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Southern Africa Labour and Development Research Unit

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RACE AND TRUST IN POST APARTHEID SOUTH AFRICA*

Justine Burns

Abstract

I examine the impact of racial identity on behaviour in trust games played by White, Black and Coloured high school students in South Africa. There is a systematic pattern of distrust towards Black partners, even by Black proposers, partially attributable to mistaken expectations. White proposers are significantly less likely to engage in a strategic interaction at all when paired with a Black partner, while Coloured and Black proposers engage in exchange but at lower levels than when paired with non-Blacks. However, greater racial diversity in schools and friendship groups is positively and significantly associated with greater trust towards Black partners.

1 Introduction

With the demise of apartheid in South Africa came increased awareness and visibility of the social disparities between the different race groups, and a strong emphasis in policy initiatives on leveling the playing field, and bringing previously marginalised individuals, particularly Black South Africans and women, into the economic mainstream. Yet, despite some progress towards racial reconciliation, large socio-economic inequalities between race groups remain, and race continues

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to be a pervasive theme in everyday life. To the extent that the expectations and social meanings created by apartheid persist, one might expect the racial identity of participants to affect trust relationships, particularly those involving Black South Africans, as it was this group that was most severely marginalised by apartheid institutions.

Yet, these effects have been little studied in South Africa. In an important study, one of the first of its kind in South Africa,¹ Ashraf *et al* [2003] find that Black proposers make significantly lower offers in a trust game, supporting previous work suggesting that members of previously disadvantaged groups in a society may be less trusting [Alesina *et al*, 2000]. The work reported here comes from trust games run with high school students in which photographs of participants were used to transmit information about the race of the individuals in the games, and extends this earlier work by examining the impact of the racial identity of *both* the proposer and the trustee on individual behaviour in this strategic setting. Thus, the work described here more closely resembles that of Fershtman and Gneezy [2001, 2002], Glaeser *et al* [2000], and Eckel and Wilson [2003].

2 Trust and Social Identity

Individuals may differ in their trust levels because of differing beliefs about the trustworthiness of others or different abilities to elicit trustworthy behaviour from others [Glaeser *et al*, 2000]. These differences may be exacerbated in segmented societies where group affiliation based on some individual attribute such as race, ethnicity, or gender, is particularly salient, with trust being inversely related to the social distance between groups [Zak and Knack, 2001; Bouckaert and Dhaene, forthcoming; Akerlof, 1997]. Thus, while inter- and intra-group trust may affect the economic success or failure of the society as a whole [Knack and Keefer,1997], it may also affect the relative economic outcomes for different groups within that society [Fershtman, and Gneezy, 2001]. Individuals may be less likely to trust outsiders, and more prone to stereotyping, especially where outsiders can be easily identified by costlessly observable cues such as race and gender²[Chandra, 2003; Cornell, 1996]. In return, negative group stereotypes may affect the performance of members of those groups about whom the stereotype exists [Hoff and

¹The only other trust game study in South Africa that the author is aware of is the work of Carter and Castillo [2003] and in this work, they do not examine differences in behaviour by race.

²Because these attributes are costlessly observable, they are likely to be privileged over other categorisations, such as class or educational background, even when the latter might be more relevant for individuals trying to distinguish between in-group and out-group members.

Pandey, 2003; Steele *et al*, 2002]. Hoff and Pandey [2003] provide evidence from experiments in India that caste identity, when it is publicly revealed, inhibits the motivation of low-caste subjects in maze-solving experiments, and attribute this lowered motivation to an expectation on the part of low caste subjects that their efforts would be poorly rewarded.

Mounting experimental evidence suggests that real attributes such as race [Glaeser et al, 2000; Eckel and Wilson, 2003], gender [Scharleman et al, 2001; Chaudhuri et al, 2002; Croson and Buchan, 1999] and ethnicity [Fershtman and Gneezy, 2001; Brouckaert and Dhaene, 2003] do affect behaviour in the trust game. In their work on the impact of linguistic segmentation in Belgium, and religious segmentation in Israel, Fershtman *et al* [2002] find evidence of insider favouritism, with individuals tending to favor players from his/her own linguistic or religious group. In their work on ethnic affiliation in Israel [Fershtman and Gneezy, 2001, they find that significantly lower offers are made to Jews of Eastern origin, particularly men. Most surprising about this pattern of distrust towards Eastern Jewish males is that it is perpetuated by Eastern Jewish males themselves. By way of contrast, in a more recent study which also relied on names to reveal ethnic identity, Bouckaert and Dhaene [forthcoming] do not find any evidence of discrimination in the levels of trust or reciprocity in a trust game in which male small business owners of Turkish and Belgian ethnic backgrounds were matched with each other. They attribute this to the fact that the small business owners shared other common characteristics (namely, gender, socio-professional status and place of residence) sufficient to reduce the salience of ethnic differences.

Instead of relying on names to signal ethnic identities, other studies have made use of photographs to transmit information about the race of players [Eckel and Wilson, 2003] or have allowed participants to see each other face to face before the experiment begins [Glaeser *et al*, 2000]. Glaeser *et al* [2000] find that proposers in same race pairs made higher offers in the trust game than if their partner was from a different race group, although this effect was not significant. However, trustees in same race pairs made significantly higher return offers than those paired with someone from a different race group. Eckel and Wilson [2003] find that while proposers were significantly less likely to make an offer if they were paired with members of minority race groups, ³ the trustworthiness⁴ of trustees was unaffected by the race of the proposer.

Finally, while the available experimental evidence suggests that racial or eth-

 $^{^3 {\}rm Specifically},$ African-American and Asian trustees were significantly less likely to receive an offer.

⁴Trustworthiness was measured as the probability that the trustee returned the full amount of the loan (before being doubled) made to them by the proposer.

nic identities may affect trust interactions, such behaviour is also likely to be mediated by one's membership of networks and peer groups, insofar as membership of these networks affects exposure to members of other groups, or creates inter-group competition for resources. Available evidence from social psychology confirms the intuition that individuals who have close personal interactions with outgroup members tend to exhibit greater empathy towards, and understanding of, members of out groups more generally [Stephan and Finlay, 1999; Duncan *et al*, 2003.] The alternative view, of course, is that exposure to other groups will exacerbate tensions rather than alleviate them, especially in competitive settings. [Sherif and Sherif, 1961; Lerner and Nagai, 1996; Thernstrom and Thernstrom, 1997]. In light of the educational reforms aimed at increasing racial integration in schools that have occurred in post-apartheid South Africa, this paper will explore the associations between racial diversity in schools and peer groups and inter-racial trust.

3 Experimental design

High school students from six different high schools in the greater Cape Town area were recruited to participate. These students form part of the first generation of South African students who have not only had the opportunity to participate in a more integrated schooling environment, but have also spent much of their lives living in the "new" South Africa, where attempts to redress the devastating effects of racial segregation under apartheid have been made.

Each participating school was visited three times. During the initial visit, students were told about the experiments and given the opportunity to sign up. At the second visit, which occurred at least two to three weeks prior to the experiments being run in order to minimise possible priming of subjects, the (randomly) selected students had their photographs taken and were asked to complete a questionnaire designed to elicit demographic as well as attitudinal information. During the third visit, the experiments were run. The 337 students that participated in the experiments ranged in age from 14 to 19, with an almost equal gender split. Just over two fifths of the students were Black, with White and Coloured⁵ students making up the remainder in roughly equal proportions.

The experiments were run on-site at the schools and each experimental session involved three schools, as this was the minimum number of schools required to ensure a sufficient degree of racial heterogeneity in the sample. The endowment in the trust game was thirty rands 6 and all payments were made in cash at

⁵In South Africa, the term "Coloured" is used to refer to mixed-race individuals

⁶At the time of the experiments, the exchange rate was approximately US\$1=ZAR10. Students were also paid a show up fee.

the end of the experimental session. The BDM [1995] version of the trust game was run, where proposer offers were tripled, and once proposers had made their offers, they were asked to record how much they expected their partner to return to them. These expectations were recorded before the proposers received the actual return offers from their partners. Photographs were used to reveal the racial identity of partners, and care was taken to ensure that students were not assigned partners who attended their own school.

To maintain the anonymity of offers, each student was given their own privacy box, a three-sided cardboard box that stood up on each student's desk, behind which they recorded all their offers. Once the experiment was over, students were asked to complete additional questionnaires designed to elicit any doubts that students might have had over the validity of the experiment.

