cohesion.

For example, the exposure hypothesis implies that people are less trusting towards others they are less exposed to. Implementations like the Employment Equity Act (EEA) is an example of a progressive practice that aims to diversify the work environment, enhance equality, ensure fair and equal representation, improve the quality of the South African workforce, and reduce income inequality and unemployment. These kinds of factors have the potential to improve trust and social cohesion amongst diverse employees, and the state, and improve economic development.

At present, South African legislation does require businesses to comply with EEA; however, stricter enforcement and implementation is needed from both the state and businesses to ensure EEA targets are being improved and met. A report by the institute for justice and reconciliation on the importance of the workplace for social cohesion and reconciliation in South Africa, highlighted that the workplace is an environment where interracial interactions can occur, and it is a space for social and economic transformation (Potgieter et al. 2018). The report also showed that Whites exhibited the lowest levels of distrust towards colleagues while African employees exhibited the highest levels of distrust. This finding was somewhat influenced by the fact that professional work environments were dominated by Whites, and this had implications for African colleagues' feelings of exclusion (Carrim, 2016).

It is worth noting that an Employment Equity Amendment Bill is being proposed, which aims to provide more affirmative action targets for companies through greater state intervention. If this Bill is enacted, the government intends on setting better targets across sectors, regions, and occupations to boost representation and transformation nationally (Lumb and Bouchier, 2020). The

results of this study showed that people who are economically active are far more likely to trust than those who are not. Therefore, these interventions mentioned above which have links to the exposure hypothesis have the potential to build trust and equality amongst different groups in South Africa, by increasing employment opportunities as well as increasing diversity amongst people who are already employed. The disadvantaged group hypothesis is also indirectly addressed through these transformation targets.

A test of the disadvantaged group hypothesis can also be seen in the results for relative economic position, perceived average income status was positive for intra-racial trust, and it was positive and highly significant for inter-racial trust. Previous studies have shown that disadvantaged people are generally less trusting than those in a position of advantage (Putnam, 1993; Knack and Keefer, 1997; Alesina and La Ferrara, 2002). People who perceive their income to be above average are more willing to extend trust to other race members, possibly because they might not view themselves as disadvantaged if they have positive perceptions about their relative economic status. The negative effect of race on trust falls when perceptions of income are added in the analysis, indicating that improved socioeconomic status has the potential to mediate race differences in trust. Relative economic position forms part of the measure for socioeconomic status, thus, the findings support the argument that race differences in trust can be reduced if socioeconomic status increases.

Fischer and Torgler (2006) suggested that envy may affect perceptions of others, under conditions of inequality, which leads to feelings of distrust from the perspective of the disadvantaged. Sztompka (2007) proposes that people with higher class have less to lose if their trust is betrayed, since they have more resources to fall back on, whereas the disadvantaged are more cautious with their trusting behavior due to constrained resources, and they cannot take the same risks as the advantaged. The disadvantaged group hypothesis may be addressed by increasing the economic status of the most vulnerable in society, through tackling income inequality, poverty, unemployment, and a more equal access to resources; trust and social cohesion could increase as groups move from a position of historical disadvantage to advantage.

A 2018 WIDER working paper highlighted that a key mechanism for reducing inequality in South Africa is through increasing workers' wages and salaries (Leibbrandt et al. 2018). The paper found that labour market policies are imperative to increasing access to employment and the types of jobs available to people. Social grants also had a positive influence on increasing the socioeconomic

status of workers; thus, the combination of increasing employment, income, and social grants are all key to reducing socioeconomic inequality and increasing trust and social cohesion in South Africa.

The heterogeneity hypothesis can be observed in the results for the area variables and the stay variable. This hypothesis proposes that trust is lower in communities that are heterogenous, and studies have found evidence for decreased interpersonal trust in racially heterogenous areas while racially homogenous areas exhibited higher trust levels (Alesina and La Ferrara, 2002; Marschall and Stolle, 2004; Posel and Hinks, 2012). This finding is possibly due to heterogenous areas exhibiting more differences in socioeconomic characteristics and racial/ethnic backgrounds, whereas homogenous areas -where trust tends to be higher- are more likely to comprise people of similar statuses, backgrounds, and shared experiences. This study found that there was generally a strong preference to stay in one's area for all races, which may indicate a sense of community and familiarity that encourages people to stay in their neighbourhoods. The results on the urban area variables were negative compared to living in a rural formal area, which is in line with the findings by Posel and Hinks (2012) who found higher levels of trust among rural formal dwellers owing to the probable racial homogeneity ergo shared characteristics that have a positive influence on intra-racial trust.

Persistent homogeneity in communities stems from the legacy of Apartheid's racial segregation, whereby people were forced to stay in racially allocated areas and the situation has not changed substantially post-Apartheid. Previously disadvantaged groups, especially Africans and Coloureds, still tend to live in racially homogenous areas and while the sense of community and trust might be high in these circumstances, these areas are usually still under-resourced, comprised of people with low socioeconomic status, and lack of access to employment opportunities.

The negative relationship between racial heterogeneity and trust needs to be reversed so that heterogenous spaces eventually promotes trust between different groups. It seems that this will need to be done through simultaneously addressing the previous hypotheses mentioned and the subsequent policy recommendations. The main factors which have been discussed for all hypotheses are addressing inequality, poverty, and unemployment to lessen the socioeconomic differences between people and moving South Africa towards equality, unity, and social cohesion.

