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The Impact of Inequality on Social Cohesion: Evidence from NIDS Data

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Abstract

In this paper, we investigate reported measures of trust in South Africa, from the Social Cohesion module in the 2012 National Income Dynamics Study. Our interest is related to trust as an essential ingredient for social cohesion; and it is used as a proxy such cohesion. We consider the genesis of the concept of social cohesion and its distinction from the notion of social capital. As a concrete expression of trust, the measure of trust available – and used in this report – relate to individual perceptions of adults regarding the likelihood that a lost wallet containing R200 would be returned by ‘someone who lives close by’ or by a ‘complete stranger’. Notably, low levels of trust are reflected among the majority of adults; but we find that white South Africans are significantly more likely to report trusting neighbours than strangers. We use multinomial logistic regression to estimate the determinants of these two measures of trust. Consistent with previous studies, using other versions of the same data for South Africa, as well as abroad, both gender and race feature significantly as determinants of trust. Some caution should be exercised in considering differences between demographic groups due to concerns about sample size. Trusting strangers more, or, trusting neighbours less than anyone else seems to be related to a negative experience of one’s proximal circumstances; experiencing higher levels of social disorder, consequently being dissatisfied and having a preference to leave one’s current abode.

Introduction

The scope of this paper is to understand social cohesion in relation to income inequality in South Africa. Considering the literature on social cohesion and inequality in the context of South Africa is quite a difficult task for technical reasons – inequality is a feature of society rather than an individual level characteristic, and consequently it does not vary between individuals who comprise a common societal grouping. Trust is essential to facilitating positive interaction and reciprocal social relations and its relationship to social cohesion is discussed at length in the main body of the paper. Thus, the focus of this paper is to examine the impact on trust as a critical indicator of societal cohesion of one's access to resources, well-being and neighbourhood affiliation related to demographics.

Effects of Inequality

One of the influential writings on social cohesion and inequality is the book by Richard Wilkinson & Kate Pickett, *The Spirit Level: Why More Equal Societies Almost Always Do Better* (2010). The main thrust of their argument is that social inequality undermines a vast array of social outcomes; with all, not only the poor, suffering the effects of inequality on well-being. In particular, the book highlights the 'pernicious effects that inequality has on societies: eroding trust, increasing anxiety and illness, (and) encouraging excessive consumption.' Eleven health and social problems are explored: physical health, mental health, drug abuse, education, imprisonment, obesity, social mobility, trust and community life, violence, teenage pregnancies, and child well-being, and outcomes are demonstrated to be significantly worse in more unequal societies.

Writing in the Guardian (2014) Wilkinson & Pickett discuss how literature has evolved in the wake of the financial crisis, with the emergence of social movements like Occupy, providing more evidence of the link between inequality and adverse social outcomes:

The truth is that human beings have deep-seated psychological responses to inequality and social hierarchy. The tendency to equate outward wealth with inner worth means that inequality colours our social perceptions. It invokes feelings of superiority and inferiority, dominance and subordination – which affect the way we relate to and treat each other.

Extending earlier findings about the effect on social outcomes, a growing body of research shows that inequality damages the social fabric of the whole society. As indicated by Richard Wilkinson and Kate Pickett in *The Guardian*, (2014), Ichiro Kawachi describes inequality as a social pollutant, in relation to his research on the health effects of inequality. Across societies, health and social problems have a significantly higher incidence in more unequal societies. Further, the elite tend to justify their access to an unequal share of

resources by pathologising the poor, in order to distance themselves from vulnerable people in society, which undermines the scope for appropriate support being availed.

Critically, equality is found to matter in both rich and poor societies (The Guardian, 2014).

At an individual level, social relationships, and, in particular being regarded as inferior has been found to raise stress, reduce cognitive performance and affect emotional well-being. What is new are studies showing that inequality at a societal level is related to higher rates of child abuse (Eckenrode, Smith, McCarthy & Dineen, 2014). Higher rates of bullying have been confirmed in schools in more unequal countries, from data comparing 35 countries (Due, Merlo, Harel-Fisch, Damsgaard, Holstein, Hetland, Currie, Gabhainn, & de Matos, 2009).

Wilkinson & Pickett (2010) showed that mental illnesses are more prevalent in more unequal societies. This has also been borne out by studies examining the link between inequality and depression and schizophrenia. Evidence that relative income, i.e. income rank, is a better predictor of developing illness than absolute income is instructive. Greater income inequality leads to social polarisation and status anxiety, which undermines community life.

Recent research has also indicated that inequality has a negative impact on economic growth. 'Greater inequality leads to shorter spells of economic expansion and more frequent and severe boom-and-bust cycles that make economies more vulnerable to crisis' (The Guardian, 2014). Further, the International Monetary Fund has suggested that inequality reduction and improving long-term growth performance may be 'two sides of the same coin.' When one considers poverty reduction, it should be clearly apparent that even if income poverty is reduced, through cash transfers, for example, the welfare effects of this reduction are threatened where the cost of living is decidedly unequal.

Wilkinson & Pickett (2014) also contend that inequality is becoming an environmental issue, among others, because of the link between intensifying consumerism as a result of status competition. Personal indebtedness is also cited as a concern related to consumerism.

In South Africa inequality is patent and as noted by the Presidency in its 2010 *Development Indicators*, functional distribution of national income has not improved since the dawn of democracy. The Presidency further observed that the share of national income resorting to the richest has grown massively such that today, just over 50% of national income goes to the richest 10% of households 'while the poorest 40% received just over 5% of income'.

Furthermore, human beings in society interact in numerous ways, and the extension of trust is essential to foster reciprocal relations. The absence of trust inhibits people from fostering social relations and undertaking collaborative action, whether in the home, community, workplace or in other groups. Sustained positive interaction relies largely on trust. Social capital is often linked to trust, as is social cohesion. While the two are not the same, trust underpins individual reciprocity towards others in relationships of direct (social capital) and indirect benefit (interdependent social cohesion). Geographic, social and cultural differences have all been found to affect levels of trust, in both the general and specific senses – and once lost, trust is very difficult to cultivate (Helliwell & Wang, 2010).

Everyday aspects of life that are a function of trust include feeling secure, freedom from intrusion, being protected from losses and upholding contracts. Where trust exists in the workplace, monitoring costs are diminished (Frank, 1988 cited in Johnson & Mislin, 2011), staff turnover is lower (Dirks & Ferrin, 2002 cited in Johnson & Mislin, 2011) and employees behave more positively without additional compensation (Dirks & Ferrin, 2002; Konovsky & Pugh, 1994 cited in Johnson & Mislin, 2011).

At societal level, it has been shown that a ‘shared willingness to engage in trusting or trustworthy behaviour’ yields better economic outcomes (Arrow, 1972; Fukuyama, 1995; Putnam, 1993 cited in Johnson & Mislin, 2011). Cross-country data analysed by Knack and Keefer (1997) show that higher levels of trust are related to higher per capita GDP. Higher levels of intra-country trade as well as entrepreneurial activity, financial development and participation in the stock market are also contingent on higher levels of trust (Guiso, Sapienza, & Zingales, 2004; Guiso, Sapienza, & Zingales, 2006; Guiso, Sapienza, & Zingales, 2008; Guiso, Sapienza, & Zingales, 2009). In addition, ‘higher levels of trust have been associated with more efficient judicial systems, higher quality government bureaucracies and lower corruption’ (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997 cited in Johnson & Mislin, 2011).

Inequality undermines the trust, solidarity, and reciprocity necessary for responsible citizenship. South Africa’s history of race-based oppression, marginalisation and exclusion entrenched an unequal socio-economic environment. The end of Apartheid as a system of racial segregation meant that the scope of social policy broadened immensely, and grand efforts were and still are being made to create economic opportunities, extend access to basic social services, and address manifestations of abject poverty through a variety of interventions including social grants. While this has somewhat narrowed the income gap between the races, the collective level of inequality in society as a whole has not declined. It would seem that, precisely because of this, the towering objective to forge social cohesion has yet to be facilitated successfully (Inchauste, Lustig, Mashekwa, Purfield & Woolard, 2015).

On a global scale, a critical driver of inequality is the changing structure of wages; an instance in which top business executives earn a disproportionate share of revenues, relative to what they earned in the past. Global value chains have rewarded those with talent and connections, but the variation in social policy in different countries has mediated the gap between the rich and the poor to different extents. In countries where data are available, the transmission of inequality between generations forces a stark realisation that social mobility is far more constrained than is advertised, and this radically undermines the social unity project (Wilkinson & Pickett, 2010).

Additionally, high levels of inequality lead to disempowered citizens, breeding cynicism and anxiety. Labour market attachment is often tenuous, and the poor are confined to jobs with limited growth. Individuals constrained by their circumstances do their best to secure their well-being. However, sharing the nation's resources to develop potential into capacity, to regulate markets and to fairly distribute the gains from productive activity are all critical to foster cohesion. Public policy is the tool to set the rules of the game (Wilkinson & Pickett, 2010).

The 'trickle-up' effect in terms of income is well in evidence across the globe. In a recent report, the International Labour Organisation observes:

During much of the past century, a stable labour income share was accepted as a natural corollary or 'stylised fact' of economic growth. As industrialised countries became more prosperous, the total incomes both of workers and of capital owners grew at almost exactly the same rate, and the division of national income between labour and capital therefore remained constant over a long period of time, with only minor fluctuations... An outpouring of literature has provided consistent new empirical evidence indicating that recent decades have seen a downward trend for the labour share in a majority of countries for which data are available [Global Wage Report, the International Labour Organisation (2013:45-46)].

Besides these rising levels of inequality, the greed of the rich sectors of society has also come out in bold relief as scandal after scandal in the financial and other sectors are exposed. The most recent of these are the Panama Papers which expose the intricate web of efforts, some of them illegal, to reduce the taxes that they have to pay. Combined, all these developments are helping to exert pressure on policy-makers at least to be seen to be pursuing social equity through the introduction of higher minimum wages and other such interventions. However, except in a few countries with histories of entrenched social democratic policies, the interventions seem to be superficial and ineffectual.

Social Cohesion

Social cohesion itself is not neatly defined, as recognised by Jenson (2010) at the outset of *Defining and Measuring Social Cohesion*. MISTRA's earlier work (2014) discusses the emanation of the context citing Jenson (2010). 'Social cohesion,' according to Jenson, 'is a concept with a history. It is not simply an academic concept or a catch-all word meaning many things. Rather, it is what is helpfully termed a 'quasi-concept' – a hybrid operating within policy communities' (2010:3). Jenson cites Bernard, who proposed this classification, and described a hybrid concept as a construction 'with two faces' that can be applied scientifically while retaining 'a vagueness that makes them adaptable to various situations, flexible enough to follow the meandering and necessities of political action from day-to day' (1999:2). According to King (2009), the concept of social cohesion was popularised in the 1990s.

In *Mapping Social Cohesion* (1998), Jenson identified five dimensions structured in binary patterns of positive and negative attributes, these are: belonging/isolation; inclusion/exclusion; participation/non-involvement; recognition/rejection; and legitimacy/illegitimacy. This model has been adopted and applied to South Africa by Cloete and Kotze (2009) and by Struwig, *et al.* (2013).

By way of expanding the dimensions:

Belonging: To be part of, and to experience, a sense of affiliation to the community and the larger society. It involves processes of identification and acceptance within a community and larger society. In a diverse society such as South Africa, it requires identification with, and acceptance of, groups. Its opposite is isolation.

Inclusion: To be included on an equal basis in all social activities and rights and to have equal access to all life opportunities. Its opposite is exclusion.

Participation: Unhindered participation means active involvement in community and social activities, programmes and events. This is opposed to non-involvement.

Recognition: To recognise, acknowledge and value differences without discrimination. It is negated by rejection.

Legitimacy: Integrity and social legitimacy of public bodies and leaders representing community members and citizens. This is undermined by illegitimacy.