A research team, comprising a team leader, room monitors and "phoners" was dispatched to each school. Separate classrooms were used for proposers and trustees and each classroom had a room monitor who ran the experiment. Given the diverse locations of the participating schools, the offers between participants were communicated via cell phone by designated "phoners". The "phoners" were additional research assistants who were not in the classroom while the experiment was run. They waited outside the classroom until the proposers had recorded their offers and handed back their forms. Once this was complete, the room monitor left the classroom, and the phoner took over, explaining that as they had not been in the room during the experiment, they had no way of knowing which student had made any particular offer. The phoner then recorded the offers onto a single sheet of paper at a desk at the front of the classroom, before calling the location where the trustees were waiting for the offers. This protocol was followed in every group, and phone monitors all used the same script when transmitting the offers in order to reinforce the credibility of the experiment in the eyes of the students. Once the call had been initiated in the presence of the students, the phoner in the proposer classroom would leave the classroom before transmitting the actual offers, but would leave the classroom door open so that students could verify that he/she was still on the telephone. It was explained to the participating students that this was being done in order to maintain the privacy of their offers, so that their colleagues in their classroom could not hear what offers they had made. While it is possible that this might have created some doubt in the minds of the students as to the credibility of the experiment, post-experiment questionnaires, where their doubts about the experiment were elicited do not indicate that this was a problem.⁷

⁷The post-experiment questionnaires utilised the same questions as Frolich *et al*[2001]. In regressions not reported here, none of the doubt variables significantly affected behaviour.

4 Results

4.1 Black Proposers Are Less Trusting

On average, proposers offered a third of their endowment (Table 1). This is somewhat lower than in other trust games, where proposers send 50% of their endowment on average [Camerer, 2002]. However, in trust game experiments run with school children in the United States, Harbaugh *et al* [2002] find that average offers are 33% across all participants, and 37% for school children in grades 9-12, a sample most comparable to this study.

Black proposers make significantly lower offers than White or Coloured students in the trust game (Tables 1 and 2).⁸ This supports the findings of Ashraf *et al* [2003] who find similar results in a trust game among South African University students. However, in contrast to Hoff and Pandey's [2003] result that members of historically disadvantaged groups may not take advantage of economic opportunities because they expect to be poorly rewarded for their efforts, Black proposers do not make lower offers because they expect to receive significantly lower returns. In fact, Black proposers expected on average to receive a larger proportion of the tripled endowment back than other students, and these expectations do not vary significantly with the race of the person they are paired with (Table 1).⁹ Moreover, in the pooled regression results in Table 2, Black proposers make significantly lower offers even after controlling for their expected returns.

⁸In evaluating differences in means, an independent samples t-test was used in conjunction with a Mann-Whitney test. Where the significance levels from these two tests differed, this will be reported, but unless this is made explicit, the significance levels from the two tests is the same. Mean offers made by Black proposers are significantly lower than mean offers by White proposers (significant at 1% level) and Coloured proposers (significant at 5% level using t-test; 20% using Mann-Whitney). There are no significant differences between offers made by White and Coloured proposers on average.

⁹Expectations of the mean proportion to be returned held by Black proposers are significantly higher than for White proposers (15% significance using t-test) and Coloured proposers (significant at 5% level using t-test; 11% using Mann-Whitney). There are no significant differences in the expected mean returns held by White and Coloured proposers, and there are no significant differences in the expected mean return in Black-Black pairings compared to Black-White and Black-Coloured pairings respectively.

4.2 Black Trustees Are Mistakenly Trusted Less

Black trustees receive significantly lower offers on average than White and Coloured trustees. ¹⁰ While there are no significant differences in the offers made by White proposers contingent on the race of their partner, Coloured proposers make significantly lower offers to Black trustees, favoring Coloured trustees instead (Tables 1 and 2). Black proposers, surprisingly, make significantly lower offers to Black trustees¹¹.

These lower offers to Black trustees are at least partially attributable to an expectation that Black trustees would remit less than others on average (Table 1).¹² In the Tobit regression results, (Table 2), notice the decline in the race coefficient (Trustee is Black) once expectations are accounted for. In fact, White proposers make significantly higher offers to Black trustees once expectations are accounted for in the Tobit regression (Table 2). This may suggest the confounding influence of altruism on trusting behaviour [Carter and Castillo, 2003; Cox, 2000; Ashraf *et al*, 2003], since despite the fact that White proposers expect Black (and Coloured) trustees to return significantly less,¹³ they do not fully adjust their offers downwards in response. Recall that there are no significant differences in offers made by White proposers contingent on the race of the trustee. By way of contrast, while there are no significant differences in the expectations of Coloured proposers concerning returns from trustees of different race groups, they still exhibit a strong insider-bias in their offers and do not trust Black trustees (Tables 1 and 2).

Ironically, any expectation that Black trustees would remit significantly lower amounts is mistaken. There are no significant differences in the amounts remitted by Black and White trustees on average, and Black trustees remit significantly higher amounts than Coloured trustees (Table 1). Indeed, it is Coloured trustees

¹⁰Offers to Black trustees are significantly lower than offers to white trustees (10% using a t-test; 1% using Mann Whitney) and Coloured trustees (5% significance using t-test, and 1% using Mann-Whitney). There are no significant differences between the offers made to White and Coloured trustees on average.

¹¹In Table 1, there are no significant differences in the offers made by White proposers contingent on the race of the trustee. Offers in Coloured-Coloured pairings are significantly higher than Coloured-Black pairings (significant at 1% level), and Coloured-White pairings (significance of 10% using t-test; 15% using Mann-Whitney). Offers in Black-Black pairings are significantly lower (at 5% significance level) than Black-White and Black-Coloured pairings respectively.

 $^{^{12}}$ On average, Black trustees are expected to remit less than White trustees (significance of 15% using t-test; 5% using Mann-Whitney). However, there are no significant differences in the expected returns from Black versus Coloured trustees.

¹³White proposers expect both Black and Coloured trustees to remit significantly less than White trustees. Mean expectations in White-Black and White-Coloured pairings are significantly lower than for White-White pairings, at the 1% and 5% levels respectively (Table 1).

who return significantly less than both Black and White trustees, and¹⁴ this is especially the case in Black-Coloured pairings.¹⁵ These mean differences are reflected in the regression results presented in Table 3 which demonstrate that return offers by Black trustees to Black and White proposers are not significantly different than returns by other trustees, and in fact, they make significantly higher return offers to Coloured proposers than trustees from other race groups. Thus, any expectation that Black proposers would consistently return significantly lower amounts compared with other trustees is mistaken.

However, there is a caveat here. Because Black trustees make significantly higher return offers to Coloured proposers compared to Black proposers, it may be that Black proposers paired with Black trustees rationally expected to receive lower return offers, and hence made low offers to Black partners in anticipation of this. Thus, the lower offers by Black proposers to Black trustees may partially reflect this expectation, as is suggested by the difference (albeit insignificant) in expected returns for Black-Black versus Black-Coloured pairings (Table 1). However, even after accounting for expectations, Black proposers still exhibit a negative bias towards Black trustees, so expectations alone cannot fully account for this result (Table 2).

4.3 White Proposers Prefer Not To Trust Blacks At All

The results presented thus far suggest a systematic pattern of distrust towards Black trustees, despite the fact that Black trustees are not significantly different in their remittance behaviour. However, the Tobit results treat an offer of zero as part of a continuum of offers, when arguably, a zero offer indicates the proposer's unwillingness to engage in an interaction at all. If making a zero offer is a qualitatively different response than making a positive offer, in that it signals an unwillingness or refusal to trust at all, as opposed to a decision to trust a little, then examining behaviour in terms of the decision to make an offer or not, as separate from the decision of how large an offer to make once the participation hurdle has been crossed, may yield interesting results.

¹⁴Returns by Coloured trustees are significantly lower than returns from Whites trustees (at 5% level of significance), and Blacks trustees (1% significance using t-test, 5% using Mann-Whitney).

¹⁵In pairings involving Coloured proposers, Black trustees returned significantly higher amounts than White trustees (1% significance using t-test; 5% using Mann-Whitney) or Coloured trustees (1% significance). There are no significant differences in the amounts returned by White or Coloured trustees to Coloured proposers. In pairings involving Black proposers, there are no significant differences in the amounts return by Black and White trustees to Black proposers. However, both return significantly higher amounts than Coloured trustees.

