

Attitudes to Immigrants in South Africa: Personality and Vulnerability

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Abstract

While many countries across the world face increasing numbers of immigrants, the literature on attitudes to foreigners and immigrants focuses on Western countries. This article tests broad insights from Western countries in a specific non-Western context – South Africa, a country marked by sporadic violence against some immigrant groups. This provides an important validity check. Data from the 2013 South African Social Attitudes Survey and the 2013 World Value Survey are used to model attitudes to immigrants. In line with research on Western countries, individual personality is associated with differences in attitudes; people in vulnerable positions and those who lack a personal support mechanism are more likely to oppose immigrants. When implemented to reflect the specific context, research on attitudes to immigrants appears to generalise to non-Western contexts.

Attitudes to immigrants in South Africa: Personality and vulnerability

While many countries across the world face increasing numbers of immigrants, the literature on attitudes to foreigners and immigrants focuses on Western countries. This article tests broad insights from Western countries in a specific non-Western context – South Africa, a country marked by sporadic violence against some immigrant groups. This provides an important validity check. Data from the 2013 South African Social Attitudes Survey and the 2013 World Value Survey are used to model attitudes to immigrants. In line with research on Western countries, individual personality is associated with differences in attitudes; people in vulnerable positions and those who lack a personal support mechanism are more likely to oppose immigrants. When implemented to reflect the specific context, research on attitudes to immigrants appears to generalize to non-Western contexts.

Keywords: attitudes to immigrants, South Africa, personality, vulnerability, generalizability

When an angry mob attacked immigrants from Nigeria and Somalia in Pretoria in February 2017, this was but one of many similar events that have occurred in the past few years. Violent attacks on immigrants send shock-waves through the media, and leave the country searching for explanations. While there is much research on negative reactions to immigrants in Western Europe and North America, the literature on other countries is thin (see Bessudnov 2016; Meseguer and Kemmerling 2016 for exceptions), and it remains unclear to what extent these findings apply to other contexts like South Africa. Experts often question whether findings from other continents apply to situations like the violence against immigrants in South Africa. For instance, commentators in South Africa have claimed that opposition to immigrants is so widespread that it is impossible to identify clear patterns and tendencies (Mattes et al. 1999; Harris 2002; Solomon and Kosaka 2013). However, usually these commentators provide no convincing argument why South Africa – or any other country – should be an exceptional case.

The focus on South Africa has the advantage to put the spotlight on a context that is clearly different from that of most studies to date, namely Western Europe and North America (Barceló 2016; Meseguer and Kemmerling 2016). South Africa is a major destination country (Ratha and Shaw 2007; UNHCR 2015) – helped by the relative prosperity of the country and the liberal way asylum applications are handled (as opposed to decisions, Amit 2015). In addition to covering an under-researched country (and continent), this article contributes an important validity test to the literature. By studying attitudes to immigrants in South Africa, we can test existing theories on really fresh data once the concepts are adapted to the context under study. In the absence of evidence to the contrary, we can assume that the same mechanisms are at work in South Africa as in other places, namely authoritarian personality, contact with immigrants, and

perceptions of relative deprivation (see Pettigrew 2016 for a recent review). These general patterns are confirmed: Individual personality is associated with differences in attitudes, contact with immigrants reduces opposition, and individuals in vulnerable positions who lack a personal support mechanism are more likely to oppose immigrants. This questions the views that attitudes to immigrants in South Africa are exceptional, and provides evidence that the mechanisms identified in Western countries are also likely to be at work elsewhere.

The case of South Africa

South Africa is a middle-income country with a large informal sector (Wills 2009). Compared to Western countries, ethnic diversity is more pronounced, but the share of immigrants is somewhat lower: around 5 per cent of the population. The exact share of immigrants in the population is surprisingly hard to establish, and different sources disagree. The 2011 Census gave a share of 4.2 percent (up from 2.3 percent in 2000), while the more recent 2016 Community Survey reports 2.8 percent. It is thought that this apparent drop reflects methodological differences between the Census and the Community Survey, but also an increasing tendency to hide one's nationality in a context where violence against foreigners is far from unknown. The United Nations' Department of Economic and Social Affairs (DESA) put the share of immigrants at 5.8 percent (see Chiumia 2016 for further discussion). Economic growth has slowed in recent years – with job losses in major economic sectors like mining and agriculture –, but South Africa remains the second largest economy on the continent (after Nigeria). The official unemployment rate is around 25 per cent, and economic inequality is among the highest in the world: Around half the population lives in townships and informal settlements. Despite the high levels of unemployment, the workforce does not meet the demand for skilled workers, which can lead to foreign workers being recruited (Facchini, Mayda, and Mendola 2013).