Shared values: In societies with diverse cultures, it is to be expected there will be diverse, and even divergent, values. It is thus important for citizens to subscribe to a basic set of shared values such as democracy, freedom, equality, justice and mutual respect. This is contrasted by the absence of shared values.

Co-operation: A willingness to co-operate and work on community and social projects with diverse citizens, as opposed to non-cooperation.

Belief: Confidence in the future of the community with the conviction that the future of the community depends on the action of the community members. The notion of self-worth is integral. Scepticism and a lack of confidence is its opposite (MISTRA, 2014:96).

As reported in *The Mail & Guardian* (13 July 2012), in early July 2012, the South African Department of Arts and Culture (DAC) convened a National Social Cohesion Summit in Kliptown, Soweto. The DAC announced the state's official position on social cohesion as being 'based on four key pillars – diversity, inclusiveness, access and values' and it was 'about celebrating diversity in an inclusive manner, working with common values and making sure that all have equal access to basic services, education, healthcare, justice and housing. It is about ensuring that South Africans relate better to one another, be it as friends, neighbours, family, colleagues or even strangers.'

While the notion of social cohesion experienced a revival at the beginning of the 21st Century following riots between 'white racist right-wingers and marginalised youth in the United Kingdom', Emile Durkheim, a sociologist, writing in *The Division of Labour in Society* (1893), is credited as being the first to formally explore 'mechanical' versus 'organic' solidarity or social cohesion (Boundless, 2015).

Durkheim's definition (1893) of mechanical solidarity can almost be considered to be clannish affiliation, where people's relationships are a function of kinship and familial networks which yield social opportunities, and individuals feel connected through similar work, educational and religious backgrounds as well as lifestyle. Mechanical solidarity is posited as a function of small-scale society, at low levels of development. Modern economic relationships, based on industrialisation and trade as a function of comparative advantage, led to more organic forms of solidarity due to the interdependence arising from specialisation of function. It is contended that interdependence as a function of parts of the production process, yields a reliance on individuals who perform different roles in society. While individuals might have different values and interests, organic solidarity emerges between them because of the societal surplus arising from specialisation within the collective. Durkheim believed that people's norms, beliefs, and values make up a collective consciousness, or a shared way of understanding and behaving in the world.

In addition, social capital theory has frequently displaced the concept of social cohesion, or is often conflated with it. The first strand of conceptual work on social capital theory was advanced by Pierre Bourdieu (1980 cited in Green & Preston, 2001), as one of a cluster of concepts, including human capital and cultural capital,

that sought to disentangle the various resources and processes that underpin the acquisition and transmission of power and status in modern capitalist societies. In *The Ethics of Social Cohesion* (2005), Brian Heuser advocates for social cohesion as intimately tied to social capital. For Heuser, social cohesion is simultaneously an economic and a social phenomenon. It can thus be defined in terms of capital, value, and ethics. More clearly,

The intrinsic worth of humans and their relationships can be understood as human, social, and cultural capital. Viewing our lives as integrated provides us with a rich framework by which we can begin to understand our connection to the lives of others, including our interdependence on both the resources and the capital we share and build together in community. Our social, moral, and economic lives form the delicate matrix by which our worth as a society is to be measured (Heuser, 2005).

Social capital theory has made rapid inroads into Anglo-American social science and policymaking, largely displacing—or simply conflating—earlier, more ‘European’ discourses of social cohesion and social solidarity. However, for all its advances in understanding community networks and despite the success of the theory in bringing the ‘social’ back into dominant neoliberal discourses of politics and economics (Schuller et al., 2000), there may also be dangers in forgetting the insights of some of the earlier traditions that treated cohesion as an explicitly cooperative societal phenomenon.

Cooperation in society can be voluntary or involuntary, but in general, the distinction between social cohesion and social capital facilitating cooperation is that the former implies no coercion. Social capital relies on power differentials within and between groups yielding cooperative exchange related to self-interest, but says nothing about the terms of trade. In Durkheim’s original conception, cohesion was distinct from filial or community based cooperation because of the interdependence the industrialised society generates relative to the small-scale agrarian/cottage society setup preceding it. This interdependence is tacitly related to fairness, due to an assumption that interdependence is underpinned by relatively equal human relations, because we all form a role in production, and rely on one another. It is patent that both within and between groups in society, and indeed across societies equality has not resulted from the process of industrialisation, and that inter-class and intra-class relations both arise from and exacerbate inequality.

Additionally, the concept of Ubuntu in the South African context can be considered to parallel the solidarity emanating from social cohesion. Ubuntu can be understood as a social humanism of interpersonal care, sharing, and the commitment to the contribution of the greater social good. It positions the individual human being within a social construct; in a public culture consisting of human reciprocity and solidarity. The individual here is taken to be a human being by virtue of other human beings. This unreserved humanist and inclusive social

ethos, as Ramose (2004) suggests, places every individual in a social relationship with other individuals. This interconnectedness based on valuing and respecting all human beings, is the foundation of social solidarity. It constitutes a social compact of rights and responsibilities animating and regulating social life. A successful strategy for social cohesion and nation formation would likely be grounded on such a principle (MISTRA, 2014: 93).

While what is meant by social cohesion is often contested, there is some consensus that social cohesion can be said to be present in societies to the extent that societies are coherent, united and functional, and provide an environment within which its citizens can flourish. In other words, social cohesion is what holds societies together, and its opposite would be a polarised society. A key component for social cohesion is social justice. This is the measure of the extent of fairness and equity in terms of access to and participation in the political, socio-economic and cultural aspects of society. Social capital has both *negative* and *positive* aspects inherent in it, to the extent that it excludes certain people - racial or ethnic groups, religious groups, social classes, gender groups - may well create conditions for cooperation, networking, and building specific social capital which is limited, and does not encompass the much broader reciprocity defining cohesion. The negative effects of exclusion of certain elements in society - often major groups, such as women or workers - are significant in terms of their longer term social impact (MISTRA, 2014: (iv)).

As mentioned above, the notion of social capital is said to be parallel with that of social cohesion. Accordingly, the study asserts that it is difficult to practically separate the two constructs, since social capital is almost always used as an indicator of social cohesion (Chidester, *et al.* 2003). The World Bank, for example, uses the terms social cohesion and social capital interchangeably to mean the same thing. Broadly speaking, high stores of social capital are said to be features of cohesive societies (Fukuyama, 1999). Pierre Bourdieu and James Coleman are credited as first popularising the social capital; Bourdieu's social capital 'is the advantages and opportunities accruing to people through membership in certain communities', while Coleman loosely defined the concept as 'a resource of individuals that emerges from their social ties' (Portes, 1996) (*ibid*: (v)).

Noah Friedkin (2004) identifies a view which relies on an individual identifying themselves as members of a particular group (within the already bigger group named 'society') rather than as members of other groups. Accordingly, 'an in-group identification triggers a de-individuated state in which group members reference their attitudes and behaviours to the prototypical norms that are most characteristic of the in-group and uncharacteristic of the out-groups' (Friedkin: 2004). In addition to this,

Groups are often self-sustaining with respect to conditions that produce positive membership attitudes and behaviours. Groups are cohesive when they possess group-level structural conditions that produce

positive membership attitudes and behaviours and when group members' interpersonal interactions maintain these group-level structural conditions. Many people understand the importance of retaining valued members, enlisting members' contributions to group activities and tasks, reducing the number of negative and increasing the number of positive relationships between members, resolving disruptive disagreements, achieving consensus, and encouraging a positive view of the group as a social unit. Because many people understand (or believe) that such things are important, they often act intentionally to bring them about. Social networks are formed in part from these intentional efforts to create and maintain various forms of social cohesion (Friedkin: 2004).

Heuser (2005) reminds us that it is important that the underlying forces of social capital, as with social cohesion, are economic as well as social. He used Stephen Heyneman's (2002) notion of social capital which posited that social relationships of trust and reciprocity that enhance a group's capacity to coordinate actions of their members as they work toward a collective good. As such, *generalised social trust* then becomes the impetus by which humans are able to interact with one another in productive and meaningful ways. In other words, trust is the base component of the 'glue' that holds the ideal society together and empowers stable economic activity among citizens. With trust then come shared ethical norms that that allows the creation of social relationships guided by security. This trust 'allows people to combine their talents, ideas, assets, and other resource into a bank of human capital. It also draws on existing cultural mechanisms such as custom, religion and tradition to create and sustain a constant level of social capital.' (Heuser, 2005).

In an investigation of Robert Putnam's 'Hunkering down' hypothesis, Gal Ariely (2013) gave the following account

Robert Putnam's studies during the 1990s and 2000s accentuated the importance of social capital – and in particular social trust – for maintaining prosperous societies, proposing that 'social networks and the associated norms of reciprocity and trustworthiness' (Putnam, 2007: 137) constitute facilitators of peaceful collective action, inclusiveness, tolerance, confidence in institutions and political participation (Putnam, 2000). Social capital research has paid especial attention to interpersonal trust, which, it is argued, comprises an important dimension of social capital. In colloquial language, people living in ethnically diverse settings appear to "hunker down" – that is, to pull in like a turtle' (Putnam, 200:7149, emphasis in original).

At a basic level, conversations around social cohesion have been a reaction to the perceived deterioration of societies in whichever way we understand 'deterioration'. For the most part, research communities have linked this decline to external forces or 'threats' that prevent societies from functioning at optimal level. The findings can be roughly grouped into four categories, i.e. political, economic, social and cultural threats. Within

these categories, the impact of globalisation, the information age, increasing diversity (multiculturalism), unemployment, income inequalities, homelessness, etc. make for popular topics of investigation (*ibid.* (vi)). Furthermore, the social cohesion paradigm is used where single-focus policies have not been effective. It provides an integrated model (and an alternative to the dominant economic model) that allows for discussions and plans of action in a range of interconnected policy fields. In other words, 'every policy or action eventually has impact on every other policy and action, so social cohesion has to be taken into account in the development of every policy' (Stanley, 2003) (*ibid.*: (vii)). The point also needs to be made that the social capital that a member of a group, however defined, commands – which in turn may result in social cohesion within that group – does not necessarily translate into cohesion between that group and another group. For instance, the social capital available to a community of low-skilled workers would be much different from that enjoyed by senior managers. Besides reflecting differentiation in the value of social capital as such, this also underlines the fact that cohesion within one social group could in fact be in opposition to another group.

Inequality in Relation to Cohesion

In Christine Han, Jan Germen Janmaat, Bryony Hoskins, and Andy Green's paper titled *Perceptions of Inequalities: Implications for Social Cohesion* (2012), inequality is referred to as the differences in outcomes for individuals in education and in society. This is a broader definition than income inequality, referred to elsewhere in the paper. Inequalities of outcome – which may occur as a result of differences in individual endowments, or in the way people are treated by institutions and other individuals - are usually measured in terms of inequality in wages, household income, and wealth. Different forms of inequalities often mutually reinforce each other. For example, income differences are usually linked to a number of factors, including social class, ethnicity, gender, wealth, and the rural-urban divide (2012: 12).

However, they continue, the fact that there are differences in outcome may not in and of itself be considered undesirable or intolerable by people in a society. Faced with differences in outcome, individuals look at other factors to determine whether such differences are morally acceptable. Among other things, they look at whether the differences in outcomes are based on differences in factors they consider relevant. Given a situation where there are differences in remuneration, individuals may consider whether there are differences in the ability or effort required in, or the responsibilities of, the job in question. The factors that are considered relevant may differ from society to society. There are societies which consider that workers should be remunerated on the basis of ability and responsibility, while others do so on the basis of seniority. Hence, what is regarded as being an acceptable relevant factor is socially constituted. However, the principle remains the same, viz. that differences in outcome will be tolerated by most people if these are based on a socially accepted factor relevant to the outcome (*ibid.*: p13).