Cragg's [1971] specification provides a means of testing whether the *probability* of a non-limit outcome is determined apart from the *level* of the non limit outcome as a variant of the tobit model, using a likelihood ratio test. Utilising this specification, the likelihood ratio test confirms that for the regressions presented in Table 4, the probability of a limit outcome *is* determined apart from the level of the non limit outcome.¹⁶ In addition, there are some interesting racial differences. For Black and Coloured proposers, being paired with a Black partner has no impact on the decision to make an offer or not. Rather, it impacts (negatively and significantly) only the size of the offer that is made. In stark contrast, White proposers with Black partners are significantly less likely to make an offer at all, preferring to "opt out" of any interaction at all, while White proposers who do decide to engage in an interaction do not treat Black trustees significantly differently than trustees from other race groups.

4.4 Black And Coloured Trustees Are Less Trustworthy Towards Black Proposers

Average remittances by trustees in this experiment are substantially lower than in other studies, with less than a third of the tripled endowment being returned on average (Table 1). Harbaugh *et al* [2003] find similar results in their trust games run with children, noting that children tend not to display the same high levels of reciprocity as respondents in the Berg *et al* [1995] experiments.

Black proposers receive significantly lower returns from Black and Coloured trustees (Table 5).¹⁷ Moreover, Black and Coloured trustees are significantly less likely to make any return at all when they are paired with a Black proposer as demonstrated by the probit regression results in Table 5¹⁸. White trustees,

¹⁶Specifically, in the pooled results, the test yields a chi-square statistic of 114.81 (p=0.00). In the separate race regressions, a chi-square statistic of 26.11 (p=0.00) for Black proposers; chi-square statistic of 59.22 (p=0.00) for Coloured proposers; and chi-square statistic of 47.41 (p=0.00) for White proposers. These results hold when one includes the additional controls for expectations (although the magnitude of the chi-square statistic is reduced in every case, the significance values are still well below the 5% level).

¹⁷Note that this is different from the argument made earlier that Black trustees do not remit significantly lower amounts than other trustees. There, the argument focused on returns by Black trustees to proposers of different races. The argument here focuses on returns by trustees of different races to Black proposers, hence the divergence in results. Moreover, the result that Black trustees make significantly lower return offers to Black proposers is due to the fact that Black trustees remitted significantly higher amounts to Coloured proposers specifically, as discussed in Result B above.

¹⁸Utilising Cragg's specification once again, the likelihood ratio test confirms that with the exception of Coloured trustees, the probability of a limit outcome is determined apart from the level of the non limit outcome. Specifically, in the pooled results, the test yields a chi-square

however, do not treat Black proposers significantly differently than proposers from other race groups (Table 5).

5 Racial Diversity and Trust

Trusting behaviour, may, of course, be significantly affected by an individual's exposure to and interaction with members of other race groups. Individuals who attend racially mixed high schools, or who count members of other race groups among their closest friends, may plausibly behave quite differently towards members of other race groups in strategic settings compared with individuals who do not have the same exposure. Duncan *et al* (2003), for example, find that college students tend to be more empathetic towards the social groups to which their roommates belong, and in particular, white students randomly assigned black roommates in their first year of college tend to be more supportive of affirmative action policies.

To examine the association between racial diversity in schools and trust behaviour towards black participants, the measure of racial heterogeneity used here is the Herfindahl concentration formula,¹⁹ which is frequently used by economists studying the impact of ethnic heterogeneity on economic growth [Easterly and Levine, 1997; Collier, 1998; 1999; Fedderke and Klitgaard, 1998]. The racial diversity of friendship groups is represented by a dummy variable that takes a value of one if the respondent and her three closest friends are all from the same race group. Based on these measures of racial diversity in schools and friendship groups, black students in this experiment are both more likely to have same race friends and to attend less racially diverse schools.²⁰ Because each student

¹⁹This is given by :

$$R = \sum_{i=1}^{n} \left[\frac{n_i}{N} \right] \left[\frac{n_i - 1}{N - 1} \right] \tag{1}$$

where n_i is the number of members of the *i*th race group in the school, and N is the total number of students in the school. This measure reflects the likelihood that two students chosen at random in a school will be from different race groups.

 20 The average measure of racial diversity in schools based on the Herfindahl index is 0.13 for Black students, 0.54 for White students and 0.52 for Coloured students. Similarly, 84% of black students had same race friends, compared with 69% of White students, and 57% of Coloured students.

statistic of 17.31 (p=0.01); a chi-square statistic of 15.17 (p=0.02) for Black trustees; chi-square statistic of 8.68 (p=0.19) for Coloured trustees; and chi-square statistic of 24.41 (p=0.00) for White trustees.

in a particular school will have the same measure of school racial diversity, the regressions control for clustering at the school level.

Before proceeding, there is an important caveat to all the results presented below. Owing to unresolved identification issues, the relationships between racial diversity in schools and friendship groups, and offers made to black partners can only be characterised as statistical associations. However, there may be good reasons to make the causal argument that increased racial diversity in schools or peer groups in post-apartheid South Africa has bred racial tolerance, particularly towards black partners. Educational reform in the late 1990s that removed institutionalised racial segregation in schools meant that non-white students could attend formerly all-white schools.²¹ Given the historically vast differences in educational spending, facilities and teacher quality between white and black educational institutions, it is far more plausible that the driving force behind nonwhite individuals enrolling at formerly all-white schools had to do with accessing better quality education, as opposed to preferences concerning racial diversity. Moreover, white students were already in these schools, so in some sense, the increased racial integration in their schools was exogenously imposed on them, as opposed to being initiated by them or their parents. And finally, it seems unlikely that the significant institutional changes that occurred post-1994 would not have had a significant impact on the attitudes and behaviours of this generation of high school students. Prior to this, the opportunities for inter-racial mixing were very limited, being the exception rather than the rule.

5.1 Racial Diversity In Schools And Peer Groups Is Positively Associated With Trust Towards Blacks

Table 6 presents the Tobit regression results including controls for racial diversity in schools and peer groups. The interaction terms between racial diversity in schools and friendship groups are included in order to control for the possibility that despite attendance at racially mixed schools, students may still cluster with friends from the same race group. The top panel of Table 8 presents the partial derivatives of these proposer offers, evaluated at the mean, specifically for proposers with black partners. I refer to these partial derivatives in what follows.²²

²¹Contrary to expectation, it is not the case that more racially diverse schools in this sample are bordered by Black and Coloured neighborhoods. Students travel long distances to school, often attending formerly all-White schools in white suburbs far from Black and Coloured townships.

 $^{^{22}}$ In evaluating the partial derivatives, only co-efficients that were significant at least at the 10% level of significance were included, otherwise their value was recorded as zero.

Even after controlling for racial diversity measures, Black proposers still make significantly lower offers to Black trustees relative to trustees from other race groups. The extent of this distrust is, however, reduced for Black proposers with same race friends (Table 8, Row 1). In contrast, White and Coloured proposers with same race friends are significantly less trusting of Black trustees, while there is an associated reduction (and in the case of White proposers, a reversal) of this distrust towards Black trustees for those with mixed race friends.

However, the behaviour of proposers towards Black trustees may be different depending on the extent of racial diversity in the proposer's school environment. Offers by proposers with Black partners are increasing in the extent of racial diversity in their schools (Table 8, Row 2), suggesting that exposure to a racially diverse environment is significantly and positively associated with trusting behaviour towards black partners. This association is even larger if the proposer, most notably Black and White proposers, has mixed race friends.

The composition of friendship groups matters too. White and Coloured proposers with same race friends are significantly less trusting of Black trustees than those with mixed race friends, while the reverse holds true for Black proposers (Table 8, Row 3). However, a key finding is that racial diversity in schools and friendship groups interact in important ways. White and Black proposers in more racially diverse schools with same race friends are significantly less trusting of Black partners (Table 8, Row 4). For Coloured proposers, the effect is in the opposite direction, a somewhat puzzling result that warrants further investigation in future work.

