MORE DIVERSE NEIGHBORS, MORE SOLIDARITY? THE EFFECTS OF PREJUDICE AND INTERGROUP CONTACT ON DESERVINGNESS AND REDISTRIBUTION SUPPORT

By
Alex Duni

Submitted to Central European University - Private University
Department of Political Science

In partial fulfilment of the requirements for the degree of Master of Arts

Supervisor: Professor Björn Bremer

Vienna, Austria
2025

COPYRIGHT NOTICE

[1]

For bibliographic and reference purposes this thesis should be referred to as: Duni, Alex. 2025. More Diverse Neighbors, More Solidarity? The Effects of Prejudice and Intergroup Contact on Deservingness and Redistribution Support. MA thesis, Department of Political Science, Central European University, Vienna.

[1] Icon by Font Awesome.

AUTHOR'S DECLARATION

I, the undersigned, **Alex Duni**, candidate for the MA degree in Political Science declare herewith that the present thesis is exclusively my own work, based on my research and only such external information as properly credited in notes and bibliography. I declare that no unidentified and illegitimate use was made of the work of others, and no part of the thesis infringes on any person's or institution's copyright.

I also declare that no part of the thesis has been submitted in this form to any other institution of higher education for an academic degree.

Vienna, 29 May 2025

__Alex Duni_____

Signature

ABSTRACT

This thesis examines the effects of prejudice reduction and interethnic contact on attitudes towards redistribution. Whereas previous research finds that members of ethnic majorities support redistribution less in ethnically diverse contexts and they find minority members less deserving of receiving welfare benefits, this research looks at how reduction of prejudice through interethnic contact mitigates this by positively affecting deservingness evaluations and increasing support for redistribution to the marginalized parts of society. The study employs a quantitative approach on data from the United States. Large-scale survey data from the General Social Survey are combined with a survey experiment to allow for a causal claim about the effects of contact and prejudice reduction on redistribution-associated variables. The results show that contact does mitigate deservingness penalty and increases support for specific dimensions of redistribution, but the effects are mostly not significant.

Keywords: Public Opinion, Redistribution attitudes, Prejudice, Intergroup Contact, Deservingness, Political Behavior, Survey Experiment

ACKNOWLEDGEMENTS

I would like to sincerely thank my thesis supervisor, Professor Björn Bremer, for his guidance and support throughout the thesis writing process. His class "Political and Economic Inequality" was a key inspiration for this research, and I am deeply grateful for the support and opportunities he provided that helped me grow as a researcher.

I am also thankful to Professor Anil Duman for her comments on my workshop proposal, to Professor Alexander Bor for his feedback on the survey design, and to Professor Gábor Simonovits for his courses which helped me with my methodology.

Finally, I would like to express my heartfelt gratitude to my family and friends for their unwavering support and for all the shared moments that kept me going throughout the year.

TABLE OF CONTENTS

1. Introduction 1

2. Literature review 6

2.1 Redistribution Preferences and Ethnicity 6

2.2 Deservingness Perceptions 10

2.3 US: racialization of welfare and prejudice 14

3. Theory and hypotheses 17

3.1 Contact theory 17

3.2 Prejudice, welfare, and redistribution 19

3.3 Hypotheses 21

4. Data and methods 23

5. General Social Survey Data Analysis 25

5.1 Independent Variables 25

5.2 Dependent Variables 26

5.3 Controls and Model Specifications 30

5.4 Analysis Results 32

5.5 Discussion 35

6. Survey analysis 37

6.1 Sample 37

6.2 Independent variable: experimental manipulation 37

6.3 Deservingness: Conjoint element 41

6.4 Redistribution attitudes 43

6.5 Controls 44

6.6 Results: Deservingness with choice tasks 48

6.7 Results: Deservingness ratings and overall thermometer 55
6.8 Results: Attitudes Towards Redistribution 56

7. Discussion 59

8. Conclusion 62

Appendix A: Model Specifications 63

Appendix B: Regression Tables with GSS Models 65

Appendix C: Regression Table with Deservingness and Feelings Models 73

Appendix D: ANOVA Results 74

Appendix E: Regression Table with Redistribution Preferences Models 75

9. Bibliography 77

LIST OF FIGURES

Figure 1: Distribution of Independent Variables 26
Figure 2: Distribution of Dependent Variables 29
Figure 3: Trends in Dependent Variables Over Time 30
Figure 4: Regression Coefficients for Models 1-18 33
Figure 5: Regression Coefficients for Models 19-24 35
Figure 6: Measures of Redistribution 44
Figure 7: Age Distribution by Condition (Including Overall Sample) 45
Figure 8: Histogram of Scores on Racial Resentment 46
Figure 9: Distributions of Controls 47
Figure 10: Political Affiliation by Condition 48
Figure 11: AMCEs for the Whole Sample 50
Figure 12: Marginal Means by Condition 51
Figure 13: AMCEs by Experimental Condition 52
Figure 14: AMCEs by Condition and Racial Resentment 54
Figure 15: Marginal Means by Condition and Racial Resentment 54
Figure 16: Regression results for Race by Group for Deservingness and Overall Prejudice 56
Figure 17: Regressions with Contact and Redistribution 57

LIST OF TABLES

Table 1: Descriptives of Controls 31

Table 2: Conjoint Attributes and Their Levels 42

Table 3: Results Table for GSS Models 1-6 65

Table 4: Results Table for GSS Models 7-12 67

Table 5: Results Table for GSS Models 13-18 69

Table 6: Results Table for GSS Models 19-24 71

Table 7: Survey Regression Results for Deservingness and Overall Prejudice 73

Table 8: ANOVA Results Table 74

Table 9: Survey Regression Results 75

1. INTRODUCTION

After a long period of a steady decrease, past decades have seen rising economic inequality, measured in income and wealth, across Western Europe and the United States (Piketty 2015). The recent rise in inequality stems primarily from a sharp rise in earnings and wealth accumulation at the top of the distribution, while the middle and bottom have stagnated. This rise has turned scholarly attention towards investigating the various causes behind the persistence and growth of inequality in democratic societies. Authors have argued that these inequalities can, to a certain extent, be attributed to governments' (in)action (Hacker and Pierson 2010). States can redistribute economic resources from the top of the distribution to the middle and lower tails through various forms of taxation combined with welfare policies and transfers, thereby offsetting the growth of inequalities. In democratic societies, the public attitudes towards inequalities and redistributive policies should inform the policy outcomes in this domain. Classic models of vote choice, such as the Meltzer-Richard model, base these preferences on individual economic standing and predict that rising inequality should increase support for redistribution, as most voters stand to gain from more redistributive policies (Duman 2019). In other words, as the median voter gains from redistributive policies, which conversely include taxing the richest strata, electoral competition should ensure that redistribution will rise with rising inequalities. In practice, however, this is often not the case.

Besides the unresponsiveness of policymakers and inequalities in political influence between voters and organized interests (Hacker and Pierson 2010), and the misperception of inequalities and one's economic standing (Gimpelson and Treisman 2018), this is also because the redistributive preferences of individuals may be affected by factors other than their standing within the income distribution. One of the most widely researched factors is the influence of ethnicity and the ethnic makeup of a given country. Since the publication of the influential

work of Alesina and Glaeser (2004), individuals belonging to the ethnic majority in countries with more ethnic fractionalization and a somewhat marginalized standing of the minority are found to be less supportive of redistribution, and this finding has been confirmed in various contexts (Mau and Burkhardt 2009; Houle 2017; Alesina and Glaeser 2021).

This is connected to research on deservingness perceptions, which shows that ethnic outgroups are consistently viewed as less deserving of welfare benefits by dominant (white) majorities in Western Europe and North America. (Gilens 1999; van Oorschot 2006; Attewell 2020; Kootstra 2016). Minorities, such as African American in the United States, are often stereotyped as lazier and more dependent on welfare (Brown-Iannuzzi et al. 2017), and this prejudice leads to lower welfare support (Gilens 1999). In Europe, this is also translated into welfare chauvinism, which denotes a set of beliefs and discourses that the welfare state should be limited to an ethnically defined community. This narrative has been increasingly exploited by radical right parties and politicians (Savage 2023; Ziller and Careja 2021; Ford 2016). As Cavaillé and Trump (2015) argue, social policy preferences have two distinct dimensions: support for redistribution *from* the upper classes and support for redistribution *to* the lower classes. Within this framework, individuals who would otherwise be predisposed to support redistribution may nonetheless express lower levels of support. This is because they may endorse redistribution from the top but oppose redistribution to the bottom—particularly when deservingness perceptions and ethnic heterogeneity shape their views of the beneficiaries.

However, comparatively less is known about various factors that could mitigate or influence this effect on the level of individuals. This thesis will attempt to connect the literature on redistribution preferences and deservingness perceptions in ethnically heterogeneous contexts to the burgeoning research on prejudice and its reduction (Paluck et al. 2021). The contact hypothesis, originally formulated by Allport (1954), states that generally, more direct

contact with outgroup members will lead to a more positive perception of the outgroups and less prejudice. Since its first formulation, the contact hypothesis has been widely tested across various settings with different groups and has been found to positively influence evaluations of outgroups and intergroup relations in most studies (see e.g. Pettigrew and Tropp 2006; Paluck et al. 2019).

It would intuitively seem that, similarly, interethnic contact could also have a positive influence on the aforementioned patterns of redistributive preferences and perceptions of deservingness of outgroups. Moreover, ceteris paribus, more ethnic heterogeneity should lead to more contact with minorities, and therefore less prejudice. However, in the context of welfare attitudes and redistribution, the presence of minorities is found to lead to more exclusionary attitudes, which presents a further paradox. So far, only a few recent studies have tried to disentangle the relationship between prejudice and welfare attitudes (Brown-Iannuzzi et al. 2021; Bor and Simonovits 2021; Finseraas and Kotsadam 2017), and interethnic contact and redistribution support in particular (van der Meer and Reeskens 2021; Coban 2020), presenting mixed results.

This thesis will seek to contribute to these strands of literature and answer how intergroup contact and prejudice reduction towards minorities affect redistributive preferences and deservingness perceptions in the context of ethnically heterogeneous societies. The main independent variable of interest is individual interethnic contact, which is posited to influence support for redistribution and perceptions of deservingness of the outgroup members. It hypothesizes that interethnic contact will lead to positive affect and empathy towards minorities, decreasing prejudice and deservingness penalties associated with race (ethnicity). This, in turn, will lead to more support for redistribution *to* the less well-off (Cavaillé and Trump 2015), increasing the overall redistribution support.

To test these assumptions, I will use a mix of methods, integrating an experimental survey design with large-scale observational data, which presents a methodological innovation compared to the previously mentioned studies. Specifically, the study follows a sequential explanatory design, wherein a survey experiment (N=400) tests the causal effects of intergroup contact, while the General Social Survey (GSS) data is analyzed to assess whether real-world intergroup contact—measured through workplace and neighborhood ethnic composition—influences redistributive attitudes.

To operationalize interethnic contact, I will use the imagined contact hypothesis, which states that merely imagining intergroup contact has similar effects to actual direct contact (Crisp and Turner 2012; Miles and Crisp 2014). This indirect version of contact, which should induce similar patterns, allows the splitting of the sample into treatment and control groups through a survey. For the dependent variables within the experimental survey, I will first use a conjoint design. Randomly varying attributes influencing deservingness perceptions and estimating the penalty associated with race will allow us to compare the experimental and control groups. Redistribution preferences will be captured using the framework of Cavaillé and Trump (2015). This allows for a more precise separation of the effects of ethnic fractionalization and, conversely, of interethnic contact on redistributive preferences. Methodologically, these approaches allow for a clear estimate of causal effects of the independent variable between the control and treatment groups and present a clear advantage compared to observational data or self-reported values as a measure.

The combination of these methods serves both a complementarity and a triangulation function: The experiment provides high internal validity, allowing for rigorous causal inference and estimation of differences between the treated and non-treated, while the GSS data ensures external validity, enabling us to examine whether patterns observed in the experimental setting

extend to naturally occurring intergroup contact in a broader population. Moreover, this design allows for methodological triangulation, where the experimental findings are validated against real-world data.

By integrating these two approaches, the study offers methodological innovation over previous studies examining this relationship, which only use observational data (Coban 2020; van der Meer and Reeskens 2021). It bridges the literature on exclusive welfare preferences and prejudice reduction, deepening our understanding of individual-level mechanisms underpinning redistribution preferences in the context of ethnicity, and of the effects of prejudice reduction on different areas of public opinion and broader stereotypes.

The results from the analysis of GSS and survey data shows that the hypothesized direction of effects holds, but these effects are mostly not statistically significant. Contact has influence on deservingness perceptions of African Americans, albeit this effect is insignificant in the survey analysis due to a surprising baseline, as participants across all conditions are more likely to select African Americans as deserving than Whites. The effects of contact on redistribution support were only notable when race specific redistribution support was measured, and the survey data did not confirm a strong effect of contact on support for redistribution to the poor. Nevertheless, the small sample size in the experiment means that some of these results might stem from low statistical power. These results can motivate further research into the intersection of identity and public opinion about inequality and redistribution, and its practical relevance is underscored by the rising inequalities in Western Democracies.

2. LITERATURE REVIEW

2.1 Redistribution Preferences and Ethnicity

Most of the earlier work on preferences for redistribution and mitigation of inequalities starts with the assumption that individual attitudes towards redistribution are mainly driven by self-interest, which is a function of one's gains or losses from redistribution (Duman 2019, 173). However, scholars have identified numerous other factors that might predict individual attitudes towards redistribution, including normative beliefs (Duman 2019, 175-176), subjective perceptions of one's class (Duman 2019), and individual and societal risks (Rehm 2011; Gingrich and Ansell 2012). One such factor is attitudes towards outgroups and their distribution in the population, which build upon the assumption that individuals' attitudes towards welfare are determined not only by their self-interest but also by the characteristics of their surroundings (Luttmer 2001). Luttmer (2001) first hypothesized that exposure to welfare recipiency in one's community influences redistribution support and that the share of welfare recipients from an outgroup negatively affects it. Using data on welfare dependency and racial makeup of Metropolitan areas, States, and census tracts in the United States, Luttmer (2001) shows that the ratio of African American welfare recipients has significant adverse effects on welfare support among whites. Respondents' race is also generally one of the strongest predictors of welfare support, with African Americans being, on average, 13 percent more likely to respond that welfare spending is too low than whites with the same characteristics living in the same area (Luttmer 2001, 19). In other words:

> "Interpersonal preferences provide a complementary explanation. If individuals prefer to redistribute to their own racial, ethnic, or religious group, they prefer less redistribution when members of their own group constitute a smaller share of beneficiaries. As demographic heterogeneity increases, on average, the share of beneficiaries belonging to one's own group declines. Thus, average support for redistribution declines as heterogeneity increases." (Luttmer 2001, 25)

This hypothesis received further attention due to the seminal work of Alesina and Glaeser (2004), which attempted to answer the question of why the extent of redistributive policies in the United States is much lower than in Western Europe, even though both are relatively similar on many economic and sociopolitical indicators. They posit that the differences can be explained by the racial makeup of the United States, which is far more fractionalized because of slavery and mass migration. Using country-level data, they show a strong negative correlation between ethnic fractionalization and redistribution, which is measured as the proportion of social spending to GDP. At the same time, they use panel data on welfare attitudes from U.S. states, and they show that the proportion of the African American population in each state is significantly negatively correlated with support for redistribution. As a result, they claim, "it is much easier to convince a white middle-class person in the United States to think that the poor are "different" (read black) than to convince a white middle-class person, say, in Sweden." (Alesina and Glaeser 2004, 8). According to them, this has been exploited by the political right, which utilized racial divisions to make a case for less welfare spending (Alesina and Glaeser 2004, 136).

Since the publication of Alesina and Glaeser's (2004) work, scholars have tried to test their theory by combining macro-level data on ethnic homogeneity with individual data on redistribution preferences or by aggregating this individual data into overall public opinion on redistribution. Based on his model, including fractionalization and inequality both within and between groups, (Lind 2007) shows that whereas inequality within a group increases support for redistribution, inequality between the groups decreases support, and this holds true based on panel data from the United States. Using data from a more diverse set of 89 countries, (Houle 2017) finds that support for redistribution is lower in cases where the less economically well-off are more ethnically diverse. In the European context, this hypothesis has been most widely researched in the context of Western European welfare states and populations with a

background of migration (Mau and Burkhardt 2009; Dahlberg, Edmark, and Lundqvist 2012; Eger 2010). Mau and Burkhardt (2009) posit that the rise and widening of welfare states in Europe were closely related to the formation of national identities and the development of territorially and ethnically closed societies and that the inclusion of diverse outgroups into these societies might decrease support for social spending. Using ESS data from 17 Western European countries, they find a negative correlation between migration and welfare preferences. However, it is not as strong as to be able to significantly erode the welfare state and its support (Mau and Burkhardt 2009, 225). In an analysis based on data from Sweden, which has one of the most egalitarian welfare states, Eger (2010) finds that recent immigration and the absolute proportion of foreign-born people reduce positive attitudes towards universal welfare spending. In another study from Sweden, Dahlberg, Edmark, and Lundqvist (2012) used data from a governmental program that exogenously placed arriving migrants in municipalities. They find that the placement of migrants in a municipality negatively affects the preferred levels of social benefits and that the effect is relatively more substantial among individuals in the upper tail of income and wealth distribution (Dahlberg, Edmark, and Lundqvist 2012). Using data from the NUTS-3 and NUTS-2 regional level in Europe, Alesina, Murard, and Rapoport (2021) find that the share of immigrants in the region has similarly strong effects on redistribution support as other variables typically seen as strong predictors, such as education and income. The increase in exposure to migrants on the regional level leads to a misperception of the migrant population in the country and the misperception of the share of migrants among welfare recipients, which drives down the support (Alesina et al. 2021). The effect is even more strongly pronounced in the context of greater segregation between natives and migrants (Alesina et al. 2021).

More recently, authors have attempted to unpack the mechanisms behind these results. Rueda and Pontusson (2010) proposed that economically advantaged individuals display

parochial altruism and solidarity with the more disadvantaged members of society. However, altruism and solidarity decrease as the lower classes become more ethnically fragmented and less similar to the more well-off. In other words, this mechanism presupposes that the preferences for redistribution among the higher classes will decrease relatively more than those of the lower classes (Rueda 2018). Using ESS data, Finseraas (2012) does not find evidence that ethnic fractionalization significantly lowers redistribution support in general, but has a significant adverse effect among the rich. This aligns with the hypothesis that social affinity matters for redistribution (Lupu and Pontusson 2011; Alt and Iversen 2017). As the perceived distance between the rich and the poor increases, whether due to the difference in incomes and wealth or due to ethnic differences, the rich lose altruistic motivation to support redistribution. This might also be due to the fact that as the perceived characteristics of poor people deviate from the characteristics of the more well-off, the rich might perceive less of a threat of downward mobility, therefore supporting less redistribution due to less risk of ever being significantly dependent on it (Finseraas 2012).

On the other hand, other scholars proposed that the lower tails of the wealth or income distribution drive down the support for welfare in multiethnic settings due to highlighted intergroup conflict. Competition for benefits makes lower classes hold more exclusive perceptions of welfare (Hooijer 2021), and this might also translate to less welfare support in general. Moreover, other scholars contend that as the group's relative standing in society improves, individuals become more optimistic about their future, so if the white lower classes see that other members of their ingroup are doing significantly better than most of the outgroup members, they will see redistribution as less necessary (Becker 2021; Quattrociocchi 2018). Therefore, on these accounts, as fractionalization increases, the less well-off become less supportive of redistribution relative to the rich, and this leads to lower aggregate welfare support (Houle 2017; Borges 2022; Savage 2023).

Regardless of which mechanism translates individual attitudes into aggregate public opinion, there is significant evidence that, on average, living in an ethnically heterogeneous country influences individuals to be more negatively predisposed towards redistribution and welfare policy and, consequently, tolerance of inequality. However, this is also connected to welfare preferences being more than unidimensional (Cavaillé and Trump 2015). Cavaillé and Trump (2015, 146) argue that the tension between accounts focused on individual economic standing and perceptions of others is "in part an artifact of conceptualizing demand for redistribution as unidimensional." They propose "distinguishing between redistribution conceived as taking from the "rich" and redistribution conceived as giving to the "poor." They propose that these two dimensions tap into different sets of considerations and find empirical evidence using data from the United Kingdom. In line with this framework, the effect of ethnic makeup is connected to the second dimension – redistribution as *giving to.* The preferences for redistribution to the poor and outgroups are intricately connected to the deservingness perceptions of the recipients (Gilens 1999; Lanford and Quadagno 2022). The following section details this literature.