Additionally, in situations where there are differences in outcome, individuals may also take into consideration the opportunities for mobility. In other words, they may tolerate inequality of outcome if they believe there is a degree of equality of condition or opportunity. Hence, inequality of outcome may not, in itself, be something individuals consider undesirable or intolerable. Whether they are willing to tolerate this depends on whether they think the outcomes in particular, and conditions in general, are just. In other words, inequality of outcomes is considered a social ill, and will not be tolerated, if it is not linked to factors that render it just (*ibid*: 13).

In addition, people use their values and beliefs to form judgements about inequality. The way they think about inequality – what the authors describe as understandings in common parlance – may vary from person to person depending on these beliefs and judgements. With regard to how individuals understand inequality, Gandy and Baron (1998) similarly note that such understandings are often filtered through the lens of ideology or social affiliations (e.g. membership of ethnic group, or social class).

Such understandings may also be influenced by exposure to the mass media, and the way that these may present or ‘frame’ the different social groups (*ibid*: 16).

Beliefs, understanding and values may also be affected by experiences of unequal treatment. For instance, studies have shown that experience of deprivation and poverty at an impressionable, youthful stage in life is linked to individuals being more risk averse, and more likely to value state redistribution of resources (Alesina and Giuliano, 2009). At the same time, the way people experience the society around them can also make a difference to their outlook. For instance, when disadvantaged individuals in highly unequal societies are means-tested for benefits, they tend to feel pessimistic, and also lack a sense of control over their destiny; this pessimism and lack of control is associated with low levels of generalised trust – a diminished sense that people outside their immediate social group can be trusted. In addition, as will be shown, individuals may also make psychological adjustments with respect to their beliefs when faced with perceptions or experience of inequality. The further point can also be made that perceptions and experience of inequality may be closely linked. For instance, a person who believes that there is societal racism towards his own ethnic group, may experience that racism personally (*ibid*: 17).

The three cognitive elements of inequality (judgement, perception and belief) are interrelated. *Judgement* of existing inequality, for instance, will depend on the gap between *perception* and *belief*. The larger the discrepancy between people’s estimates of inequality and their ideas about just inequality, the harsher their judgement of existing inequality is likely to be (Sen 2000, Osberg and Smeeding 2006). There is also a strong link between perception and belief. People find it difficult to live with an inconsistency between how they perceive the world to be and how they think it should be, and they may therefore adjust their normative

beliefs to 'fit' their perceptions. In other words, what they think 'is' may determine what they think 'should be' (Berger et al., 1972, and Homans, 1974, cited in Marshall et al 1999) (*ibid*, 19). Finally, the two dimensions of inequality – viz. the size or *magnitude* of inequality, and the *principles* determining the allocation of resources and rewards – are also likely to be interlinked. Common sense would lead us to expect that people who believe that the principle of merit should determine income are likely to accept much larger income differences than people who think that income should be based on need (*ibid*: 20).

The authors then argue for a link that can theoretically be postulated between the cognitive elements of inequality and important social outcomes such as participation, tolerance, and social solidarity. If people prefer large inequalities, and judge existing inequality to be fair, they do not have an incentive to mobilise politically in an effort to change the situation for the better (i.e. we can expect their participation levels to be low) (Furnham, 2003). People are also likely to hold negative views of the poor and other disadvantaged groups because of their conviction that these groups 'get what they deserve' (Lerner, 1980). This, in turn, is likely to diminish their support for social welfare programmes benefitting these groups. Furthermore, a belief in a just world has also been associated with higher levels of both interpersonal and institutional trust (Fink and Guttenplan, 1975), with more life satisfaction and well-being (Lipkus et al, 1996), and lower stress levels and higher achievement motivation (Tomaka and Blascovich, 1994). That is, if people believe that the world is just and fair, they are also likely to believe that fellow citizens are trustworthy, and that they can improve their own fate, and their efforts are rewarded. In other words, the belief in a just world is a strategy to cope with the insecurity and unpredictability of the real world (Dzuka and Dalbert: 56, 2000). Belief in a just world is thus related in different ways to various social cohesion and competitiveness outcomes (*ibid*: 55).

Consequently, the authors found that belief in a just world is associated with positive social outcomes like institutional trust, and life satisfaction and well-being. At the same time, changes in the prevailing economic and political order – and associated ideology – suggests links between the cognitive elements of inequality and political behaviour (*ibid*: 55).

On the possibility of measuring social cohesion, the study argues that while it may not be possible to measure any one thing that can be recognised as defining social cohesion, trust is a necessary condition to support both social capital and social cohesion. Factors affecting social cohesion could include the ways in which people view themselves in terms of race, nationality, or other markers of identity; the extent to which there is common purpose or a shared set of values; and the extent to which people in society engage in and are part of a recognisable social dialogue. Identity in relation to trust is important, but notions of intersectional identity and the occupation of different roles in society by the same person might necessitate the collection of specialised data.

Negative social phenomena could well have their origins in or be exacerbated by the exclusion of individuals from communities and society in general. Phenomena that relate to a lack of social cohesion or of the negative consequences of social cohesion include violence, unrest, substance abuse, intolerance, lack of motivation, a sense of hopelessness and the emphasis on difference. The degree of cohesion in society is related to the extent to which participants and observers of society find the lived existence of citizens to be relatively peaceful, gainfully employed, harmonious and free from deprivation, whether in terms of basic needs such as food, water and shelter, in terms of basic human rights such as freedom, democracy and governance, or in terms of culture, language and intellectual stimulation (*ibid*: (vi)).

Social cohesion is linked to individual parts played in contribution to the greater whole of society. Every facet of individual life is intricately linked to another in a way that creates a unified whole. In addition, 'the quality of the relationships forming this matrix is predicated by values that produce the ethics and norms by which a society functions. The nature of those values determines the strength of the relationships which ultimately dictate how stably a group of people will function in society' (Heuser: 2005). Independent of whether one considers that societal relations are ultimately underpinned by self-interest, empathy or altruism, trust or reciprocity are essential ingredients for cohesive behaviour across society.

Societal level cohesion then, could be considered to be human decency, reciprocity and solidarity, operating at a supra-level, independent of one's status in society. Social capital on the other hand, could be considered to be cooperative relations amidst smaller groups in society forged on the basis of self-interest and enrichment.

What would lead to the attainment of a cohesive society? Fundamentally, one should be able to relate to another as intrinsically worthy, and be confident that trust extended would render considerate behaviour. To what extent is this feasible in a diverse society with a history of oppression, intentional division and inequality? The facilitation of cohesion would require that the inequalities, exclusions and disparities based on ethnicity, gender, class, nationality, age, disability, or any other distinctions which engender divisions, distrust and conflict, are reduced or eliminated in a planned and sustained manner. This should be underpinned by active participation of the citizenry working together for the attainment of shared goals, designed and agreed upon to improve the living conditions for all (MISTRA, 2014).

It is useful to return to the South African society here, and consider what the effects of Apartheid and extreme inequality imply about the relationships between individuals in society. South Africa is a nation in which the legacy of Apartheid and dynamics of 'internal colonialism' as well as colonial experiences on the continent influence the composition of its contemporary population. Race-based oppression has left an indelible mark

on the wellbeing of individuals across society, intimately linked to their racial designation under Apartheid, manifesting in numerous ways, both on material well-being as well as societal ills including crime and xenophobia.

Whether inequality or poverty is considered as an income or asset derived measure, or formulated in terms of other outcomes, South Africa is in a unique position globally, in terms of multiple South African 'societies' that have emerged from its history. This argument might be put forward at the level of consignment to oppressed and indentured labour or the exacerbation of factional ethnicity – largely replicated in provincial designations today (MISTRA, 2014). The ongoing scourge of violence on the basis of gender, race, nationality and suffered inordinately by the vulnerable in South African society, stems directly from the oppressive force used to maintain and control Apartheid South Africa.

Nunn (2008) examines the long-term impacts of Africa's slave trade. While he notes that South Africa and Namibia did not have a significant history in transatlantic slave export, it could be argued that descendants of slaves suffer the impact of slavery whether one examines their communities at source or destination. The Cape functioned as a fully-fledged slave economy for a lengthy period and the majority of South Africans who are of 'mixed-race' or Malaysian origin are in part descendant from slaves. Slaves were brought to the Cape from 1653 until 1822, and while the abolition of slavery in British colonies began in the early 19th century, the date for the formal emancipation of slaves [in South Africa] was set at 1834. Nunn (2008) utilises historical data relating to the African slave trade, which was sustained for a period longer than 400 years and finds that it 'had a significant negative effect on long-term economic development.' **Slavery** is found to have a **negative causal relationship with income today**. The significance of this research, in terms of the use of historical economic data to prove the link on contemporary incomes cannot be overstated.

Africa's slave trades were also unique because, unlike previous slave trades, some individuals from the same or similar ethnicities collaborated in this heinous enterprise. This treachery had particularly detrimental consequences, including social and ethnic fragmentation, political instability and a weakening of states, and the corruption of judicial institutions. Slavery was an immensely harmful practice. While initially the capture of slaves occurred through organized raids and warfare, the environment descended into one which 'caused individuals to turn on others—including friends and family members—and to kidnap, trick, and sell each other into slavery (Koelle, S, 1854; Hair, P, 1965; Piot, 1996 cited in Nunn & Wantchekon, 2011).

Nunn & Wantchekon (2011) examine the slave trade in relation to mistrust in Africa. Using individual level survey data in relation to slave export intensity by ethnic group, they show contemporary differences in trust

levels within Africa have a historical relationship with transatlantic and Indian Ocean slave trades. Heavy raiding of ancestors leads individuals to be less trusting today, and the researchers show strong evidence that the relationship is causal. In particular, it is found 'that most of the impact of the slave trade is through factors that are internal to the individual, such as cultural norms, beliefs, and values' (Nunn & Wantchekon, 2011: 3221).

In South Africa the impact of slavery and colonialism is visible to the eye, yet neat analyses to measure the effect of historical oppression on contemporary circumstances are very difficult. While certainly due in part to the general availability of quantitative data historically, the deficit of information to provide a clear link of the effect of oppression on individual outcomes is at least in part due to the deliberate obscuring of historical data relating to black South Africans, broadly defined. Nonetheless, the effect on race-based inequality in aggregate is apparent, both between and within groups.

MISTRA's 2014 publication titled '*Nation Formation and Social Cohesion: An Enquiry into the Hopes and Aspirations of South Africans*' sets off to assess the extent to which South Africa satisfies the prerequisite to be a socially cohesive nation. The study defines social cohesion as a post-nationalist project in established nation states where either sections of the national majority or historical and new immigrant minorities find themselves excluded and marginalised (MISTRA, 2014:14). In this sense, social cohesion is thus more concerned with addressing the *negative effects* of economic, social, cultural and other forms of exclusion that develop in highly unequal and stratified societies, or in ones where sections of the population, local or immigrant, are subject to systematic exclusions in different spheres of social life (*ibid*: 14).

In addition, the South African case illustrates the struggle for a socially cohesive nation which has not (yet) brought about the full inclusion of the majority of the population, economically or otherwise, in the post-apartheid society. Rather, society today still manifests elements of old forms of mass exclusion, or produces new ones on such large scales that the process of [social cohesion] could be said to have been left inadequately attended, with the emergence of a non-racial national bourgeoisie and middle strata having assumed prominence, and the urban and rural poor remaining largely marginalised (*ibid*:15). Sociologists and liberation movements characterised South Africa as colonialism of a special type to describe the unique situation in which the colonisers permanently settled in the country that they colonised *with* the colonised.

What follows from the characterisation, as Joel Netshitenzhe (February, 2016) illustrates in his presentation of '*Black Man's Burden? South Africa's Collective burden?*', is the phenomenon of the liberator being required to lead and manage both the subject that was colonised as well as the former coloniser. In addition, when liberation is attained under these circumstances, the result is the liberator adopting and assimilating the

dominant archetype that made up the metropolis; 'the definition of such liberation can, among the black elites, easily revolve around the mantra, 'we have arrived'!. Black elitism then joins up with white elitism where both 'elites would then worry about the crumbs to be thrown at the multitudes along the fence of social division'. What follows from this reality is the inevitable bubbling of tension by the marginalised in the face of rampant poverty and widespread inequality; which is mostly followed by protests and social disharmony. The act of social transformation therefore needs to address the totality of the 'national question': to create a united, non-racial, non-sexist, democratic and prosperous society, founded essentially on social equity (Netshitenzhe, 2016).

