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Theater as an Intervention for Prejudice Reduction: Primary and Secondary Transfer Effects of Intergroup Contact

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Master in Psychology of Intercultural Relations

Supervisor:

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November, 2022



CIÊNCIAS SOCIAIS
E HUMANAS

Department of Social and Organizational Psychology

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To

*All human beings, whom I hope will benefit from social science research that seeks to make
the world a better place.*

And

*To all individuals who are a part of a minority or discriminated group. May we all one day
live in a world of peace and justice and be free from the harms of prejudice and
discrimination.*

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Resumo

O preconceito continua a ser um problema social persistente que resulta em discriminação, desigualdades, e violência. Tem sido feita muita investigação básica e aplicada sobre as diferentes formas de reduzir preconceitos, sendo a teoria do contacto intergrupais, que diz que o contacto positivo entre grupos sociais pode melhorar as relações intergrupais, uma das mais estudadas. Desde que Gordon Allport propôs a teoria há quase 70 anos, os investigadores desenvolveram a teoria e encontraram efeitos mais alargados da redução dos preconceitos para outros grupos. Estudos recentes sugerem que a utilização de peças de teatro como veículo de redução de preconceito (ou seja, contacto indirecto). Com base na literatura sobre o contacto directo e indirecto, o presente estudo examinou se, assistir ao teatro ao vivo pode reduzir o preconceito e melhorar as atitudes em relação ao grupo representado na peça, bem como generalizar a outros grupos que não foram referidos na peça (ou seja, o efeito secundário de transferência). Especificamente, examinamos as atitudes das pessoas antes (Tempo 1) e depois (Tempo 2) de assistirem a uma peça sobre imigrantes (condição experimental) versus um tópico não relacionado (condição de controlo). 37 participantes americanos brancos participaram no estudo, no entanto, considerando o tamanho muito pequeno da amostra, tivemos de realizar apenas testes não paramétricos, não mostrando diferenças entre as atitudes dos participantes em relação a múltiplos grupos sociais. Tendo em conta estas grandes limitações, não podemos tirar quaisquer conclusões do estudo actual e é necessária mais investigação para testar os efeitos hipotéticos.

Palavras-chave: contato intergrupais, generalização, liberalização cognitiva, redução do preconceito

Abstract

Prejudice continues to be a persistent social problem that results in discrimination, inequalities, and violence. Much basic and applied research have been done on ways to reduce prejudice with the most common theory studied being intergroup contact theory, which says that positive contact between group members can improve intergroup relations. Since Gordon Allport proposed the theory almost 70 years ago, researchers have grown the theory and found spillover effects in prejudice reduction to other groups. One understudied area is research into using plays or theater as a vehicle for prejudice reduction (i.e., indirect contact). Building on this literature on direct and indirect intergroup contact, the current study examined if attending live theater may reduce prejudice and raise positive attitudes toward the group portrayed in the play, and generalize to other groups that were not contacted in the play (i.e., secondary transfer effect). Specifically, we assessed people's attitudes before (Time 1) and after (Time 2) they watched a play about immigrants (experimental condition) vs an unrelated topic (control condition).³⁷ White American participants participated in study, however considering the very small sample size we had to conduct only non-parametric test, showing no differences between participants attitudes towards multiple social groups. Considering this major limitation, we cannot make any conclusions from the current study and further research is needed to test the hypothesized effects.

Keywords: Intergroup contact, secondary effects, cognitive liberalization, prejudice reduction

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Introduction

Approximately 50% of respondents from minority groups in the United States and European Union (e.g., migrants, LGBT, etc.) said that they have personally felt discriminated against or harassed in the last year (Bell, 2017; Farkas, 2017). In addition to being widespread, prejudice may have far reaching implications for intergroup relations and can escalate to extreme hatred such as torture, murder, and even genocide (Hamer et al., 2019; Sparkman & Eidelman, 2018; McFarland et al., 2012). Prejudice can lead to harmful and destructive consequences for individuals, groups, and nations and by better understanding how prejudice works we can help to prevent its negative outcomes. Solving the problems of prejudice may take some creativity and a novel avenue that is still underexplored is promoting intergroup contact indirectly, via live theater and its influence on prejudice reduction.