2.2 Deservingness Perceptions

An important factor that underlies welfare considerations along the second dimension is the perception of welfare recipients as deserving. Deservingness is said to work as a heuristic, which is triggered when a consideration about the distribution of resources is tackled and can even override values and consciously held opinions (Petersen 2012; Hansen 2019; Aarøe and Petersen 2014). Like other heuristics, it operates as a judgmental shortcut and reduces the information necessary to reach a decision (Petersen 2012, 2-3). Nevertheless, drawing upon evolutionary psychology, Petersen (2012) argues that deservingness considerations differ from other heuristics, which are learned through culture or institutions, as it has evolved to regulate

behavior connected to redistribution in small-scale groups during human evolution, and, therefore, operates independently of cultural norms of values. Therefore, the information that "feeds" into the deservingness consideration and the propensity to view different categories as deserving or undeserving is conditional upon the empirical context. However, the pattern of seeking them out is inherent (Petersen 2012). Nevertheless, this means that despite the universal predisposition to seek out deservingness cues, the content of deservingness cues is influenced by the available information (Aarøe and Petersen 2014). Thus, deservingness as a cognitive process is distinguished from existing beliefs about group categories that allow the mechanism to operate (Petersen 2012).

According to Aarøe and Petersen (2014), the cross-national differences in deservingness perceptions and connected welfare support are not influenced by the heuristic itself but rather by the content of the cues available through the culture and media in these systems, and mainly, the dominant stereotypes about welfare recipients. If welfare recipients are seen as more "lazy" on average, this prompts people to categorize them as more undeserving (Aarøe and Petersen 2014, 687). Opinions held about minorities as being less deserving of help interact with this mechanism to inform opinions about welfare and redistribution.

According to van Oorschot (2000, 36), five different dimensions of deservingness evaluations can be identified:

1. control, poor people's control over their neediness or their responsibility for it; the less control, the more deserving;

2. need: the greater the level of need, the more deserving;

3. identity: the identity of the poor, i.e. their proximity to the rich or their ‘ pleasantness’; the closer to ‘ us, ’ the more deserving;

4. attitude: poor people’s attitude towards support, or their docility or gratefulness: the more compliant, the more deserving;

5. reciprocity: the degree of reciprocation by people experiencing poverty or having earned support: the more reciprocation, the more deserving.

This means that based on the identity and the assessment of welfare recipients’ perceived proximity to one’s own identity, some welfare recipients are seen as less deserving than others. This connects to the lower deservingness perception of ethnic outgroups, as they are seen as not ‘fulfilling’ the identity criterion and are thus seen as less deserving, which is confirmed by empirical evidence. The fact that ethnic outgroups are, in most cases, perceived as the least deserving of social assistance in comparison to other economically disadvantaged groups is well documented in several settings (van Oorschot 2006). In a study using EVS data from 23 European countries, van Oorschot (2006) found that immigrants are systematically ranked as the least deserving of all other salient welfare recipient groups, including the unemployed. Using data from the United Kingdom and the Netherlands, Kootstra (2016) shows that, on average, unemployed second-generation migrants are not judged as less deserving than unemployed majority members. However, in case the individual failed to look for work or has a shorter work history, the majority respondents ‘punish’ the outgroup member more and the difference between majority and minority deservingness becomes significant. Using a vignette experiment in the Netherlands, van der Meer and Reeskens (2021) find that foreign origin is among the three most significant reasons for reduced welfare deservingness, labor market reintegration behavior, and culpability for unemployment. Van Oorschot (2006) also shows that more negative attitudes towards migrants are strongly related to more conditional views

on welfare spending on the individual level. Moreover, deservingness perceptions are also found to affect individuals' vote choice, as individuals who see welfare recipients as less deserving are more likely to support radical right parties (Attewell 2020).

Gilens (1999, 61-62) shows that the perceptions of welfare recipients in the United States as undeserving and taking advantage of the system due to being less hardworking are widespread. According to him, Americans generally support helping the poor, but this is conditional on a very strict and exclusive perception of their deservingness. Moreover, he shows that deservingness perceptions are racially motivated, as African Americans are often perceived as primary recipients of welfare benefits, and the most salient frames depict them as undeserving and lazy (Gilens 1999, 67-72). Thus, Americans who view African Americans as disproportionately undeserving and, at the same time, overestimate their share among the welfare recipients are most likely to oppose any redistribution and drive the aggregate support for social policies down (Gilens 1999). Therefore, in Gilens' (1999) account, the deservingness of the disproportionately poor minority is the link between ethnic fractionalization in the U.S. and the ungenerous redistributive attitudes of American citizens. Several studies, including recent ones, confirm this finding. Kreitzer et al. (2022) show that aggregate deservingness perceptions of recipients on the state level influence policy outcomes in multiple domains, including social assistance, as the state context influences the availability and type of cues available. Race is bound up with perceptions of people with low incomes as hardworking and deserving, with a greater percentage of whites among the poor leading to more positive evaluations (Cooley et al. 2024). These differences in deservingness views between races are reinforced by a strong racialization of welfare policies and association of race categories with poverty, which is detailed in the next section.

2.3 US: racialization of welfare and prejudice

In the American context, the abovementioned deservingness penalties for outgroups are reinforced by the implicit racialization of welfare, whereby the public perception of welfare is underlined by the belief that welfare recipients are implicitly or explicitly framed and viewed as African American, which drives down welfare support (Federico 2004). Racial schemes in the US often portray blacks as lazy and less hardworking than the average American, which makes them less deserving. In this sense, public discourse is closely intertwined with deservingness perceptions. As Aarøe and Petersen (2014) note, deservingness is a general mechanism invoked by individuals when making judgements about distribution. However, this mechanism is filled with culture-specific content and schemes that specify the particular deservingness criteria valued by society.

Winter (2006) shows how redistributive policies in the United States are implicitly linked to racial cues in political discourse. Focusing on Social Security and Welfare, he finds that the former is subtly and symbolically associated with 'whiteness', whereas the latter is linked to 'blackness'. Discursive frames are used to induce, invoke, and reinforce cognitive schemes-cognitive structures of knowledge about a concept (Winter 2006). American racial schemes consist of division into racial ingroups and outgroups; attributes connected to these groups, such as deservingness, work ethic, independence, or discrimination; and outcomes linked causally to these attributes, such as inequality, unemployment, or crime (Winter 2006). Framings of social security implicitly associate it with whiteness by portraying it as an earned right based on previous contributions, work, and just rewards, in contrast to welfare, which is associated with dependence and laziness, which are usually attributed to African Americans in the racial schemes (Winter 2006). This is further strengthened by the discursive use of the "us" versus "them" dichotomy when talking about these two programs in the political discourse

(Winter 2006). The result is that white Americans with stronger feelings towards the outgroups support social security more, while prejudice against African Americans is associated with reduced support for welfare (Winter 2006).

Previous literature extensively documents the interplay between racialized stereotypes, deservingness, and welfare support in the US. The central claim of these accounts can be summarized as welfare support being lower when welfare is seen to primarily benefit African Americans, which is driven by stereotyped perceptions of African Americans as lazier and less deserving (Brown-Iannuzzi et al. 2021). Using a conjoint experiment to measure how white Americans assess the degree of belonging of profiles to different target groups, Myers, Zhirkov, and Lunz Trujillo (2024) show that African Americans are more likely to be seen as welfare recipients than whites. Moreover, they find a positive relationship between prior prejudice against African Americans and the probability of viewing welfare recipients as black, and individuals who are more likely to view the average welfare recipient as black are also more likely to oppose welfare spending (Myers et al. 2024). In a series of experiments, Brown-Iannuzzi et al. (2017) first examined participants' mental representations and demonstrated that the average welfare recipient is viewed as black, lazy and undeserving, whereas the average welfare non-recipient is white. Next, the morphed images of the average welfare recipient and non-recipient from the previous experiment were shown to a different group of respondents, who were significantly less likely to support awarding welfare assistance to the black average welfare recipient than to the non-recipient. Therefore, the authors posit that racial considerations are linked to deservingness considerations, which leads to support for giving benefits (Brown-Iannuzzi et al. 2017, 101). Americans are also more likely to implicitly associate being black with being poor, which predicts believing that welfare assistance benefits African Americans more than whites, and greater strength of this implicit association also predicts less support for redistributive policies (Brown-Iannuzzi et al. 2019). Implicit

stereotypes and prejudice predict explicit attitudes towards redistribution and welfare (Brown-Iannuzzi et al. 2019). Harell, Soroka, and Iyengar (2016) use vignettes to show that racial cues influence how welfare recipients are viewed, with participants awarding lower benefits to African Americans than all other included ethnic groups. This effect is even more pronounced when participants have higher prior levels of overt racism (Harell et al. 2016). More importantly, they show that a similar pattern holds in the United Kingdom and, to a lesser extent, in Canada and that greater overt racism levels and racial cues have the same effects when the dependent variable is welfare spending in general (Harell et al. 2016, 737-738).

The aim of this thesis is to look at how prejudice reduction through intergroup contact influences these perceptions, and whether a reduction in biases and deservingness penalty associated with race leads to more redistribution support. The following section details the theoretical framework and the hypotheses. First, it details prejudice reduction and intergroup contact theory, followed by previous work that broadly looked at the interconnections of the variables of interest and hypotheses that will be tested.

3. THEORY AND HYPOTHESES

3.1 Contact theory

As the main aim of this thesis is to investigate whether, on the individual level, interethnic contact can influence these patterns, the independent variable is interethnic contact. The hypothesis that interethnic contact plays a role in decreasing prejudice towards outgroups was first formulated by Allport (1954). He posited that, under certain contextual conditions that need to be fulfilled, contact between members of opposing groups can positively influence perceptions of the outgroup in individuals and reduce prejudice (Allport 1954). The four conditions outlined by Allport (1954) as necessary for a successful effect of contact on prejudice reduction were equal status between the groups in the situation, common goals, intergroup cooperation, and the support of authorities, law, or custom. Successive studies focused on the effects of these conditions and even found that in the case that they were not present, contact could further increase prejudice and tension (e.g. Amir 1969). However, the meta-review conducted by Pettigrew and Tropp (2006), which included more than 500 studies, showed that even studies which reported samples without the presence of Allport's conditions showed a significant relationship between contact and prejudice. Overall, the meta-analysis found overwhelming support for the contact hypothesis, as 94% of samples showed an inverse relationship between contact and prejudice, and the "mean effect rises sharply for experiments and other rigorously conducted studies" (Pettigrew and Tropp 2006). However, a recent meta-review by Paluck, Green, and Green (2019), which focused exclusively on policy related outcomes and reviewed solely experimental evidence, found that Allport's conditions might have some impact on the effectiveness of contact. Nevertheless, their analysis also finds strong support for the contact hypothesis overall, as 24 out of their 27 experimental samples display

positive effects, and the "average effect across these experiments is substantively large, diminishing measured prejudice by 0.39 standard deviations" (Paluck, Green, and Green 2019).

Pettigrew (1998) further breaks down how contact reduces prejudice, presenting distinct cognitive and affective paths. He identifies four distinct mechanisms: learning about the outgroup, changing behavior, generating affective ties, and ingroup reappraisal (Pettigrew 1998, 70). I posit that for deservingness-related prejudice reduction, mainly intergroup learning and affective ties are relevant. Contact facilitates learning about outgroups, which might mitigate prejudice and stereotypes. Yet, research finds that this pathway only operates in specific types of contact, and that it can explain prejudice reduction only partially and in connection with other mechanisms (see Pettigrew 1998). Forging more positive affect and stronger affective ties towards the outgroup is one of them. Contact reduces anxiety in outgroup encounters and arouses positive emotions towards the outgroup (Pettigrew 1998, 71). Contact with a member of a marginalized outgroup, such as an AIDS patient, can instill empathy and improve views of the outgroup as a whole (Batson et al. 1997). Individuals with stronger affective ties to outgroups report lower levels of prejudice on multiple dimensions (Pettigrew 1998, 72).

Therefore, the effect of intergroup contact on reducing prejudice and negative outgroup attitudes is well documented in social sciences literature. As contact is significantly effective at reducing prejudice and outgroup biases, it follows that its effects could also stretch out to other areas where intergroup relations influence behavior or attitudes. It would seem intuitive that, contingently, contact should also influence attitudes towards redistribution to outgroups and their deservingness. By generating more positive emotions and evaluations of outgroups, along with learning about the outgroup, stereotypes and prejudice connected to their deservingness characteristics should be mitigates. Moreover, this would also be somewhat

counterintuitive to the main findings of literature on redistributive preferences in ethnically heterogeneous contexts, as individuals might actually come into contact with outgroups more often when the share of minorities is greater. The question of how and whether this translates into effects on the individual level has partly been addressed in recent scholarly literature.

3.2 Prejudice, welfare, and redistribution

Broadly speaking, the literature linking prejudice reduction with attitudes towards welfare, redistribution, and deservingness perceptions is scarce and produces different results. Finseraas and Kotsadam (2017) examined the link between interethnic contact and attitudes towards welfare dualism (welfare chauvinism) using a natural experiment. They randomized the placement of Norwegian army recruits into training camp bunks during their training period and looked at whether sharing a room with a person with a non-Norwegian background influences the assessment of minorities' work ethic and exclusionary welfare views. They found that this form of contact made majority soldiers view minorities as more hard-working but did not significantly influence welfare chauvinism (Finseraas and Kotsadam 2017).

Building upon perspective taking, a prejudice reduction technique involving "Seeing the world through the eyes of a member of an ethnic minority or other disadvantaged groups", Bor and Simonovits (2021) looked at whether reducing prejudice against poorer people boosts welfare support. They hypothesized that perspective taking will induce empathy and compassion towards poorer people, leading to warmer feelings, fewer stereotypes and higher support for redistribution (Bor and Simonovits 2021). However, the treatment condition, in which participants were asked to write a short essay imagining they were an unemployed individual struggling to make ends meet, did not significantly affect redistribution support or support for various welfare policies (Bor and Simonovits 2021). Christiani et al. (2024) show

that when participants receive additional information that describes racial inequalities in the US as structural, their views of black welfare recipients improve, and they support welfare more.

Two published works have broadly looked at the relationship between interethnic contact and welfare attitudes in contexts of ethnic fragmentation (van der Meer and Reeskens 2021; Coban 2020). The paper by van der Meer and Reeskens (2021) looks at whether municipality-level ethnic composition influences welfare chauvinism, and they compare three possible mechanisms: conflict, which posits that increased ethnic heterogeneity induces a perception of conflict for resources with the outgroup; constrict, which postulates that increased heterogeneity creates confusion about norms and coordination problems; and contact. Their analysis supports the hypothesis that neighborhood diversity harbors welfare chauvinist attitudes, and they thus rule out contact and constrict hypotheses in favor of the conflict one. However, they only manipulate the dependent variable using vignettes, and they use observational on the level of neighborhoods, which, as the authors themselves note, introduces problems of possible selection effects and makes it difficult to isolate the causal direction of the effects (van der Meer and Reeskens 2021, 94). Moreover, this does not deal with the question of the conditions of individual contact, which can influence whether the prejudice-reducing potential of contact is successfully realized (Allport 1954).

Coban (2020) investigates the link between contact and redistributive preferences in the context of European immigrant populations. He finds that more contact with migrants will positively influence attitudes towards migrants, which in turn influences redistribution demands (Coban 2020, 22). Coban (2020) relies on data from the European Social Survey (ESS), which asks about self-reported frequency of contact with ethnic outgroups as a measure of intergroup contact. Using self-reported values of contact is problematic, primarily due to

possible biases and unclear direction of causality. Moreover, ESS data only contain a single measure of opinion about redistribution, which only asks about the general attitude towards redistribution.

Therefore, previous research on the link between prejudice reduction and redistribution attitudes is very limited in scope and has so far yielded contradicting results. I will attempt to improve upon this by investigating the link between contact and two concepts that are also linked to welfare chauvinism: attitudes towards both dimensions of redistribution and perceptions of the deservingness of outgroups. Moreover, this study will improve upon the previous methodologically, using experimental manipulation, allowing for a clear estimation of counterfactuals.

3.3 Hypotheses

This study thus extends this work by investigating the relationship between contact and redistribution preferences and outgroup deservingness perceptions. The causal link that it proposes is that contact affects perceived deservingness of minorities through instilling warmer feelings towards them, as well as by inducing empathy and solidarity, and finally, also changing stereotype content. Stereotypes and prejudice have multiple dimensions, including warmth and competence (Fiske et al. 2018). Interethnic contact influences prejudice through multiple pathways, mitigating both affective and cognitive dimensions of prejudice (Pettigrew 1998). For this thesis, the principal suggested causal pathway is through the affective dimension of prejudice, which the contact improves (see Pettigrew 1998). Intergroup contact induces positive feelings towards minorities, which will mitigate the view of these as undeserving; moreover, intergroup contact also instils empathy (Batson et al. 1997), which should lead to viewing outgroup members as more deserving of help and welfare (Bor and Simonovits 2021, 1252). Given the link between the perception of deservingness of welfare recipients and

redistribution support, I further propose that less deservingness penalty associated with race will lead to more redistribution support to the poor (Cavaillé and Trump 2015), which is also connected to minorities being often seen as typical welfare recipients (Brown-Iannuzzi et al. 2017). This should also have a positive effect on the overall redistribution support. Based on this, the following hypothesis is formulated:

H1: Interethnic contact leads to less deservingness penalty associated with race (ethnicity)

Through influencing deservingness perceptions, it is posited that contact will positively influence overall redistribution support, as majority members will be less hesitant to support redistribution to poorer parts of the population, which are predominantly seen as minority members (Brown-Iannuzzi et al. 2017). Therefore, the subsequent hypotheses are formulated as follows:

H2: interethnic contact increases redistribution support (aggregate)

H3: Interethnic contact increases support for redistribution to lower-income groups.

Finally, the analysis will also test if interethnic contact leads to more positive feelings towards the outgroup, which is a restatement of the original contact hypothesis (Allport 1954). Interethnic contact should lead to this effect regardless of whether other hypotheses hold, so testing this mainly serves as a robustness check for the experimental treatment. The next section describes the data and the methods used.

4. DATA AND METHODS

The data for testing these hypotheses were collected in the United States. This thesis focuses on the United States as the empirical context for several theoretical and practical reasons. First, the relationship between ethnicity and attitudes toward redistribution is well established in the American case. The United States has a longer history of immigration, racial heterogeneity, and racialized conflict than most European countries, which has shaped the development of a comparatively residual welfare state (Alesina and Glaeser 2004). This diversity has also contributed to the racialization of public attitudes toward welfare, with numerous studies showing how African Americans are systematically perceived as less deserving of government assistance (e.g., Brown-Iannuzzi et al. 2017; Winter 2008). Second, the U.S. has served as a central empirical setting for the study of prejudice and its reduction. Most of the seminal work on intergroup contact theory emerged in the context of racial desegregation and civil rights struggles in post-war America (Paluck et al. 2019, 133). Taken together, these factors make the United States a "most likely" case for observing the hypothesized effects. The American case provides a theoretically and empirically rich environment for exploring the hypothesized links between ethnic context, deservingness, and redistribution, and if these mechanisms exist, they should be especially visible in the U.S. setting.