South Africa has a long history of immigration, especially related to the discovery of gold in the 19th century (Kang'ethe and Duma 2013). Even though it has been over two decades since the abolition of apartheid, South Africa remains inherently associated with this system of racial segregation and minority rule (Burger et al. 2017). Under the apartheid regime, immigration from 'white' countries was actively sought and played an important role in ensuring the survival of the minority regime. In the Aliens Control Act of 1937, section 4(3)(b) explicitly demanded that immigrants be "likely to become readily assimilated" with European inhabitants in the Union (Segatti 2011, 35). After 1961 the racial criterion was proactively pursued and complemented with substantial grants to encourage 'white' immigrants as the National Party was politically strengthened. The system was known as the two-gate system: the front gate to attract 'white' immigrants, and a back gate to allow temporary workers to meet economic demand – drawing on bilateral agreements with neighbouring countries that precluded settlement and family reunification. The racial criterion was toned down in 1986 under international pressure, with a requirement to assimilate to any population group (Segatti 2011). Implementation was opaque, however, and the 1986 amendment did not change the *practice* of racial selection (Wa Kabwe-Segatti 2006). What is more, the South

African state did not have the capacity to enforce the back gate to restrict immigration numbers in the long term.

After 1986 it became increasingly clear that the two-gate system neither met economic demand adequately, nor was there a means to deal with non-economic migrants like refugees from countries in the region, such as Mozambique. However, there was no change in policy beyond unifying existing policy into a single act in 1991. When the African National Congress (ANC) assumed power in 1994, immigration was low on an agenda focusing on economic transition (Segatti 2011). Since 1997 South Africa has a new constitution lauded for its progressive stances on inter-group relations, but despite increasingly obvious inadequacy to deal with contemporary migration challenges – refugees, labour shortages –, immigration policies were only revised in 2002 and 2004, and then only to a limited extent despite a progressive preamble to the Immigration Act claiming to encourage highly skilled workers. The 2007 and 2011 amendments failed to introduce policies that facilitate the recruitment of skilled workers (Nkomo 2014), and only increased enforcement mechanisms – targeted at irregular immigrants but applicable to all immigrants, including the skilled workers the economy needs, and despite insufficient state capacity to enforce these policies. In this sense, South Africa has immigration policies that remain influenced by the apartheid-era and largely discourage immigration despite ostensible commitment to recruit skilled immigrants (Segatti 2011).

The result is that, like in most European countries, there are few legal channels to migrate to South Africa except for claiming asylum. South Africa maintains a relatively open asylum system that provides the right to work and move freely within the country after applying for asylum. Decisions often take long, and many rejected asylum seekers are thought to stay in the country, although officials frequently stop suspected rejected asylum seekers for identification and deport them (Amit 2015). Without identity documents – because their application is pending – and bank accounts, many immigrants are forced into the informal sector (Solomon and Kosaka 2013).

A common narrative is that negative attitudes in South Africa are linked to the post-apartheid nation-building project (Crush 2001; Peberdy 2001), a context of low trust (Steenkamp 2009). The intuition is that negative identification *against* immigrants is a means to increase *positive* identification with the new in-group: a multi-racial South Africa. Violence against immigrants is thus regarded as a perverse upshot of the end of apartheid (Harris 2002). Given that violence against immigrants and negative attitudes are a recurring phenomenon, this explanation has face validity (Dodson 2010). By contrast, it fails to explain why anti-immigrant sentiments and violence against immigrants also occur in established Western countries without such a nation-building project. Leaving this counterfactual aside, the link between negative *attitudes* and violence – behaviour – is one of the big unknowns in South Africa, as elsewhere: It is clearly not direct (see contributions in Nelson 2009; Piper and Charman 2016; Carlsson and Eriksson 2016).

Several contributors have noted that violence against immigrants in South Africa is directed against black Africans, not white immigrants (Sharp 2008; Matsinhe 2011). This may be a lingering influence of apartheid and its preference for white immigrants, but more plausible is probably a difference in opportunity: violence directed against the

immigrant group that is ‘there.’ At the same time, opportunity alone is not a sufficient explanation, given that negative attitudes to different immigrant groups are dissimilar – and that these negative attitudes are thought to be causally prior to violent behaviour (Dovidio et al. 2010). Piper and Charman (2016) use a survey of shopkeepers in areas affected by violence against immigrants, and find that the experience of violence is more about undercutting competitors than about nationality or being an immigrant. Nonetheless, the media and politicians systematically politicize against immigrants (Danso and McDonald 2001), unlike the more balanced coverage found in Western Europe (Van der Brug et al. 2015).

Theory and expectations

Over the years many reasons have been identified as to why some individuals are more likely to oppose immigrants and minority groups than others, amongst which (authoritarian) personality, perceptions of relative deprivation, and contact with immigrants find consistent empirical support (Pettigrew 2016). Historically, with the so-called authoritarian personality the focus was on individuals without regard to their social connections (Adorno et al. 1950). Although often frowned upon in social sciences, the influence of personality on attitudes points to genetic influences – in particular gene-environment interactions (Freese 2008). Recent contributions have both reaffirmed that personality plays a role for attitudes to immigrants (Gallego and Pardos-Prado 2014; Johnston, Newman, and Velez 2015), and placed them into a wider framework of basic personal values (Schwartz et al. 2014). Put simply, individuals who value tradition and conformity and reject universalism are more likely to reject immigrants. These tend to be individuals who value obedience to law and have conservative or right-wing preferences. Similarly, relevant personality may also be reflected in sociological liberalism (Crouch 1999), an association generally only implicit in recent research on the link between personality and attitudes to immigrants. Sociological liberalism is a broad outlook on inter-group relations more generally drawing on ideals of equality and social justice, supporting a peaceful cooperation and coexistence of different groups in society. Here, the intuition is that this general positive outlook on inter-group relations is associated with positive attitudes to immigrants: Immigrants are regarded largely the same way as other groups falling outside the cultural mainstream (Kalkan, Layman, and Uslaner 2009; Schwartz et al. 2014).