Contact theory is one of the most effective theories that researchers study and put into practice to reduce prejudice and raise positive attitudes toward outgroups. The idea is that positive intergroup contact can improve intergroup relations. Positive intergroup contact has been shown to decrease prejudice toward outgroup members and raise positive attitudes toward those groups (White et al., 2021; Rathje et al., 2021; Vezzali et al., 2021; Paluck et al., 2021; Boin et al., 2021). The outcome of reduced prejudice and increased tolerance and positive attitudes toward one outgroup has also been shown to extend to similar outgroups (Vezzali et al., 2021; Boin et al., 2021; Lemmer & Wagner, 2015). If someone has positive contact with an immigrant, they not only would feel more positively toward immigrants but also possibly Muslims, Black people, Asian people, etc. (Brueneau et al., 2018; Sparkman & Hamer, 2020). Intergroup contact can take a direct form (face to face) and indirect forms (extended- ingroup friend with outgroup friend, electronic- internet contact, imagined- mental visualization, vicarious- observation of ingroup-outgroup interaction, and parasocial- media exposure (White et al., 2021, Bews, 2021; Rathje et al., 2021; Gimmestad & de Chiara, 1982).

Building on this research, the current study examines if intergroup contact through a theater performance will reduce prejudice toward the group (immigrants) depicted in the play. Theatre performances and activities have been shown to have various benefits (i.e. prejudice reduction, attitude changes, tolerance) for individuals and groups of people (Rathje

et al., 2021; Greene et al., 2018; Greene et al., 2014; Gimmestad & de Chiara, 1982). Additionally, building on research showing that the positive effects of contact can generalize to other non-involved groups (i.e., secondary transfer effect) as well as to other outcomes such as cognitive flexibility, social dominance orientation (Vezzali et al., 2021; Meleady et al., 2020; Meleady et al., 2019), we also examine if the theater performance may cause any secondary or tertiary transfer effects. This is important because different forms of intergroup contact is thought to help decrease social dominance orientation (SDO), which has been identified as a common denominator between many types of prejudices like racism, sexism, homophobia, and so on (Meleady et al., 2020; Meleady et al., 2019; Hamer et al., 2019; Pratto et al., 1994). SDO and authoritarianism are shown to have the largest positive correlates with generalized prejudice and the tendency for one prejudice to correlate with others is well established in different times and places (Hamer et al., 2019; Pratto et al., 2013; McFarland, 2010). If watching a theatre performance or other indirect intergroup contact experience can reduce SDO, it may also reduce prejudice towards various outgroups.

Literature Review

1.1 Positive Intergroup Contact

Prejudice and intergroup conflicts pose major challenges in society. Many studies have been done to see how prejudice takes form and how different strategies can work to diminish that prejudice (Polluck et al., 2021; Brown & Patterson, 2016; Polluck et al., 2009). Positive contact between members of different groups is one such method that can have extensive effects on diminishing prejudice (Martiny et al., 2022; Rathje et al., 2021; Paluck et al., 2021; Polluck et al., 2009; Allport, 1954). The basic premise of contact theory is that by having positive intergroup contact with members of an outgroup, prejudice will be reduced toward that outgroup. The connection between prejudice reduction and positive intergroup contact is strengthened by conditions such as equal status, cooperation, common goals, and institutional support (Martiny et al., 2022; Meleady et al., 2020; Meleady et al., 2019; Allport, 1954).

A rigid mentality of “us” and “them” becomes weaker with positive contact and multicultural experiences, particularly contact with outgroup members and contact with cultural elements, such as food, music, clothing, entertainment, and so forth (Sparkman & Hamer, 2020; Sparkman & Eidelman, 2018; McFarland et al., 2012). These different forms of contact help individuals alter the ways that they categorize and re-categorize things and people to shift perceptions from “us” and “them” to a more inclusive “we”. This shift (social re-categorization) changes the way people think about group boundaries, the ingroup and outgroup, and common identities that we share with different groups (Paluck, et al., 2021; Schellhaas & Dovidio, 2016; Paluck et al., 2009). The rationality is that when people are categorized into ingroups and outgroups, this is enough to increase intergroup bias (social categorization) and when group boundaries are questioned, rearranged, or become flexible, this is enough to reduce intergroup bias (social re-categorization).