This thesis uses a mix of methods and data sources to test these hypotheses. The first part of the analysis uses large-scale data from the General Social Survey (GSS). I use data from all GSS surveys between 1972 and 2022, which includes 34 waves on nationally representative samples. The combination of these data sources assures a balance between the ability to claim causality, on one hand, and generalizability to empirical data, on the other hand. The GSS is a nationally representative attitudinal survey of US adults that has been conducted bi-yearly since

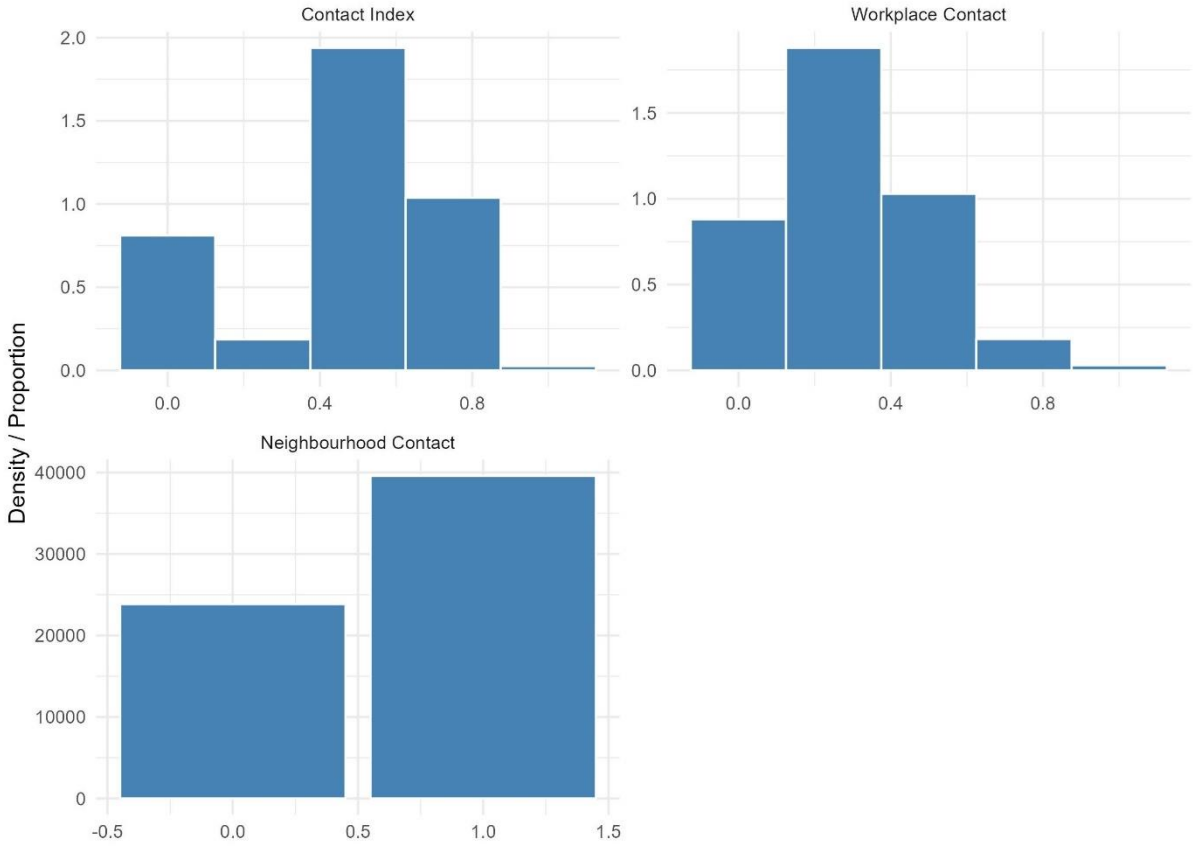
1972 (NORC n.d.). The GSS contains standard demographic, behavioral and socioeconomic questions along with modules covering attitudes and behaviors towards specific social topics. It includes a wide range of items measuring attitudes towards redistribution and ethnic and racial relations and prejudice, making it ideal for the purpose of this thesis. Due to its representativeness over time, space, and demographics, it allows for generalizability of the results. However, the observational nature of the data, which is self-reported, diminishes the ability to make causal claims. This is especially important for estimating the effects of interethnic contact on prejudice-related items, as both might be subject to a social desirability bias. Moreover, self-reported values of these variables might be influenced by effects of confounding variables. For this reason, I also collect data in a survey experiment. Experiments are considered the 'Golden Standard' of causality-oriented research within the potential outcomes (counterfactuals) framework due to the ability to isolate causal effects by only manipulating one variable while keeping all other variables constant (Imbens and Rubin 2015). The following sections detail the data and analyses utilized for the GSS data and the survey design and analysis.

5. General Social Survey Data Analysis

5.1 Independent Variables

Interethnic contact is the primary independent variable of interest, which is operationalized using two standard GSS items covering workplace and neighborhood-level contact. The first item asks participants if "the people who work where you work are all white, mostly white, about half and half, mostly black, or all black?". The variable is recoded into continuous with values between 0 and 1, with 1 representing the highest contact expressed as an 'all black' workplace. The item also contains an option of working alone, which is recoded into a 0. The second item asks whether any white (for African American participants) or black (for White participants) people live in their neighborhood. This binary variable is also recoded to (0, 1). While not a complete substitution of contact, neighborhood diversity leads to more contact and favorable outgroup evaluation (Deutsch and Collins 1951; Oliver and Wong 2013). These two items are further indexed, which attempts to capture overall levels of contact. This is done by simply averaging the scores on the two variables, meaning that the possible values again lie between 0 and 1. For example, if a person lives in an all-white neighborhood (0 on the neighborhood variable) and their workplace is about half and half (0.5 on the workplace variable), their score on this item would be 0.25. The distributions of all three independent variables can be seen in Figure 1. As can be seen, the number of respondents living in neighborhoods with no African Americans is still relatively high but lower than people living in diverse neighborhoods. Regarding workplace contact, only a negligible proportion of participants work in whole or mostly Black workplaces. The highest proportion of respondents work in predominantly white workplaces. When the two items are indexed, the median lies approximately at 0.5.

Figure 1: Distribution of Independent Variables



Together, the two types of contact represent a robust measure of overall contact. As Paluck et al. (2019, 130) note, the desegregation of neighborhoods and workplaces in the United States during the 1940s and 1950s brought about a reduction in prejudice that served as empirical motivation for original formulations of the contact hypothesis. While it is not possible to directly estimate whether the criteria for successful prejudice-reducing contact formulated by Allport (1954) were met in individual cases based on this data, it can plausibly be assumed that these two types of contact provide opportunity for extensive and repeated contact and a setting that encourages intergroup acquaintance (see Pettigrew 1998, 75-77).

5.2 Dependent Variables

These three independent variables are then used in a series of linear regression models. Firstly, the effect of contact on overall redistribution support is evaluated by regressing the IVs

on two GSS variables: eqwlth, which asked participants whether the government should concern itself with reducing income differences on a 7-point Likert scale, and natfare, which asks whether we are 'spending too much, too little, or about the right amount on welfare?' with the three answer categories mentioned in the question-wording. The first of these items, eqwlth, measures general agreement with redistributive policies, similar to standard items used for this construct in other large-scale surveys such as ESS and ISSP. Whereas welfare might have racialized undertones in some cases (e.g. Winter 2006), it is nevertheless a broadly encompassing concept representing all welfare policies, and the wording of natfare captures general support. Therefore, these two items present adequate measures of general redistribution support, allowing us to test hypothesis 2 concerning this outcome.

Moreover, to assess the hypotheses about the effects of contact on deservingness and the 'to the poor' dimension of redistributive preferences, we look at outcomes related explicitly to the deservingness of African Americans and redistributive policies targeting them. First, the item 'workblks' is used. It measures whether people in the group (Blacks) tend to be hardworking or if they tend to be lazy on a 7-point Likert scale, effectively serving as a proxy for deservingness. Previous literature repeatedly shows that viewing welfare recipients as lazy compared to unlucky is closely connected to perceiving them as undeserving (Petersen 2012; Gilens 1999, Brown-Iannuzzi et al. 2021). I also combine two items that measure preferences for racialized redistributive policies. The first item measures agreement with the government having an obligation to improve the living standards of Blacks on a 5-point scale, which is recorded to go from disagreement to agreement between 0 and 1. Second, the item natrace is used, which asks if we are spending too much, too little, or about the right amount on improving the conditions of Blacks, taking on too little, about right, and too much. These variables were also recoded into 0 and 1 and combined them into an index using a simple average.

Figure 2 visualizes the distributions of the dependent variables. The distribution of the variable workblks approximates the normal distribution, with most respondents choosing to view African Americans as between lazy and hardworking. Most respondents also think that the U.S. is spending too much on welfare, followed by respondents who consider welfare spending appropriate. On the other hand, only a relatively small proportion thinks that welfare spending is too low. The item eqwlth is distributed multimodally: whereas the middle of the distribution seems to be distributed normally, there are significant peaks on both ends of the distribution, meaning that large groups of respondents either think that the government should not concern itself with reducing income differences at all, or should definitely reduce income differences. A similar distribution is visible for the index capturing support for help for African Americans. Whereas most respondents lie in the middle of the distribution, a significant number of respondents either support aid to African Americans entirely or oppose it altogether. These results highlight the polarization of public opinion on redistributive issues, especially when it is framed racially.

Figure 2: Distribution of Dependent Variables

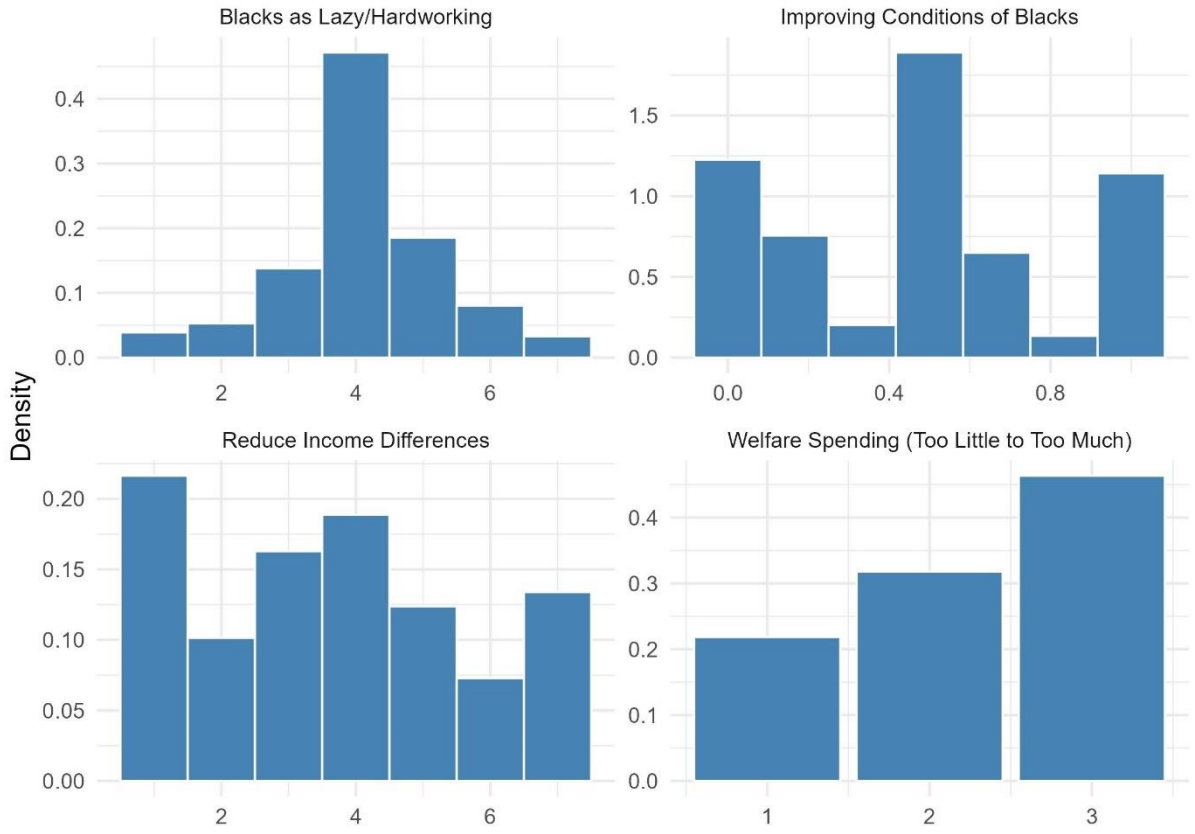
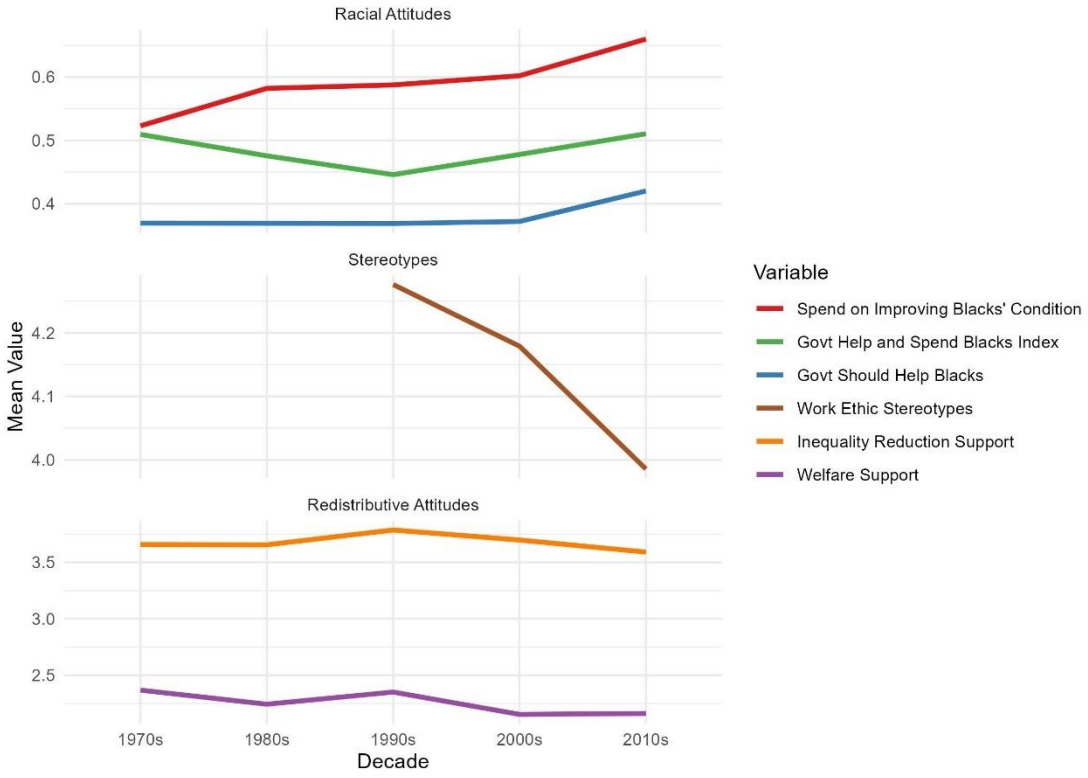


Figure 3 also summarizes the trends of the dependent variables over time. Both items measuring support for aid for African Americans have been rising over the past couple of decades. There is an especially notable increase for these items between the 2000s and the 2010s. At the same time, the view of Blacks as lazy has diminished; however, this is not that significant, as the answer scale for this item goes from 1 to 7. Attitudes towards redistribution remained relatively stable since the first GSS waves in the 1970s. However, this is paradoxical since wealth and income inequality has steadily risen since this period. Overall, these trends show relative stability across all of these items, with some decrease in prejudice and disagreement with Black-specific redistribution. The upcoming section details the controls and models further to investigate the relationships between these variables and their predictors.

Figure 3: Trends in Dependent Variables Over Time



5.3 Controls and Model Specifications

I further include a set of controls. Firstly, basic demographics are included by controlling for race, gender, age, and education, which are expressed as the highest years of schooling completed. Moreover, I included items for individual income and unemployment using an item that asked about any period of unemployment over the last 10 years. Next, a set of items about political identities are included: political party identification, general ideological position on the liberal-conservative scale, and confidence in the federal branch of the government, which is an important control, especially for question phrasings that explicitly mention government redistribution-in this case, eqwlth. Finally, I also control for the period by including a categorical variable capturing the decade of the given survey wave. As scholars have notably argued that prejudice and stereotypes have been changing in the U.S. over the past decades (e.g. Hurwitz and Peffley 2005), including fixed effects of time is important to

account for this. The categorical variable thus includes six levels (decades) between the 1970s and 2010s. Table 1 includes descriptives of all the controls used across the models.

Table 1: Descriptives of Controls

var	n	mean	sd	median	trimmed	min	max	range	se
Sex*	72278	1.56	0.50	2	1.57	1	2	1	0.00
Race*	72283	1.26	0.56	1	1.13	1	3	2	0.00
Educ	72127	13.03	3.18	12	13.12	0	20	20	0.01
Age	71621	46.56	17.60	44	45.64	18	89	71	0.07
Confid	47727	2.18	0.68	2	2.23	1	3	2	0.00
Income	44573	4.42	21.96	11	9.59	-90	12	102	0.10
Unemp*	45717	1.68	0.47	2	1.73	1	2	1	0.00
Decade*	68846	3.16	1.39	3	3.20	1	5	4	0.01
Party ID*	71905	3.75	2.05	4	3.67	1	8	7	0.01

I run separate models for every combination of independent variables and dependent variables. For each combination, I run three models progressively adding controls to assess robustness:

1. Baseline: Controls for demographic covariates (race, sex, age, education).

2. Economic Controls: Adds unemployment status and income.

3. Political Controls: Adds government confidence and partisan identification.

Therefore, I run 2 x 3 x 3 (DVs x IVs x control sets) models in total. First six models (Models 1–6) are varying both the outcome (EQWLTH, NATFARE) and the control set, with overall contact as the key independent variable. Next, I examine whether the *type* of intergroup contact matters by replacing the overall contact index with either neighborhood or workplace contact. For each type of contact, I estimate the same set of models for both dependent variables, using the three control specifications outlined above. This yields Models 7–18:

- Models 7–12 use neighborhood contact as the key predictor.

- Models 13–18 use workplace contact.

Finally, I test whether contact predicts more specific attitudes toward African Americans, using two additional dependent variables: support for Black workplace integration (workblks) and support for government efforts to aid African Americans. For these models, I return to the overall contact index as the key predictor, and again estimate three nested specifications. This results in six additional models (Models 19–24). All of the model specifications expressed as formulas can be found in Appendix A.

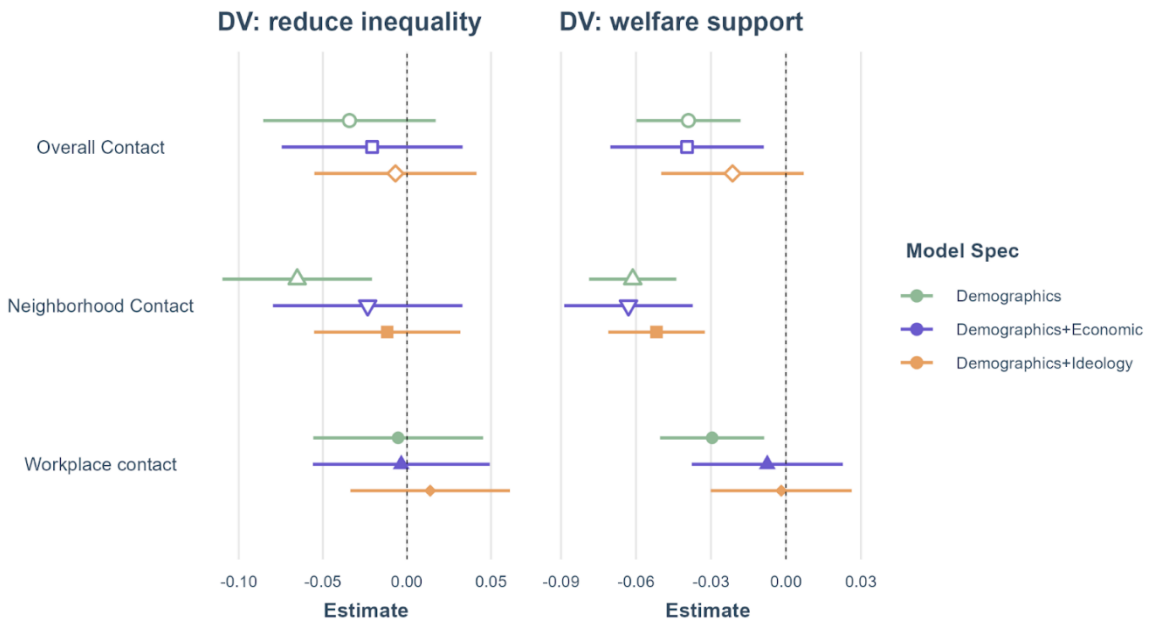
5.4 Analysis Results

The regression coefficients for the contact index from the first six models are included in Figure 4, and the complete results can be found in a table in Appendix B. Looking at the results of the first three models, including the support for government reducing inequality, contact does not have a significant effect. The contact index is statistically insignificant for all of the models, including the one with basic demographics only. The direction of the effect is nevertheless in line with the expectations since the coding of the DV means that higher values entail less support for inequality reduction, and the relationship with more contact is negative. This is not true for the model with political controls, but the effect size is small, so this does not seem contradictory. All the controls also exhibit effects that align with expectations and the previous literature: being non-white is highly significant. It increases support for inequality reductions and so does being female. The effect of income is significant and in line with the expectation that lower income leads to more redistribution support. Model 3 shows that weaker identification with the democratic party and support for Republicans also result in less support for redistribution.