5.2 Racial Diversity In Schools And Peer Groups Is Positively Associated With Trustworthiness Towards Blacks

Once the additional controls for racial diversity in schools and friendship groups are included in the trustee regression (Table 7), the returns by Black and Coloured trustees to Black proposers are no longer significantly different than their returns to non-black proposers, suggesting that racial diversity in schools and peer groups is positively associated with greater trustworthiness towards blacks. (See Table 8, Row 5, for the partial derivative estimates evaluated at the mean).²³ White trustees with same race friends make significantly higher returns

²³A qualification on the results pertaining to black responders is that because of collinearity between variables, it is not possible to include the entire set of variables in this regression. Thus, it is not possible to distinguish the associations between racial diversity in both friends and schools on the behaviour of Black trustees from the associations of these measures for Black trustees specifically paired with a Black proposer. See Table 8.

to their black proposers while those with mixed race friends make significantly lower return offers, a somewhat counterintuitive result. ²⁴

Moreover, once again, racial diversity in schools and friendship groups interact in important ways. White trustees in more racially mixed high schools with same race friends are significantly less trustworthy towards black proposers than white responders in more racially diverse schools with mixed race friends. This mirrors the association between racial diversity in schools and friends and trusting behaviour by White proposers.

6 Discussion

The results presented here suggest that, at least for this sample of South African students, racial identity remains a salient cue for decision making in a strategic setting characterised by limited information. The significantly lower trust exhibited towards Black trustees is at least partially attributable to an expectation by proposers that Black trustees would remit less. Arguably, such expectations may be quite rational, given the persistent socio-economic differences between race groups, with Black South Africans being significantly poorer than others on average. Yet, Black trustees did not conform to this expectation in these games, and their behaviour sends a clear signal that in spite of their poorer socio-economic backgrounds on average, they are at least as trustworthy as members of other race groups.

But perhaps more important is the result that mistrust of Black partners manifests itself in different ways, with White proposers being significantly less likely to engage in an exchange at all, while Black and Coloured partners engage but at significantly lower levels than when paired with non-Black partners. These differences in behaviour are important. By refusing to engage in any exchange at all, White proposers are unable to gain additional information about the trustworthiness of Black partners, and thus, racial stereotypes remain entrenched. This behaviour of White proposers paired with Black partners is consistent with Loury's [2002] notion of racial stigma, the argument being that when subjects are racially stigmatised, observers are less likely to engage in the critical experimentation required to reveal flaws in their beliefs concerning these individuals. In contrast, Black and Coloured proposers appear more willing to undertake this experimentation process, making low offers to Black trustees, even though they

²⁴However, if one accepts that the second stage in the trust game is analogous to a dictator game, this is the same pattern of behaviour as revealed by white proposers with same race friends who were paired with a black partner in a dictator game. The dictator game results are not reported here. See Burns, 2004.

may expect that these offers might not pay off. In so doing, these proposers are able to acquire important information that allows them to update their expectations and stereotypes concerning the trustworthiness of Black partners. An important and interesting extension of this work would be to observe inter-racial trust in a repeated trust game setting, that would allow one to observe the extent of the updating process for proposers from different race groups paired with Black partners.

The systematic pattern of distrust towards Black partners might be characterised as "discrimination in contract" [Loury, 2002:95]²⁵ and while such discrimination may be morally objectionable, recourse to third parties such as the State to prevent such discrimination from occurring in real world contexts is certainly possible. However, these results also shed light on the more invidious problem of "discrimination in contact" [Loury, 2000:95], or "race-mediated social relations" [Loury, 2002:100]. Inter-racial trust, particularly towards Blacks, is positively associated with increasing racial diversity in both the school environment and peer groups, both of which reduce "discrimination in contact". The racial composition of local networks such as peer groups may be especially important, in that individuals may continue to practice discrimination in contact in terms of their close associates, despite attending racially diverse schools. In these experiments, this type of behaviour is associated with lower trust towards Blacks. However, to the extent that attendance at a more racially mixed high school increases the incidence of mixed race friendships, as documented by Quillian and Campbell [2003], these two factors should work together over time to enhance inter-racial trust.

7 Conclusion

This paper has presented the results of a trust game played by a sample of high school students in South Africa, where the racial identity of both partners was revealed using photographs. Before accounting for racial diversity measures, Black and Coloured participants are both less trusting of and less trustworthy towards Blacks, while White students choose either not to engage in exchange at all, or apparently allow altruistic concerns to dominate strategic concerns in their behaviour. However, the results provide encouraging evidence of positive associations between greater racial diversity in schools and peer groups and interracial trust, particularly towards Blacks.

 $^{^{25}}$ Loury[2002:95] defines this as the "unequal treatment of otherwise like persons on the basis of race in the execution of formal transactions". In contrast, discrimination in contact is the "unequal treatment of persons on the basis of race in the associations and relationships that are formed among individuals in social life."

Given the difficulties of conducting this type of experimental work on a large scale, small sample sizes are inevitable, and there is an important need for further replication of this work, perhaps even using a repeated game setting in order to examine more carefully the notion of racial stigma as distinct from racial stereotypes. Moreover, if economists are serious about better understanding the mechanisms through which social capital, networks and group affiliation affect behaviour, and thereby exchange, then more detailed attention needs to be given to collecting better and more comprehensive data on the composition and functioning of these kinds of institutions. The simple measures of racial diversity in schools and peer groups used in this study, while compelling, are limited in illuminating the ways in which they really affect behaviour. This is a challenging but exciting task for future behavioural research.

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	Mean offer as Proportion of tripled		Actual pro	oportion of		
Categorization	propor	tion of	offer prop	oser expects	tripled off	er returned
	endov	vment	to be	returned	to pro	oposer
]	By race of	proposer			
Proposer is Black	0.24	(0.19)	0.43	(0.26)	0.21	(0.23)
	69.00		60.00		59.00	
Proposer is White	0.43	(0.31)	0.37	(0.13)	0.24	(0.23)
	49.00		40.00		37.00	
Proposer is Colored	0.34	(0.26)	0.34	(0.20)	0.20	(0.16)
	51.00		44.00		43.00	
Total	0.33	(0.26)	0.39	(0.22)	0.23	(0.21)
	169.00		144.00		139.00	
		By race of	trustee			
Trustee is Black	0.27	(0.28)	0.35	(0.22)	0.28	(0.25)
	70.00	()	53.00	(**==)	52.00	()
Trustee is White	0.36	(0.24)	0.40	(0.16)	0.25	(0.19)
	55.00	(**= *)	49.00	(00-0)	47.00	()
Trustee is Colored	0.38	(0.24)	0.41	(0.27)	0.16	(0.16)
	44.00		42.00		40.00	
Total	0.33	(0.26)	0.39	(0.22)	0.23	(0.21)
	169.00		144.00		139.00	
		By race p	pairing			
Black to Black	0.16	(0.14)	0.39	(0.29)	0.26	(0.30)
	23.00		18.00		18.00	
Black to White	0.28	(0.20)	0.41	(0.20)	0.25	(0.18)
	23.00		21.00		20.00	
Black to Colored	0.30	(0.22)	0.48	(0.30)	0.13	(0.18)
	23.00		21.00		21.00	
White to Black	0.41	(0.36)	0.31	(0.13)	0.22	(0.26)
	25.00		18.00		17.00	
White to White	0.47	(0.26)	0.44	(0.09)	0.28	(0.20)
	21.00		19.00		18.00	
White to Colored	0.33	(0.17)	0.30	(0.06)	0.11	(0.09)
	3.00		3.00		2.00	
Colored to Black	0.23	(0.23)	0.34	(0.20)	0.35	(0.14)
	22.00		17.00		17.00	
Colored to White	0.32	(0.22)	0.31	(0.15)	0.18	(0.15)
	11.00		9.00		9.00	
Colored to Colored	0.49	(0.25)	0.35	(0.23)	0.20	(0.13)
	18.00		18.00		17.00	

Table 1:	Mean	Offers	And	Returns	In	Trust	Game	By Ra	ce	Of Participants
			14	loon offer of		Dror	artian a	ftminalad		A stual properties of

In all pairings above, the race of the proposer is presented first, and the race of the trustee presented second. Standard deviations in brackets, and sample size in italics