Social categorization and re-categorization are necessary to human perception and social functioning and occurs with different forms of contact that can be effective in reducing prejudice. Some of those forms are vicarious contact using media like books, virtual reality programs, and television, extended contact by knowing an ingroup friend has an outgroup friend, imagined contact using imagination, and direct contact of having cross-group personal

friendships (Christofi & Michael-Grigoriou, 2018; Brown & Patterson, 2016; Allport, 1954). Having less ingroup loyalty, favoritism, identification, as well as perceiving an outgroup member to be characteristic of their outgroup can also enhance the positive attitudes of intergroup contact in both minority and majority groups (Boin et al., 2021; Bruneau et al., 2018; Brown & Patterson, 2016). This is partly due to the fact that connecting with outgroup members under certain circumstances can enhance empathy, increase perspective-taking, and decrease anxiety. Particularly when contact is designed to encourage equal status, shared goals, cooperation, support of institutional authorities, or developing a comradery with an outgroup member is when social re-categorization can be harnessed for prejudice reduction (Boin et al., 2021; Schellhaas & Dovidio, 2016; Allport, 1954).

1.2 Direct and Indirect Contact

Direct contact involves face-to-face contact or interaction between individuals that are part of different ingroups (White et al., 2021; Paluck, et al., 2021; Paluck & Green, 2009; Allport, 1954). Indirect contact occurs through other means and does not involve any direct or physical contact. Although direct contact was one of the first focus topics in prejudice research, in today's society, direct contact between group members can be difficult to achieve at times. This is due in part to segregated contexts (such as religious, ethnic, refugee, or neighborhood separation), intergroup anxiety, war or conflict situations, unbalanced group ratios (immigrants or people with a disability), or invisible outgroups (LGBT+ or people with mental illness) (White et al., 2021; Bews, 2021; Logie et al., 2019; Totah & Khoury, 2018; Allport, 1954).

Some different forms of indirect contact are extended, electronic, imagined, vicarious, and parasocial (White et al., 2021; Bond, 2021; Chrisofi et al., 2018; Brown & Patterson, 2016; Shiappa et al., 2005). Extended contact is about having an ingroup friend that is known to have outgroup friends (White et al., 2021; Bond, 2021; Brown & Patterson, 2016). Only the friend has contact with the outgroup member, but knowing that fact reduced prejudice and raises positive attitudes toward that outgroup in general. Electronic or E-contact occurs via a computer or the internet where ingroup and outgroup members interact with each other. E-contact can be used as an intervention to meet Allport's four optimal conditions for contact: equal status, cooperation with each other, working toward a common goal, and authority or institutional support (parent, teacher, moderator, etc.) (White et al., 2021; Brown & Patterson, 2016; Allport, 1954). Imagined contact relates to imagining or

thinking of a positive interaction between the self and a member of an outgroup (White et al., 2021; Chrisofi et al., 2018; Brown & Patterson, 2016). This type of indirect contact can be a good first step before other forms of contact in order to reduce anxiety, threat, and fear during high-prejudice situations. Vicarious contact consists of simple observation of an interaction with individuals who belong to different groups (White et al., 2021; Brown & Patterson, 2016; Vezzali et al., 2015). This may occur while sitting on a park bench or through media sources such as watching television, listening to the radio or music, reading books, and so forth.. Parasocial contact posits that simple positive exposure to outgroups, typically through the media, live performance, or so forth is enough to reduce prejudice (White et al, 2021; Bews, 2021; Rathje et al., 2021; Greene et al., 2018; Greene et al., 2014; Brown & Patterson, 2016). This theory proposes that this exposure is enough to reduce prejudice similar to the way that direct interpersonal contact does.

Taking these physical or psychological barriers into account, indirect contact has shown that it's not just a replacement for direct contact, but a potent avenue to reduce prejudice to the same degree or more as direct contact (White et al., 2021; Bews et al., 2021; Paluck et al., 2021; Brown & Patterson, 2016). One of the benefits of indirect contact is that it can be more easily and effectively implemented in situations where there is homogenization, segregation, or conflict (El-Dirani et al., 2022; Feuchte et al., 2020; Logie et al., 2019; Totah & Khoury, 2018; Skeiker, 2015). It can also have an impact on a greater scale rather than a single person-to-person like direct contact, so more people can benefit from the prejudice reduction effects at a time (White et al., 2021; Bews et al., 2021; Paluck et al., 2021; Brown & Patterson, 2016; Etherton & Prentki, 2006; Day, 2002).