Personality expectations: People with more authoritarian personality have more negative attitudes to immigrants.

People with sociologically liberal views have more positive attitudes to immigrants.

When social interactions are taken into consideration, two broad explanations have been put forward. On the one hand individual and group interests are highlighted, on the other hand contact between groups is regarded in less competitive terms. In the former case, different groups in society are regarded as competitors over scarce resources (Blalock 1967). The larger an out-group is, the more competition can be expected – both actual and perceived competition. Such competition can be at the individual level such as when an individual’s wages are reduced, or at the societal level, such as when social benefits and the welfare system are put under strain. The psychological impact of this

competition can lead to feelings of threat and prejudice, and it is expected that individuals more directly affected – by being in a vulnerable position – express more negative attitudes to their competitors and may feel bitter about their perceived relative deprivation (Poutvaara and Steinhardt 2015; Alexseev 2015; Gorodzeisky and Semyonov 2016; or Steenkamp 2009 on South Africa). Pettigrew (2016) highlights that *relative* deprivation is relevant, which is why economic outsiders tend to be more negative to immigrants (Jaime-Castillo, Marqués-Perales, and Álvarez-Gálvez 2015).

In Western countries, the level of education is often used as a proxy for vulnerable positions in the labour market – usually under the assumption that most immigrants have low skills and thus compete with low educated people in the labour market, an assumption which does not necessarily hold outside Western countries (Meseguer and Kemmerling 2016; Barceló 2016; Facchini, Mayda, and Mendola 2013). While studies in Western countries usually find that individuals with higher levels of education are less opposed to immigration (Dancygier and Laitin 2014; Hewstone, Rubin, and Willis 2002), education is used to capture different mechanisms, from being more exposed to economic competition, to a supposed liberalizing effect of education, or simple social desirability biases (Janus 2010; An 2015). Hello et al. (2002) demonstrate that the ‘effect’ of education varies across countries; Weil (1985) argues the ‘effect’ of education may be limited to liberal democracies. Empirically, the different mechanisms are difficult to disentangle, although the common use as proxy for labour-market competition has been challenged both conceptually and empirically (Pecoraro and Ruedin 2016).

Attitudes reflect perceptions of threat and deprivation – not necessarily objective competition –, which is why subjective measures are important: *feeling* vulnerable or *perceived* social position, although the subjective and objective measures are likely to be somewhat associated. Feelings of relative deprivation and vulnerability may be worse for individuals who lack a social support network, who feel relatively isolated in addition to relatively worse off. An individual’s network may constitute a resource and coping mechanism commonly referred to as ‘social capital’ (Stolle and Harell 2013; Portes 1998; or Gordon and Maharaj 2015; and Steenkamp 2009 on South Africa). If individual-level competition dominates, we can expect a multiplicative effect (interaction) between being in a vulnerable position – exposed to competition with immigrants – and having a support network. In this case the support network can alleviate the impact of competition. If perceptions of society-level competition dominate (Hainmueller and Hopkins 2014), we can expect a cumulative effect where having a support network reduces perceptions of threat irrespective of individual exposure to competition.

Perceived relative deprivation expectation: People with insufficient income and lack of support from their neighbours have more negative attitudes to immigrants.

Commonly presented as a complement to threat theory, contact with immigrants has consistently been shown to reduce negative attitudes (Pettigrew and Tropp 2006). Relevant contact includes friendship, acquaintance, and having friends who are friends with immigrants (Hewstone and Swart 2011; Turner et al. 2007). While the findings are unambiguous, it is usually difficult to rule out self-selection and thus ascertain causal

order (Enos 2016): Individuals with positive attitudes to immigrants are more likely to seek and accept friendship with immigrants in the first place, or experience such relationships positively and describe them as friendship. For this reason it may be more appropriate to capture contact with acquaintances (rather than contact with friends) where individual control over the relationship is less pronounced. What is more, increasing diversity may lead to social withdrawal (Laurence and Bentley 2016), actually leaving individuals more vulnerable to (perceived) competition with immigrants. With cross-sectional data, the present article will be unable to address this issue, and in common with the literature assumes that the main influence is from contact to attitudes and not the other way around (Kaufmann and Harris 2015).

Contact expectation: People who have acquaintances from other countries have more positive attitudes to immigrants.