Variable	Poo	oled	Proposer	is Black	Proposer i	s Colored	Proposer	is White
				Tobit inc	dex estimates			
Constant	-2.381 (0.23)	-1.639 (0.18)	19.793 (1.52)	12.219 (1.01)	-32.690 (0.92)	-18.860 (0.64)	-104.656 (2.19)	-59.213 (1.98)
Proposer is Black	-0.485 (2.53)	-0.597 (3.60)						
Trustee is Black	-0.726 (3.94)	-0.432 (2.67)	-0.564 (2.21)	-0.413 (1.73)	-1.063 (3.09)	-0.810 (2.81)	-0.541 (1.41)	0.547 (2.03)
Age of proposer	0.482	0.326	-2.235	-1.385	4.336 (0.94)	2.558	13.553	7.698
Age squared of proposer	-0.011 (0.28)	-0.008	0.070	0.044	-0.133	-0.080	-0.428	-0.250 (2.05)
Proposer is female	-0.067	0.074 (0.48)	-0.330 (1.36)	-0.194 (0.86)	-0.080 (0.26)	0.150 (0.58)	0.092	0.155
Proposer's expected return		2.551 (7.72)	(110.0)	1.500 (3.68)	(0.20)	2.766 (4.72)	()	6.226 (7.77)
Log Likelihood	-251.96 169.00	-225.07 169.00	-97.12 70.00	-90.71 70.00	-72.16 51.00	-62.49 51.00	-74.59 48.00	-52.27 48.00
R ⁻ ANNOVA	0.12	0.40	0.14	0.31 <u>Margi</u>	0.21 nal Effects	0.51	0.13	0.67
Constant Proposer is Black	-2.280 -0.465	-1.603 -0.584	19.029	11.885	-31.919	-18.708	-99.337	-58.998
Trustee is Black Age of Proposer	-0.696 0.462	-0.423 0.319	-0.542 -2.149	-0.401 -1.347	-1.038 4.233	-0.803 2.538	-0.513 12.864	0.545 7.670
Age squared of Proposer Proposer is female Proposer's expected return	-0.011 -0.064	-0.008 0.072 2.495	0.067 -0.318	0.043 -0.189 1.459	-0.129 -0.078	-0.079 0.148 2.743	-0.406 0.088	-0.249 0.154 6.203

Table 2: Tobit Regression Conditioning Offers In Trust Game On Race

Absolute value of t-statistics reported in brackets. The dependent variable, Amount offered in the Trust Game, is logged to minimise scaling effects.

Variable	Pooled	Proposer is Black	Proposer is Colored	Proposer is White
		Tobit	Index Estimates	
Constant	1.543	6.077	-4.367	1.261
	(0.45)	(1.07)	(1.14)	(0.12)
Trustee is Black	0.029	-0.023	0.109	0.015
	(0.63)	(0.28)	(1.80)	(0.12)
Age of trustee	-0.184	-0.800	0.575	-0.103
	(0.44)	(1.13)	(1.23)	(0.08)
Age squared of trustee	0.006	0.027	-0.018	0.003
	(0.49)	(1.21)	(1.23)	(0.06)
Trustee is female	0.005	-0.009	-0.006	0.024
	(0.13)	(0.12)	(0.13)	(0.26)
Tripled amount received by trustee	-0.001	0.001	-0.003	-0.002
	(1.22)	(0.46)	(2.55)	(1.22)
Log Likelihood	-30.940	-21.463	17.461	-9.952
n	139.000	59.000	41.000	39.000
R^{2}_{ANNOVA}	0.020	0.040	0.330	0.020
R^2_{DECOMP}	0.030	0.090	0.340	0.030
		Ma	rginal Effects	
Constant	1.228	4.237	-4.244	0.998
Trustee is black	0.023	-0.016	0.106	0.012
Age of trustee	-0.147	-0.558	0.559	-0.082
Age squared of trustee	0.005	0.019	-0.017	0.002
Trustee is female	0.004	-0.006	-0.006	0.019
Tripled amount received by trustee	-0.001	0.001	-0.003	-0.002

Table 3: Tobit Regression, Conditioning Return Offers In Trust Game By Trustees On Own Demographic Characteristics And Offer Received From Proposer

The dependent variable is the fraction remitted by the trustee (Amount returned/Tripled amount received), and is not logged. Absolute value of t-statistics is reported in brackets.

Decision Of How Mu	tch To C	Offer, Co	onditione	d On Ra	ace.							
		Pooled		Prop	oser is Bla	ick	Propo	ser is Colo	red	Prop	oser is Whi	e
	Probit	Non-I	imit	Probit	Non-L	imit	Probit	Non-L	imit	Probit	Non-Li	mit
						Index e	stimates					
Constant	0.264	-0.340	-0.137	44.116	6.567	5.930	-60.221	1.604	2.235	-85.811	-18.399	-19.689
Proposer is Black	(0.02)	-0.570 -0.570	-0.588	(0C.1)	(0.74)	(/0.0)	(10.1)	(60.0)	(0.12)	(1.40)	(/0.0)	(0.74)
Trustee is Black	-0.744	-0.275	(+c.c) -0.251	-0.559	-0.312	-0.298	-0.743	-0.743	-0.714	-0.921	0.105	0.237
Age of proposer	(2.87) 0.066	(2.58) 0.292	(2.35) 0.255	(1.37) -5.227	(1.69) -0.593	(1.61) -0.527	(1.27) 8.010	(4.25) -0.151	(4.12) -0.225	(1.70) 10.940	(0.68) 2.744	(1.39) 2.875
A de sources of proposer	(0.04) 0.000	(0.39) -0.006	(0.34) -0.005	(1.32)	(0.55)	(0.49)	(1.10) -0.259	(0.06)	(0.10)	(1.40) -0 343	(0.80)	(0.86) -0.094
readard to pample ager	(0.01)	(0.27)	(0.23)	(1.32)	(0.61)	(0.55)	(1.11)	(0.19)	(0.21)	(1.38)	(0.81)	(0.89)
Proposer is female	-0.009	-0.078	-0.055	-0.506	-0.091	-0.079	-0.077	-0.002	0.034	0.415	-0.222	-0.163
Proposer's expected return			(0.54) 0.377 (1.60)	(1.18)	(0.53)	(0.46) 0.219 (0.67)	(0.15)	(0.02)	(0.22) 0.491 (1.27)	(0.83)	(1.32)	(0.98) 1.154 (1.66)
Log Likelihood n	-66.27 169.00	-128.28 169.00	-127.01 169.00	-23.81 70.00	-60.26 70.00	-60.03 70.00	-18.45 (51.00)	-30.00 51.00	-29.21 51.00	-18.75 48.00	-26.24 48.00	-24.91 48.00
<i>n</i> after truncation R^{2}_{ANNOVA}	0.06	144.00	144.00	0.11	61.00	61.00	0.10	44.00	44.00	0.19	39.00	39.00
						Margina	1 Effects					
Constant	0.057	-0.339	-0.137	7.611	6.511	5.881	-11.755	1.604	2.245	-20.111	-18.399	-19.699
Truptee is Black Are of monoser	-0.171 0.014	-0.275 -0.275 0.292	-0.250 -0.250 0.255	-0.108	-0.309	-0.305	-0.155	-0.743	-0.714	-0.216 2 564	0.105	0.247
Age squared of proposer	0.000	-0.006 200.0-	-0.005	0.028	0.020	0.028	-0.050	0.014	0.026	-0.080	-0.088	-0.094
Proposer's expected return	700.0-	1.0.0-	0.377	060.0-	0.60.0-	0.227	CTO.0-	700.0-	0.491	c01.0	777.0-	1.154
The dependent variable, Am	ount offere	ed in Trust	Game, is lo	gged to min	nimise pos	sible scali	ng effects. A	bsolute va	lue of t-st	atistics is re	ported in b	rackets.

Game To Make An Offer From The	
Table 4: Examining Differences In The Decision By Proposers In The Trust	Decision Of How Much To Offer, Conditioned On Race.