Moving on to the models where the outcome is welfare support, contact plays a more significant role. It is significant both in the model with basic controls and in the one which

controls unemployment and income. However, it is not significant in the model which includes political attitudes. In all three models, the direction of effects is as expected, with more contact leading to perceiving welfare spending as too low. The direction of effects is likewise in line with expectations and the results of the first model, with significant positive effects on welfare spending support for non-white racial identity and political identification with the democratic party. Contrary to the first set of models, education also significantly and positively affects welfare support. This was not the case in the first set of models, where more years of schooling led to less support for equality reduction.

Figure 4: Regression Coefficients for Models 1-18



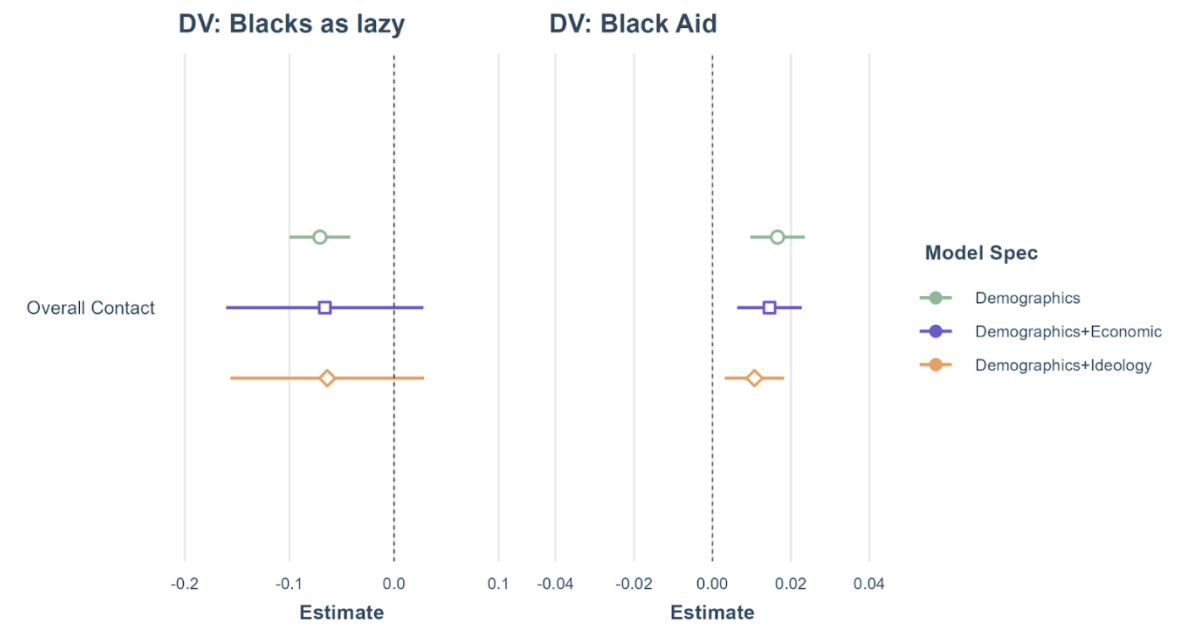
The results of the following models shed more light on these outcomes, as they include the disaggregated components of the contact index used in the first table. The results of neighborhood and workplace contact from all of these models are also visualized in Figure 4, with the complete tables in Appendix B. Models 7-12 looked at the same dependent variables, but the primary independent variable of interest was the proxy for neighborhood-level contact. The effect of this variable on support for redistributive equality is significant and positive

(negative) in the first model. However, the effects become insignificant when individual economic and political variables are added.

On the other hand, all of the models which examined the predictors of welfare support show a high significance of neighborhood diversity with $p < 0.001$. Neighborhood racial makeup thus seems to strongly influence support for welfare spending, with participants in diverse neighborhoods being significantly more likely to evaluate welfare spending as insufficient. As the question about neighborhood makeup was used in more GSS waves than the question about workplace contact, we can examine the fixed effects of more decades. Notably, support for welfare spending increased in all decades compared to the 1970s, with more significant effects, especially since the 1990s. The coefficients of the rest of the controls are also aligned with the outcomes of previous models.

In contrast, the effects of workplace contact are markedly less significant. Models 13-18 show that workplace contact does not have a notable effect. The exception is the baseline model with welfare support as DV, where workplace contact influences it at the 0.01 level. However, this effect becomes weaker and statistically insignificant when individual economic and attitudinal controls are added. This comes as some surprise, as the workplace should intuitively be a place which influences perceptions of work ethics the most. Therefore, it would be plausible to expect that more contact with outgroups in the workplace will also lead to the hypothesized effects. As a robustness check, the analysis was also re-run with different ways of coding this variable, including a categorical (low-medium-high contact) and a dummy (low-high). However, this did not significantly alter the results. Once again, most controls elicit similar effects as in the previous models.

Figure 5: Regression Coefficients for Models 19-24



Finally, the next set of models examined the effects of the overall contact on deservingness and race-specific redistribution support. Results of these models, visualized in Figure 5 and included in Appendix B, show that contact is a much more important predictor than the previous ones. Contact negatively predicts viewing Blacks as lazy in the baseline model, significant on the 0.001 level. When controls are added, the significance level drops, but the effect size remains relatively stable. When looking at support for the index of two items asking specifically about improving the living conditions of blacks, contact is an even more significant predictor, even when adding economic and political controls.

5.5 Discussion

These results shed light on the role of contact in redistribution preferences and deservingness perceptions. Several preliminary conclusions can be drawn. Firstly, neighborhood contact has a larger effect on redistribution support than workplace contact. This can be considered somewhat surprising, given that workplace contact with minorities should be more effective in decreasing deservingness-related aspects of prejudice specifically.

Nevertheless, it confirms previous findings that neighborhood-level contact and desegregation play a notable role in intergroup relations (Deutsch and Collins 1951; Oliver and Wong 2013). On the other hand, this can also mean that contrary to the hypothesized causal chain, improvement in perceptions of individual-level deservingness of minorities does not translate to broader considerations about redistribution and intergroup dynamics.

Furthermore, we see notable effects of overall contact on attitudes towards aid and redistribution, specifically to African Americans. This lends some support to the effect hypothesized in H3: namely that contact will mainly translate into support for the dimension of redistribution *to* the lower-income group. As Cavaillé and Trump (2015) note, the conflation of the two dimensions of redistribution support might obscure more fine-grained explanations. This could also be the case here. Whereas contact does not affect overall redistribution support very significantly, which puts H2 into question, it predicts notable increases in support for redistribution to the lower end of the income or wealth spectrum. The more significant effect of contact on welfare support compared to support for inequality reduction in the first set also seems to be in line with this explanation since welfare is oftentimes more clearly linked to low-income groups and racial minorities (Winter 2006). Therefore, these results seem to partly confirm the causal pathway suggested: Contact positively influences deservingness perceptions and support for redistribution *to* lower income groups since there is more solidarity and affinity with them, yet this is not strong enough to influence overall support for redistribution per se.

However, due to the data's self-reported and observational nature, causal claims can not be fully substantiated. For this reason, the next section presents the results of the survey experiment, which enables us to assess whether there is a causal link or not.

6. SURVEY ANALYSIS

6.1 Sample

The survey experiment aimed to sample 400 participants from the United States. The participants were recruited through an online survey platform, Prolific. The sampling criteria were selected within Prolific, and the sample is representative in regard to age, race, and partisanship. In total, the sampling frame included 32 thousand eligible Prolific users. All participants who completed the survey were rewarded financially based on the completion time at the rate of approximately 9.40 GBP per hour. The average completion time was 8 minutes, so the average participant received 1.25 GBP for participation. In total, 437 participants started filling out the survey. Of these, 25 participants returned the survey before finishing, and Prolific timed out 3 participants. 9 further responses were rejected through Prolific due to poor quality of responses: either failing to write anything in the text box during the experimental manipulation or selecting the same answers across the whole questionnaire. The final dataset thus includes 400 responses.

6.2 Independent variable: experimental manipulation

One of the greatest challenges for this thesis was how to manipulate contact. The previous literature on intergroup contact and prejudice reduction in general usually relied on two broad approaches: surveys with self-reported experiences or frequency of past contact or experiments which directly exposed a treatment group of participants to a situation of contact (Pettigrew and Tropp 2006). Most of the experimental designs were either experiments in the field or laboratory experiments (Paluck and Green 2009). However, due to the scope and financial support for this thesis, an actual field or laboratory experiment would be nearly impossible to conduct. On the other hand, survey-based approaches that rely on self-reported

measures of contact are prone to biases and threats posed by reverse causality, as less prejudiced individuals might simply be seeking more contact and not the other way around (Paluck et al. 2019). However, over the past 15 years, a new strand of literature on intergroup contact has gained traction within social psychology, extending the original contact hypothesis to indirect forms of contact. This literature stems from the fact that direct, face-to-face contact is oftentimes difficult to achieve in segregated or highly unequal contexts, so researchers sought ways of reducing prejudice through other media (White et al. 2021). The most notable forms of contact researched within the indirect contact literature include extended contact, vicarious contact, and imagined contact (Brown and Paterson 2016; White et al. 2021). What all of these have in common is that they do not require direct interaction with an outgroup member: extended contact entails simply knowing ingroup members who have outgroup friends, vicarious contact refers to observing an interaction between ingroup and outgroup members, and imagined contact is an imagined interaction of self with an outgroup member (Brown and Paterson 2016). Most importantly, for the purposes of this study, since these forms of contact do not require any direct interaction with outgroup members, they can be utilized as stimuli in experiments in various settings, including surveys.

This thesis focused on imagined contact, which is used for experimental manipulation. Imagined intergroup contact is defined as "the mental simulation of a social interaction with a member or members of an outgroup category" (Crisp and Turner 2009, 234). The imagined contact hypothesis follows a long line of research in social cognition that argues that mental imagery has important behavioral and attitudinal implications (Crisp and Turner 2012). By the same token, Crisp and Turner (2009) argued that merely imagining yourself in a situation of contact should be sufficient to elicit similar prejudice-reducing properties as engaging in actual outgroup contact. In their meta-review, Miles and Crisp (2014) found that the effects of imagined contact parallel those of real contact, mitigating intergroup bias in attitudes,

emotions, intentions and behavior. In addition to this, research has also found that the effects of imagined contact are persistent over time (Schuhl et al. 2019). Moreover, due to being partly independent of the immediate real-life setting, imagined contact does not require the satisfaction of Allport's (1954) original criteria for the contact to be successful in reducing prejudice (Miles and Crisp 2014).

For these reasons, imagined contact is used in the survey to experimentally manipulate contact. Based on the findings of previous literature on imagined contact, it should be able to elicit similar responses in prejudice reduction to actual contact across different outcomes and intergroup settings (Miles and Crisp 2014). Therefore, if contact has an effect on the dependent variables observed in this study, imagined contact should be a stimulus sufficient to uncover these effects, especially over a short time.

The participant sample was randomly divided into control and treatment groups. The treatment group was primed with an exercise prompting participants to imagine a positive situation of contact with an African American man. The prompt is roughly similar to the ones used in previous similar studies on imagined contact (Schuhl et al. 2019; Lau et al. 2014). While imagining the scenario, participants were asked to write a short text about their feelings and thoughts in the text box below the prompt. The full text for the experimental group reads as follows:

> "Imagine that you are sitting in a park on a sunny afternoon. A friendly African American man sits down next to you and starts a conversation. You begin chatting about your favorite hobbies, weekend plans, and the things you have in common. The conversation is relaxed and pleasant. You both laugh at some shared experiences, and the exchange leaves you feeling comfortable and positive."
>
> Take about 60 seconds to imagine this interaction in as much detail as possible. Try to picture the setting, the conversation, and how you would feel. In a few words or sentences, describe what you imagined or how it made you feel:
> [Text box]

The control group was primed with imagining a completely unrelated situation. The text described a situation in which an individual was baking a cake for their family. Presumably, this prompt could not prime any considerations of intergroup dynamics. Similarly to the treatment group, participants were also asked to put down their thoughts during the imagination. The full text is as follows:

> "Last weekend, Jamie decided to try baking a new recipe for a chocolate cake. After picking up ingredients from the store, Jamie spent the afternoon measuring, mixing, and experimenting with frosting designs. The end result was surprisingly good — a moist cake with a rich, velvety texture. Jamie shared it with some friends who were visiting, and everyone enjoyed it."
>
> Take about 30 seconds to picture this scenario in your mind. What stood out to you about the story? You may write a sentence or two below.
> [Text box]

The text entries of participants also served as a manipulation check. I checked all of the responses to filter out any participants who failed to write anything about their thoughts or whose answers were disconnected from the content of the text. No participants had to be excluded at this step, as they all provided directly relevant answers to the task. The final group composition was equal, with 200 participants in each group. To ensure that the two groups were properly randomized, t-tests and chi-square tests between the groups were conducted for variables unrelated to the manipulation (see particular descriptions in the "Controls" section below). The results of Welch's two-sample t-tests for racial resentment and age were insignificant (p-values of 0.7989 and 0.3034, respectively), thus rejecting the null hypothesis that the underlying distributions of these variables in the two groups differed. A similar conclusion was reached by running Pearson's chi-square test for gender ($p = 0.637$), partisanship ($p = 0.7107$), race ($p = 0.3063$), and education ($p = 0.16$). These tests show that randomization worked and the underlying sociodemographic and prior attitudinal variables are distributed equally across the groups. The following section details the operationalization of dependent variables.

6.3 Deservingness: Conjoint element

The first dependent variable of interest is perceptions of deservingness. More precisely, the aim is to estimate the deservingness penalty associated with merely being categorized as an ethnic outgroup, in this case, African Americans. To measure this, the experiment employs a conjoint design, which allows subsequently to measure the differences in the effects of race on deservingness between the two experimental groups.

All participants were presented with eight vignettes in total. Vignettes were always presented in pairs containing one black and one white profile, resulting in 4 vignette-pairs per participant. Each of the profile descriptions was identical, with varying attributes connected to deservingness. Table 1 summarizes all of the attributes and their levels. The exact wording of the profiles was as follows:

> [Race (name)] is a [Age] year old [Race] man who recently lost his job as a [Job Title]. He had been working at the same company for [Employment duration] but was laid off due to [Layoff reason]. He [Job search behavior]. He is now applying for unemployment benefits to support himself while transitioning.

Table 2: Conjoint Attributes and Their Levels

Attribute	Levels
Race (name)	Black (Jamal, Darnell, Marcus, Malik, DeShawn, Andre) White (Kyle, Brian, Luke, Cody, Logan,)
Age	32, 34, 36
Job Title	Delivery driver, Warehouse assistant, Janitor
Employment Duration	1 year, 4 years, 7 years
Layoff Reason	Company downsizing, Bad performance
Job Search Behavior	Is actively applying and attending interviews, Has not started looking

After every profile, participants were asked about the person's deservingness of benefits and their overall feeling towards the person. The question about deservingness was formulated as "To what extent do you think this person deserves government assistance in their current situation?" with answers on a 5-point scale ranging from "definitely deserves assistance" to "definitely does not deserve assistance". Right afterwards, participants expressed their overall attitudes towards the person by answering "How do you feel about this individual overall? Please rate from 0 (very negative feelings) to 7 (very positive feelings)". As indicated by the question, the measure was a 7-point slider scale. This item partly serves the purpose of a manipulation check, as contact should elicit a broad improvement in attitudes towards outgroups and outgroup individuals. Therefore, we expect feelings measured this way to be more positive for the treatment than the control group.

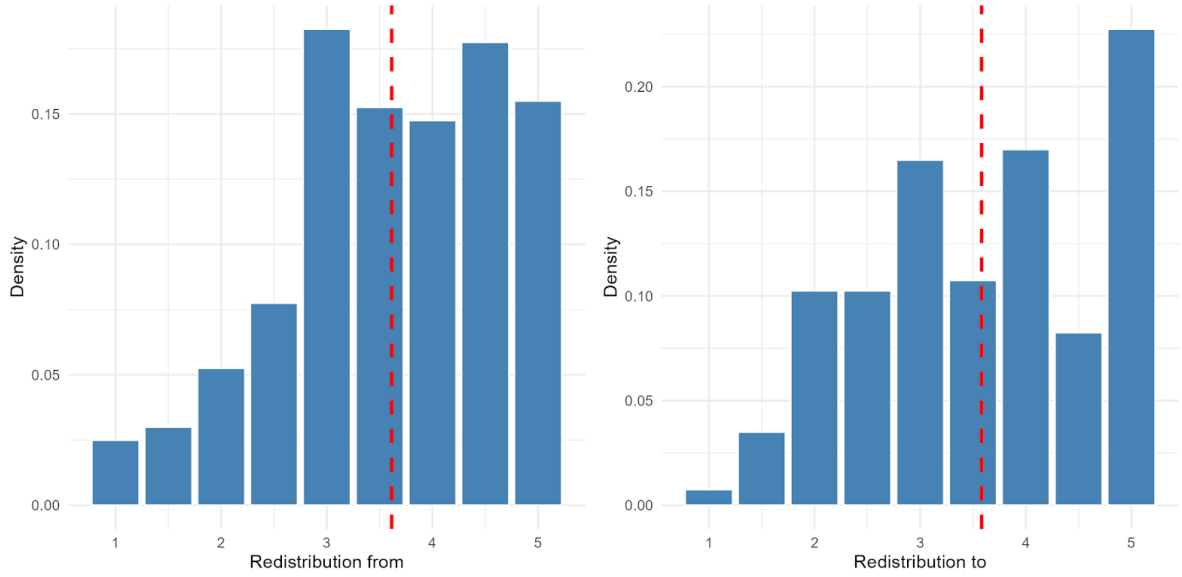
As mentioned above, respondents were always presented with two profiles, one of which was black and one was white. Besides these standard questions for each profile,

respondents were asked to select the more deserving of the two profiles after every profile pair. The question was posed as "Now imagine that only one of these people can receive support. Based on what you've read, who do you think should receive it?" with the two names as possible answers. In total, this means that each participant completed four comparison tasks.

6.4 Redistribution attitudes

The other dependent variable included in the survey is attitudes towards redistribution. To test H3 and whether contact specifically influences support to lower income groups, items directly adapted from Cavaillé and Trump (2015) are used. More specifically, this part includes two questions each for the two dimensions of redistribution support that Cavaillé and Trump (2015) identified. The selected items load onto the respective dimension in their factor analysis with factor loadings of more than 0.7 (Cavaillé and Trump 2015, 154). Support for redistribution from the better-off is measured by agreement with the following statements: "It is the government's responsibility to reduce the differences in income" and "Working people do not get their fair share of the nation's wealth." The agreement with these items is measured by a 5-point scale, ranging from "strongly disagree" to "strongly agree". The other dimension, relevant for H3, is measured by agreement with the statements "Many people who get welfare don't deserve any help" and "Most people receiving unemployment benefits are cheating the system" on the same 5-point scale. The distributions of answers on both dimensions are visualized in the top row of Figure 6. As can be seen, the distributions are relatively similar. Only a small proportion of respondents expressed low levels of support for either of the dimensions. Moreover, the means for both measures are almost equal.