Negative attitudes can also occur without contact, as highlighted by social identity theory where negative attitudes are regarded a symptom of in-group favouritism (Abrams and Hogg 2010). This is a common narrative in qualitative studies and comments on the situation in South Africa (Crush 2001; Peberdy 2001): negative attitudes to immigrants as an unintended consequence of the post-apartheid nation-building project. Creating a positive identity for the new in-group (South Africans) is facilitated by having negative attitudes to an out-group (immigrants). Such negative images of immigrants can be actively mobilized by political actors (Van der Brug et al. 2015; Gordon 2016 on South Africa). Adida (2011) highlights that the lack of obvious cultural difference can be a reason why community leaders politicize difference to other groups. In post-apartheid South Africa racial and ethnic identities remain strong, and individuals who regard their group as threatened – because community leaders politicize identity – may project negative feelings on immigrants (Gordon 2017).

Data and methods

While the general expectations outlined are formulated independent of context, we need to adapt the operationalization to the specific context: Simply re-using the same variables could lead to an invalid test of the theories. Data from the South African Social Attitudes Survey (SASAS) 2013 are used to examine negative attitudes to immigrants (HSRC 2013). The data are nationally representative, collected using the 80,787 enumerator areas of the 2001 Census as primary sampling units (PSU), drawn with probability proportional to the number of non-vacant resident dwellings in the PSU. Dwellings and individuals in households were drawn randomly (HSRC 2013). As is common in such surveys, individuals in institutions (hospitals, prisons) were not sampled, and only South African citizens were targeted. There are 2,885 respondents, aged 16 and older, all interviewed face-to-face. Data were weighted to account for variation in the population size of the selected PSU, and benchmarked to official statistics on gender and age. The response rate was 88%. To ascertain the robustness of the findings, I replicated the analysis with data from the World Value Survey 2013 as far as possible (WVS 2013). There are 3,531 respondents aged 16 and older in the WVS, with the sampling strategy equivalent to that of the SASAS.

The SASAS includes several questions on attitudes to immigrants, and I construct an additive scale of anti-immigrant attitudes as the outcome variable where all variables

carry the same weight (Cronbach $\alpha = 0.78$, see supplement S1 for details on the scale and other variables). This approach is common in existing studies on attitudes to foreigners in Europe and North America. The items used in the scale ask “How much do you agree or disagree with the following statements?”, each measured on a 5-point scale that is treated as continuous in the analysis: “immigrants increase crime rates” [agree], “immigrants are generally good for South Africa’s economy” [disagree], “immigrants take jobs away from people who were born in South Africa” [agree], “immigrants make South Africa more open to new ideas and cultures” [disagree], “immigrants bring disease to South Africa” [agree], and “immigrants bring skills that are needed in South Africa” [disagree]. Values on the scale range from -5 to +2.6, with most responses between -2 and +2 and a mean of 0.3 (standard deviation 0.87). Higher values denote negative attitudes.

As a test of robustness, I replicate the findings with a single question rather than the scale: “Immigrants take jobs away from people who were born in South Africa.” (34 percent of respondents strongly agree with this statement). Like the scale, this single question measures negative attitudes. These results are included in the supplement alongside the results using the scale (supplement S3 and S6).

For the replication with the World Value Survey, two questions are used as outcome variables – and analysed separately. The first is a statement with which respondents can agree, disagree, or neither agree or disagree (“When jobs are scarce, employers should give priority to South African people over immigrants.”, inverted). 51 per cent of respondents agree with this statement. The responses are treated as a continuous variable. The second is part of the question on undesirable neighbours (“On this list are various groups of people. Could you please mention any that you would not like to have as neighbours?”, respondents mentioning ‘Immigrants/foreign workers’). The variable is binary, and 43 per cent mentioned immigrants/foreign workers as undesirable neighbours. See supplement S1 for details.

For the predictor variables, the following question was used to capture whether an individual is in a vulnerable position and ostensibly more exposed to competition with immigrants, reflecting qualitative work in South Africa (Adjai and Lazaridis 2013): having an insufficient income (self-declared, “Sometimes people find that their income does not quite cover their living costs. In the last 12 months, has this happened to you?”, binary variable). 41 per cent of respondents report insufficient income. Supplement S1 also describes alternative variables used in bivariate analysis only. One question asks whether respondents consider themselves wealthy, using six response categories; one asks about income relative to other households in the neighbourhood, using 5 response categories; and I use an additive count of objective ownership of household goods and amenities as they are frequently asked in middle- and low-income countries. These variables allow me to differentiate absolute from relative deprivation.

Two questions capture access to support networks and community help and are combined (“How comfortable would you be asking a neighbour to lend you a cup of sugar if you needed it?”, “If you were short of money, how comfortable would you be asking a neighbour if you could borrow R20?”). For both underlying variables, 28 per cent of respondents say that they are ‘very comfortable’. Contact with immigrants is captured by “How many acquaintances do you know who have come to live in South

Africa from another country?”. 38 per cent of respondents report ‘none’, and 9 per cent report ‘very many’ such contacts. See supplement S1 for details.