		Pooled		Πn	istee is Bla	ck	Tru	istee is Colo	red	Πn	astee is Wh	ite
Variable	Tobit	Probit	Non- I imit	Tobit	Probit	Non- I imit	Tobit	Probit	Non- I imit	Tobit	Probit	Non- Limit
	(1)	(2)	(3)	(4)	(5)	(9)	(2)	(8)	(6)	(10)	(11)	(12)
Constant	1.420	1.763	1.169	5.123	11.738	-1.096	1.736	-13.397	5.970	0.966	14.216	-5.384
	(0.54)	(0.29)	(0.47)	(1.04)	(1.14)	(0.24)	(0.30)	(1.19)	(0.87)	(0.16)	(0.91)	(1.39)
Proposer is Black	-0.102	-0.189	-0.047	-0.197	-0.374	-0.078	-0.151	-0.502	-0.051	0.021	0.030	0.004
1	(2.85)	(2.35)	(1.37)	(3.14)	(2.48)	(1.24)	(2.67)	(1.75)	(0.72)	(0.30)	(0.19)	(0.07)
Age of Trustee	-0.167	-0.220	-0.117	-0.590	-1.347	0.148	-0.278	1.669	-0.787	-0.115	-1.829	0.735
	(0.51)	(0.29)	(0.38)	(1.00)	(1.09)	(0.27)	(0.37)	(1.17)	(0.89)	(0.15)	(0.93)	(1.51)
Age squared of Trustee	0.006	0.008	0.004	0.018	0.040	-0.003	0.011	-0.051	0.026	0.004	0.058	-0.023
	(0.58)	(0.33)	(0.43)	(1.04)	(1.07)	(0.20)	(0.46)	(1.13)	(0.93)	(0.16)	(0.94)	(1.53)
Trustee is female	-0.002	0.049	-0.022	-0.110	-0.136	-0.095	0.108	0.138	0.078	0.043	0.108	0.000
	(0.00)	(0.69)	(0.70)	(2.02)	(1.22)	(1.71)	(2.23)	(1.50)	(1.34)	(0.70)	(0.81)	(00.0)
Amt. Received by Trustee	-0.002	0.001	-0.003	-0.004	-0.001	-0.006	0.000	0.000	-0.001	0.001	0.005	-0.001
	(2.21)	(0.30)	(3.70)	(3.26)	(0.49)	(3.69)	(0.08)	(0.02)	(0.71)	(0.85)	(1.15)	(0.47)
Log Likelihood	-27.15	-70.78	52.28	-5.09		52.00	6.94	-11.78	23.06	-14.44	-27.42	25.19
Restricted Log Likelihood		-75.00						-19.79			-28.97	
u	139.00	139.00	139.00	52.00		52.00	39.00	39.00	39.00	48.00	48.00	48.00
McFadden R ²		0.06						0.40			0.05	
${f R}^2$ decomp	0.06			0.23			0.19			0.02		
<i>n</i> after truncation			107.00			42.00			31.00			34.00