The MISTRA study further illustrates an established relationship between social cohesion and *nation formation*. Since 1994, key legislation was enacted to promote national unity, equality, and to entrench and protect human rights in South Africa. The Constitution of the Republic of South Africa (Act 108 of 1996) enabled the establishment of, among others, the Human Rights Commission (1994); the Truth and Reconciliation Commission (through the Promotion of National Unity and Reconciliation Act (1995)); the Commission for Gender Equality (1996); the Youth Commission (1996); the Commission for the Promotion and Protection of the Rights of Cultural, Religious and Linguistic Communities (2002), and the Pan South African Language Board (1995). In conjunction with economic policies aimed at black empowerment and equity, the cluster of laws and institutions set out to fundamentally transform South African society, promote national unity, reconciliation and social cohesion (*ibid*: 91).

The existence of these laws and the work of these bodies greatly assisted in monitoring and disabling existing patterns of discriminatory practices and human rights violations. Nonetheless, the deeper structural features of minority rule and race-based inequality have not as yet been dismantled. In other words, the democratic government sees its responsibility as attacking the structural manifestations of social divisions through programmes of social transformation; but at the same time promoting a sense of national unity and reconciliation and a common overarching identity among South Africans. The latter, is seen as dependent on 'active and responsible citizenship', which includes the promotion of social cohesion (Outcome 12 in government's programme after the 2009 elections assigned to the Ministry of Arts and Culture) (*ibid*: 92).

Furthermore, the relationship between social cohesion and nation formation arises from the fact that stark divisions and inequalities produced by colonialism and apartheid persist in post-apartheid South Africa – in its economic and social life; while at the same time, the postcolonial state, under the conditions of globalisation, has lost some of its leverage effectively to promote social cohesion. The National Development Plan (NDP) adopted by government in 2012 makes the similar observation that access to economic resources and quality education remains largely based on 'race, gender, geographic location, class, and linguistic' factors. It then argues that, if left unchecked, this will not only persist indefinitely but could also threaten the long-term

sustainability of democracy in South Africa. As such, a minimum level of social cohesion is required for society together to pursue the strategy for economic growth and job creation, education and skills, and a capable and developmental state. –On the other hand, attainment of social cohesion ultimately would depend on creating employment opportunities through faster economic growth; improving the quality of education, skills development and innovation; as well as building the capability of the state to play a developmental, transformative role (*ibid*: 92).

Methods and Descriptive Statistics

Behavioural economics literature investigates reciprocity in relation to trust; and trust/fairness are terms often used interchangeably with what might in other literatures be understood as social cohesion. Dufwenberg and Gneezy (2000) analysed the results of an experimental lost wallet game to elicit insight into how individuals would behave if they retrieved a lost wallet, and were able to return it to the owner via the closest police station. The owner is asked by the police to offer an appropriate reward to the finder. What is found is that, while the finders' motivation to return the lost wallet is related to its value, rewards for the return of the wallet are only weakly related to the value of the lost wallet. Using a rational basis for understanding human behaviour, finders should always choose to [keep?] the wallet, yet they do not do so, invalidating simple 'rational choice' as a means for understanding how the decision to return a lost wallet is undertaken.

Johnson & Mislin (2011) undertake a meta-analysis of the experimental economics work on the trust game in order to verify the generalisability of its findings. They find that when there is more at stake, individuals become more risk averse. It is also shown that relative to other areas where trust experiments have been undertaken, poorer sections of society appear less trusting than others. When endowments are distributed unequally, less lending/sharing occurs. Inequality could hence be understood to undermine trust and cooperative exchange.

The National Income Dynamics Study (NIDS) provides a rich data source including demographic information and well-being, to establish the level of trust extended by population [and] language groups controlling for a number of dimensions of inclusion, from income, but also perceptions of subjective welfare, exposure to social ills and education and employment outcomes. Trust is critical for facilitating the development of society. Relating issues of trust, to inclusion, from a monetary perspective, as well as broadly conceived access to education, jobs and useful assets, belonging, language affiliation, life satisfaction, and emotional well-being allows us to garner insight into the relationship between inclusion and cohesion in an unequal society. In particular, it is intended to examine how broadly conceived determinants of deprivation and inclusion or

individual identity have a significant relationship with the level and kind of trust one extends to others in society. Security is also related to trust, a major issue in South Africa, and NIDS includes household level information on perceptions of the prevalence of crime and other social ills within the community.

The policy of segregation and accompanying forced removals of communities from their land, implemented under colonialism and intensified under the apartheid government (1948–1994) is understood have had a significant impact on neighbourhood social order, which has been sustained until the present. Perceptions of violence and criminal activity are frequently reported as concerns, and have a sustained impact on behaviour in society, even when the incidence of crime fluctuates. Tomita, Labys & Burns (2015) examine the relationship between symptoms of depression and neighbourhood social disorder using NIDS (2010). Social disorder is measured using scores constructed in relation to the perceived frequency of violent, criminal and illicit activities in the community. NIDS presents a particularly rare nexus of household information linked to health data, including a module containing the 10-item version of the Center for Epidemiologic Studies Depression Scale.

Tomita, Labys & Burns (2015) find that perceptions of neighbourhood social disorder are related to ‘significant levels of depressive symptomatology.’ Perceived health status, as well as gender, race and level of education were significantly correlated with scores indicative of depression. In light of these findings, the authors urge that strategies should be undertaken to reduce the effect of social disorder, and develop positive social norms in neighbourhoods. While this might well be difficult to implement; findings elsewhere indicate the benefits of reclamation of community spaces, broad use of public libraries, and the participation in social sport on well-being in multiple domains.

Considering access to income and sustainable livelihoods, it is found that despite worsening inequality, multidimensional poverty levels in South Africa have improved. Multi-dimensional poverty is a more extensive measure of poverty than money metric poverty and includes other facets of well-being, related to inclusion, security, education, employment as well as access to decent wages, food, shelter, potable water and electricity. Finn, Leibbrandt & Woolard (2013) use data covering the post-Apartheid period to evaluate changes in well-being comprised of education, health and living standards. It is shown that multidimensional poverty has declined significantly since 1993, and at a much greater rate than income poverty. Social services and improvements in infrastructure largely underpin the amelioration of poverty, when considered broadly. That said, stark differences in well-being persist between urban and rural communities in South Africa (Noble, Zembe, Wright, 2014).

Examining social cohesion using empirical data is best suited to using specifically designed experiments, mixed methods and carefully constructed survey data. In this paper the 2012 Wave of the National Income Dynamics Study (NIDS) is utilised to examine the relationship between social cohesion and inclusion on the one hand, and the context of inequality on the other. The dataset is a rich panel household longitudinal dataset, although at present the current investigation is limited to the third wave of data. It includes a module on social cohesion, which can be linked to detailed demographic and socioeconomic variables to understand their relationship with reciprocity or trust, as measured in the NIDS dataset.

Two questions are asked to measure trust, relating to the return of a lost wallet. Earlier waves of the data have been analysed to measure levels of trust. Posel & Hinks (2012) uses the 2008 Wave of NIDS to evaluate the variation between races and the measures of trust registered. While questions ideally are standardised in all waves of the data; where it is clear that improving the question will improve inference from analysis, some changes are implemented. In addition, in the interests of minimising the odds of non-response, sometimes questions and modules are rotated or excluded. In 2012 NIDS individual adult respondents are asked to estimate the likelihood of a lost wallet containing R200 which included the respondent's contact details being returned, in one instance by someone residing nearby and in the other instance by a stranger. At the personal level, it is considered that both the amount mentioned as well as proximity – which is compounded by segregation in South Africa – pose much difficulty to inferring the underlying latent factors underpinning one's estimation of the odds of a wallet being returned.

The version of data that Posel & Hinks (2012) utilised did not include material relating to the availability of contact information to facilitate the return of the lost wallet. Nonetheless, Posel & Hinks (2012) report that very low levels of trust are found across the population, which is considered a realistic view in the high crime environment of an unequal South African society. While there is a distinction between a wallet being lost or stolen, it is very hard to unpack what affects one's estimation of a lost wallet being returned – is it simply considered an expensive exercise relative to the value in the wallet to return it, or assumed that opportunistic theft is widespread, albeit with some differences between neighbours and strangers?

In 2008 (Posel & Hinks, 2012) found that while trust in general is low, South Africans are significantly more likely to trust their neighbours than strangers. Consistent with local studies and those conducted in the United States of America (USA) considerable racial variation is found to be related to reported trust. In 2008, the White population South Africa reported lower levels of trust in people living close by, but these effects are diminished when one controls for personal and neighbourhood income. Racial differences in trust of strangers are much smaller, with the Black population reporting higher levels of trust in strangers than other groups,

although this may be driven by the fact that a stranger is very likely to be black, and congruent with in-group bias.

Table 1: Overall Rates of Trust

	High	2473	13.71%
	Uncertain	505	2.80%
	Low	10913	60.52%
	Greater Trust in Neighbour	2537	14.07%
	Greater Trust in Stranger	1071	5.94%

Source: Own calculations, NIDS 2012.

*inconsistent is an omitted category, where unknown is chosen only once regarding trust in strangers or neighbours

In 2012, the population distribution of the NIDS dataset changed substantially, and the descriptive statistics provide clear evidence of why extreme caution should be applied regarding results relating to comparisons between groups, particularly on the basis of race using the dataset.

Congruent with findings by Posel & Hinks (2012) utilising the 2008 version of NIDS it is clear that a significant majority of South Africans exhibit low generalised as well as particularised trust regarding the likelihood of a lost wallet being returned. A small minority indicate that they are uncertain about the odds of a wallet being

returned, and one might think more would have responded that they were uncertain about the return of the wallet given the phrasing of the question.

Table 1 depicts the levels of trust people have regarding their expectation of whether a wallet can be returned if lost. Considering Table 1 read together with Table 2, what is worth noting is that a significant minority do expect that both a neighbour or stranger would undertake the effort to return a lost wallet – and this might in fact indicate that this is behaviour that they too would exhibit. As shown in Table 1, only about 13.7% have a high expectation that a stranger would return their lost wallet. A higher percentage however, almost 60%, have a low expectation that their wallet would be returned to them if lost. When one considers those who trust their neighbours more than strangers, it is worth noting that the proportion is similar to those who exhibit high generalised and particularised trust. This might speak to trust relating to social capital in terms of local community or neighbourhood networks, rather than the broader nature of trust one might associate with social cohesion.

Those who trust strangers more than neighbours are also worth noting, as this suggests that they have some bias against their neighbours and that a complete stranger might be believed to extend greater reciprocity to them than their neighbours. Again examining Table 1, which depicts the relationship between trust of neighbours to that of strangers, one notices that those who are more inclined to trust their neighbours are more likely to have less trust in strangers. 60% of the people indicated that they would rather trust their neighbour than a stranger. In addition, only about 12% of the respondents indicate that they would trust both strangers and their neighbours.

Table 2: Relationship between Trust in Neighbours and Strangers

Trust of Neighbours	Trust of Strangers		
	Unlikely	Unknown	Likely
<u>Unlikely</u>			
Cell Percentage	60.54%	1.08%	12.80%
Row Percentage	81.36%	1.45%	17.20%
Column Percentage	88.90%	26.11%	46.06%
<u>Unknown</u>			
Cell Percentage	1.86%	2.80%	1.27%
Row Percentage	31.34%	47.24%	21.42%
Column Percentage	2.73%	67.97%	4.57%
<u>Likely</u>			
Cell Percentage	5.70%	0.24%	13.72%
Row Percentage	28.98%	1.24%	69.78%
Column Percentage	8.37%	5.92%	49.37%

Source: Own calculations, NIDS 2012.