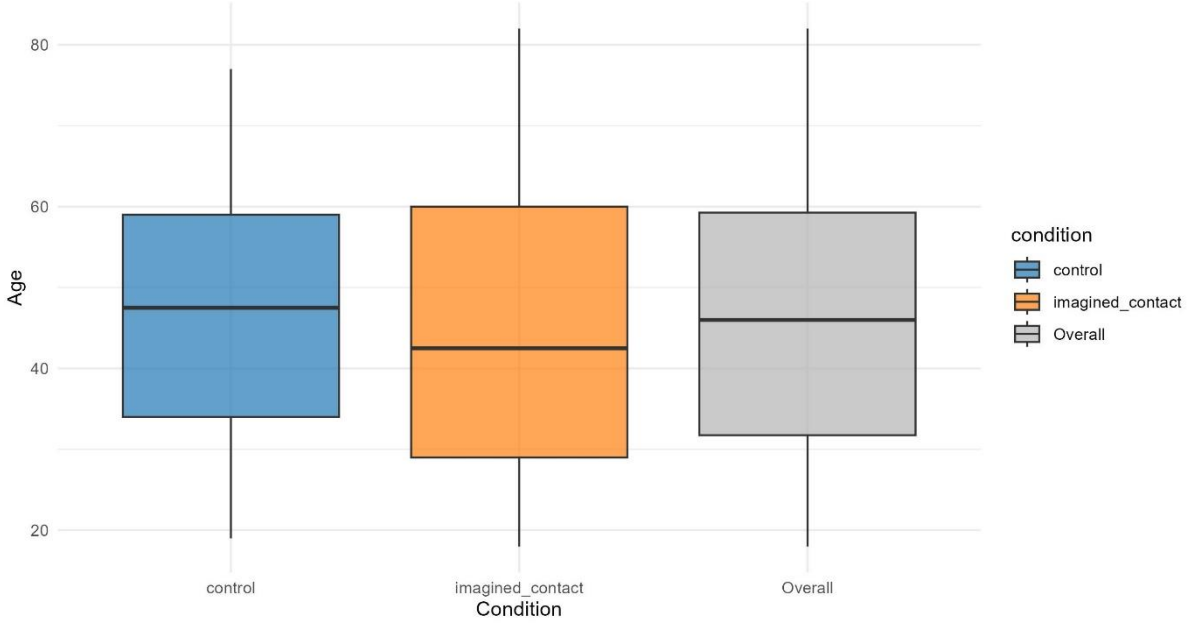
Figure 6: Measures of Redistribution



6.5 Controls

The survey included several other items. These questions broadly serve two primary purposes: firstly, they allow us to check whether randomization worked and whether the control and treatment groups are, on average, identical on the most important sociodemographics. Secondly, they allow testing for heterogeneous effects of sub-groups. Before the experimental manipulation, participants were asked about their age, gender, and highest education level with four answer categories (less than high school, high school, college degree, graduate degree). The distribution of age across the experimental groups is presented in Figure 7. Confirming the t-test results comparing the groups, the distribution in all three groups is relatively balanced. The same can be said about education, which is visualized further down in Figure 9.

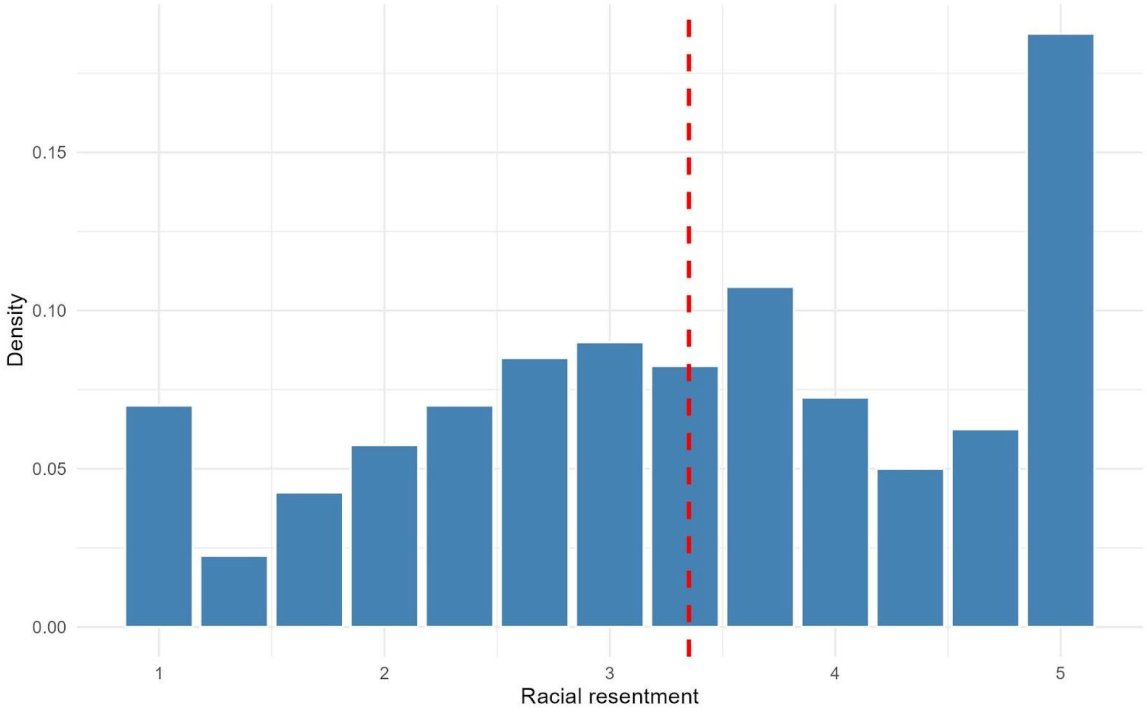
Figure 7: Age Distribution by Condition (Including Overall Sample)



Participants were then presented with three items measuring their prior level of racial prejudice before completing the experimental task. Firstly, deservingness cues' effects might differ across different levels of previous ethnic prejudice (Peffley et al. 1997). Moreover, less previous prejudice might be correlated with the previous frequency of interethnic contact or might diminish the effect of contact due to prejudice already being low enough. Therefore, this measure helps to account for the possibility of such prior "saturation" by controlling for the level of prior general prejudice. The questions were adapted from the racial resentment scale by Kinder and Sanders (1996), which is typically used to measure prejudice across large-scale surveys and previous research in the United States. In the interest of time, Three items out of the scale were selected: "Irish, Italians, Jewish, and many other minorities overcame prejudice and worked their way up. Blacks should do the same without special favors", "Generations of slavery and discrimination have created conditions that make it difficult for Blacks to work their way out of the lower class", "It's really a matter of some people not trying hard enough; if Blacks would only try harder, they could be just as well off as whites." The agreement with these statements is measured on a 5-point scale between "strongly agree" and "strongly

disagree". The agreement with these three items was indexed by taking a simple average for each respondent. The distribution of the racial resentment index is visualized in Figure 8. As can be seen, there is quite some polarization in the sample, as the extreme scores are relatively frequent. Notably, the mode lies at the score of 5, representing the lowest level of racial resentment, as the answer 5 represented strong disagreement. Therefore, a notable part of the sample completely disagreed with items expressing resentment towards African Americans. This means that levels of racism in a large part of the sample were relatively low before the treatment, which will be accounted for in the analysis.

Figure 8: Histogram of Scores on Racial Resentment



After completing the experimental manipulation and answering the deservingness and redistribution-related questions, participants completed further questions about their financial and political status. First, political affiliation was measured by the item “Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?”. This item is adapted from the GSS and has eight answer categories ranging from strong Democrat to

strong Republican, independent in the middle, and others. Afterwards, respondents were also asked about their race and income bracket. For visualization and subsequent analysis, political affiliation was further recoded into a simple republican/democrat/other. Again, partisanship is distributed evenly in both groups, as seen in Figure 10. Racial makeup of both groups can be seen in Figure 9.

Figure 9: Distributions of Controls

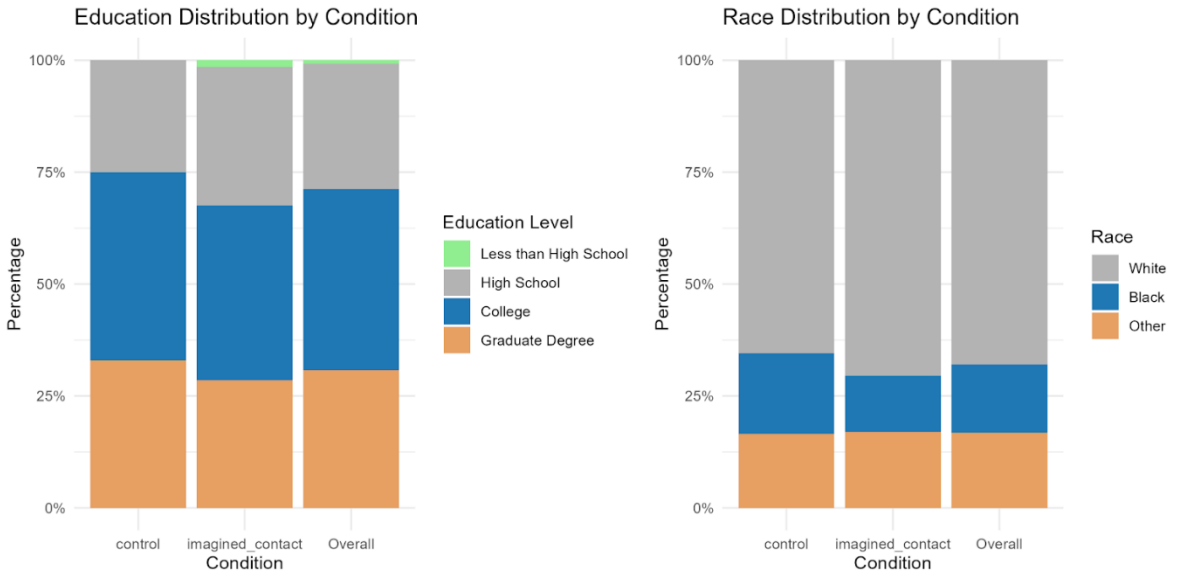
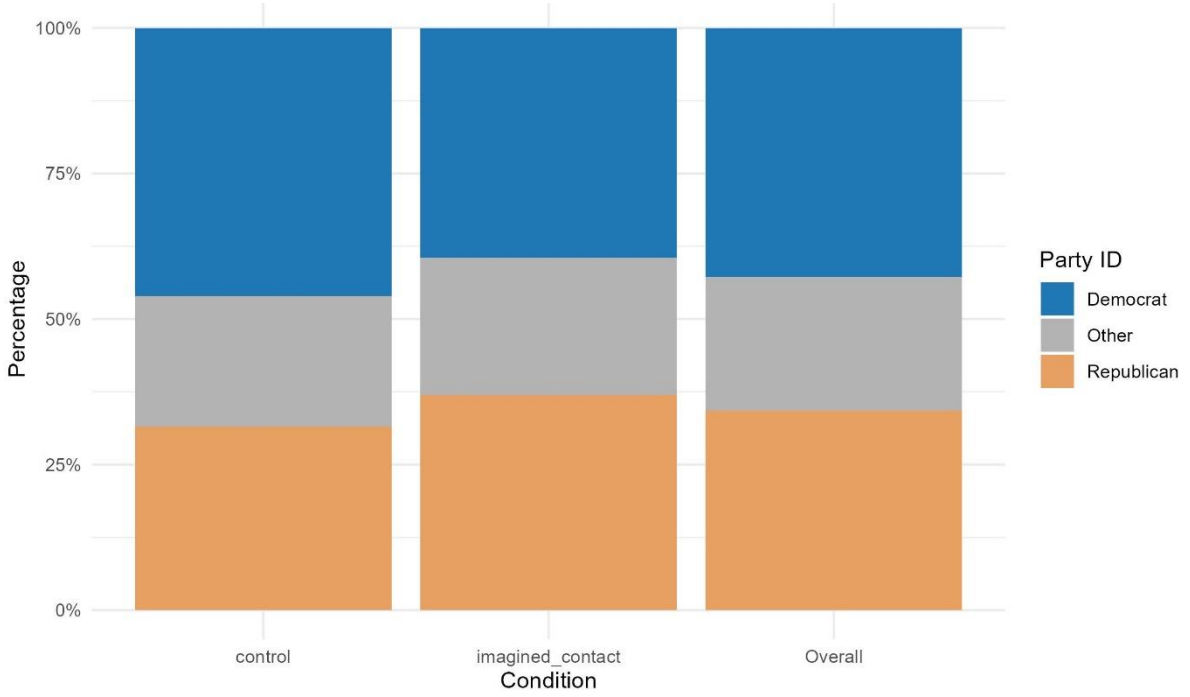


Figure 10: Political Affiliation by Condition



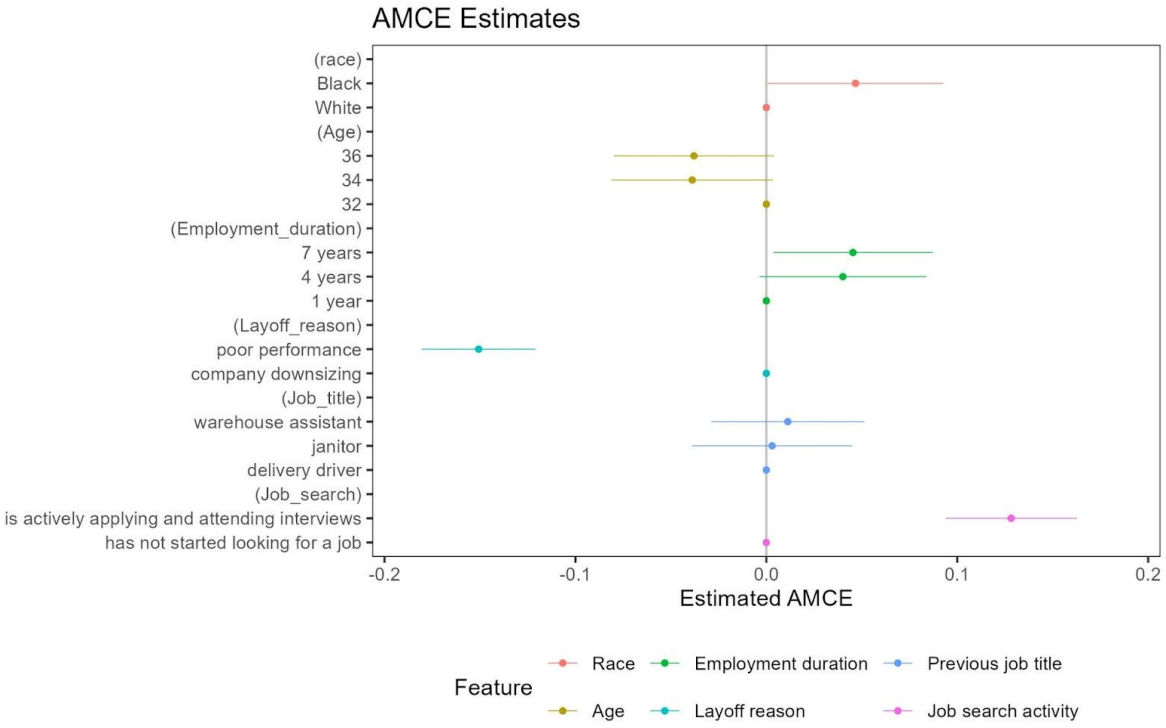
6.6 Results: Deservingness with choice tasks

To test H1, the differences between groups from the conjoint task are examined by looking at the Average Marginal Component Effects (AMCEs). AMCEs are the primary tool for estimating conjoint results, as they show how each attribute level (e.g., being Black vs White) changes the probability of a profile being selected or rated more favorably, on average, holding all other attributes constant. Formally, the AMCE for a given level of an attribute represents the expected change in the probability of a profile being selected (or receiving a higher rating) when that level is present, compared to a reference category, averaged over all possible combinations of the other attributes. The estimation relies on the assumption of randomization of attribute levels, which ensures that the AMCEs can be interpreted causally. To complement the AMCE analysis for subgroups, I will also compare marginal means and fit models with and without the experimental condition to estimate if it improves model fit, in line with the recommendations of Leeper et al. (2020)

First, the AMCEs for the profile pair selection tasks are discussed. All of the AMCEs were estimated using the cregg package in R. The overall AMCEs for the whole sample, including all selection tasks, are visualized in Figure 1. Surprisingly, being black positively affects the probability of selecting a profile compared to being white. More precisely, the AMCE point estimate was 0.047, meaning that respondents were 4.7 percentage points more likely to choose a profile when the profile was African American, compared to white, holding all other attributes constant. This effect is statistically significant at the 5% level ($p = 0.046$), with a 95% confidence interval ranging from approximately 0.1 to 9.3 percentage points. This suggests that race had a modest but meaningful influence on respondents' preferences in the conjoint task. This is at odds with most previous literature on deservingness, which suggests that minority identity and being African American have, on average, adverse effects. The effects of levels of other attributes are in line with expectations. Higher age results in a more negative evaluation, although this is not statistically significant.

On the other hand, a more extended period of employment before losing a job results in a more positive evaluation of deservingness. This is in line with the presumption that reciprocity expressed as previous contributions makes individuals seen as more deserving (van Oorschot 2006, 26). The most notable effects are clearly associated with layoff reasons and job-seeking behavior. Being laid off for poor performance decreases the average probability of selecting this profile by 15 percentage points compared to being laid off for company downsizing. This reflects the previously found deservingness criterion of control, which refers to the control that the individual has over their situation (van Oorschot 2006, 26). On the other hand, if the individual actively searches for a job, he is almost 13 percentage points more likely to be selected than an individual who has not started searching, ceteris paribus.

Figure 11: AMCEs for the Whole Sample

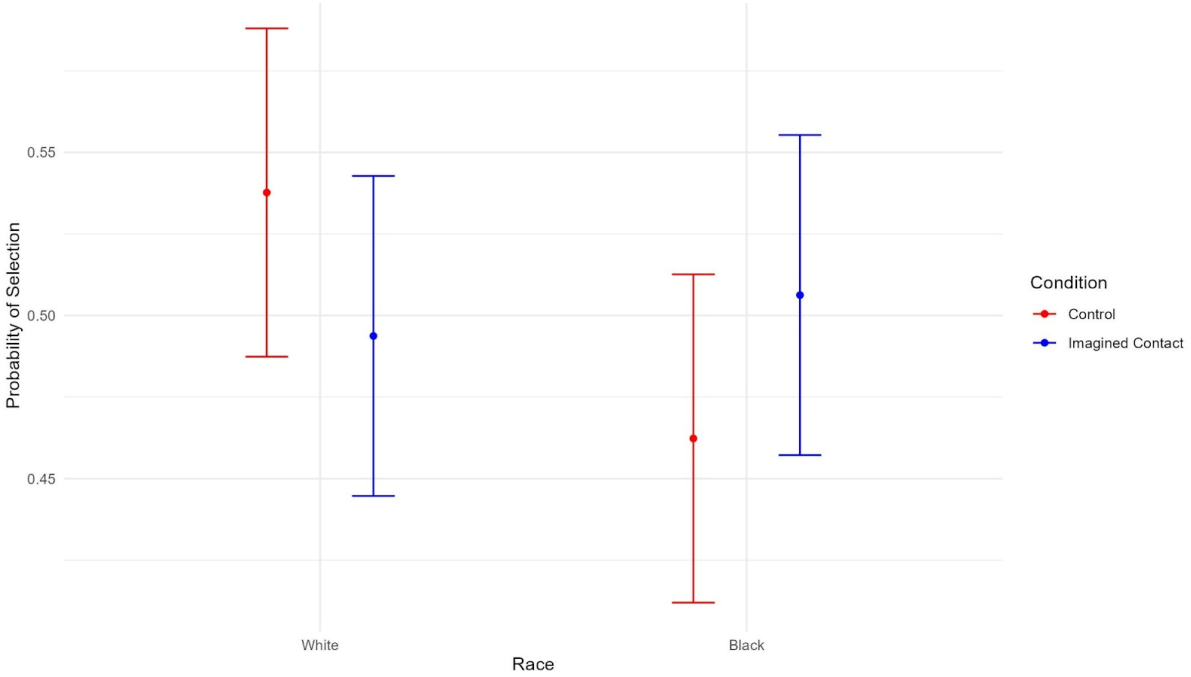


To evaluate the causal effect of contact on these results, the right side of Figure 2 shows the AMCEs by experimental condition. In line with the results above, being Black positively affected both groups. However, the effect was statistically significant only in the group primed with imagined contact, which was also more substantial. This points towards contact, which also drives the overall significant effect for the whole sample. For other attributes, the manipulation does not produce systematic changes besides making age and previous employment duration less important and insignificant for the choice.

However, Leeper et al. (2020) warn against causally interpreting solely based on AMCEs by subgroups, as this is susceptible to variation by different reference groups. Instead, they suggest descriptively evaluating subgroup effects by estimating marginal means, which denote the column and row mean outcomes for each feature level averaging across all other features (Leeper et al. 2020, 210). A formal test of effects should then be achieved by running a linear model with the attributes as predictors and comparing it to a model with interaction of

the subgroup grouping variable (in our case, treatment) with the attributes and conducting an ANOVA to see if the model fit is improved (Leeper et al. 2020). Figure 12 thus visualizes marginal means of race between subgroup conditions. As the figure shows, marginal means align with expectations in the control group, with white race being associated with a higher probability of being selected. The treatment reverses this effect, making it more likely for black profiles to be selected. Therefore, this seems to offer some descriptive support for the hypothesized effect. However, Appendix D contains the results of the ANOVA of the two linear models for a formal assessment of the differences. The ANOVA results are not significant (p-value of 0.25), meaning that the inclusion of the experimental group does not improve the model fit, so it is very improbable that there are subgroup differences (Leeper et al. 2020). Therefore, contact treatment does not seem to significantly affect the effects of attributes, including profile's race.