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Variable Prooled Proposer is Colored Proposer is Colored Proposer is White Constant 0.470 20.918 -17.996 -77.228 Constant 0.040 (2.31) (1.41) (2.04) Proposer is Black -0.211 (1.53) (1.41) (2.04) Proposer is female 0.063 (27.79) (0.68) (2.33) (0.72) Proposer's expected return 2.670 1.526 2.827 6.343 Racial diversity in proposer's school x (12.11) (9.25) (3.65) (1.83) Racial diversity in proposer's school x 1.192 1.426 3.822 2.807 Racial diversity in proposer's friends 1.192 1.426 3.822 2.807 Racial diversity in proposer's friends x (0.63) (2.74) (1.417) (1.45) Racial diversity in proposer's school and friends (5.69) (7.55) (2.06) (7.64) Racial diversity in proposer's school and friends -7.268 -4.534 (1.45) (1.45) Racial diversity in proposer'	Schools And Enchasing Groups O		II IIIC IIU	o Game.	L
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Variable	Pooled	Proposer is	Proposer is	Proposer is
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Constant	0.470	20.918	-17.996	-77.228
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Proposer's expected return 2.670 1.526 2.827 6.343 Racial diversity in proposer's school 3.261 3.098 4.084 3.415 Racial diversity in proposer's school x (12.11) (9.25) (3.65) (1.83) Racial diversity in proposer's school x (0.64 (28.81) (0.80) (2.98) Racial diversity in proposer's friends 1.192 1.426 3.822 2.807 Racial diversity of proposer's friends x (0.629 9.262 -6.381 2.489 Trustee is Black 0.629 9.262 -6.381 2.489 (0.31) (22.48) (11.87) (1.45) Racial diversity in proposer's school and (5.69) (7.55) (1.92) (6.75) Racial diversity in proposer's school and -1.842 -14.862 10.926 -6.064 friends x Trustee is Black -1.842 -14.862 10.926 -6.064 friends x Trustee is Black -2.17.12 -80.67 -59.23 -47.34 n 169.00 70.00 51.00 48.00 R ² ANNOVA 0.46 0.47 0.58 <td></td> <td>(0.8)</td> <td>(3.33)</td> <td>(0.72)</td> <td>(1.91)</td>		(0.8)	(3.33)	(0.72)	(1.91)
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Racial diversity in proposer's school x 2.022 17.198 -4.061 10.927 Trustee is Black 2.022 17.198 -4.061 10.927 Racial diversity in proposer's friends 1.192 1.426 3.822 2.807 Racial diversity of proposer's friends x 1.192 1.426 3.822 2.807 Trustee is Black 0.629 9.262 -6.381 2.489 Racial diversity in proposer's school and friends -2.210 -2.644 -7.268 -4.534 Griends x Trustee is Black -1.842 -14.862 10.926 -6.064 (0.58) (25.47) (12.78) (1.68) 10.926 -6.064 Log Likelihood -217.12 -80.67 -59.23 -47.34 n R ² ANNOVA 0.46 0.47 0.58 0.72 Marginal Effects Constant 0.462 20.662 -17.897 -77.142 Proposer is Black -1.264 -9.857 1.899 -4.631 Proposer's expected return 2.623 1.507 2.811 6.336 Proposer's expected return </td <td>~ x x</td> <td>(12.11)</td> <td>(9.25)</td> <td>(3.65)</td> <td>(1.83)</td>	~ x x	(12.11)	(9.25)	(3.65)	(1.83)
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Racial diversity in proposer's friends $(0.64$ (28.81) (0.80) (2.98) Racial diversity in proposer's friends x 1.192 1.426 3.822 2.807 Trustee is Black 0.629 9.262 -6.381 2.489 (0.31) (22.48) (11.87) (1.45) Racial diversity in proposer's school and friends -2.210 -2.644 -7.268 -4.534 (5.69) (7.55) (1.92) (6.75) Racial diversity in proposer's school and friends x Trustee is Black -1.842 -14.862 10.926 -6.064 (0.58) (25.47) (12.78) (1.68) Log Likelihood -217.12 -80.67 -59.23 -47.34 n 169.00 70.00 51.00 48.00 R^2_{ANNOVA} 0.46 0.47 0.58 0.72 Marginal EffectsConstant 0.462 20.662 -17.897 -77.142 Proposer is Black -0.207 -1.264 -3.880 0.136 Proposer is female 0.100 0.276 0.380 0.136 Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school x 1.172 1.408 3.801 2.804 Racial diversity in proposer's friends x 1.987 16.987 -4.039 10.915 Racial diversity in proposer's friends x 1.172 1.408 3.801 2.804 Racial diversity in proposer's friends x 1.1	Trustee is Black	2.022	17.198	-4.061	10.927
Racial diversity in proposer's friends 1.192 1.426 3.822 2.807 Racial diversity of proposer's friends x (5.63) (10.75) (2.06) (7.64) Racial diversity of proposer's friends x (0.31) (22.48) (11.87) (1.45) Racial diversity in proposer's school and friends -2.210 -2.644 -7.268 -4.534 Racial diversity in proposer's school and friends x Trustee is Black -1.842 -14.862 10.926 -6.064 Log Likelihood -217.12 -80.67 -59.23 -47.34 n 169.00 70.00 51.00 48.00 R^2_{ANNOVA} 0.46 0.47 0.58 0.72 Marginal Effects Constant 0.462 20.662 -17.897 -77.142 Proposer is Black -1.264 -9.857 1.899 -4.631 Proposer is female 0.100 -0.276 0.380 0.136 Proposer is female 0.100 -0.276 0.380 0.136 Proposer's expected retum 2.623 1.507 2.811 6.336 Raci		(0.64	(28.81)	(0.80)	(2.98)
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Racial diversity in proposer's school and friends $(1.8.7)$ $(1.8.7)$ $(1.8.7)$ $(1.8.7)$ Racial diversity in proposer's school and friends x Trustee is Black -2.210 -2.644 -7.268 -4.534 Log Likelihood -1.842 -14.862 10.926 -6.064 (0.58) (25.47) (12.78) (1.68) Log Likelihood -217.12 -80.67 -59.23 -47.34 n 169.00 70.00 51.00 48.00 \mathbb{R}^2_{ANNOVA} 0.46 0.47 0.58 0.72 Marginal EffectsConstant 0.462 20.662 -17.897 -77.142 Proposer is Black -0.207 -0.276 0.380 0.136 Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school 3.204 3.060 4.061 3.411 Racial diversity in proposer's friends x 1.987 16.987 -4.039 10.915 Racial diversity in proposer's friends x 1.172 1.408 3.801 2.804 Racial diversity in proposer's school and -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and -1.810 -14.680 10.866 -6.058	Trustee is black	(0.31)	(22.48)	(11.87)	(1.45)
Racial diversity in proposel's school and friends-2.210 (5.69)-2.644 (7.55)-7.268 (1.92)-4.534 (6.75)Racial diversity in proposer's school and friends x Trustee is Black-1.842 (0.58)-14.862 (25.47)10.926 (12.78)-6.064 (16.8)Log Likelihood-217.12 (0.58)-80.67 (25.47)-59.23 (12.78)-47.34 (16.8)Log Likelihood-217.12 (0.58)-80.67 (0.46)-59.23 (0.47)-47.34 (18.00) R^2_{ANNOVA} 0.460.470.580.72Marginal EffectsConstant0.462 (0.207)20.662 (1.92)-17.897 (17.897)-77.142Proposer is Black Proposer is female-1.264 (0.100) (0.276)-9.857 (0.380)1.899 (0.360)-4.631 (0.360)Proposer's expected return Racial diversity in proposer's school x Trustee is Black1.987 (1.987)16.987 (4.039)-4.039 (0.915)Racial diversity in proposer's friends x Trustee is Black0.618 (0.518)9.148 (0.518)-6.346 (2.486)Racial diversity in proposer's school and friends x Trustee is Black0.618 (0.217) (2.171)-2.612 (2.2212)-7.228 (2.284)Racial diversity in proposer's school and friends x Trustee is Black-1.810 (2.171)-14.680 (10.866) (0.866)-6.058	Pagial diversity in propagar's school and	(0.51)	(22.40)	(11.07)	(1.+3)
Inertids -2.210 -2.044 -7.208 -4.354 Racial diversity in proposer's school and friends x Trustee is Black (5.69) (7.55) (1.92) (6.75) Log Likelihood -1.842 -14.862 10.926 -6.064 (0.58) (25.47) (12.78) (1.68) Log Likelihood -217.12 -80.67 -59.23 -47.34 n 169.00 70.00 51.00 48.00 R^2_{ANNOVA} 0.46 0.47 0.58 0.72 Marginal EffectsConstant 0.462 20.662 -17.897 -77.142 Proposer is Black -0.207 -0.276 0.380 0.136 Proposer is female 0.100 -0.276 0.380 0.136 Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school x 3.204 3.060 4.061 3.411 Racial diversity in proposer's friends 1.172 1.408 3.801 2.804 Racial diversity in proposer's friends x 1.987 16.987 -4.039 10.915 Racial diversity in proposer's friends x 1.172 1.408 3.801 2.804 Racial diversity in proposer's friends x -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and friends x Trustee is Black -1.810 -14.680 10.866 -6.058	friends	2 210	2 6 4 4	7 260	1 521
Racial diversity in proposer's school and friends x Trustee is Black (1.33) (1.32) (0.73) Log Likelihood -1.842 -14.862 10.926 -6.064 (0.58) (25.47) (12.78) (1.68) Log Likelihood -217.12 -80.67 -59.23 -47.34 n 169.00 70.00 51.00 48.00 \mathbb{R}^2_{ANNOVA} 0.46 0.47 0.58 0.72 Marginal EffectsConstant 0.462 20.662 -17.897 -77.142 Proposer is Black -0.207 -0.207 -1.264 -9.857 1.899 -4.631 Proposer is female 0.100 -0.276 0.380 0.136 Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school 3.204 3.060 4.061 3.411 Racial diversity in proposer's friends 1.172 1.408 3.801 2.804 Racial diversity in proposer's school and -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and -1.810 -14.680 10.866 -6.058	intends	-2.210	-2.044	-/.208	-4.334
Racial diversity in proposer's school and friends x Trustee is Black -1.842 -14.862 10.926 -6.064 Log Likelihood -217.12 -80.67 -59.23 -47.34 n169.00 70.00 51.00 48.00 R^2_{ANNOVA} 0.46 0.47 0.58 0.72 Marginal EffectsConstant 0.462 20.662 -17.897 -77.142 Proposer is Black -0.207 -0.276 0.380 0.136 Proposer is female 0.100 -0.276 0.380 0.136 Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school x 1.987 16.987 -4.039 10.915 Racial diversity of proposer's friends x 1.172 1.408 3.801 2.804 Racial diversity in proposer's school and -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and -1.810 -14.680 10.866 -6.058	Designation in a second sector of and	(3.09)	(7.55)	(1.92)	(0.73)
Intends X Hustee is Black -1.842 -14.862 10.926 -6.064 (0.58)(25.47)(12.78)(1.68)Log Likelihood -217.12 -80.67 -59.23 -47.34 n169.0070.00 51.00 48.00R ² _{ANNOVA} 0.460.470.580.72Marginal EffectsConstant0.46220.662 -17.897 -77.142 Proposer is Black -0.207 -0.207 -1.264 -9.857 1.899 -4.631 Proposer is female0.100 -0.276 0.3800.136Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school x 1.987 16.987 -4.039 10.915 Racial diversity of proposer's friends 1.172 1.408 3.801 2.804 Racial diversity in proposer's school and -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and -1.810 -14.680 10.866 -6.058	Racial diversity in proposer's school and	1.0.42	14.963	10.026	()(1
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	friends x Trustee is Black	-1.842	-14.862	10.926	-6.064
Log Likelihood -217.12 -80.67 -59.23 -47.34 n 169.0070.0051.0048.00 R^2_{ANNOVA} 0.460.470.580.72Marginal EffectsConstant0.46220.662 -17.897 -77.142 Proposer is Black -0.207 Trustee is Black -1.264 -9.857 1.899 -4.631 Proposer is female0.100 -0.276 0.3800.136Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school 3.204 3.060 4.061 3.411 Racial diversity in proposer's friends 1.172 1.408 3.801 2.804 Racial diversity of proposer's friends x 1.172 1.408 3.801 2.804 Racial diversity in proposer's school and -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and -1.810 -14.680 10.866 -6.058		(0.58)	(25.47)	(12.78)	(1.68)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Log Likelihood	-217.12	-80.67	-59.23	-47.34
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Marginal EffectsConstant 0.462 20.662 -17.897 -77.142 Proposer is Black -0.207 -0.207 -0.207 -0.207 Trustee is Black -1.264 -9.857 1.899 -4.631 Proposer is female 0.100 -0.276 0.380 0.136 Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school 3.204 3.060 4.061 3.411 Racial diversity in proposer's school x -1.987 16.987 -4.039 10.915 Racial diversity in proposer's friends 1.172 1.408 3.801 2.804 Racial diversity of proposer's friends x -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and -14.680 10.866 -6.058	R ² _{ANNOVA}	0.46	0.47	0.58	0.72
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Constant 0.462 20.662 -17.897 -77.142 Proposer is Black -0.207 -0.207 -1264 -9.857 1.899 -4.631 Proposer is female 0.100 -0.276 0.380 0.136 Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school 3.204 3.060 4.061 3.411 Racial diversity in proposer's school x -14.088 3.801 2.804 Racial diversity of proposer's friends 1.172 1.408 3.801 2.804 Racial diversity in proposer's school and -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and -18.10 -14.680 10.866 -6.058			Marg	tinal Effects	
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Trustee is Black -1.264 -9.857 1.899 -4.631 Proposer is female 0.100 -0.276 0.380 0.136 Proposer's expected return 2.623 1.507 2.811 6.336 Racial diversity in proposer's school 3.204 3.060 4.061 3.411 Racial diversity in proposer's school x 1.987 16.987 -4.039 10.915 Racial diversity in proposer's friends 1.172 1.408 3.801 2.804 Racial diversity of proposer's friends x 1.172 1.408 3.801 2.804 Racial diversity in proposer's school and -2.171 -2.612 -7.228 -4.529 Racial diversity in proposer's school and -1810 -14.680 10.866 -6.058	Proposer is Black	-0.207			
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Racial diversity in proposer's school3.2043.0604.0613.411Racial diversity in proposer's school x1.98716.987-4.03910.915Racial diversity in proposer's friends1.1721.4083.8012.804Racial diversity of proposer's friends x71.1721.4083.8012.804Trustee is Black0.6189.148-6.3462.486Racial diversity in proposer's school and-2.171-2.612-7.228-4.529Racial diversity in proposer's school and-14.68010.866-6.058	Proposer's expected return	2.623	1.507	2.811	6.336
Racial diversity in proposer's school xTrustee is Black1.98716.987-4.03910.915Racial diversity in proposer's friends1.1721.4083.8012.804Racial diversity of proposer's friends x710.91510.915Trustee is Black0.6189.148-6.3462.486Racial diversity in proposer's school and-2.171-2.612-7.228-4.529Racial diversity in proposer's school and-14.68010.866-6.058	Racial diversity in proposer's school	3.204	3.060	4.061	3.411
Trustee is Black1.98716.987-4.03910.915Racial diversity in proposer's friends1.1721.4083.8012.804Racial diversity of proposer's friends x	Racial diversity in proposer's school x				
Racial diversity in proposer's friends1.1721.4083.8012.804Racial diversity of proposer's friends x0.6189.148-6.3462.486Racial diversity in proposer's school and friends-2.171-2.612-7.228-4.529Racial diversity in proposer's school and friends x Trustee is Black-1.810-14.68010.866-6.058	Trustee is Black	1.987	16.987	-4.039	10.915
Racial diversity of proposer's friends xTrustee is Black0.6189.148-6.3462.486Racial diversity in proposer's school and friends-2.171-2.612-7.228-4.529Racial diversity in proposer's school and friends x Trustee is Black-1.810-14.68010.866-6.058	Racial diversity in proposer's friends	1.172	1.408	3.801	2.804
Trustee is Black0.6189.148-6.3462.486Racial diversity in proposer's school and friends-2.171-2.612-7.228-4.529Racial diversity in proposer's school and friends x Trustee is Black-1.810-14.68010.866-6.058	Racial diversity of proposer's friends x				
Racial diversity in proposer's school and friends-2.171-2.612-7.228-4.529Racial diversity in proposer's school and friends x Trustee is Black-1.810-14.68010.866-6.058	Trustee is Black	0.618	9.148	-6.346	2.486
friends-2.171-2.612-7.228-4.529Racial diversity in proposer's school and friends x Trustee is Black-1.810-14.68010.866-6.058	Racial diversity in proposer's school and	0.010	<i></i>	0.0 10	2
Racial diversity in proposer's school and friends x Trustee is Black -1.810 -14.680 10.866 -6.058	friends	-2 171	-2.612	-7 228	-4 529
friends x Trustee is Black -1.810 -14.680 10.866 -6.058	Racial diversity in proposer's school and	2.1/1	2.012	1.220	1.52)
	friends x Trustee is Black	-1.810	-14.680	10.866	-6.058