Relative to the proportions displaying different levels of trust – higher rates of trust are found on aggregate in 2012 relative to 2008. Posel & Hinks (2012) advance the argument that low levels of trust are to be expected; as the longevity of democratic arrangements is associated with higher levels of trust, citing Ingelhart (1990) and Muller and Seligson (1994). It seems that the argument in aggregate might hold. On the other hand, Posel & Hinks (2012) indicate that high unemployment, poverty, inequality and crime might all drive low expectations that a wallet would be returned.

Those who are unlikely to trust strangers, are also almost as unlikely to trust their neighbours, while those who are likely to trust strangers are also likely to trust their neighbours, although the likelihood of the trusting relationship appears weaker than the relationship of low trust in both strangers and neighbours.

If one examines Figure 1 read together with table 3, it is apparent that low levels of trust are exhibited largely by the Coloured and African populations – who comprise the majority of the dataset. In particular, the representation of the White and Indian/Asian populations should be treated with exceeding caution. If one considers the differences in the type of neighbourhoods (gated communities) richer people occupy, it makes sense that attrition would affect larger proportions of the White and Indian/Asian populations, and that those who remain are both more accessible as well as more trusting and hence willing to participate in the survey, which in combination with the small effective participation rate makes it very hard to infer that any estimates on these populations would be representative of the broader community.

Figure 1: Greater Trust by Race Group

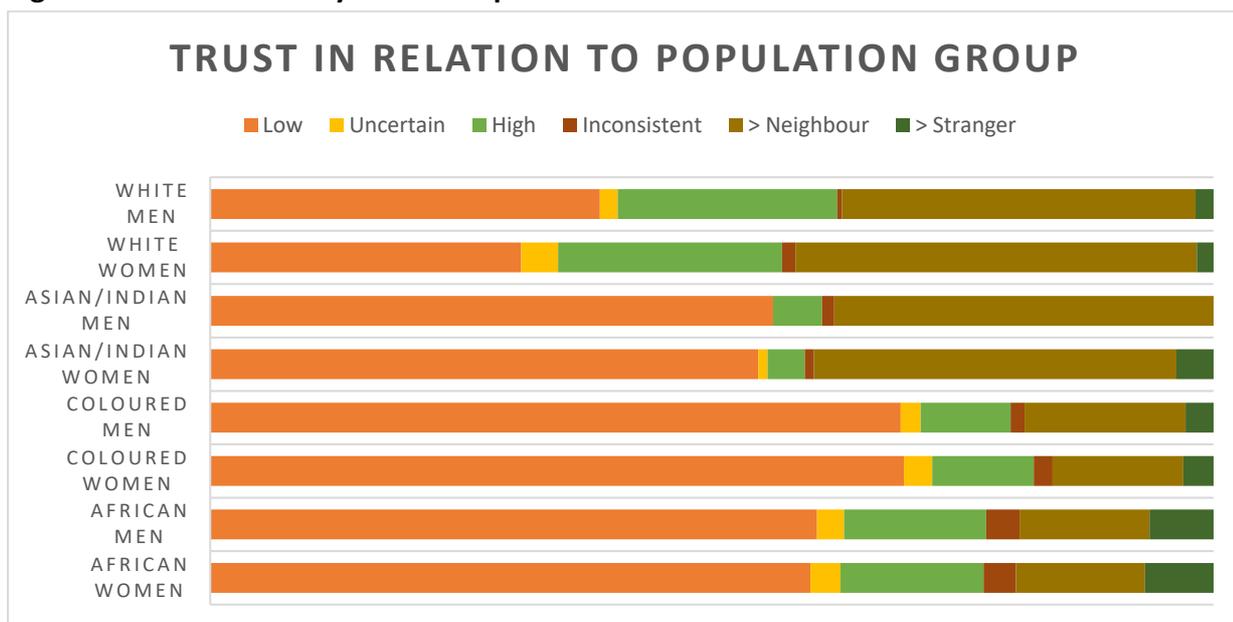


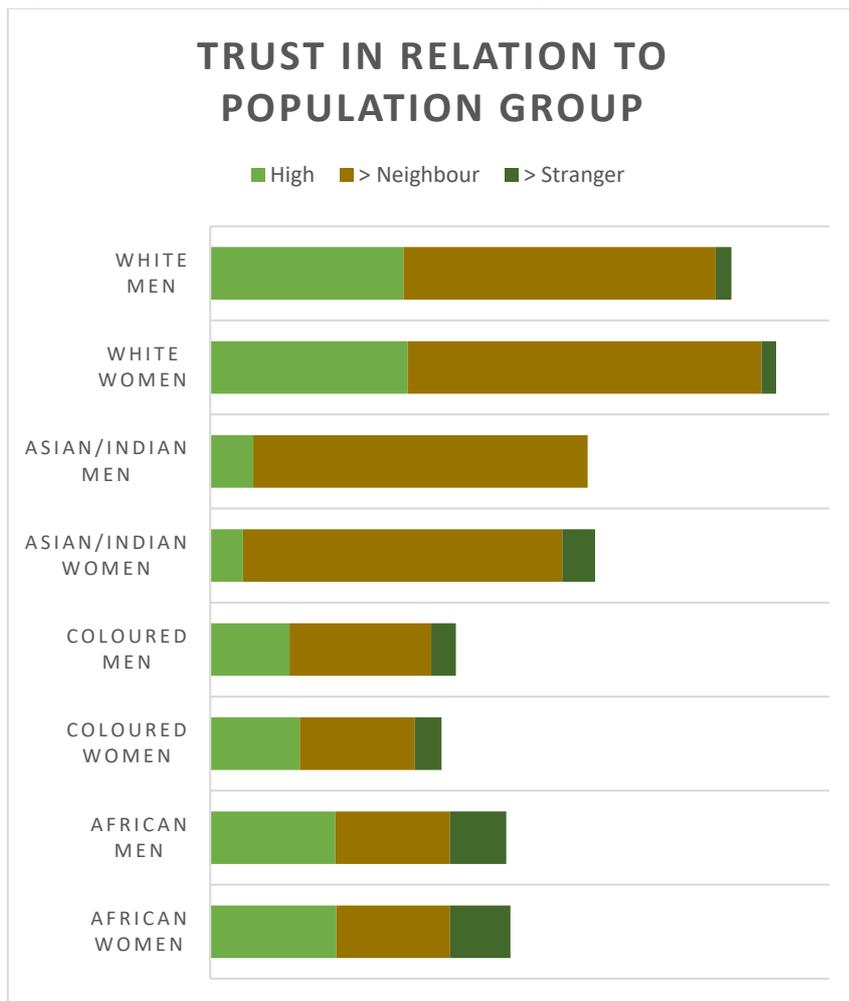
Figure 1 shows that higher levels of trust are exhibited by White people, in both generalised and particularised form. This is in line with Posel & Hinks (2012) previous findings using the 2008 version of NIDS.

Table 3: Trust in Neighbours and Strangers by Population Group

	Trust of Neighbours			Trust of Strangers			n
	%	s.e.	st. dev	%	s.e.	st. dev	
African Women	0.129	0.004	0.335	0.068	0.003	0.252	8910
African Men	0.130	0.004	0.336	0.064	0.003	0.244	5913
Coloured Women	0.130	0.009	0.337	0.030	0.004	0.171	1491
Coloured Men	0.160	0.012	0.367	0.028	0.005	0.165	1004
Asian/Indian Women	0.361	0.046	0.483	0.037	0.018	0.190	108
Asian/Indian Men	0.378	0.054	0.488	-	-	-	82
White Women	0.400	0.028	0.491	0.017	0.007	0.128	300
White Men	0.353	0.032	0.479	0.018	0.009	0.133	224

Considering the estimates with confidence intervals in Table 3 (rather than the raw numbers in Figure 1) – levels of trust in neighbours are only slightly higher in the Coloured population than the African population. Levels of greater trust in strangers is never higher than a particularised trust in neighbours, although a small proportion of Africans are more likely to trust strangers more than neighbours. The gap in trust in neighbours and strangers is most pronounced for white people. What is interesting in general, is that despite good reason for why there might be gendered differences in levels of trust, where these differences are borne out, they are small.

Figure 2: Conditional Type of Trust Being Extended by Population Group



Neighbourhood Affiliation

As alluded to before, segregation still affects most neighbourhoods today. Segregation in South Africa under Apartheid was effected in many cases through forced removals under the Group Areas Act (Government of South Africa, Act 41 of 1950). The material worsening of circumstances experienced by Black South Africans was only exacerbated by the destruction of communities as well as families, many of whom were split up, destroying cohesion. Despite emanating from dire circumstances, today segregation would operate differently – and its effect on neighbourhood-level cohesion that it is worth investigating. We examine this through the lens of an individual’s preference to remain in their current neighbourhood.

Table 4: Preference to Stay in Current Neighbourhood

	Stay	13587	75,53%
	Uncertain	2325	12,93%
	Leave	2076	11,54%

Source: Own calculations, NIDS 2012.

Interestingly, Table 4 indicates that the overwhelming majority of individuals would prefer to stay in their current neighbourhood. Only 16% of the current sample indicate that they have ever lived outside of their current 'suburb/town/village', as per the questionnaire. This question is quite broad, and might indicate that most people move within a narrow geographical space, or, indeed that it is harder successfully to do survey follow-up with those who move more regularly over larger distances.

However, when considering Table 5 to see if living elsewhere explains a preference to leave, it does not appear that this is a major driver of an individual's preference to leave, although it might partly be attributed to one's preference to remain in their current neighbourhood.

Table 5: Relationship between Neighbourhood Attachment & Living Elsewhere Previously

Prefer to Stay?	Lived Elsewhere				Total	
	No		Yes			
Leave	1694	0.816	382	0.184	2076	1.000
Uncertain	1957	0.842	368	0.158	2325	1.000
Stay	11893	0.875	1694	0.125	13587	1.000

Figure 3 shows us that when neighbourhood affiliation is considered in relation to population group, Coloured and African individuals look most similar in terms of their preferences to remain or leave their current neighbourhood. White people largely occupy the most affluent neighbourhoods in South Africa, and perhaps their strong preference to remain in their current neighbourhood is most predictable. The Indian population estimates, while needing to be treated with caution also indicate a high level of neighbourhood affinity. Whether these estimates of neighbourhood affiliation are a function of status quo bias or affiliation is hard to tell, but it seems that despite vast inequality in living situations black South Africans experience, the significant majority have adapted to an unfair history sufficient to feel some attachment to their neighbourhood and their community.

What is evident from Figure 4 though, is that when one considers trust in relation to neighbourhood attachment, those that think strangers are more likely to return their wallet than their neighbours are most likely to want to leave their neighbourhood, followed by those with universally low levels of trust. The smallest proportion of individuals who want to leave their neighbourhoods display higher trust in neighbours or trust in general. The best way to interpret this is that with no reason for neighbourhood level trust to be undermined, one would not have much inclination to leave the place to which one is most accustomed, and has very likely been one's lifetime home. Those who display low trust in general, or think that a random person would extend more reciprocity to them than their neighbour might well have reason to want to see if another location offers them a different experience of life.