Although direct contact can be very effective, it can be difficult and unrealistic to achieve because it requires that every individual to be in contact with an outgroup member for the prejudice reduction effects to appear (White et al., 2021; Bond, 2021; Brown & Patterson, 2016; Gimmestad & Chiara, 1982). Indirect contact may be more beneficial to influence prejudice reduction en mass and can capitalize on using mass media and other avenues (such as theater) to create large-scale interventions that influence more people at a time. Indirect contact is shown to be less costly and more flexible, which makes it easier to be used in naturalistic settings and large-scale interventions in educational or work contexts (El-Dirani et al., 2022; White et al., 2021; Bond et al., 2021; Brown & Patterson, 2016; Harvey & Miles, 2009).

1.3 Transfer Effects

We know that the typical contact intervention decreases prejudice toward the outgroup as well as similar outgroups (Vezzali et al., 2021; Meleady et al., 2019; Lemmer & Wagner, 2015). This is called secondary effects and occurs when the prejudice reduction toward one outgroup generalizes or spills over to other outgroups (Boin et al., 2021; Vezzali et al., 2021; Meleady et al., 2019). For example, a contact intervention aimed at reducing prejudice toward immigrants may also end up reducing prejudice toward Muslims, but is unlikely to decrease ageism toward older people. Secondary transfer effects are strongest when the contacted individual is thought to be typical or representative of the outgroup they are in and when their group membership is noticeable (Boin et al., 2021; Vezzali et al., 2021; Meleady et al., 2019; Lemmer & Wagner, 2015). Our study will test secondary transfer effects by using empathic concern and positive feelings as an indicator toward outgroups that are not depicted in the theater play.

Tertiary transfer effects, also called cognitive liberalization, are even broader and are related to tolerance building in general, increased cognitive flexibility, and increase a person's ability to be creative, productive, and solve problems (Boin et al., 2021; Meleady et al., 2019; Vezzali et al., 2021; Lemmer & Wagner, 2015). Positive intergroup contact changes attitudes toward the individual, to their outgroup, and other outgroups as well, particularly if the first and second outgroup are perceived to be highly similar (Boin et al., 2021; Meleady et al., 2019; Vezzali et al., 2021; Lemmer & Wagner, 2015). Research shows that well-designed and theory based contact programs increase positive attitudes and decrease prejudice toward the contacted individual and the outgroup in general and that effect spills over to similar outgroups and increases cognitive flexibility in general (Boin et al., 2021; Vezzali et al., 2021; Meleady et al., 2019; Lemmer & Wagner, 2015).

The reason for this cognitive flexibility is because positive contact with different groups can help break down stereotypes and cognitively change how someone mentally sees the distinction between the ingroup and outgroup (Boin et al., 2021; Vezzali et al., 2021; Sparkman & Hamer, 2020; Vezzali et al., 2015). Positive intergroup contact experiences can help individuals become aware of other perspectives and facilitate thinking outside the box. We use stereotypes to make some cognitive tasks faster or easier, but when we interact with people and experiences that do not fit into existing schemas, our cognition must change from category-based to more individuated modes of processing information (Boin et al.,

2021; Vezzali et al., 2021; Sparkman & Hamer, 2020; Vezzali et al., 2015). Over time as we challenge our stereotypes and expectations, we train our brain to process information in a way that does not rely on knowledge that is immediately and habitually accessible.

Universalism-tolerance is shown to increase when SDO decreases and studies have used SDO as an indicator to measure tertiary effects (Boin et al., 2021; Vezzali et al., 2021; Hamer et al., 2019). Tertiary effects and increased tolerance have a relationship to SDO, which we plan to use as an indicator as well.

1.4 Theater for Social Change

Not only can theater be used to create social and attitude change among audience members, it can also be used among actors and participants to achieve those effects. Endorsed by UNESCO and referred to as theater of the Oppressed (TO), this type of theater can be used to help combat injustices like sexual violence, environmental issues, medical abuse, systemic racism, and so forth (Rathje et al., 2021; Greene et al., 2018; Greene et al., 2014; Gimmestad & de Chiara, 1982). Theater based activities for social change can help train participants or actors on how to respond and find solutions to situations of injustice, discrimination, and other problems that negatively impact people based on skin color, ethnicity, gender, etc. It can also help people reflect on their biases, raise awareness, and gain knowledge about different issues (El-Dirani et al., 2022; Van Bower et al., 2021; Bews, 2021; Quinlan et al., 2020; Day, 2002).