Personality is approached through individual beliefs and ideology in two variables, which were chosen on the basis that they resonate contemporary political debates in the country and because of their closeness to the theoretical constructs suggested in the literature: supporting the death penalty for murder (authoritarianism: “People convicted of murder should be subject to the death penalty”; 21 per cent of respondents agree or strongly agree); and whether they believe that it is (morally) wrong that gay men and lesbians live their own life as they wish (lack of sociological liberalism; 48 per cent of respondents agree or strongly agree). Furthermore, self-placement on a political liberal—conservative scale is available (conservatism: “In political matters, people talk of ‘the left’ and ‘the right’ or ‘liberal’ and ‘conservative’. Where would you place your views on this scale?”, 10 response categories treated as continuous). This is a standard measure of conservatism, with its wording adapted to the way politics are commonly described in South Africa.

With regard to control variables, one question is whether individuals contacted a politician or local government official in the past 12 months, assuming that this reflects individuals who are politically mobilized so that latent negative attitudes are triggered and crystallized (Claassen 2014). This mechanism has been suggested in the South African context in particular (Claassen 2014; Gordon 2016). Social identity is approached with two questions on nationalism that are combined (“I would rather be a citizen of South Africa than of any other country in the world” and “Generally speaking, South Africa is a better country than most other countries”, combined into a single continuous variable), reflecting social identity theory. There are control variables for education, age (continuous), gender, and race. Education is a central control variable in the literature on attitudes to immigrants, capturing anything from competition in the labour market to the liberalizing effect of education or the likelihood to give socially desirable answer (An 2015; Facchini, Mayda, and Mendola 2013). The highest level of education was converted into years of education using typical completion times (supplement S2). Age, gender, and race are standard sociodemographic control variables.

In the World Value Survey, insufficient income was measured with satisfaction with the financial situation (“How satisfied are you with the financial situation of your household?”). 6 per cent of respondents are completely dissatisfied with their financial situation, with most responses around the middle. While the question in the SASAS focuses on feeling comfortable asking a neighbour a favour when needed, the best equivalent in the WVS focuses on feeling part of the community (“I see myself as part of my local community”). 45 per cent of respondents strongly feel part of the community, with under 2 per cent strongly disagreeing with the statement. There is no variable on contact with immigrants in the WVS, but respondents with immigrant parents can be identified – who will have contact with immigrants (“Are your mother and father immigrants to this country or not?”). 4 per cent of respondents report having immigrant parents. See supplement S1 for further details and a description of variables in the extended models.

Although missingness is not a major problem in the present dataset, in line with current best practice (Allison 2001; Lall 2016), multiple imputation was carried out to maximize use of the information in the data (5 imputations). The same substantive results can be obtained with list-wise deletion (supplement S3). In the regression analysis, (Gaussian) *normal regression* models (R Core Team 2008) are used when predicting negative attitudes using the scale in the SASAS data, as well as the preference of South African workers in the WVS data – equivalent to ordinary least squares. The question on undesirable neighbours in the WVS is binary and probit models are used. In all the models, (negative) attitudes to foreigners are the outcome variable, and having insufficient income, help from the community, and contact with foreigners the predictor variables. In each case, I start with perceived relative deprivation and add other predictor and control variables in more complex models to show that the reported findings are robust to alternative explanations.

Findings

Competitive threat theory stipulates that individuals in vulnerable positions exposed to economic competition with immigrants are more opposed to immigrants. Objective measures of absolute income and wealth are *not* associated with negative attitudes to immigrants in South Africa (income $r=-0.01$ [95% CI -0.05, 0.04], sum of “does your household have...” $r=0.01$ [95% CI -0.02, 0.05], cellphone ownership (no substantive differences, supplement S4). Self-declared social class as a subjective measure of absolute income is not clearly associated with negative attitudes, but suggests more positive attitudes for the ‘upper middle class’ and ‘upper class’ (supplement S4). Measures that more clearly capture (perceptions of) relative positioning *are* associated with negative attitudes: household income relative to neighbourhood ($r=-0.05$ [95% CI -0.08, -0.01], supplement S4) (compare Dambrun et al. 2006), and individuals who *perceive* their income as insufficient (Model M1 in Table 1). Table 1 subsequently introduces additional variables in Models M2 and M3 to demonstrate that the statistical associations are robust. The reported findings on (perceived) relative deprivation are reminiscent of studies in Western Europe and the United States where objective positions seem less relevant than subjective feelings of perceived threat (Stephan et al. 2005; Sides and Citrin 2007; Semyonov et al. 2004; Weber 2015): Negative attitudes in South Africa are not associated with absolute deprivation, but a sentiment that what one has is not enough – feeling vulnerable.

Consistent across the models in Table 1 is the finding that individuals who think that they can count on the community in times of need have more positive attitudes. These are the consistently negative coefficients on the second line in the table. The statistical interaction between this variable of community help and having insufficient income, however, is not clearly substantive in model M4. Compared to the coefficient, the standard error is large. The sign of the interaction indicates an association between insufficient income and negative attitudes to immigrants only among those with little or no community support. This points to individual-level concerns over competition with immigrants. Both variables in this interaction point to weak or vulnerable positions in society, but not necessarily direct competition with immigrants. This finding is reminiscent of Billiet et al. (2014) who found more negative attitudes in economically

insecure communities; here the same phenomenon may be picked up at the individual level.