Figure 3: Preference to Stay in Current Neighbourhood

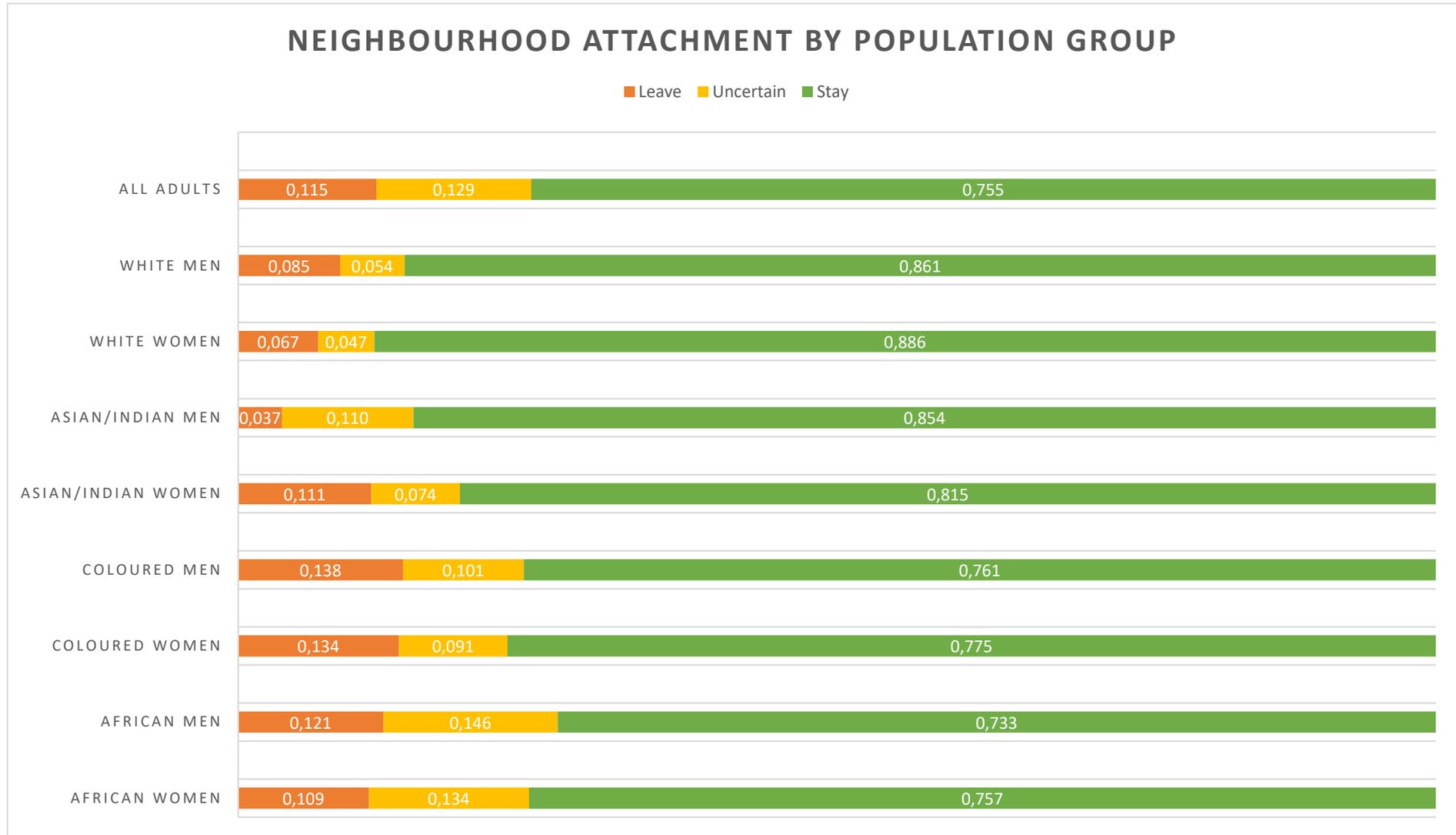


Figure 4: Trust related to Preference to Stay in Current Neighbourhood

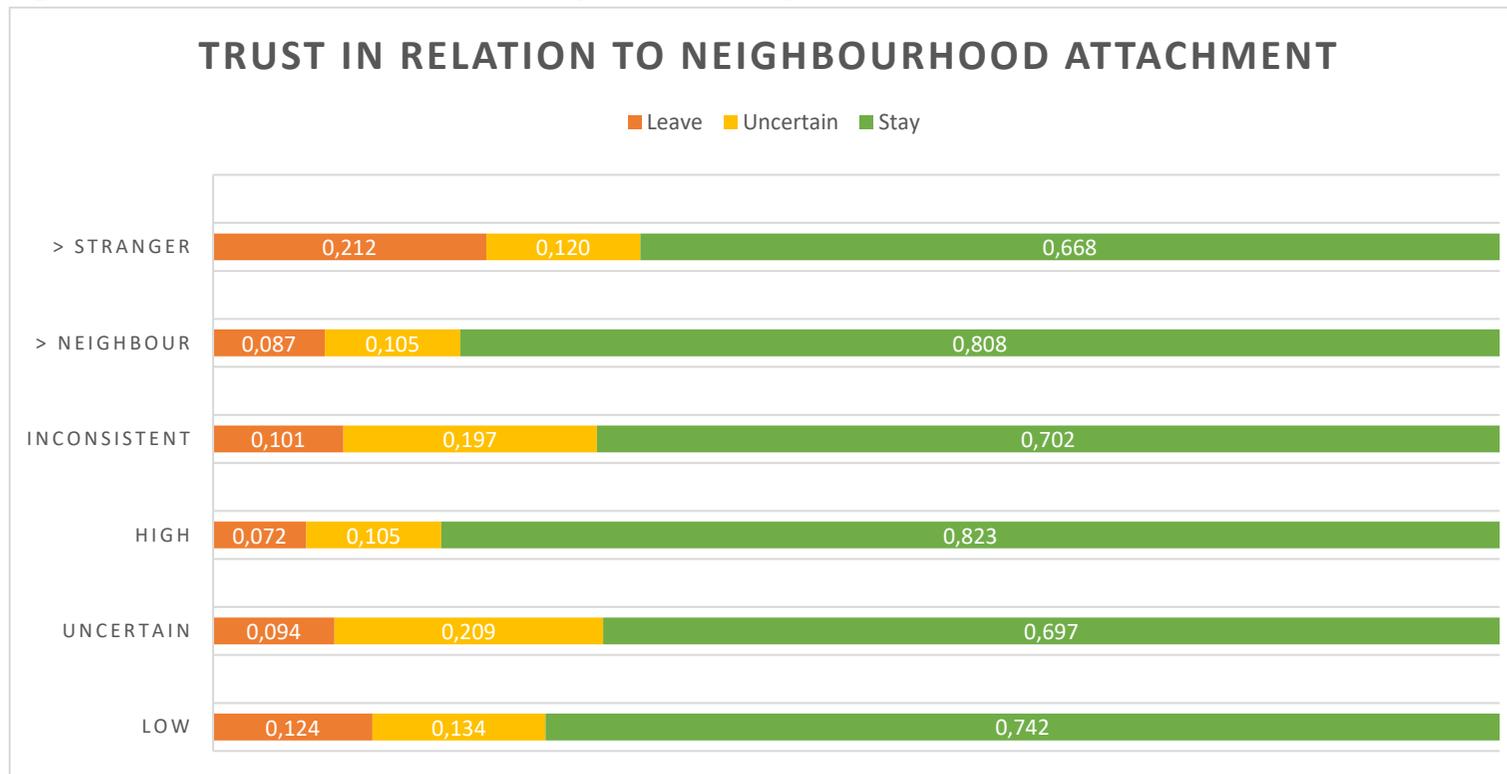


Table 5: Life Satisfaction by Race and Gender

Population Group				Number
African Women	0.498	0.317	0.185	8911
African Men	0.504	0.296	0.200	5914
Coloured Women	0.238	0.264	0.498	1491
Coloured Men	0.242	0.267	0.491	1004
Asian/Indian Women	0.139	0.222	0.639	108
Asian/Indian Men	0.098	0.280	0.622	82
White Women	0.103	0.253	0.643	300
White Men	0.134	0.228	0.638	224
	0.449	0.300	0.251	18034

Life Satisfaction is reported in the dataset on the basis of ranking one’s own subjective well-being. If one reports scores 1-3 one is considered dissatisfied, 4-7, indifferent, and 8-10, satisfied. Broadly, looking at Table 5, life satisfaction seems to be related to differential circumstances of the various population groups in South Africa, and this does broadly relate to social status or class position. It can be argued that the distribution of life satisfaction shown here mirrors inequality we see amidst society, with Blacks overwhelmingly located on the lowest rungs of the social ladder. However, inequality does affect the sense of security among those who are well-off (with the white community largely located in the upper rungs), thus negatively affecting the life satisfaction score within this group.

The Model

Jenson (2010) highlights a variety of metrics relevant to measuring social cohesion, and Wilkinson & Pickett (2010) indicate the relationship between inequality and a variety of social outcomes. Within NIDS we are able to examine inclusion in relation to Noble & Wright’s (2012) indicators of multiple deprivation in South Africa, controlling for income, selected assets, education, labour market attachment as well as urban/rural location. Hence our model examines different measures of trust, in relation to demographics i.e. gender, race, age, language group and geographic location as well as education, employment, marital status, income, access to assets, life satisfaction, neighbourhood attachment, perceived exposure to social ills within the community, stokvel participation, religiosity, mental health symptomology and perceived physical health.

Given that the perceptions of trust are multiple, yet not related in an ordered/ranked manner, the appropriate estimation model is a multinomial logistic model. In text, descriptive statistics for the entire sample are provided. The appendix contains a table looking at descriptive statistics for the sample partitioned on the basis of demographics. While the previous descriptive analysis provided an unconditional overview of the data, the estimation that follows examines the outcome of trust in relation to the co-factors listed in the paragraph above.

Table 6: Means and Standard Errors of Independent Variables

	All	
African Women	.4940687	.0037225
African Men	.3279933	.0034955
Coloured Women	.0827051	.0020508
Coloured Men	.0556541	.0017069
Asian/Indian Women	.0059867	.0005744
Asian/Indian Men	.0045455	.0005008
White Women	.0166297	.0009521
White Men	.0124169	.0008245
IsiNdebele	.009706	.0007302
IsiXhosa	.1625069	.0027475
IsiZulu	.3073766	.0034364
Sepedi	.0944537	.0021781
Sesotho	.0812535	.0020349
Setswana	.0961176	.0021952
SiSwati	.0201331	.0010461
Tshivenda	.0165835	.0009511
XiTsonga	.0231836	.0011208
Afrikaans	.1591791	.0027246
English	.0295064	.0012603
Formal	.0972838	.0022064
Tribal Authority	.4258315	.0036816
Urban Formal	.4066519	.0036573
Urban Informal	.0702328	.0019026
Age in Years	37.99645	.1306059
Age in Years Sq.	1751.438	11.80317
Years of Education	8.410917	.0298114
Employed	.3495108	.0035553
Married	.2554077	.0032478
Divorced/Widowed	.1039379	.0022728
Living Together	.0711037	.001914
Unmarried	.5695507	.0036876
Log Household Income p.c.	6.74291	.0076485
Vehicle Ownership	.0711234	.0019145
Computer Ownership	.0660566	.0018498
Mobile Phone Ownership	.7755906	.0031067
Unsatisfied	.4490407	.003704
Indifferent	.3000444	.0034127
Satisfied	.2509149	.0032285
Leave Neighbourhood	.1154145	.0023819
Uncertain about Staying	.1293065	.0025013
Remain in Neighbourhood	.755279	.0032049
Ever Lived Elsewhere	.1362578	.0025548

Social Disorder Score (6-30)	17.82911	.0457494
Stokvel Participation	.033633	.0013431
Importance of Religion	.9120018	.0021122
Depressed: CESD10 Score > 10	.2539815	.0032426
Poor Health	.1254989	.0024666
Good Health	.2900222	.0033786
Great Health	.5838692	.00367

It is important to note the very small proportions of the population that the White and Indian/Asian populations comprise (less than 4% of the total sample, or less than 665 people). The reliability of these specific results should therefore be approached with extreme caution, due to small cell sizes being used to estimate effects for an entire population. Results relating to Smaller language groups i.e. SiSwati, TshiVenda and XiTsonga should also be interpreted cautiously.