# 7. Conclusion

The main research questions of this paper aimed to assess if trust within and between groups differ by race, and whether adults in South Africa are more likely to trust same race members compared to members of a different race. Using the 2017 NIDS wave 5 adult dataset which for the first-time probed race questions around trust, this study employed probit regression analysis to estimate how race differences in trust may be influenced by a range of socio-economic factors including individual demographic, household, and neighborhood characteristics.

The descriptive results suggested that levels of trust amongst South African adults are generally low, with a greater proportion of adults reporting distrust than trust towards both same race and other race members. However, the results did indicate that South African adults are relatively more trusting towards members of their own race group than towards members of a different race group. In particular, Africans and Coloureds were significantly more likely to trust same race members compared to trust of other race members, which is in line with the literature and previous studies that found trust to be higher when there is more group homogeneity. These two groups also displayed the highest proportions of distrust in general and especially towards other race members (compared to Whites and Indians/Asians), thereby suggesting that an in-group bias may be strongest for Africans and Coloureds, once again highlighting the positive relationship between trust and racial homogeneity.

Results from the regression estimations confirmed these racial-trust differences, as Africans and Coloureds reported significantly lower levels of trust compared to Whites. The coefficients for these two groups were negative and significant for both intra-racial and inter-racial trust, with African adults exhibiting particularly low levels of trust compared to other race groups (especially when compared to Whites). The relative lack of trust among Africans was also much more pronounced in the estimations for inter-racial trust, suggesting that Africans are the least likely to extend trust to other race members. While the general results for intra-racial and inter-racial trust amongst Indians/Asians were not significant, the differences in trust between all race groups and Whites decreased as other correlates of trust were included in the regressions. The negative coefficients for Africans and Coloureds were reduced particularly when the estimations controlled for socio-economic status and perceived income, although race differences in trust persisted and remained significant. Africans and Coloureds form part of the previously disadvantaged groups

most affected by South Africa's Apartheid regime, who also face persistent socio-economic challenges post-Apartheid. Thus, these racial-trust findings illustrate an example of the disadvantaged group hypothesis.

It appears that to a certain extent, income and other individual, household, and neighborhood characteristics related to an individual's socio-economic status do influence trusting behavior in South Africa. More specifically, as socio-economic status increases and when people have shared characteristics and experiences, then the willingness to trust others also increases. The results of this paper are aligned with the literature on race and trust which finds that people would be more willing to extend trust to others, like members of a different race, if they have had positive experiences with trusting people they are more familiar with. This gives an indication of the exposure hypothesis, and since trust levels seem to be considerably low in South African society, it suggests that South African adults may not be experiencing much exposure to different groups. Additionally, South African adults may have not had many positive experiences with trust and would be less willing to extend trust towards members of different races. A lack of trust in South Africa's society could possibly be due to the country's past experiences of racial discrimination during the Apartheid regime, the enduring legacy of racial segregation, and the persistent high rates of poverty, inequality and unemployment which is often experienced by the same groups that were discriminated against during Apartheid. This context offers a plausible explanation for why trust levels are particularly low amongst Africans and Coloureds, who also exhibit the lowest socio-economic status in South Africa, still often live in racially homogenous and under-resourced areas, and who have still been negatively affected by the legacy of Apartheid.

The low levels of trust observed for South African adults in this study point to potentially low levels of social cohesion in South African society. In South Africa, the concept of *ubuntu* has often become synonymous with social cohesion, nation-building, and an attempt to bridge the cultural and racial divides of the past (David et al. 2014). Very low trust levels tend to undermine social cohesion, and racial divisions and socio-economic inequality, which have been observed as strong influences of low trust levels, further undermine the substance and meaning of the rainbow nation and the essence of *ubuntu* (David et al. 2014; Burns et al. 2018).

Addressing the lack of trust and therefore lack of social cohesion is especially important in South Africa given the context of widening inequality, growing unemployment, and persistent racial

inequalities. Since entering a democracy in 1994 the goals of the liberation movement do not seem to be realised. If we are to move past the injustices and inequalities left behind by the Apartheid regime and move towards a socially cohesive and unified society, one of the first steps can be to understand and develop trust in South Africa. This study has shown that racial differences in trust can be somewhat mediated by socio-economic factors. Therefore, the more equal people become in access and opportunity of important livelihood characteristics (socio-economic, individual, household, and neighborhood) the more likely it is that the nation building goals of South Africa like social cohesion can be advanced.

## 7.1 Limitations of the study

Possible limitations to the study are that firstly, the data on trust is based on self-reported responses and it cannot be determined if people provided accurate information on the extent to which they do trust others, thus, there could be a reporting bias in the data collected that the study cannot control for. Secondly, the sample is restricted to one wave of NIDS (wave 5) since the trust questions of interest have not been asked in other waves before. Consequently, the study cannot observe changes over time. The estimations also do not control for unobservable characteristics that may influence a predisposition to trust and the study therefore cannot make behavioral inferences. Third, there are certain social/psychological factors that may be correlated with trust like past experiences of discrimination, perceptions of being part of a disadvantaged group, degree of overall social interaction with others that cannot be captured by the data in this study. Fourth, it is not possible to establish the direction of causality between trust and the covariates in the regressions. For example, marriage and health may influence trust, but trust may also influence the likelihood that people marry or feel healthy. Reverse causality may also exist in the relationship between neighborhood crime and violence and trusting behavior (the influence could run in either direction). Lastly, the survey question about inter-racial trust, asked in wave 5 of NIDS, does not distinguish among the different race groups to be trusted. It is possible that this may influence particularised trust. For example, Africans may be more trusting of Coloureds than of Indians, but both groups are included in the category of people of a different race.

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