[Table 1 around here]

In line with the literature, individuals who have immigrant acquaintances are less likely to express negative attitudes (Model M3). Actual and meaningful contact with immigrants is associated with less prejudice, indicating that negative attitudes probably reflect a fear of the unknown or poorly known rather than calculated responses to a known threat. If the variable on acquaintances in the model shown here is replaced with one that asks about immigrant friends, the predicted reduction of anti-immigrant attitudes is larger and the model fit is increased substantially (supplement S5). With the variable on immigrant friends, however, it may be argued that individuals have positive attitudes to immigrants first and then become friends with immigrants – questions of self-selection and causality.

The associations between attitudes and being in a vulnerable position or having contact with immigrants are robust against the inclusion of a range of different variables, as apparent in Figure 1 where the coefficients are shown graphically. The figure presents the point estimates of the regression models as points with thin and thick lines indicating 1 and 2 standard errors. Each model is provided in a different shade, and dots of the same shade and shape belong to the same model. Starting from the left with a model including relative deprivation and personal contact (black, squares), additional variables are introduced. The second model (dark blue, circles) includes two variables to capture personality types and political ideology (see also Table 1). Authoritarian personality is approached with a question whether respondents support the death penalty for murder. Support for the death penalty is associated with negative attitudes to immigrants: Individuals with more authoritarian personality tend to express more negative attitudes to immigrants – visible by the corresponding coefficients above the dashed zero line in Figure 1. Sociological liberalism is approached with a question on whether gay and lesbian people should be free to live as they want. Individuals who think that such different lifestyles are wrong – individuals who do not exhibit sociological liberalism – are more opposed to immigration (supplement S6).

[Figure 1 around here]

In the data at hand, there is evidence that mobilization plays a significant role for negative attitudes to immigration in South Africa. The intuition followed here is that individuals more likely to be participate in politics are more likely to be exposed to political messages (Ruedin 2007), which would make them susceptible to be mobilized against immigration (Claassen 2014). This is the case for any of the variables available in the dataset: contacting a politician (Table 1), contacting a traditional leader, and participation in a protest or demonstration (supplement S7). The sign of the association

is in all cases as predicted with substantial differences in the regression models. Research on media messages in Europe (Klingeren et al. 2015), for example, suggests that this line of research merits further investigation – probably with variables that better capture mobilization and exposure to incriminating messages. At the same time, mobilization may play a significant role not so much in shaping attitudes, but when it comes to turning negative attitudes into discriminatory behaviour and violence – something the data at hand do not cover.

The rightmost models in Table 1 and Figure 1 show that the outlined associations are robust against the inclusion of a range of variables at the individual level: nationalism, the level of education, age, gender, race, and political ideology (liberal–conservative). None of these additional variables influences the associations with relative deprivation, contact, and personality substantively. These variables include alternative explanations for negative attitudes in the case of nationalism (as social identity), and conservative ideology, and standard controls that may affect how the question on attitudes to immigrants is answered in the case of age, gender, race, and education – a variable often highlighted in Western Europe and North America, despite probably capturing different mechanisms (Hello, Scheepers, and Gijsberts 2002). Higher levels of education tend to be associated with being self-monitoring and trying to control prejudices (Janus 2010; Kunstman et al. 2013). Increased age is similarly associated with a reduced tendency to control prejudices due to social and cognitive reasons (Radvansky, Copeland, and von Hippel 2010; Henry, von Hippel, and Baynes 2009).

Robustness with World Value Survey data and education

To ascertain the robustness of the findings, I replicated the analysis with data from the World Value Survey 2013 as far as possible (WVS 2013). Supplement S1 outlines the variables used, while supplements S3 and S6 show that for most explanatory and control variables, the sign of the coefficients is the same; and the same variables tend to be substantively important. In particular, individuals who feel part of the local community are less likely to express anti-immigrant views. As in the models above, individuals who are not satisfied with the financial situation of their household express more negative views about immigrants. To further test the robustness, I also used a question on immigrant neighbours as an alternative outcome variable with the World Value Survey data, even though the concepts are not necessarily equivalent. Probit models predicting answers on not wanting immigrant neighbours are substantively in line with the results reported (supplements S3, S6).

An important difference to the models using the SASAS data is that education remains a substantive correlate in some models using the World Value Survey. This is likely a reflection of differences in the coding, which leads to a slightly more skewed distribution in the SASAS data compared to the operationalization with the WVS data. Additional analysis in supplement S8 shows that this association can also be found in the SASAS data when differentiating university graduates from everyone else. University graduates are clearly more positive to immigrants than individuals with lower levels of education. The other variables in the models are not substantively affected by the substitution of the educational variable, but I have refrained from modifying the models reported above because this exploration was not motivated by theoretical considerations but by a simple scatter plot. Future research is necessary in

this regard. With significant differences between university graduates and others, the results for South Africa are in line with findings in Western Europe and North America in that individuals with higher levels of education are less likely to express negative attitudes to immigrants in surveys. At the same time, it should be highlighted that the statistical evidence for this association between education and attitudes is mixed in the limited research on attitudes to foreigners outside Western Europe and North America, perhaps highlighting that education is capturing different causal mechanisms that may be easier to disentangle in countries where the purported liberalizing effect of education and labour market competition can be differentiated empirically rather than just conceptually. Such research may also explore the interaction between levels of education and other variables in the models.