It's obvious that theater serves entertainment purposes, but it can also lead to measurable changes in attitudes, empathy, and pro-social behavior. After watching plays depicting a discriminated or disadvantaged group, audience members show increased empathy for the groups, more cognitive flexibility, decreased social dominance orientation (SDO), and greater pro-sociality as measured by greater resources donated to charity (Rathje et al., 2021; Greene et al., 2021; Greene et al., 2014). Not a lot of research has been done on live theater and its psychological effects and the research that has been done is mostly correlational. In some studies that were conducted with middle and high schoolers, in plays depicting disadvantaged groups, students self-reported an increase in empathy for people who are suffering, increased social cognition, and more flexible socio-political attitudes (Rathje et al., 2021; Greene et al., 2018; Greene et al., 2014; Gimmestad & de Chiara, 1982).

It is also possible that narrative transportation, or how immersed and engaged a person feels in the story, as well as level of empathy plays a role into how much attitude or belief change a person may experience (Rathje et al., 2021; Greene et al., 2018). Previous research also suggests that watching live theater with others, compared to alone, can amplify the effects that theater sets in motion. It also suggests that watching live theater as compared to reading the book or watching the movie may be more influential in its effects (Rathje et al., 2021; Greene et al., 2018; Greene et al., 2014). All forms of indirect contact are shown to be effective and there may be some quality to theater performance that lends this form of parasocial contact to be more impactful than reading a book or watching a movie.

In sum, not enough is known about this topic and this research aims at examining if experiencing a live theater performance depicting a discriminated group (immigrants) decreases prejudice toward that group as well as similar groups, as well as decreases SDO resulting in cognitive liberalization. This research looks to see if the theater performance may cause any secondary or tertiary transfer effects if the prejudice reduction transferred to groups beyond immigrants through the empathic concern and feeling thermometer scale or reduced SDO scores. Overall, we hypothesize that participants attending the theater play portraying an immigrant group will have more favorable attitudes towards immigrants in general, and if this effects generalize to other related minority groups (i.e., Muslims, Black people, Asian People, etc.) as well as to decreased SDO (i.e., tertiary effects that increase tolerance, mental flexibility, etc.).

CHAPTER 2

Method

2.1 Participants

Based on previous average ticket sales at the theater companies involved in the study, it was estimated that 5,000 people over the age of 18 purchased tickets online. With an estimated participation range of 10%, we aimed to reach 400 participants. However, we started off with a sample of 81 at Time 1 (44 in the control group and 37 in the experimental group), but then had a large drop out and ended up with 37 people who completed T1 and T2 (20 in the control group, 15 in the experimental group and 2 participants who did not indicate what play they attended). All data and demographics describe those 37 participants. We had 15 missing responses for the questions about age, sex, gender, education, and race/ethnicity.

Both conditions included, we had 37 total participants that completed the survey at T1 and T2. Participants were members of the public who bought tickets for the two plays in our study design. The 22 responses for age ranged from 18 to 65 or more (18-24 years- 1, 25-34 years- 1, 45-54 years- 2, 55-64 years- 2, 65 or more years- 16). There were 15 females and 7 males, with 15 missing responses. Nine people reported their gender as a woman, 6 as a man, and 7 did not provide a response. Participants were typically well educated, 1 person with a high school degree, 10 with a bachelor's degree, 7 with a master's degree, 4 with a Ph.D. or higher. 37 participants said their country or birth and citizenship were both the United States. 20 participants described themselves as White or European-American, 1 as Black or African-American, and 1 as Latino or Hispanic. The average identification with racial/ethnic group was $M = 5.50$, $SD = 1.26$, and regarding political orientation (from liberal to conservative the min=1, max=5), participants lean towards the liberal ($M = 2.36$, $SD = 1.14$). Finally, there were 21 responses for "How often do you attend theater" (never to frequently the min=3, max=7, $M = 5.76$, $SD = 1.26$).