Table 6: Tobit Regression Controlling For The Influence Of Racial Diversity In Schools And Friendship Groups On Offers In The Trust Game.

Age controls included but not reported. The dependent variable, Amount offered in the Trust Game, is logged. Absolute value of t-statistics is reported in brackets. The results control for clustering by school.

Table 7: Return Offers By Trustees In The Trust Game, Controlling For TheRace Of Trustees, And Racial Diversity In Schools And Friendship Groups

Variable	Pooled	Trustee is Black	Trustee is Colored	Trustee is White
		Tobit Index	Estimates	
Constant	1.73	2.74	-0.08	6.29
	(0.42)	(0.30)	(0.01)	(0.87)
Proposer is Black	-0.52	-0.28	0.14	-2.00
	(2.79)	(0.19)	(0.18)	(1.73)
Trustee is female	0.01	-0.13	0.12	0.07
	(0.17)	(2.90)	(3.53)	(1.57)
Amount received by Trustee	0.00	-0.01	0.00	0.00
	(0.98)	(3.73)	(0.12)	(0.41)
Racial diversity in Trustee's school	0.33	-0.26	0.95	3.80
	(0.91)	(2.77)	(0.59)	(3.54)
Racial diversity in Trustee's school x proposer	0.64	0.07		2.46
is Black	0.61	-0.06	-0.70	3.46
	(1.92)	(0.02)	(0.43)	(1.71)
Racial diversity in Trustee's friends	0.18	-0.11	0.71	2.08
Desial diversity in Trusteals friends y monogon	(0.99)	(0.85)	(0.95)	(2.26)
is Black	0.50	0.18	-0.77	3.09
15 Diack	(2,71)	(0.12)	(0.99)	(2.05)
Racial diversity in school and friends of Trustee	-0.39	(0.12)	-1 49	-3.91
Racial diversity in school and mends of musice	(1.03)		(1.06)	(2.19)
Racial diversity in school and friends of Trustee x	(1.05)		(1.00)	(2.1))
Racial diversity in school and friends of Trustee x proposer is Black	-0.76	-0.08	1.70	-5.39
	(2.65)	(0.03)	(1.04)	(1.98)
LogL	-24.56	-2.62	8.38	-4.93
n	139.00	52.00	39.00	48.00
R2 decomp	0.08	0.26	0.24	0.30
		Marginal		
Constant	1.39	2.35	-0.07	5.33
Proposer is Black	-0.42	-0.24	0.12	-1.70
Trustee is female	0.01	-0.11	0.10	0.06
Amount received by Trustee	0.00	0.00	0.00	0.00
Racial diversity in Trustee's school	0.27	-0.23	0.81	3.22
Racial diversity in Trustee's school x proposer				
is Black	0.49	-0.05	-0.59	2.93
Racial diversity in Trustee's friends	0.14	-0.09	0.60	1.76
Racial diversity in Trustee's friends x proposer	0.40	0.15	0.55	0.60
IS Black	0.40	0.15	-0.65	2.62
Racial diversity in school and friends of Trustee x	-0.32		-1.26	-3.31
proposer is Black	-0.61	-0.07	1.44	-4.57

Age controls included but not reported. Absolute value of t-ratios in brackets. Results control for clustering at school level.

Table 8: Partial Derivative Estimates [Evaluated At The Mean] Of Offers In The Trust Game, Controlling For Racial Diversity In Schools And Friendship Groups.

	Partial effect on offers made by Proposers	Conditioning	Proposer is Black	Proposer is Colored	Proposer is White
1. $\frac{1}{\partial B}$	∂Offer lackTrustee	Same race friends Mixed race friends	-0.40 -7.56	-0.65 0	-2.01 1.25
2. $\overline{\partial B}$	∂Offer RlackTrustee ∂RDSchool	Same race friends Mixed race friends	2.31 16.99	10.87 0	4.86 10.92
3. $\overline{\partial E}$	∂Offer BlackTrustee ∂RDFriends		7.17	-0.65	-3.27
4. $\overline{\partial B}$	∂Offer BlackTrustee ∂RDFriends ∂RDSchool		-14.68	10.87	-6.06

Partial effect on return offers made by Trustees		Trustee is Black	Trustee is Colored	Trustee is White
∂Offer	Same race friends	0	0	0.02
5. $\partial Black \operatorname{Pr} oposer$	Mixed race friends	0	0	-0.09
∂ <i>Offer</i>	Same race friends	0	0	-1.64
6. $\frac{\partial Black \operatorname{Pr} oposer \ \partial RDSchool}{\partial Black \operatorname{Pr} oposer \ \partial RDSchool}$	Mixed race friends	0	0	2.93
7. $\frac{\partial Offer}{\partial Black \operatorname{Pr} oposer \ \partial RDFriends}$		0	0	0.11
8. $\frac{\partial Offer}{\partial Black \operatorname{Pr}oposer} \partial RDFriends \partial RDSchool}$		0	0	-4.57

Key: BlackProposer = Proposer is Black; BlackTrustee= Trustee is Black, RDSchool = Racial diversity in schools; RDFriends = Racial diversity in friendship groups. These effects are significant at least at the 10% level of significance.

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The Democracy in Africa Research Unit (DARU) supports students and scholars who conduct systematic research in the following three areas: 1) public opinion and political culture in Africa and its role in democratisation and consolidation; 2) elections and voting in Africa; and 3) the impact of the HIV/AIDS pandemic on democratisation in Southern Africa. DARU has developed close working relationships with projects such as the Afrobarometer (a cross national survey of public opinion in fifteen African countries), the Comparative National Elections Project, and the Health Economics and AIDS Research Unit at the University of Natal.

The Social Surveys Unit (SSU) promotes critical analysis of the methodology, ethics and results of South African social science research. One core activity is the Cape Area Panel Study of young adults in Cape Town. This study follows 4800 young people as they move from school into the labour market and adulthood. The SSU is also planning a survey for 2004 on aspects of social capital, crime, and attitudes toward inequality.

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