Discussion and conclusion

In this article, I examined the attitudes of South African citizens to immigration. This allowed me to test existing theories developed in Europe and the United States on a fresh case, an important test of validity. In the absence of evidence to the contrary, I assumed that that findings from other places also apply to South Africa because the underlying mechanisms are assumed to be the same. Contrary to some commentators on xenophobia in South Africa (Harris 2002; Mattes et al. 1999; Solomon and Kosaka 2013) there are clear patterns in who tends to be more positive or negative about immigration. Once the concepts were applied to the historical and local specificities of the case, the general findings from Europe and the United States also apply to South Africa.

Individuals in vulnerable economic situations and those lacking community support are more likely to oppose immigration. The subjective feeling that one is vulnerable and finds it hard to make ends meet is associated with negative attitudes. It is not objective competition with immigrants and poverty, but *perceived* threat: Many objective measures that capture poverty and vulnerability are not substantively associated with negative attitudes to immigrants, but the feeling of being in a vulnerable situation by not having sufficient income is. The importance of *perceived* threat is reminiscent of studies in Europe and the United States where the influence of the size of the immigrant out-group on attitudes to immigrants is examined (Pottie-Sherman and Wilkes 2017; Lahav 2004).

Individuals who feel they can rely on their neighbours when it matters, more generally, are less likely to express negative attitudes to immigrants. This association can be found across society, not just those in vulnerable economic positions. In line with much of the literature (Semyonov et al. 2004; Ben-Nun Bloom, Arikian, and Lahav 2015), this points to perceptions of vulnerability and social isolation as important factors – not objective competition with immigrants – although the two are unlikely to be completely disconnected.

People with more authoritarian personalities are more likely to oppose immigrants in South Africa, while those showing sociological liberalism (Crouch 1999) give more positive responses in questions on immigrants. With this, there is support for personality types shaping reactions to immigration. These findings are congruent with more universal approaches to the role of personal values in political attitudes (Schwartz et al.

2014), operationalized with more generic variables on authoritarianism, conservatism, and sociological liberalism available in the data used.

Like in Western countries, contact with immigrants is associated with more positive attitudes to immigration in South Africa. Individuals with immigrant acquaintances – let alone immigrant friends – are much less likely to oppose immigration. It may be that contact with immigrants alleviates perceptions of competition. Put differently, in the absence of contact, attitudes to immigrants may reflect fear of the unknown, reminiscent of studies in Europe and the United States that highlight individuals concerned about threats to their society rather than their own situation (Hainmueller and Hopkins 2014) – often by individuals with the least contact (Newman 2014). By contrast, contrary to findings in Europe and the United States, the number of years of formal education was not consistently associated with more positive attitudes in South Africa (see also Whitaker and Giersch 2015, although they focus on country differences). This is in line with evidence from Russia and Asian countries where no systematic effect of education is reported (Alexseev 2015; Barceló 2016; Gordon 2017; see also Weil 1985 who highlighted liberal democracies). Data exploration suggests that in South Africa the distinction between university graduates (more positive to immigration) and other groups in society is relevant. Further research is necessary to understand the mechanisms that drive an association in Europe and the United States, but not necessarily elsewhere, or perhaps not in the same way. Pecoraro and Ruedin (2016) suggest that individual values and beliefs may be the reason for different associations, pointing to variables interpreted as indicators of authoritarian personality in this article. In some contexts, education may also pick up vulnerable positions in society (Gorodzeisky and Semyonov 2016). Better theory and a more careful operationalization of relevant concepts may be enlightening.

In the case of South Africa, nationalism is sometimes cited (Peberdy 2001; Gordon 2017), which by implication points to social identity theory. The argument is that as South Africans construct a new inclusive post-apartheid identity, negative attitudes to immigrants as the out-group ensue naturally. While positive identity without denunciation of an out-group is possible, denouncing members of the out-group is more effective and thus commonplace (Abrams and Hogg 2010). At the individual level, there is evidence that individuals with stronger attachment to South African identity have more negative attitudes to immigrants, but this does not appear to be the dominant mechanism for negative attitudes to immigrants. Similarly, mobilization – operationalized through political participation – does appear to affect attitudes. Mobilization not only seems to play an important role when it comes to the association between negative attitudes and behaviour, such as participation in violence against immigrants (Claassen 2014), but already when it comes to the formulation of negative attitudes. More research in this area is warranted, especially since research from Europe and the United States suggests that messages in the media are able to influence attitudes (Klingeren et al. 2015; Ben-Nun Bloom, Arikian, and Lahav 2015) – perhaps by crystallizing vague notions of unease and providing narratives to express these attitudes. Such research should also disentangle political mobilization from possible underlying causes that may affect both mobilization and attitudes, such as personality types.