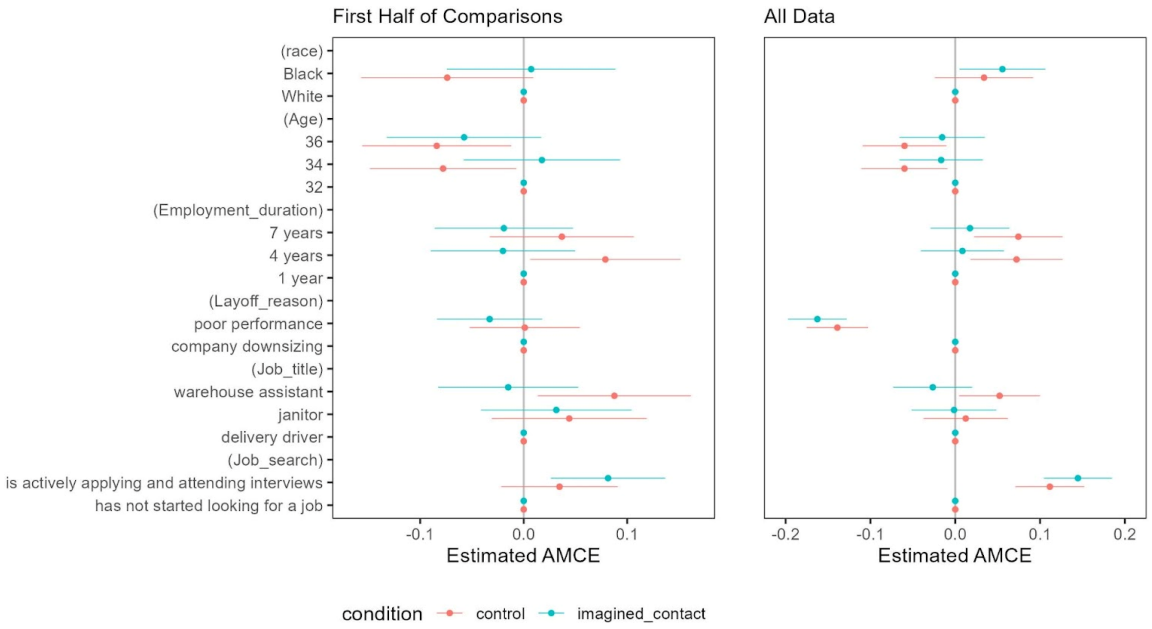
Figure 12: Marginal Means by Condition



Next, I only examine the data from the first half of the choice tasks. Since it is possible that the imagined contact lost some of its effects with the increasing number of tasks completed,

looking at the first two choice tasks instead of the whole sample clearly shows the potential of contact in affecting these variables. The left side of Figure 13 shows these results. As can be seen, being black actually had the expected effect in the control group within this subset of questions. Specifically, African American identity makes it less probable that the profile is selected by 7.3 percentage points compared to white. However, in the treatment group, the effect of being black becomes positive. However, due to a relatively small sample size (further split into two subgroups) and fewer tasks, the confidence intervals are large, and neither of the effects is statistically significant.

Figure 13: AMCEs by Experimental Condition



To further explore this effect, the influence of imagined contact by previous levels of racial resentment is analyzed. Low levels of previous racial prejudice might obscure the effects of prejudice reduction since these effects might only arise if there is prior prejudice. For these purposes, the racial resentment index was recoded into a categorical variable by ordering the scores of all participants and splitting them into thirds, resulting in a categorization of low, medium, or high. Figure 15 shows the Marginal Means for the whole sample by prior racial

resentment. The surprising result is the high probability of selecting African American profiles among participants with middle and high resentment in the control group. Within the imagined contact group, the probability of selecting African Americans only becomes higher among the participants high on resentment. Nevertheless, compared to the surprising baseline in the control group, this effect does seem negligible.

Furthermore, I explore the AMCEs of race by prior racial resentment category and experimental group from the first half of the comparisons, which are visualized in Figure 14. By the expectation that contact will not have an effect when prior prejudice is low, the differences between AMCEs in the control and treatment groups are insignificant and seem negligible. However, high racial resentment has a significant adverse effect on deservingness in the control group. As expected, being African American is associated with a deservingness penalty within this group, making it significantly less likely to select the given profile. However, when participants high on prior racial resentment are primed with contact, the AMCE becomes positive, albeit not significant. Nevertheless, this signals that contact and reduction in prejudice have a mitigating effect only if the deservingness gap exists in the first place, which, based purely on the data collected in this survey, might be called into question.

Figure 14: AMCEs by Condition and Racial Resentment

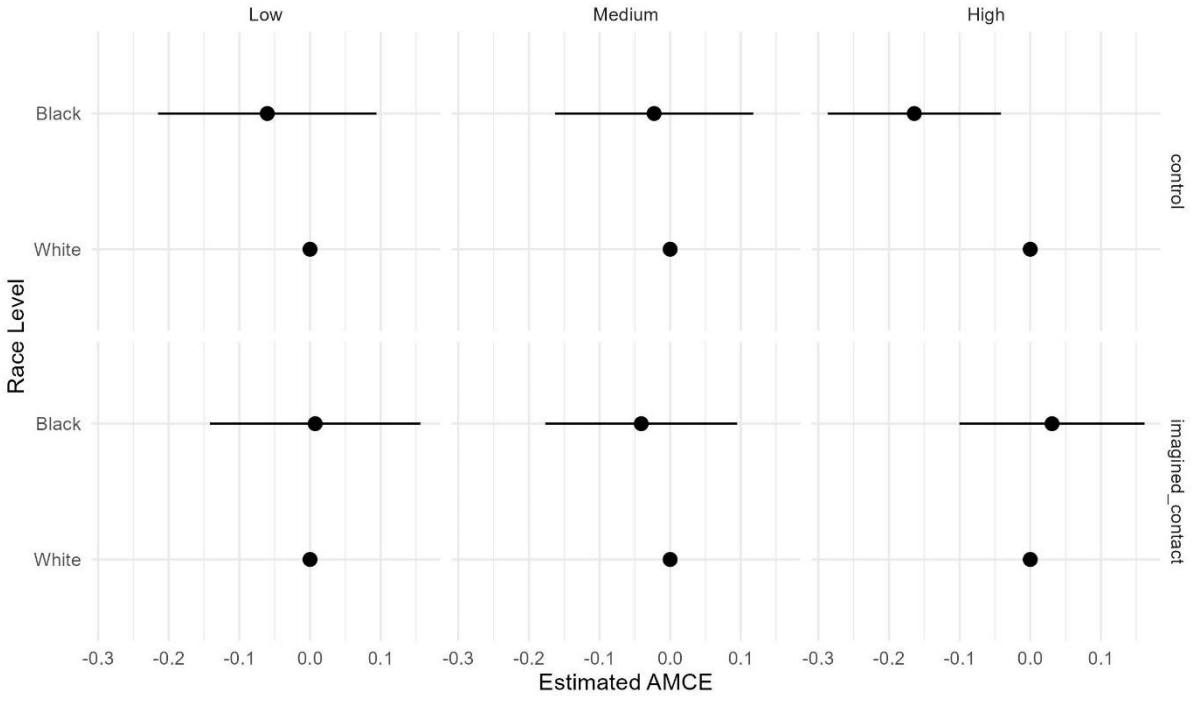
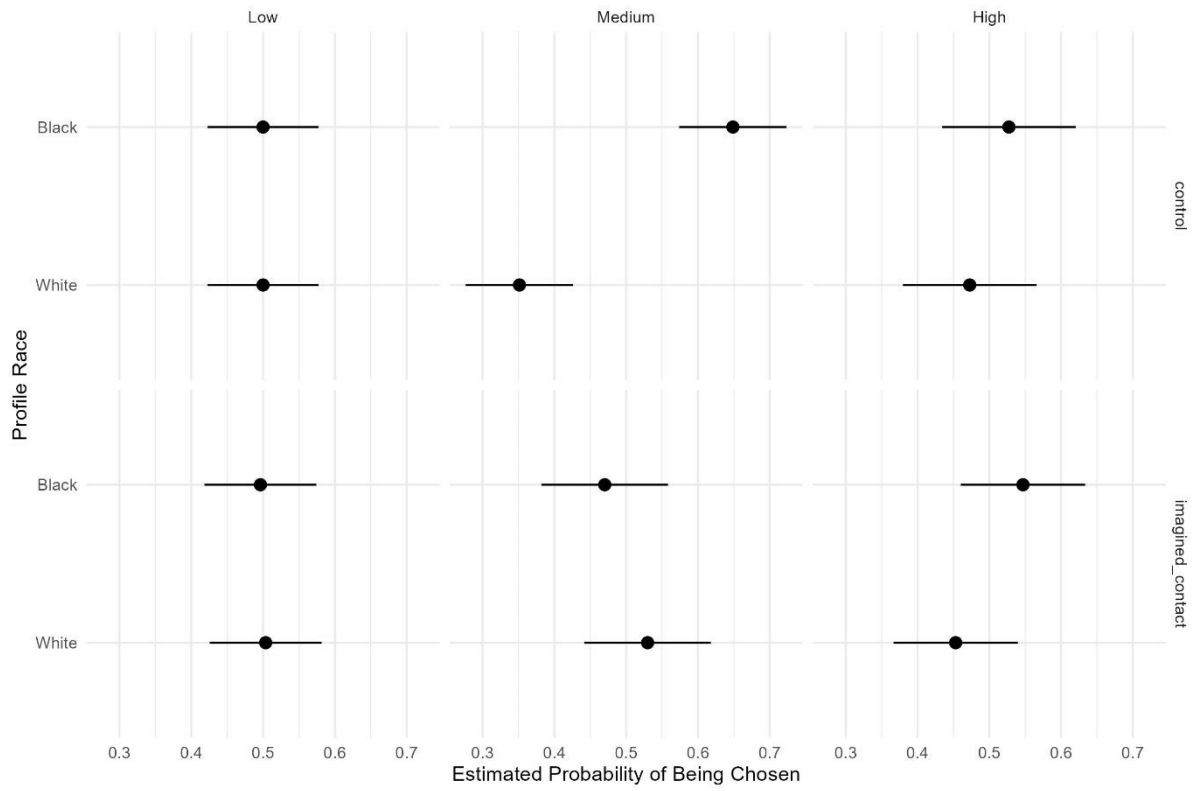


Figure 15: Marginal Means by Condition and Racial Resentment



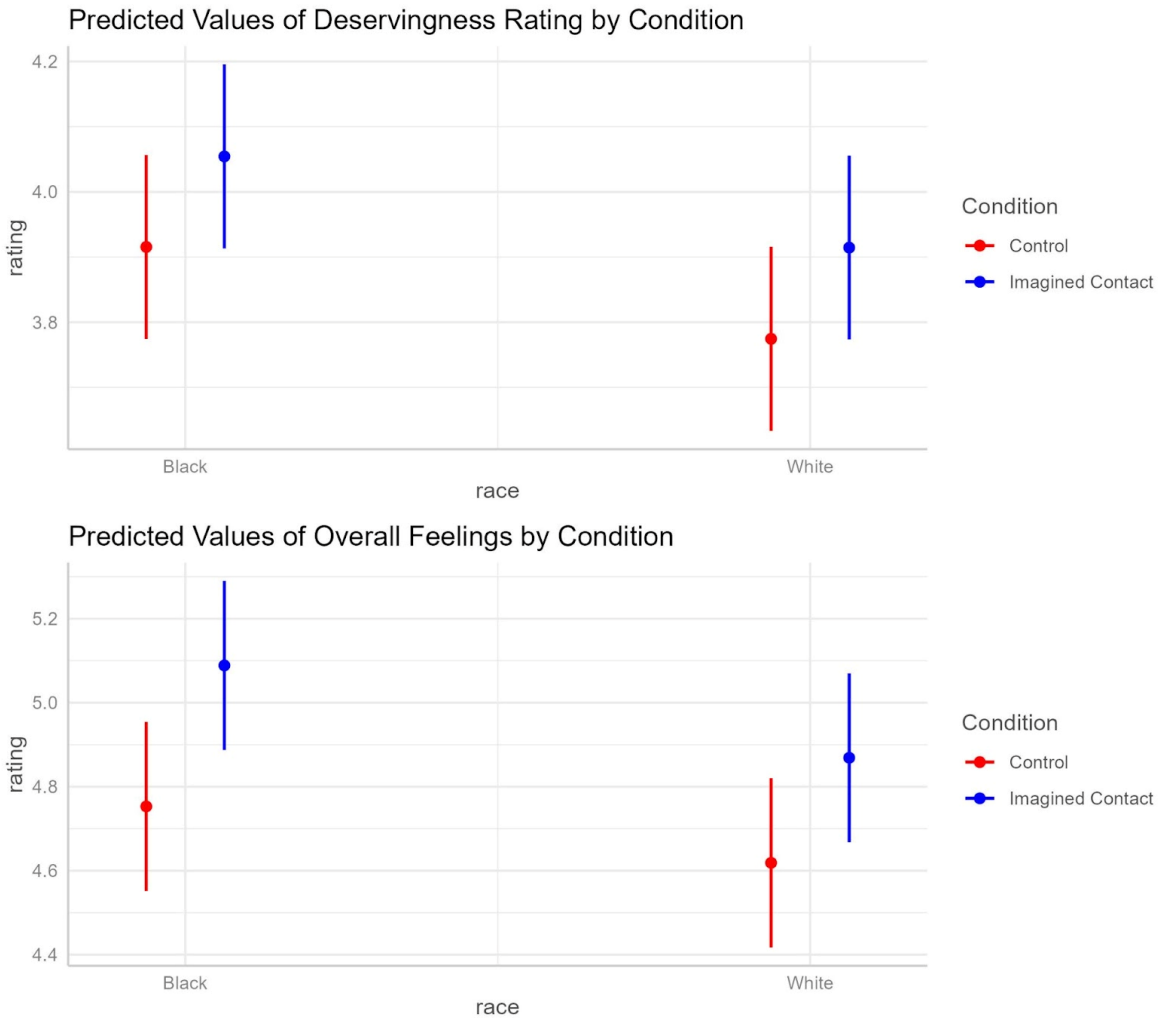
6.7 Results: Deservingness ratings and overall thermometer

Besides the choice task, typical for conjoint designs, the survey also included deservingness ratings of individual profiles for more robustness. I created a long format dataset to analyze this, and a linear model with respondent-fixed effects of the attributes and the condition was run. The complete results of the model are included in Appendix C in the first column. The upper part of Figure 16 also includes a visualization of predicted point estimates and 95% confidence intervals of race categories by experimental condition. In accordance with the results of the AMCE analysis, African American identity is surprisingly associated with a greater likelihood of being seen as deserving in comparison to being white. As the model results show, this effect is significant on the <0.001 level. At the same time, imagined contact improves the ratings of African Americans (since they are the reference constant), but this effect is not significant on the <0.05 level. Moreover, the difference in ratings between White and Black applicants is basically unchanged in the imagined contact condition compared to the baseline. Therefore, due to the puzzling baseline effect of race, there is practically no effect of contact on the difference in differences between black and white profiles between the two conditions.

The bottom of Figure 16 and the second column of the regression table in Appendix C also summarize the results for the overall feelings thermometer scores. A linear model with fixed effects and the same predictors was run, only changing the dependent variable. On this measure, just like the deservingness measures, the overall results point in the opposite direction compared to the expectations: African Americans are rated more positively than Whites, and this effect is statistically significant. Confirming the expectations, imagined contact improves the ratings of African Americans (the constant baseline) significantly. The interaction term also shows that the difference in differences between African Americans and Whites becomes even

greater between the groups, although this effect is not significant. Overall, although the baseline rating scores favored African American profiles, the effects of imagined contact align with the expectations for overall prejudice reduction, suggesting that the manipulation used was valid in this regard.

Figure 16: Regression results for Race by Group for Deservingness and Overall Prejudice

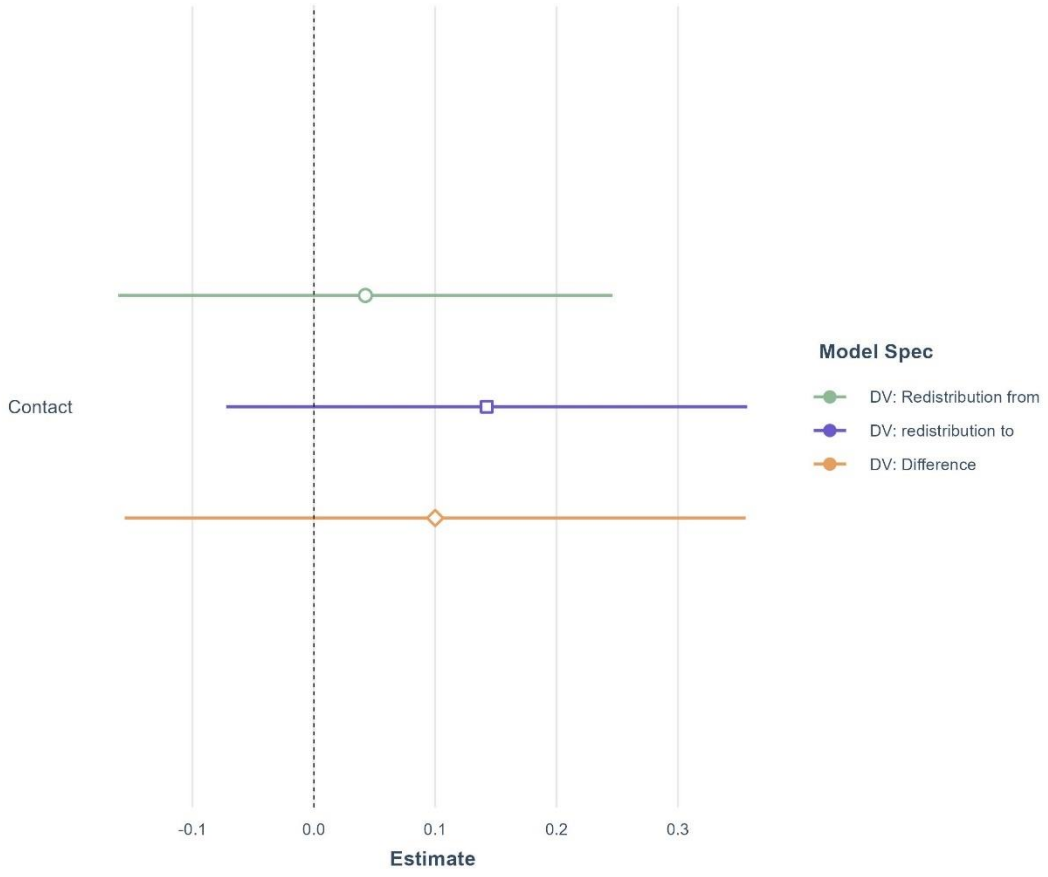


6.8 Results: Attitudes Towards Redistribution

Finally, this section tests the effects of contact intervention on attitudes towards redistribution. Both indices for redistribution to people with low incomes and redistribution from the upper classes are used as dependent variables in Models 1 and 2. Furthermore, I also

created a variable that measures the difference between the support for the two dimensions of redistribution to get a more fine-grained understanding of the effect. Since the evidence is experimental, the models do not contain controls. The point estimates with 95% confidence intervals for the three models are shown in Figure 17, and Appendix E contains the full results. Across all three levels, the effects of contact compared to the control group are negligible. In accordance with expectations, contact does not influence the top-down dimension of redistribution, with the effect being negligible and not statistically significant. At the same time, the positive effect of contact on the other dimension of redistribution support is more substantial, as predicted by H3. However, the effect size is still not notable, and the effect is also not statistically significant. The same can be said about the regression, with the outcome variable capturing the difference between the two. While contact increases the difference between the two dimensions, this effect is also not notably strong and insignificant.

Figure 17: Regressions with Contact and Redistribution



For further robustness checks, I also ran models with interactions of the experimental condition and racial resentment, respondent's race, and education. None of these specifications yielded any significant effects, additionally confirming the null effects of imagined contact on redistributive attitudes.

Overall, these results point to the conclusion that contact did not have a significant effect on redistribution preferences. The following section contextualizes all of the survey and GSS results and discusses them in more depth.