The average age of respondents is approaching being middle age, and education levels are on average 8.4 years of schooling, i.e. most respondents have incomplete secondary education. Employment levels correspond to low levels of employment, although this is a binary variable which is set equal to 1 if the respondent indicates working for pay. The average respondent is single. The per capita household income variable utilised is the imputed best measure of income provided in the derived variables data officially released by the NIDS team. Logging the variable allows one to interpret the effect on the basis of a 1% increase in income yielding some odds of displaying behaviour indicated by the outcome variable, trust. We witness low levels of access to assets such as private motor vehicles and computers, while mobile phone ownership is high. Only 25% of adults report being satisfied with life, with most being unsatisfied (45%) or indifferent (30%). The majority of adults would prefer to remain in their current neighbourhood, although only a small minority have ever lived elsewhere.

The construction of the social disorder score is undertaken using the method Tomita, Labys and Burns (2015) conceptualised as ‘unsettling or potentially threatening’ (Skogan, 2012) violent, criminal and illicit public behaviours (with visual signs of substance use, interpersonal violence, gang activity and street theft as some examples) that cause a sense of danger (Ross & Jang, 2000) and weakened social control (Gracia & Herrero, 2007).

In accordance with Tomita, Labys and Burns (2015), perceived exposure to neighbourhood social disorder is captured at the household level, with each item being scored with a 5-point Likert format 1 (never happens); 2(very rare); 3(not common); 4(fairly common); 5(very common). A household composite score was based on the sum of these six scores (range: 6–30). NIDS includes information on the perceived incidence of a variety of social ills: (a) burglaries, muggings, or thefts, (b) violence between members of the same household, (c) violence between members of different households, (d) gangsterism, (e) murder, shootings, or stabbings, and (f) drug or alcohol abuse in study participants’

neighbourhoods. A higher composite score reflected greater perceptions of the levels of violence, crime, and poor personal safety (neighbourhood social disorder).

If we examine the social disorder score which is a composite measure derived from the household level perception of the incidence of social ills at neighbourhood level, it is apparent that the perceived exposure to social ills is on average quite high. This measure which looks at violence and crime is likely a major reason for low levels of trust being exhibited by the population on average, indicating limited prospects for social cohesion to exist.

Looking at measures of communal engagement, it is apparent that a small proportion of the population, 3.3% participates in stokvels. In contrast, religiosity appears to form a major social activity, as 91.2% of respondents indicated that religion is important to them.

The CES-D 10 score is derived from the abridged 10-item version of the Center for Epidemiologic Studies Depression Scale (CES-D) to elicit depressive symptomatology. The original CES-D is a lengthier, psychometrically tested instrument for screening depression among the general population (Radloff, 1977 cited in Tomita, Labys & Burns (2015)), has been used in other South African studies (Hamad, Fernald, Karlan, & Zinman, 2008; Myer et al., 2008 cited in Tomita, Labys & Burns (2015)). The shortened form of the CES-D NIDS uses is known to show psychometric validity (Bjorgvinsson, Kertz, Bigda-Peyton, McCoy, & Aderka, 2013; Cole, Rabin, Smith, & Kaufman, 2004 cited in Tomita, Labys & Burns (2015)).

The CES-D 10 is a self-reported measure of symptoms during the past week associated with depression. Respondents indicate one of four possible responses in a Likert format: 0 (rarely or none of the time; less than 1 day); 1 (some or little of the time; 1–2 days); 2 (occasionally or a moderate amount of time; 3–4 days); 3 (almost or all of the time; 5–7 days). The CES-D composite score was based on 10 items ranging from 0 to 30. In accordance with work by Andresen, Malmgren, Carter, and Patrick (1994), a cut-off score of 10 or higher was used to indicate the presence of significant depressive symptomatology.

About 25% of the population would be at risk of a diagnosis of depression. It is interesting to compare self-assessed well-being i.e. life satisfactions scores with levels of happiness. Nonetheless, it is not intended to conflate depression which is a mental illness with acute or even chronic unhappiness with one's life which could be related to different as well as overlapping causal factors. It is also interesting to note that self-assessment of one's health indicates that both life satisfaction and potential depression, cannot be explained by poor perceived health alone.

Multinomial Logistic Models (MNL) fall in the class of discrete choice analysis. Discrete choice models - usually derived under an assumption of utility-maximising behaviour by the decision-maker – describe decision makers' choices among alternatives. (Train 2009:16, Cameron & Trivedi 2005:467, Deaton 1997:200-295). Models that can be derived

based on utility maximisation are called Random Utility Models (RUMs). The derivation assures that the model is consistent with utility maximisation. It does not preclude the model from being consistent with certain forms of behaviour. The models can also be seen as simply describing the relation of explanatory variables to the outcome of a choice, without reference to exactly how the choice is made.

Following Train (2009:19) and Green (2003:670) Random utility models (RUMs) are derived as follows: A decision maker, labelled n , faces a choice among J alternatives. The utility that the decision-maker obtains from alternative j is $U_{nj}, j = 1, \dots, J$. Implementing the assumption that economic and social agents are rational, the decision-maker chooses the alternative that provides the greatest utility. The behavioural model is therefore: choose alternative i if and only if $U_{ni} > U_{nj} \forall j \neq i$.

As indicated earlier on, the researcher does not observe or feel the decision maker's utility. The researcher observes some attributes of the alternatives as faced by the decision-maker, labelled $x_{nj} \forall j$, and some attributes of the decision-maker, labelled s_n , and can specify a function that relates these observed factors to the decision-maker's utility. The function is denoted $V_{nj} = V(x_{nj}, s_n) \forall j$ and is often called representative utility. Usually, V depends on parameters that are unknown to the researcher and are therefore estimated statistically.

Since there are aspects of utility that the researcher does not or cannot observe, $V_{nj} = U_{nj}$. Utility is decomposed as

$$U_{nj} = V_{nj} + \varepsilon_{nj},$$

where ε_{nj} captures the factors that affect utility but are not included in V_{nj} . This decomposition is fully general, since ε_{nj} is defined as simply the difference between true utility U_{nj} and the part of utility that the researcher captures in V_{nj} . Given its definition, the characteristics of ε_{nj} , such as its distribution, depend critically on the researcher's specification of V_{nj} . In particular, ε_{nj} is not defined for a choice situation *per se*. Rather; it is defined relative to a researcher's representation of that choice situation. This distinction becomes relevant when evaluating the appropriateness of various specific discrete choice models.

The Multinomial logit model is applicable where more than two alternatives are considered from where a decision maker is expected to choose. The MNL is a specialised model from a class of multinomial choice models. The MNL model can be specified as:

$$p_{ij} = \frac{e^{x_i' \beta_j}}{\sum_{l=1}^m e^{x_l' \beta_l}}, \quad (1)$$

Because $\sum_{j=1}^m p_{ij} = 1$, and a restriction is needed to ensure model identification and the usual restriction is that $\beta_1 = 0$ (Cameron & Trivedi (2005:500)). These models are operationalised using log-likelihood estimation techniques since there are no continuous data sets.

Table 7: Results of Overall Population

Multinomial Logit Regression: Predictors of the Extension of Trust

	High Trust	Trust Neighbour More	Trust Stranger More
African Women	.52182738*	.39426842***	.97051547
African Men	.55664004	.40415145**	.98207157
Coloured Women	.61087825*	.3325326***	1.6206239
Coloured Men	.5518452*	.41809819***	1.5672037
Asian/Indian Women	.26326378*	1.1584231	2.4287349
White Women	1.5273379*	1.3588584	1.7583341
IsiNdebele	2.7953331*	.91791276	1.4353294
IsiXhosa	1.9401009*	1.4986359	4.1849255**
IsiZulu	2.6507877**	1.3939438	3.5151283*
Sepedi	2.3944336**	1.4956917	1.489699
Sesotho	2.2856832*	1.541996	2.1525291
Setswana	2.5385554**	1.2108285	1.353077
SiSwati	2.2038295*	.40898105*	1.8021875
Tshivenda	2.545331*	1.1499022	.26838624
XiTsonga	2.6262904**	1.9279313*	1.6282126
Afrikaans	1.2235787	1.2432875	.92445178
'Tribal' Authority	1.3555522*	1.1682165	2.3209761***
Urban Formal	1.2869773*	1.3434955**	1.7190368**
Urban Informal	1.4497669*	1.7958918***	1.7789156*
Age in Years	1.0245517**	1.000571	.98329805
Age in Years Sq	.99980358*	1.0000356	1.0001934
Years of Education	1.0249064**	1.0352507***	1.0436932***
Employed	.8444706**	.9801099	.94768909
Married	1.0409075	.98539158	1.2056568
Divorced/Widowed	.96879884	.89267064	.82556779
Living Together	.98655114	.97596059	1.0146398
Log Household Income p.c.	1.0478641	.99817178	1.0681642
Vehicle Ownership	1.3812112**	1.1339701	1.2391217
Computer Ownership	1.0033391	1.0054028	.72573721
Mobile Phone Ownership	.88856771	1.1148538	.99579681
Unsatisfied	.86649966*	1.3149895***	1.8454894***
Satisfied	.986974	1.8076735***	1.0523246
Leave Neighbourhood	.74235189*	.83436483	1.7935284***
Remain in Neighbourhood	1.2936246**	1.2818931**	.9366593
Ever Lived Elsewhere	.91531544	.99639125	.77807434*
Social Disorder Score (6-30)	.91465807***	.93643021***	.98153002*
Stokvel Participation	.59617164***	.88557742	.7305554
Importance of Religion	1.5533303***	1.602918***	2.4055772***
Depressed: CESD10 Score > 10	2.0200242***	1.3753452***	2.0589845***
Poor Health	.80499311*	.91872348	.73434653**
Great Health	1.0907037	1.0399826	.6733403***
Constant	.12353345***	.24492759***	.00554951***

Observations 16784

Exponentiated coefficients; Standard errors in parentheses

* p<0.05, ** p<0.01, *** p<0.001

Notes

Base categories: White Men, English Home Language, Rural Formal, Unemployed, Single, Indifferent, Uncertain, Perceived Health Good

Insufficient Indian Men, coefficients for White & Asian/Indian should be interpreted with the utmost of caution

In Table 7 the results are reported and interpreted based on statistical significance and the odds ratios to predict the likelihood that people/households with certain attributes would have trust or not. In that Table, the results of the multinomial logistic regression are reported in exponentiated form. From this we see that relative to White men, African women are statistically less likely to display trusting behaviour, whether specifically i.e. in their neighbours, or in general. African men are even less likely to trust their neighbours, relative to trusting no one at all in comparison with White men. Both Coloured women and men have lower odds of displaying any form of trust than no trust relative to White men, although the effect of lower trust in neighbours is strongest. This can be reconciled with the extent to which forced removals and violent crime have affected this community. The very small sample of Indian/Asian men means it is impossible to estimate a coefficient, and the reliability of the Indian/Asian women coefficient should be treated cautiously, although it makes sense that they, too, would be less trusting than their White male counterparts. White women relative to White men are far more likely to display general trust.

Conditional on race and gender, relative to English speakers, all language groups except Afrikaans speakers display significantly higher levels of trust. Xhosa and Zulu are the largest language groups in South Africa; so it is conceivable that strangers are more likely to be from the same group and the extension of trust in strangers would, in this context, make sense.

Variables 'urban formal' and 'urban informal' represent geography of the respondents. Considering the effect of geographic location, relative to formal rural areas, individuals residing in every other categorisation of area display slightly higher odds of expecting the return of the wallet. This is interesting because it might actually relate to the density of communities in various locations, where urbanisation leads automatically to densification. Those dwelling in 'tribal' areas depict higher odds of trusting strangers compared to those in urban formal and urban informal. Those in tribal locations have the likelihood of viewing and upholding strangers with more trust, perhaps indicating that the cultural values in the tribal and mostly rural areas do not see strangers as those with a possibility to do harm anyhow. Unlike in the urban set-ups where levels of crime are higher, one expects to be harmed by strangers more than those known to them.

Regarding age and age squared which is a proxy for experience – the coefficients are both so close to one that they are barely significant. Education too, while significant has a very small size, so an increase in education of one year slightly improves the odds of one displaying generalised or particularised trust. Having a job does not raise the odds of one expecting that strangers, neighbours or both will behave in a considerate manner in the situation relating to the return of a lost wallet. Relationship status does not have a significant relationship with trust that a lost wallet will be returned.