In sum, despite claims to the contrary (e.g. Harris 2002; Solomon and Kosaka 2013), there are systematic patterns in who is more likely to favour or oppose immigration in South Africa. Indeed, it seems that the same mechanisms that shape attitudes to immigrants in Western countries are at work in South Africa: Vulnerable economic and social positions, personality, and lack of contact with immigrants are associated with negative attitudes to immigrants (compare Pettigrew 2016 for a review). This suggests that findings from other contexts are robust and generally apply. Of course historical and contextual factors always play a role how these mechanisms are played out and which variables may be best capturing these – particularly in the absence of standardized questions across surveys as they are sometimes available in Europe and the United States – but there is no reason not to draw on the extensive literature on attitudes to immigrants in Western countries. At the same time, cases like South Africa allow to test the generalizability of previous findings, and potentially refine them. This may particularly be the case for testing the relationship between negative attitudes and violence against immigrants – a phenomenon not of lesser importance in Western countries, but more commonly observed in South Africa.

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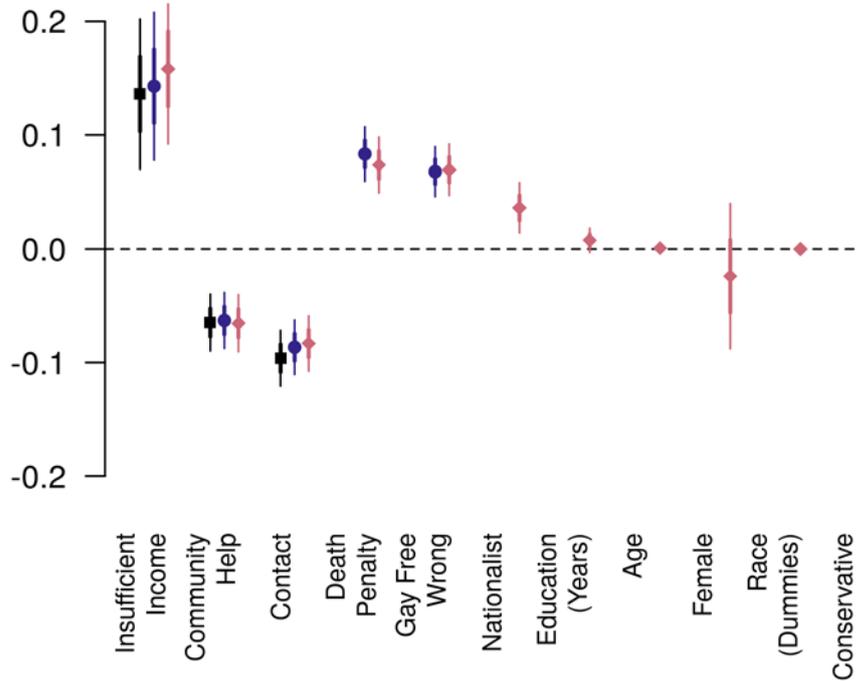
Tables and figures

Table 1. Negative Attitudes to Immigrants, Coefficients of Regression Models

	<i>M1</i>	<i>M2</i>	<i>M3</i>	<i>M4</i>	<i>E1</i>	<i>E2</i>	<i>E3</i>
<i>Perceived relative deprivation</i>							
Insufficient income	0.116 *** (0.033)	0.120 *** (0.033)	0.136 *** (0.033)	-0.028 (0.170)	0.143 *** (0.033)	0.139 *** (0.032)	0.158 *** (0.033)
Community help		-0.065 *** (0.013)	-0.065 *** (0.013)	-0.074 *** (0.017)	-0.063 *** (0.012)	-0.064 *** (0.012)	-0.065 *** (0.013)
Insufficient income * community help				0.023 (0.026)			
<i>Personal contact</i>							
Immigrant acquaintances			-0.100 *** (0.012)		-0.087 *** (0.012)	-0.088 *** (0.012)	-0.083 *** (0.012)
<i>Personality</i>							
Death penalty					0.083 *** (0.012)	0.083 *** (0.012)	0.074 *** (0.012)
Gay free wrong					0.068 *** (0.011)	0.069 *** (0.011)	0.070 *** (0.011)
<i>Control variables</i>							
Contacted politician						0.133 ** (0.045)	
Nationalist							0.036 ** (0.011)
Education							0.001 (0.005)
Additional controls							age, gender, race, conservative
Mean AIC	7216.22	7184.64	7177.24	7216.22	7100.72	7101.17	6930.90
N	2885	2885	2885	2885	2885	2885	2885

Notes: Outcome variable: negative attitudes (scale), data: SASAS 2013, weighted, 5 multiple imputations, given are the coefficients and standard errors (in parentheses) of the combined models, intercepts are not shown. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 1. Negative Attitudes to Immigrants, Coefficients of Regression Models



Notes: Outcome variable: negative attitudes to immigrants (scale), data: SASAS 2013. Given are point estimates of the coefficients as dots, with 1 and 2 standard errors as thick and thin lines. Each of the three models is presented in a different shade and shape. The leftmost (black, square) dot and line for insufficient income presents a coefficient of 0.12 with standard error 0.03. The second model from the left (dark blue, circle) includes ‘personality’, while the rightmost model (light red, diamond) includes additional socio-economic control variables, and control variables for basic ‘liberal—conservative’ position. These are models M3, E1, and E3 in Table 1.