7. DISCUSSION

The results of both analytical sections shed light on the causal effects of interethnic contact on deservingness perceptions and redistribution preferences. While the GSS results seemed to suggest that contact influences the deservingness of African Americans and specific items about redistribution to poorer parts of the population and minorities, the results from the survey data support this only partly. Whereas imagined contact positively affects deservingness rating, these effects were mostly not statistically significant. This might be mainly due to the counterintuitive baseline effect, where participants were surprisingly slightly more likely to select Black profiles even in the control condition. Imagined contact mostly affected participants with higher levels of prior racial prejudice and had a notable effect in the first part of the task, pointing to the conclusion that the primed reduction in prejudice only had a temporary effect. This is in contrast to previous studies that suggested that the effects of imagined contact are sustained over longer periods (Schuhl et al. 2019).

Nevertheless, the effect of contact was significant in the case of overall feelings towards minorities, where the baseline prejudice was also surprisingly absent. Therefore, the manipulation actually worked as expected in this case, which suggests that it was not the failure of manipulation that caused the insignificant results on deservingness outcomes. Even though the direction of the influence of contact on deservingness across all analyses was in line with expectations, the magnitude was not as significant as in the case of the feelings thermometer, and it was not able to make a difference and "beat" the surprising positive baseline in the control condition. Therefore, due to the results of the comparison task and individual profile ratings, H1 is rejected.

The picture is clearer moving on to the redistribution items and H2 and H3. None of the models found any significant effect of the contact condition on either of the redistribution dimensions. Even though contact positively affects support for redistribution to the lower classes, this effect is not significant or particularly sizable. At the same time, in accordance with expectations, contact does not influence the other dimension of redistribution support either. This allows us to reject both H2 and H3. This could mean multiple things. Firstly, the cognitive connection between welfare recipiency and race may be eroding. While the GSS data showed that contact is influencing support for aid towards African Americans, which can explicitly be linked to racial categories and prejudice, it is possible that the link found by past research about lower classes as schematically seen as predominantly black might be getting weaker. Alternatively, this could mean that prejudice does not play an important role in the redistributive penalty of outgroups. In this sense, this might offer support for theories that explain this simply by referencing boundaries and in-group favoritism (e.g. Magni 2021; Magni 2024), which precedes any prejudice and is the sole necessary criterion for lower redistribution support in ethnically diverse contexts.

The most surprising result from the survey data was the non-existence of any deservingness penalty associated with race. Across the whole sample, African Americans were rated as more deserving than whites, confirmed by AMCE results and the regressions containing individual profile deservingness ratings. Even more surprisingly, the overall evaluation of profile likeability was also biased in favor of African Americans, which is even more counterintuitive. These results sharply contrast most previous literature on ethnicity, deservingness, and prejudice. It is difficult to estimate why this arises. However, it could be due to Prolific users acting more in accordance with social desirability biases. In this regard, users of survey platforms who have taken numerous other surveys on social issues might be more affected by considerations of social desirability. For similar reasons, some of the

participants might have been able to guess the intent of the research due to the alternation of black and white profiles, which seems to possibly correlate with the AMCEs for the second half of the choice tasks being far more positive than the first.

Multiple limitations could have influenced these results. Most importantly, the sample size was constrained by the budget, and the resulting statistical power was insufficient for some of the analytical approaches. With 400 participants further split into two groups, the analysis of AMCEs for subgroups or only the first part of the tasks and the linear regressions with subgroups were underpowered, and some effects of smaller sizes might have been flagged as insignificant solely due to this reason. Additionally, the items measuring redistributive preferences were confined to two questions per dimension due to budget-related time constraints of the survey. Ideally, a larger battery of items would be used to ensure that the underlying predispositions are tapped into efficiently.

8. CONCLUSION

The aim of this thesis is to contribute to the literature on welfare preferences and prejudice in contexts of ethnic heterogeneity. By examining the link between prejudice reduction through intergroup contact, deservingness perceptions, and attitudes towards redistribution, it sought to understand how prejudice might affect preferences towards inequality and policies that mitigate it. Working within a potential outcomes framework focused on causality, it formulated a set of hypotheses which were subsequently tested using quantitative methods.

The hypotheses predicted that a reduction in prejudice will lead to a more positive view of minorities-in this case, African Americans-and subsequently to a greater support for redistribution to the poor and reducing inequalities. To test this causal chain, it combined data from a large-scale observational survey with data from an original survey experiment. All the hypotheses were rejected, which can partly be ascribed to a surprising lack of baseline prejudice in the survey data and low statistical power. Nevertheless, the direction of effects was largely in line with expectations, and some of the survey results and significant results using the GSS data would merit further exploration.

With rising inequalities and ethnic diversity in Western Societies, the intersection of attitudes towards redistribution and intergroup dynamics deserves increased attention, both from scholars and practitioners. This thesis offers results that speak to how prejudice and strategies to reduce it might affect both of these dimensions simultaneously. Future research should pay more attention not only to how group identities interact with economic inequalities, but also which strategies can influence these dynamics.

Appendix A: Model Specifications

Models 1-3:

$EQWLTH_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \varepsilon_i$

$EQWLTH_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_6 \cdot Unemployed_i + \beta_7 \cdot Income_i + \varepsilon_i$

$EQWLTH_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_8 \cdot Government\ Confidence_i + \beta_9 \cdot PartyID_i + \varepsilon_i$

Models 4-6:

$NATFARE_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \varepsilon_i$

$NATFARE_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_6 \cdot Unemployed_i + \beta_7 \cdot Income_i + \varepsilon_i$

$NATFARE_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_8 \cdot Government\ Confidence_i + \beta_9 \cdot PartyID_i + \varepsilon_i$

Models 7-9:

$EQWLTH_i = \beta_0 + \beta_1 \cdot Neighborhood\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \varepsilon_i$

$EQWLTH_i = \beta_0 + \beta_1 \cdot Neighborhood\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_6 \cdot Unemployed_i + \beta_7 \cdot Income_i + \varepsilon_i$

$EQWLTH_i = \beta_0 + \beta_1 \cdot Neighborhood\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_8 \cdot Government\ Confidence_i + \beta_9 \cdot PartyID_i + \varepsilon_i$

Models 10-12:

$NATFARE_i = \beta_0 + \beta_1 \cdot Neighborhood\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \varepsilon_i$

$NATFARE_i = \beta_0 + \beta_1 \cdot Neighborhood\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_6 \cdot Unemployed_i + \beta_7 \cdot Income_i + \varepsilon_i$

$NATFARE_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_8 \cdot Government\ Confidence_i + \beta_9 \cdot PartyID_i + \varepsilon_i$

Models 13-15:

$EQWLTH_i = \beta_0 + \beta_1 \cdot Workplace\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \varepsilon_i$

$EQWLTH_i = \beta_0 + \beta_1 \cdot Workplace\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_6 \cdot Unemployed_i + \beta_7 \cdot Income_i + \varepsilon_i$

$EQWLTH_i = \beta_0 + \beta_1 \cdot Workplace\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_8 \cdot Government\ Confidence_i + \beta_9 \cdot PartyID_i + \varepsilon_i$

Models 16-18:

$NATFARE_i = \beta_0 + \beta_1 \cdot Workplace\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \varepsilon_i$

$NATFARE_i = \beta_0 + \beta_1 \cdot Workplace\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_6 \cdot Unemployed_i + \beta_7 \cdot Income_i + \varepsilon_i$

$NATFARE_i = \beta_0 + \beta_1 \cdot Workplace\ Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_8 \cdot Government\ Confidence_i + \beta_9 \cdot PartyID_i + \varepsilon_i$

Models 19-21:

$$WORKBLKS_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \varepsilon_i$$

$$WORKBLKS_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_6 \cdot Unemployed_i + \beta_7 \cdot Income_i + \varepsilon_i$$

$$WORKBLKS_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_8 \cdot \text{Government Confidence}_i + \beta_9 \cdot PartyID_i + \varepsilon_i$$

Models 22-24:

$$\text{BLACK REDISTRIBUTION}_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \varepsilon_i$$

$$\text{BLACK REDISTRIBUTION}_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_6 \cdot Unemployed_i + \beta_7 \cdot Income_i + \varepsilon_i$$

$$\text{BLACK REDISTRIBUTION}_i = \beta_0 + \beta_1 \cdot Contact_i + \beta_2 \cdot Race_i + \beta_3 \cdot Sex_i + \beta_4 \cdot Age_i + \beta_5 \cdot Education_i + \beta_8 \cdot \text{Government Confidence}_i + \beta_9 \cdot PartyID_i + \varepsilon_i$$

Appendix B: Regression Tables with GSS Models

Table 3: Results Table for GSS Models 1-6

	M1	M2	M3	M4	M5	M6
Contact	-0.130	-0.079	0.012	-0.148***	-0.150*	-0.070
	(0.099)	(0.104)	(0.093)	(0.040)	(0.059)	(0.055)
Decade: 2000s	0.062	0.086	0.099	-0.056*	-0.039	-0.022
	(0.068)	(0.071)	(0.064)	(0.028)	(0.040)	(0.038)
Decade: 2010s	-0.120+	-0.073	-0.032	0.003	0.023	0.010
	(0.066)	(0.069)	(0.062)	(0.027)	(0.039)	(0.037)
Race: Black	-0.755***	-0.790***	-0.216**	-0.274***	-0.307***	-0.148***
	(0.077)	(0.081)	(0.076)	(0.030)	(0.045)	(0.045)
Race: Other	-0.547***	-0.531***	-0.254**	-0.156***	-0.127*	-0.080
	(0.092)	(0.097)	(0.087)	(0.038)	(0.055)	(0.052)
Sex: Female	-0.425***	-0.421***	-0.302***	-0.020	-0.029	0.007
	(0.050)	(0.052)	(0.047)	(0.020)	(0.030)	(0.028)
Age	0.010***	0.008***	0.008***	0.001	0.001	-0.000
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Education	0.044***	0.040***	0.061***	-0.017***	-0.019***	-0.012*
	(0.009)	(0.009)	(0.008)	(0.004)	(0.005)	(0.005)
Unemployment		0.349***			0.062+	
		(0.056)			(0.032)	
Income		-0.003*			0.000	
		(0.001)			(0.001)	
Government trust			-0.030			0.064**
			(0.034)			(0.020)
Not strong democrat			0.411***			0.142**
			(0.083)			(0.051)
Independent, democrat leaning			0.338***			0.077
			(0.090)			(0.053)
Independent			0.703***			0.238***
			(0.089)			(0.053)
Independent, republican leaning			1.397***			0.306***
			(0.104)			(0.061)

Not strong republican			1.378***			0.342***
			(0.093)			(0.056)
Strong republican			1.757***			0.504***
			(0.107)			(0.063)
0ther party			1.243***			0.336***
			(0.165)			(0.099)
Political Views			0.256***			0.081***
			(0.019)			(0.011)
Num.Obs.	6093	5557	5813	5783	2665	2814
R2	0.047	0.055	0.207	0.028	0.033	0.117
R2 Adj.	0.046	0.053	0.204	0.027	0.029	0.111
AIC	25380.1	23154.3	23164.8	13295.1	6112.8	6199.0
BIC	25447.3	23233.7	23291.5	13361.7	6183.4	6311.9
Log.Lik.	-12680.051	-11565.127	-11563.397	-6637.555	-3044.396	-3080.497
RMSE	1.94	1.94	1.77	0.76	0.76	0.72

- p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Table 4: Results Table for GSS Models 7-12

	M7	M8	M9	M10	M11	M12
Neighborhood contact	-0.065**	-0.023	0.017	-0.061***	-0.063***	-0.042***
	(0.023)	(0.029)	(0.022)	(0.009)	(0.013)	(0.010)
Decade: 1980s	0.075	-0.039	0.061	-0.122***	-0.116***	-0.130***
	(0.075)	(0.090)	(0.073)	(0.012)	(0.018)	(0.014)
Decade: 1990s	0.135+	0.001	0.047	-0.021	-0.029	-0.064***
	(0.075)	(0.089)	(0.073)	(0.014)	(0.019)	(0.016)
Decade: 2000s	0.039	-0.091	-0.030	-0.201***	-0.220***	-0.235***
	(0.076)	(0.091)	(0.074)	(0.015)	(0.021)	(0.017)
Decade: 2010s	-0.109	-0.226*	-0.138+	-0.185***	-0.209***	-0.222***
	(0.075)	(0.090)	(0.073)	(0.014)	(0.020)	(0.016)
Race: Black	-0.810***	-0.835***	-0.405***	-0.429***	-0.335***	-0.343***
	(0.031)	(0.041)	(0.032)	(0.013)	(0.021)	(0.017)
Race: Other	-0.474***	-0.545***	-0.253***	-0.171***	-0.112***	-0.115***
	(0.044)	(0.054)	(0.044)	(0.020)	(0.029)	(0.024)
Sex: Female	-0.316***	-0.370***	-0.248***	-0.042***	-0.024+	-0.036***
	(0.021)	(0.026)	(0.021)	(0.008)	(0.012)	(0.010)
Age	0.008***	0.007***	0.006***	0.001***	0.002***	0.000
	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
Education	0.083***	0.066***	0.078***	0.007***	-0.004+	0.006***
	(0.004)	(0.005)	(0.004)	(0.001)	(0.002)	(0.002)
Unemployment		0.307***			0.101***	
		(0.028)			(0.013)	
Income		-0.002**			0.000	
		(0.001)			(0.000)	
Government trust			-0.038*			0.035***
			(0.015)			(0.007)
Not strong democrat			0.352***			0.132***
			(0.035)			(0.016)
Independent, democrat leaning			0.329***			0.098***
			(0.039)			(0.018)
Independent			0.524***			0.137***
			(0.039)			(0.019)
Independent, republican leaning			1.026***			0.259***
			(0.044)			(0.021)
Not strong republican			1.041***			0.256***
			(0.039)			(0.018)
Strong republican			1.458***			0.315***
			(0.045)			(0.021)
0ther party			1.022***			0.155***

			(0.085)			(0.043)
Political Views			0.260***			0.087***
			(0.008)			(0.004)
Num.Obs.	34173	21269	31139	33288	14695	23038
R2	0.056	0.060	0.167	0.056	0.051	0.109
R2 Adj.	0.055	0.059	0.167	0.056	0.050	0.109
AIC	142018.0	87961.4	125369.3	76066.4	33030.3	51075.8
BIC	142119.3	88072.9	125544.6	76167.4	33136.6	51244.7
Log.Lik.	-70997.024	-43966.686	-62663.661	-38021.220	-16501.135	-25516.896
RMSE	1.93	1.91	1.81	0.76	0.74	0.73

- $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Results Table for GSS Models 13-18

	M13	M14	M15	M16	M17	M18
Workplace contact	-0.025	-0.016	0.013	-0.139**	-0.036	-0.005
	(0.123)	(0.130)	(0.116)	(0.050)	(0.074)	(0.069)
Decade: 2000s	0.040	0.075	0.083	-0.067*	-0.052	-0.034
	(0.066)	(0.069)	(0.062)	(0.027)	(0.039)	(0.037)
Decade: 2010s	-0.157*	-0.104	-0.057	-0.014	-0.012	-0.019
	(0.064)	(0.067)	(0.060)	(0.026)	(0.038)	(0.036)
Race: Black	-0.759***	-0.789***	-0.193*	-0.278***	-0.321***	-0.158***
	(0.076)	(0.080)	(0.075)	(0.031)	(0.045)	(0.044)
Race: Other	-0.509***	-0.513***	-0.220*	-0.151***	-0.122*	-0.070
	(0.090)	(0.095)	(0.086)	(0.037)	(0.055)	(0.051)
Sex: Female	-0.424***	-0.418***	-0.299***	-0.018	-0.021	0.009
	(0.049)	(0.051)	(0.046)	(0.020)	(0.029)	(0.027)
Age	0.010***	0.007***	0.008***	0.001	0.000	-0.000
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Education	0.048***	0.044***	0.065***	-0.018***	-0.020***	-0.011*
	(0.008)	(0.009)	(0.008)	(0.003)	(0.005)	(0.005)
Unemployment		0.357***			0.073*	
		(0.055)			(0.031)	
Income		-0.004**			-0.000	
		(0.001)			(0.001)	
Government trust			-0.018			0.058**
			(0.033)			(0.020)
Not strong democrat			0.453***			0.142**
			(0.082)			(0.049)
Independent, democrat leaning			0.366***			0.093+
			(0.088)			(0.052)
Independent			0.728***			0.251***
			(0.086)			(0.051)
Independent, republican leaning			1.425***			0.335***
			(0.101)			(0.060)
Not strong republican			1.396***			0.354***
			(0.091)			(0.055)
Strong republican			1.762***			0.487***
			(0.105)			(0.062)
0ther party			1.289***			0.371***
			(0.160)			(0.096)
Political Views			0.263***			0.086***

			(0.019)			(0.011)
Num.Obs.	6466	5887	6156	6118	2808	2970
R2	0.047	0.055	0.207	0.027	0.029	0.118
R2 Adj.	0.045	0.054	0.205	0.026	0.026	0.113
AIC	26963.2	24551.5	24551.9	14081.2	6452.5	6545.8
BIC	27030.9	24631.7	24679.7	14148.4	6523.7	6659.7
Log.Lik.	-13471.596	-12263.754	-12256.949	-7030.615	-3214.227	-3253.881
RMSE	1.94	1.94	1.77	0.76	0.76	0.72

- $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6: Results Table for GSS Models 19-24

	M19	M20	M21	M22	M23	M24
Contact	-0.270***	-0.236	-0.244	0.063***	0.055***	0.033*
	(0.056)	(0.171)	(0.170)	(0.013)	(0.016)	(0.015)
Decade: 2000s	-0.033	-0.254*	-0.301**	0.008	-0.012	-0.009
	(0.037)	(0.099)	(0.099)	(0.009)	(0.011)	(0.010)
Decade: 2010s	-0.170***			0.043***	0.023*	0.027**
	(0.037)			(0.009)	(0.011)	(0.010)
Race: Black	-0.548***	-0.892***	-0.819***	0.303***	0.287***	0.216***
	(0.042)	(0.155)	(0.158)	(0.010)	(0.012)	(0.012)
Race: Other	0.068	0.398+	0.646**	0.096***	0.093***	0.050***
	(0.053)	(0.219)	(0.225)	(0.013)	(0.015)	(0.014)
Sex: Female	-0.091**	-0.065	-0.021	0.041***	0.037***	0.017*
	(0.028)	(0.092)	(0.091)	(0.007)	(0.008)	(0.007)
Age	0.005***	0.013***	0.012***	-0.001***	-0.001**	-0.001***
	(0.001)	(0.004)	(0.004)	(0.000)	(0.000)	(0.000)
Education	-0.053***	-0.057**	-0.055**	0.013***	0.012***	0.008***
	(0.005)	(0.017)	(0.017)	(0.001)	(0.001)	(0.001)
Unemployment		-0.044			-0.010	
		(0.101)			(0.009)	
Income		0.003			0.000	
		(0.002)			(0.000)	
Government trust			0.039			-0.014**
			(0.068)			(0.005)
Not strong democrat			0.330*			-0.083***
			(0.165)			(0.013)
Independent, democrat leaning			-0.032			-0.077***
			(0.184)			(0.014)
Independent			0.536**			-0.138***
			(0.181)			(0.014)
Independent, republican leaning			0.242			-0.166***
			(0.188)			(0.016)
Not strong republican			0.368*			-0.175***
			(0.169)			(0.015)
Strong republican			0.339+			-0.222***
			(0.198)			(0.017)

0ther party			0.967*			-0.159***
			(0.455)			(0.026)
Political Views			0.055			-0.041***
			(0.036)			(0.003)
Num.Obs.	6489	726	729	8820	5517	5773
R2	0.066	0.100	0.139	0.133	0.126	0.236
R2 Adj.	0.065	0.089	0.119	0.132	0.125	0.234
AIC	19925.8	2380.2	2378.5	4696.1	2253.3	1574.5
BIC	19993.6	2430.7	2461.2	4767.0	2332.7	1701.0
Log.Lik.	-9952.909	-1179.122	-1171.252	-2338.071	-1114.643	-768.228
RMSE	1.12	1.23	1.21	0.32	0.30	0.28

- p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Appendix C: Regression Table with Deservingness and Feelings Models

Table 7: Survey Regression Results for Deservingness and Overall Prejudice

	Model 1	Model 2
Intercept	3.915***	4.753***
	(0.072)	(0.103)
raceWhite	-0.141***	-0.134*
	(0.039)	(0.054)
condition: imagined contact	0.139+	0.336**
	(0.082)	(0.119)
Age: 34	-0.029	-0.049
	(0.036)	(0.050)
Age: 36	-0.025	-0.030
	(0.036)	(0.050)
Employment duration: 4 years	0.093**	0.003
	(0.036)	(0.050)
Employment duration: 7 years	0.178***	0.163**
	(0.036)	(0.050)
Layoff reason: poor performance	-0.835***	-1.244***
	(0.030)	(0.041)
Job title: janitor	0.017	-0.005
	(0.036)	(0.050)
Job title: warehouse assistant	0.029	-0.013
	(0.036)	(0.050)
Job search: actively applying & interviewing	0.558***	0.783***
	(0.029)	(0.041)
raceWhite × condition: imagined contact	0.001	-0.086
	(0.055)	(0.077)
SD (Intercept: ResponseId)	0.722	1.057
SD (Observations)	0.784	1.085
Num. Obs.	3200	3200
R^2 Marginal	0.191	0.202
R^2 Conditional	0.563	0.591
AIC	8415.0	10531.7
BIC	8500.0	10616.7
ICC	0.5	0.5
RMSE	0.74	1.02

- $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix D: ANOVA Results

Table 8: ANOVA Results Table

term	df.residual	residual.deviance	df	deviance	p.value
chosen ~ race + Age + Employment_duration + Layoff_reason + Job_title + Job_search	1584	2195.899	NA	NA	NA
chosen ~ (race + Age + Employment_duration + Layoff_reason + Job_title + Job_search) * condition	1574	2179.387	10	16.51198	0.0858844

Appendix E: Regression Table with Redistribution Preferences Models

Table 9: Survey Regression Results

	M1	M2	M3
Intercept	3.593***	3.510***	-0.083
	(0.073)	(0.077)	(0.092)
condition: imagined contact	0.043	0.142	0.100
	(0.104)	(0.109)	(0.130)
Num. Obs.	400	400	400
R^2	0.000	0.004	0.001
R^2 Adj.	-0.002	0.002	-0.001
AIC	1167.2	1209.5	1349.9
BIC	1179.2	1221.5	1361.9
Log Likelihood	-580.590	-601.768	-671.952
F-statistic	0.168	1.703	0.590
RMSE	1.03	1.09	1.30

- $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

9. BIBLIOGRAPHY

Alesina, Alberto, and Edward Glaeser. 2004. *Fighting Poverty in the US and Europe.* Oxford: Oxford University Press.