For all the three dependent variables, Income is not statistically significant either as table above shows. This is interesting as essentially it could support the argument that low trust is common and detrimental to people across all

levels of income. Vehicle ownership is related to higher expectations of people generally behaving in a trustworthy manner. Other assets do not have a similar association.

When looking at life satisfaction, relative to people who are indifferent about the quality of their life, dissatisfied individuals display significantly lower generalised trust, but significantly higher particularised trust, of both neighbours on one hand and strangers on the other hand. This can be reconciled with dissatisfaction resulting from specific circumstances. In one instance, the neighbourhood might be cohesive, and in the other, dysfunctional – both are likely to exist. This effect is reinforced by satisfied individuals being more likely to report trusting their neighbours.

Relative to those who are uncertain about remaining in their current neighbourhood, those who wish to leave trust strangers more. This indicates that circumstances in neighbourhood are perceived to be worse than in an alternative situation. Those who wish to stay on the other hand, are more trusting, in general and of their neighbours.

The social disorder score is significantly associated with lower levels of trust of all forms. Demombynes & Özler (2005) show that disparities in crime exposure is a function of neighbourhood racial and income inequalities.

Stokvel participation is associated with higher levels of particularised trust and lower levels of general trust. Further, it would be interesting to know more about the extent of financial inclusion of stokvel participants and whether utilisation of stokvels might relate to mistrust in banking.

Religiosity is associated with significantly higher particularised and general trust, which one might expect. So is significant depressive symptomology which seems counter-intuitive. Relative to those with perceived good health, those who consider their health poor are less trusting in general and of strangers in particular. Those with perceived great health are more trusting in general and less trusting of strangers. It would seem, therefore, that health indicators do not reflect clear correlation with manifestations of trust.

Conclusion

In conclusion, using the 2012 Wave of the National Income Dynamics Study (NIDS) as an empirical dataset to support the investigation into social cohesion and inclusion in South Africa in the context of inequality has yielded notable results. This is however clearly not all-encompassing of factors operating at levels other than that of the individual. Even at this level, these factors nonetheless do impact prospects for attaining a cohesive and inclusive society.

Using trust as an essential ingredient for cohesion, links are made with detailed demographic and socioeconomic variables to understand their relationship with reciprocity or trust. Ultimately, questions regarding the likelihood of a lost wallet being returned, in one instance by someone who is neighbouring and in the other instance by a stranger,

do serve as a useful proxy for trust and are indicative of cohesion. However, it must be kept in mind that the bulk of South Africans display low levels of trust; and this can be attributed to historical oppression and the persistence of these fault-lines, which harms all categories of social groups.

Inequality of wealth and income is a great threat to intergenerational economic mobility and greater social inclusion. It is in turn a drain on levels of trust and social cohesion. Whether the problem of inequality is addressed or not will have major implications for social cohesion going forward. At the same time, for this to happen – for South Africa to launch onto a trajectory of higher and inclusive economic growth – will require some level of social cohesion: indeed, levels of trust that would render social compacting possible. As argued in the National Development Plan, concerted efforts to change material conditions should be combined with endeavours that impact on individual and societal consciousness. Having more campaigns focusing on social cohesion would to some extent help in improving the trust people have in one another. In general, the benefits of a socially-cohesive society are indisputable; and such a society can be achieved by a combination of programmes that improve people's quality of life and reduce inequality, on the one hand, and deliberate campaigns to foster trust across societal fault-lines, on the other.

Appendix

Partitioned Means and Standard Errors of Independent Variables Part 1

	African Women		African Men		Coloured Women		Coloured Men	
IsiNdebele	.0127975	.001191	.010318	.0013144	0	0	0	0
IsiXhosa	.197912	.0042216	.1963802	.0051671	.0020107	.0011601	.002988	.0017234
IsiZulu	.3859452	.0051582	.3541949	.0062207	.002681	.0013391	.0049801	.0022227
Sepedi	.1139425	.0033667	.1163735	.0041709	0	0	0	0
Sesotho	.0939605	.0030916	.105548	.0039964	.0013405	.0009475	.001992	.0014079
Setswana	.113269	.003358	.1207713	.0042384	.0046917	.0017697	.002988	.0017234
SiSwati	.0235743	.0016076	.0258796	.0020652	0	0	0	0
Tshivenda	.019084	.0014497	.02182	.0019002	0	0	0	0
XiTsonga	.0262685	.0016946	.0311231	.0022586	0	0	0	0
Afrikaans	.0108891	.0010996	.0140392	.0015303	.924933	.006824	.9312749	.0079881
English	.0023574	.0005139	.0035521	.0007738	.0643432	.0063543	.0557769	.0072463
Formal	.0684394	.0026747	.0834883	.0035964	.1983914	.0103277	.2191235	.0130613
Tribal Authority	.5382026	.0052809	.4855501	.0064979	.0040214	.001639	.0049801	.0022227
Urban Formal	.3194211	.0049389	.3473044	.0061901	.7453083	.0112833	.7410359	.0138321
Urban Informal	.0739369	.0027718	.0836573	.0035997	.0522788	.0057645	.0348606	.0057918
Age in Years	38.94514	.1903553	34.76153	.215562	40.1059	.4287195	38.28187	.516133
Age in Years Sq.	1839.651	17.59751	1483.263	18.8025	1882.529	38.13082	1732.694	44.66235
Years of Education	8.100584	.0449946	8.526294	.0490842	8.181574	.0902035	8.578265	.1079065
Employed	.2739649	.004731	.3939651	.0063625	.4051144	.0127392	.5698603	.0156485
Married	.2193042	.0043838	.2355428	.0055183	.3055742	.0119418	.3675299	.0152235
Divorced/Widowed	.1453423	.003734	.0363544	.0024341	.1289456	.0086881	.0498008	.0068687
Living Together	.0598204	.0025126	.0764288	.0034551	.1074547	.0080284	.1155378	.0100937
Unmarried	.5755331	.0052365	.651674	.0061959	.4580255	.0129161	.4671315	.0157536

Log Household Income p.c.	6.507745	.0097401	6.75008	.0131165	6.998335	.0221112	7.157122	.026561
Vehicle Ownership	.0299731	.0018067	.0712472	.0033467	.0550336	.0059098	.1344622	.0107719
Computer Ownership	.0361513	.001978	.0681434	.003277	.0623324	.006261	.0877368	.0089375
Mobile Phone Ownership	.8013015	.0042268	.7765004	.0054171	.6550336	.0123189	.6334661	.0152149
Unsatisfied	.4978117	.005297	.5038891	.0065021	.2380952	.011034	.2420319	.0135242
Indifferent	.3170239	.0049296	.295908	.0059359	.2642522	.011423	.2669323	.0139676
Satisfied	.1851644	.004115	.2002029	.0052038	.4976526	.0129531	.4910359	.0157852
Leave Neighbourhood	.1090868	.0033062	.1211864	.004249	.1342282	.0088344	.1377246	.0108921
Uncertain about Staying	.1337157	.0036095	.1455932	.0045921	.090604	.0074388	.1007984	.0095156
Remain in Neighbourhood	.7571975	.0045473	.7332203	.0057584	.7751678	.0108188	.761477	.0134703
Ever Lived Elsewhere	.1076198	.0032831	.1186813	.0042055	.2568746	.0113188	.2355289	.0134118
Social Disorder Score (6-30)	18.09833	.0632932	18.16269	.0790552	17.51007	.1628674	17.34861	.206694
Stokvel Participation	.0550129	.002416	.0169262	.0016784	.0053691	.0018938	.0039841	.0019891
Importance of Religion	.9492249	.002327	.844769	.0047197	.9569603	.0052647	.8968969	.0096259
Depressed: CESD10 Score > 10	.2864203	.0047916	.2504654	.005637	.19437	.0102481	.1784646	.0120964
Poor Health	.1415909	.003693	.0959946	.00383	.1481233	.0091994	.1135458	.0100176
Good Health	.3058454	.0048808	.2764915	.005815	.2788204	.011613	.247012	.0136177
Great Health	.5520027	.0052677	.6266689	.0062886	.5723861	.0128124	.6394422	.0151613

Partitioned Means and Standard Errors of Independent Variables Part 2

	Asian/Indian Women		Asian/Indian Men		White Women		White Men	
IsiZulu	0	0	.0121951	.0121951	0	0	0	0
Afrikaans	.0092593	.0092593	.0121951	.0121951	.7133333	.0261517	.7098214	.0303917
English	.9907407	.0092593	.9756098	.0171397	.2866667	.0261517	.2901786	.0303917
Formal	.3611111	.0464345	.402439	.0544877	.1333333	.0196589	.1026786	.0203264
Tribal Authority	0	0	.0121951	.0121951	0	0	0	0
Urban Formal	.6388889	.0464345	.5853659	.0547399	.8666667	.0196589	.8973214	.0203264
Urban Informal	0	0	0	0	0	0	0	0
Age in Years	42.36111	1.620357	40.32927	1.838484	50.87667	.9836253	50.16071	1.161731
Age in Years Sq.	2075.398	146.7697	1900.232	163.4087	2877.723	97.58807	2817.063	115.8232
Years of Education	9.731481	.3907808	10.41975	.3378692	12.045	.124691	12.29412	.1658518
Employed	.3333333	.0455724	.5487805	.0552905	.451505	.0288277	.6205357	.032495
Married	.5092593	.0483285	.6463415	.0531228	.5953177	.028433	.6607143	.0317057
Divorced/Widowed	.2222222	.0401911	.0609756	.0265873	.2474916	.0249993	.0848214	.0186575
Living Together	0	0	.0243902	.0171397	.0367893	.0109047	.0357143	.0124271
Unmarried	.2685185	.0428447	.2682927	.0492301	.1204013	.0188517	.21875	.0276832
Log Household Income p.c.	7.885567	.09363	7.912948	.1084616	8.719191	.0478665	8.726888	.0673736
Vehicle Ownership	.3055556	.044532	.402439	.0544877	.5466667	.0287895	.65625	.0318056
Computer Ownership	.25	.0418609	.195122	.0440327	.41	.0284435	.53125	.033417
Mobile Phone Ownership	.8148148	.0375527	.8658537	.0378677	.92	.0156893	.9234234	.0178876
Unsatisfied	.1388889	.0334327	.097561	.0329689	.1033333	.0176035	.1339286	.0228066
Indifferent	.2222222	.0401911	.2804878	.0499153	.2533333	.0251521	.2276786	.0280807
Satisfied	.6388889	.0464345	.6219512	.0538778	.6433333	.0277022	.6383929	.0321744
Leave Neighbourhood	.1111111	.0303816	.0365854	.0208602	.0668896	.0144723	.0852018	.0187375
Uncertain about Staying	.0740741	.025318	.1097561	.0347317	.0468227	.0122379	.0538117	.0151443
Remain in Neighbourhood	.8148148	.0375527	.8536585	.039272	.8862876	.0183901	.8609865	.0232194
Ever Lived Elsewhere	.0648148	.0238009	.0487805	.0239343	.3266667	.0271226	.3049327	.0308986
Social Disorder Score (6-30)	14.81481	.540686	15.21951	.6422879	12.19398	.326917	12.52232	.383326
Stokvel Participation	.0092593	.0092593	0	0	.0101351	.0058317	0	0
Importance of Religion	.9537037	.0203137	.902439	.0329689	.9466667	.0129946	.9058296	.0196022
Depressed: CESD10 Score > 10	.0833333	.0267192	.1341463	.0378677	.1233333	.0190161	.09375	.019519
Poor Health	.1851852	.0375527	.1585366	.0405826	.1466667	.0204592	.0982143	.019929
Good Health	.3425926	.045879	.2560976	.0484974	.2666667	.025574	.3035714	.0307905
Great Health	.4722222	.0482622	.5853659	.0547399	.5866667	.0284781	.5982143	.0328302

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