Aarøe, Lene, and Michael Bang Petersen. 2014. "Crowding Out Culture: Scandinavians and Americans Agree on Social Welfare in the Face of Deservingness Cues." *The Journal of Politics* 76 (3): 684–97. https://doi.org/10.1017/S002238161400019X.

Alesina, Alberto, and Edward Glaeser. 2021. "Fighting Poverty in the US and Europe: A World of Difference."

Alesina, Alberto, Elie Murard, and Hillel Rapoport. 2021. "Immigration and Preferences for Redistribution in Europe." *Journal of Economic Geography* 21 (6): 925–54. https://doi.org/10.1093/jeg/lbab002.

Allport, Gordon W. 1954. *The Nature of Prejudice*. Addison-Wesley. https://scholar.google.com/scholar?cluster=11040171997537057872&hl=en&oi=scholarr.

Alt, James, and Torben Iversen. 2017. "Inequality, Labor Market Segmentation, and Preferences for Redistribution." *American Journal of Political Science* 61 (1): 21–36. https://doi.org/10.1111/ajps.12264.

Amir, Yehuda. 1969. "Contact Hypothesis in Ethnic Relations." *Psychological Bulletin* 71 (5): 319–42. https://doi.org/10.1037/h0027352.

Attewell, David. 2020. "Deservingness Perceptions, Welfare State Support and Vote Choice in Western Europe." *West European Politics* 44 (3): 611–34. https://doi.org/10.1080/01402382.2020.1715704.

Batson, C. Daniel, Marina P. Polycarpou, Eddie Harmon-Jones, Heidi J. Imhoff, Erin C. Mitchener, Lori L. Bednar, Tricia R. Klein, and Lori Highberger. 1997. "Empathy and Attitudes: Can Feeling for a Member of a Stigmatized Group Improve Feelings toward the Group?" *Journal of Personality and Social Psychology* 72 (1): 105–18. https://doi.org/10.1037/0022-3514.72.1.105.

Becker, Bastian. 2021. "Significant Others? Social Groups, Income Expectations, and Redistributive Preferences." *Social Science Research* 100 (November):102612. https://doi.org/10.1016/j.ssresearch.2021.102612.

Bor, Alexander, and Gábor Simonovits. 2021. "Empathy, Deservingness, and Preferences for Welfare Assistance: A Large-Scale Online Perspective-Taking Experiment." *Political Behavior* 43 (3): 1247–64. https://doi.org/10.1007/s11109-021-09728-4.

Borges, Fabián A. 2022. "It's Not Me, It's You: Self-Interest, Social Affinity, and Support for Redistribution in Latin America." *Latin American Politics and Society* 64 (3): 1–36. https://doi.org/10.1017/lap.2022.10.

Brown, Rupert, and Jenny Paterson. 2016. "Indirect Contact and Prejudice Reduction: Limits and Possibilities." *Current Opinion in Psychology*, Intergroup relations, 11 (October):20–24. https://doi.org/10.1016/j.copsyc.2016.03.005.

Brown-Iannuzzi, Jazmin L., Erin Cooley, Christopher K. Marshburn, Stephanie E. McKee, and Ryan F. Lei. 2021. "Investigating the Interplay Between Race, Work Ethic Stereotypes, and Attitudes Toward Welfare Recipients and Policies." *Social Psychological and Personality Science* 12 (7): 1155–64. https://doi.org/10.1177/1948550620983051.

Brown-Iannuzzi, Jazmin L., Erin Cooley, Stephanie E. McKee, and Charly Hyden. 2019. "Wealthy Whites and Poor Blacks: Implicit Associations between Racial Groups and Wealth Predict Explicit Opposition toward Helping the Poor." *Journal of Experimental Social Psychology* 82 (May):26–34. https://doi.org/10.1016/j.jesp.2018.11.006.

Brown-Iannuzzi, Jazmin L., Ron Dotsch, Erin Cooley, and B. Keith Payne. 2017. "The Relationship Between Mental Representations of Welfare Recipients and Attitudes Toward Welfare." *Psychological Science* 28 (1): 92–103. https://doi.org/10.1177/0956797616674999.

Cavaillé, Charlotte, and Kris-Stella Trump. 2015. "The Two Facets of Social Policy Preferences." *The Journal of Politics* 77 (1): 146–60. https://doi.org/10.1086/678312.

Christiani, Leah, Nathan J. Kelly, and Jana Morgan. 2024. "The Structural Origins of Racial Inequality and Attitudes Toward Redistribution." *Race and Social Problems*, November. https://doi.org/10.1007/s12552-024-09427-9.

Coban, Mustafa. 2020. "Redistribution Preferences, Attitudes towards Immigrants, and Ethnic Diversity." *Discussion Paper*.

Cooley, Erin, Jazmin L. Brown-Iannuzzi, Ryan F. Lei, William Cipolli, and Lauren E. Philbrook. 2024. "Beliefs That White People Are Poor, Above and Beyond Beliefs That Black People Are Poor, Predict White (But Not Black) Americans' Attitudes Toward Welfare Recipients and Policy." *Personality and Social Psychology Bulletin* 50 (3): 450–65. https://doi.org/10.1177/01461672221139071.

Crisp, Richard J., and Rhiannon N. Turner. 2009. "Can Imagined Interactions Produce Positive Perceptions? Reducing Prejudice through Simulated Social Contact." *American Psychologist* 64 (4): 231–40. https://doi.org/10.1037/a0014718.

Crisp, Richard J., and Rhiannon N. Turner. 2012. "The Imagined Contact Hypothesis." In *Advances in Experimental Social Psychology*, 46:125–82. Elsevier. https://doi.org/10.1016/B978-0-12-394281-4.00003-9.

Dahlberg, Matz, Karin Edmark, and Heléne Lundqvist. 2012. "Ethnic Diversity and Preferences for Redistribution." *Journal of Political Economy* 120 (1): 41–76. https://doi.org/10.1086/665800.

Deutsch, Morton, and Mary Evans Collins. 1951. *Interracial Housing: A Psychological Evaluation of a Social Experiment*. Minneapolis: University of Minnesota Press.

Duman, Anil. 2019. “Subjective Social Class and Individual Preferences for Redistribution: Cross-Country Empirical Analysis.” *International Journal of Social Economics* 47 (2): 173–89. https://doi.org/10.1108/IJSE-06-2019-0377.

Eger, Maureen A. 2010. “Even in Sweden: The Effect of Immigration on Support for Welfare State Spending.” *European Sociological Review* 26 (2): 203–17.

Federico, Christopher M. 2004. “When Do Welfare Attitudes Become Racialized? The Paradoxical Effects of Education.” *American Journal of Political Science* 48 (2): 374–91. https://doi.org/10.1111/j.0092-5853.2004.00076.x.

Finseraas, Henning. 2012. “Poverty, Ethnic Minorities among the Poor, and Preferences for Redistribution in European Regions.” *Journal of European Social Policy* 22 (2): 164–80. https://doi.org/10.1177/0958928711433655.

Finseraas, Henning, and Andreas Kotsadam. 2017. “Does Personal Contact with Ethnic Minorities Affect Anti-Immigrant Sentiments? Evidence from a Field Experiment.” *European Journal of Political Research* 56 (3): 703–22. https://doi.org/10.1111/1475-6765.12199.

Fiske, Susan T., Amy J. C. Cuddy, Peter Glick, and Jun Xu. 2018. “A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow from Perceived Status and Competition.” In *Social Cognition*. Routledge.

Ford, Robert. 2016. “Who Should We Help? An Experimental Test of Discrimination in the British Welfare State.” *Political Studies* 64 (3): 630–50. https://doi.org/10.1111/1467-9248.12194.

Gilens, Martin. 1999. *Why Americans Hate Welfare: Race, Media, and the Politics of Antipoverty Policy*. University of Chicago Press.

Gimpelson, Vladimir, and Daniel Treisman. 2018. “Misperceiving Inequality.” *Economics & Politics* 30 (1): 27–54. https://doi.org/10.1111/ecpo.12103.

Gingrich, Jane, and Ben Ansell. 2012. “Preferences in Context: Micro Preferences, Macro Contexts, and the Demand for Social Policy.” *Comparative Political Studies* 45 (12): 1624–54. https://doi.org/10.1177/0010414012463904.

Hacker, Jacob S., and Paul Pierson. 2010. “Winner-Take-All Politics and Political Science: A Response.” *Politics & Society* 38 (2): 266–82. https://doi.org/10.1177/0032329210365050.

Hansen, Kristina Jessen. 2019. “Who Cares If They Need Help? The Deservingness Heuristic, Humanitarianism, and Welfare Opinions.” *Political Psychology* 40 (2): 413–30. https://doi.org/10.1111/pops.12506.

Harell, Allison, Stuart Soroka, and Shanto Iyengar. 2016. “Race, Prejudice and Attitudes toward Redistribution: A Comparative Experimental Approach.” *European Journal of Political Research* 55 (4): 723–44. https://doi.org/10.1111/1475-6765.12158.

Hooijer, Gerda. 2021. "'They Take Our Houses': Benefit Competition and the Erosion of Support for Immigrants' Social Rights." *British Journal of Political Science* 51 (4): 1381–1401. https://doi.org/10.1017/S0007123420000150.

Houle, Christian. 2017. "Inequality, Ethnic Diversity, and Redistribution." *The Journal of Economic Inequality* 15 (1): 1–23. https://doi.org/10.1007/s10888-016-9340-8.

Hurwitz, Jon, and Mark Peffley. 2005. "Playing the Race Card in the Post–Willie Horton Era: The Impact of Racialized Code Words on Support for Punitive Crime Policy." *Public Opinion Quarterly* 69 (1): 99–112. https://doi.org/10.1093/poq/nfi004.

Imbens, Guido W., and Donald B. Rubin. 2015. *Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781139025751.

Kootstra, Anouk. 2016. "Deserving and Undeserving Welfare Claimants in Britain and the Netherlands: Examining the Role of Ethnicity and Migration Status Using a Vignette Experiment." *European Sociological Review* 32 (3): 325–38. https://doi.org/10.1093/esr/jcw010.

Kreitzer, Rebecca J., Elizabeth A. Maltby, and Candis Watts Smith. 2022. "Fifty Shades of Deservingness: An Analysis of State-Level Variation and Effect of Social Constructions on Policy Outcomes." *Journal of Public Policy* 42 (3): 436–64. https://doi.org/10.1017/S0143814X21000222.

Lanford, Daniel, and Jill and Quadagno. 2022. "Identifying the Undeserving Poor: The Effect of Racial, Ethnic, and Anti-Immigrant Sentiment on State Medicaid Eligibility." *The Sociological Quarterly* 63 (1): 1–20. https://doi.org/10.1080/00380253.2020.1797596.

Lau, Holning, Charles Q. Lau, and Kelley Loper. 2014. "Public Opinion in Hong Kong about Gays and Lesbians: The Impact of Interpersonal and Imagined Contact." *International Journal of Public Opinion Research* 26 (3): 301–22. https://doi.org/10.1093/ijpor/edu016.

Leeper, Thomas J., Sara B. Hobolt, and James Tilley. 2020. "Measuring Subgroup Preferences in Conjoint Experiments." *Political Analysis* 28 (2): 207–21. https://doi.org/10.1017/pan.2019.30.

Lind, Jo Thori. 2007. "Fractionalization and the Size of Government." *Journal of Public Economics* 91 (1–2): 51–76.

Lupu, Noam, and Jonas Pontusson. 2011. "The Structure of Inequality and the Politics of Redistribution." *American Political Science Review* 105 (2): 316–36. https://doi.org/10.1017/S0003055411000128.

Luttmer, Erzo F. P. 2001. "Group Loyalty and the Taste for Redistribution." *Journal of Political Economy* 109 (3): 500–528. https://doi.org/10.1086/321019.

Magni, Gabriele. 2021. "Economic Inequality, Immigrants and Selective Solidarity: From Perceived Lack of Opportunity to In-Group Favoritism." *British Journal of Political Science* 51 (4): 1357–80. https://doi.org/10.1017/S0007123420000046.

———. 2024. “Boundaries of Solidarity: Immigrants, Economic Contributions, and Welfare Attitudes.” *American Journal of Political Science* 68 (1): 72–92. https://doi.org/10.1111/ajps.12707.

Mau, Steffen, and Christoph Burkhardt. 2009. “Migration and Welfare State Solidarity in Western Europe.” *Journal of European Social Policy* 19 (3): 213–29. https://doi.org/10.1177/0958928709104737.

Meer, Tom van der, and Tim Reeskens. 2021. “Welfare Chauvinism in the Face of Ethnic Diversity: A Vignette Experiment across Diverse and Homogenous Neighbourhoods on the Perceived Deservingness of Native and Foreign-Born Welfare Claimants.” *European Sociological Review* 37 (1): 89–103. https://doi.org/10.1093/esr/jcaa037.

Miles, Eleanor, and Richard J. Crisp. 2014. “A Meta-Analytic Test of the Imagined Contact Hypothesis.” *Group Processes & Intergroup Relations* 17 (1): 3–26. https://doi.org/10.1177/1368430213510573.

Myers, C. Daniel, Kirill Zhirkov, and Kristin Lunz Trujillo. 2024. “Who Is ‘On Welfare’? Validating the Use of Conjoint Experiments to Measure Stereotype Content.” *Political Behavior* 46 (1): 89–110. https://doi.org/10.1007/s11109-022-09815-0.

NORC at the University of Chicago. 2025. “About: NORC at the University of Chicago.” *GSS*. Accessed May 1, 2025. https://gss.norc.org/us/en/gss/about-the-gss.html.

Oliver, J. Eric, and Janelle Wong. 2003. “Intergroup Prejudice in Multiethnic Settings.” *American Journal of Political Science* 47 (4): 567–82. https://doi.org/10.1111/1540-5907.00040.

van Oorschot, Wim. 2000. “Who Should Get What, and Why? On Deservingness Criteria and the Conditionality of Solidarity among the Public.” *Policy & Politics* 28 (1): 33–48. https://doi.org/10.1332/0305573002500811.

van Oorschot, Wim.2006. “Making the Difference in Social Europe: Deservingness Perceptions among Citizens of European Welfare States.” *Journal of European Social Policy* 16 (1): 23–42. https://doi.org/10.1177/0958928706059829.

Paluck, Elizabeth Levy, and Donald P. Green. 2009. “Prejudice Reduction: What Works? A Review and Assessment of Research and Practice.” *Annual Review of Psychology* 60: 339–67. https://doi.org/10.1146/annurev.psych.60.110707.163607.

Paluck, Elizabeth Levy, Seth A. Green, and Donald P. Green. 2019. “The Contact Hypothesis Re-Evaluated.” *Behavioural Public Policy* 3 (2): 129–58. https://doi.org/10.1017/bpp.2018.25.

Paluck, Elizabeth Levy, Roni Porat, Chelsey S. Clark, and Donald P. Green. 2021. “Prejudice Reduction: Progress and Challenges.” *Annual Review of Psychology* 72 (1): 533–60. https://doi.org/10.1146/annurev-psych-071620-030619.

Petersen, Michael Bang. 2012. “Social Welfare as Small-Scale Help: Evolutionary Psychology and the Deservingness Heuristic.” *American Journal of Political Science* 56 (1): 1–16. https://doi.org/10.1111/j.1540-5907.2011.00545.x.

Pettigrew, Thomas F. 1998. “Intergroup Contact Theory.” *Annual Review of Psychology* 49 (1): 65–85. https://doi.org/10.1146/annurev.psych.49.1.65.

Pettigrew, Thomas, and Linda Tropp. 2006. “A Meta-Analytic Test of Intergroup Contact Theory.” *Journal of Personality and Social Psychology* 90 (May):751–83. https://doi.org/10.1037/0022-3514.90.5.751.

Piketty, Thomas. 2015. “About *Capital in the Twenty-First Century*.” *American Economic Review* 105 (5): 48–53. https://doi.org/10.1257/aer.p20151060.

Quattrociocchi, Jeff. 2018. “Group Income and Individual Preferences for Redistribution.” *Canadian Journal of Economics/Revue Canadienne d’économique* 51 (4): 1386–1418. https://doi.org/10.1111/caje.12358.

Rehm, Philipp. 2011. “Social Policy by Popular Demand.” *World Politics* 63 (2): 271–99.

Rueda, David. 2018. “Food Comes First, Then Morals: Redistribution Preferences, Parochial Altruism, and Immigration in Western Europe.” *The Journal of Politics* 80 (1): 225–39. https://doi.org/10.1086/694201.

Rueda, David, and Jonas Pontusson. 2010. “Individual Preferences for Redistribution in Western Europe: Self-Interest, Political Articulation, Altruism and Identity.” *Working Paper*.

Savage, Lee. 2023. “Preferences for Redistribution, Welfare Chauvinism, and Radical Right Party Support in Central and Eastern Europe.” *East European Politics and Societies* 37 (02): 584–607.

Schuhl, Jennifer, Lambert ,Eric, and Armand and Chatard. 2019. “Can Imagination Reduce Prejudice Over Time? A Preregistered Test of the Imagined Contact Hypothesis.” *Basic and Applied Social Psychology* 41 (2): 122–31. https://doi.org/10.1080/01973533.2019.1579719.

White, Fiona A., Islam Borinca, Loris Vezzali, Katherine J. Reynolds, Johanna K. Blomster Lyshol, Stefano Verrelli, and Juan M. Falomir-Pichastor. 2021. “Beyond Direct Contact: The Theoretical and Societal Relevance of Indirect Contact for Improving Intergroup Relations.” *Journal of Social Issues* 77 (1): 132–53. https://doi.org/10.1111/josi.12400.

Winter, Nicholas J. G. 2006. “Beyond Welfare: Framing and the Racialization of White Opinion on Social Security.” *American Journal of Political Science* 50 (2): 400–420. https://doi.org/10.1111/j.1540-5907.2006.00191.x.

Winter, Nicholas J. G. 2008. *Dangerous Frames: How Ideas about Race and Gender Shape Public Opinion*. University of Chicago Press.

Ziller, Conrad, and Romana Careja. 2021. “Personal and Contextual Foundations of Welfare Chauvinism in Western Europe.” *SSRN Electronic Journal*, January. https://doi.org/10.2139/ssrn.3797944.