2.2 Procedure

The study was approved by Iscte-IUL ethics commissions. The study used a 2 (control vs experimental group) x 2 (Time 1 vs Time 2) mixed subjects design. Participants were people who bought online tickets from one of the two theaters, Arizona Theatre Company and Live

Theatre Workshop. The control group saw a non-contact related play called *The Nina Variations* and the experimental group saw a contact related play called *How to Make an American Son*. We defined a contact play by a theatrical performance that involves vicarious, indirect contact with minority or discriminated groups. The experimental group, *How to Make an American Son*, took place at Arizona Theater Company. The theater show took place in Tucson, Arizona from June 6 through June 25, 2022 and in Phoenix, Arizona from June 30 through July 17, 2022. The control group, *The Nina Variations*, took place at Live Theater Workshop. The theater show took place in Tucson, Arizona from June 9 through July 9, 2022.

People who bought tickets online were sent an email from the theater company that contained the normal newsletter as well as information about the study and a link and QR code to the survey. The theaters also hung up posters with the QR code inside the lobby of the buildings. Participants either scanned the survey QR code from an email from the theater or on a poster inside the lobby of the theater to access the survey

The first section of the online survey presented the informed consent form and information about the research project. Upon consenting, participants answered the survey before attending the play. The dependent variables were feeling thermometer, social dominance orientation, and empathic concern. We also asked 12 demographic questions.

After the play, via email or scanning the QR code in the theater, participants were asked to complete a post-test survey where they were presented with the exact same measures presented at Time 1 (except demographics). Full surveys can be referenced in the appendix. To match participants data at the two time points we asked participants to self-generate an identification code at T1 (pretest) in order to match it with T2 (posttest) data (Audette et al., 2020). We asked participants to self-generate a code based on answers to 5 questions: their mother's initial of their first name, their number of older brothers, the month in which they were born, and the first letter of their own middle name. The surveys took less than 10 minutes each and participants did not receive any payment. There was an option at the end of the post-test survey where people could type in their email address for a chance to win 2 free tickets from the theater company they attended. Participants were able to exit the survey at any time. Upon finishing the post-survey, participants were thoroughly debriefed and fully informed on the intent and hypotheses of the study.

2.2.1 The Theater Plot

How to Make an American Son is written by Christopher Oscar Peña and directed by Kimberly Senior. The following play description is taken from Arizona Theater Company's website (2022): "A 'Model Immigrant' and business mogul, Honduran-born Mando's cleaning empire is bracing for a downturn at the exact same moment when he must rein in his over-privileged American son, Orlando. In the wake of a personal crisis, Orlando suddenly finds himself responsible for the fate of a treasured worker and the future of his father's entire enterprise. What happens when the promise of the American Dream collides with the reality of immigration and family? A moving new coming-of-age comedy about the complexities of privilege, citizenship, sexual identity, and the most complex relationship of all: family"

The Nina Variations is written by Steven Dietz and directed by Chris Moseley. The following play description is taken from Live Theater Workshop's website (2022): "In this tribute to Chekhov's *The Seagull*, Steven Dietz focuses on the final scene between two star-crossed lovers, presenting 43 new variations of their epilogue. In the original text, Treplov, a young writer, is hopelessly in love with Nina, an actress, who is in love with Treplov's mother's lover. In Dietz's variations, Nina and Treplov live out a range of conclusions from tragic to unresolved to living happily ever after. The Nina Variations is a fascinating exploration of the naivety, idealism, and universal passion of young love."

2.3 Measures

Participants took a pre-show (time 1) and post-show (time 2) survey and responded to a set of survey questions that are common to use when studying prejudice reduction. The measures we used were a feeling thermometer (Bruneau et al., 2018; Lavrakas, 2008), empathic concern, (Rathje et al., 2021; Sirin et al., 2017), social dominance orientation (Pratto et al., 2013; Hodson et al., 2018), and demographic information (Rathje et al., 2021; Postmes et al., 2013; Cameron & Stinson, 2019; Bauer et al., 2017) (see full materials in the Appendix).

For the feeling thermometer, we adapted previous measures (Bruneau et al., 2018; Lavrakas, 2008) and participants expressed on a 5-point Likert scale how favorable or unfavorable they felt toward 8 groups: Immigrants, Muslims, Jews, Christians, LGBT+ people, Asian people, White people, or Black people.

For the empathic concern, we used 7-item measure previously used by Rathje et al., 2021. Participants responded to 7 questions and rated how well it described them on a 5 point Likert scale (1 = Does not describe me well, 5 = Describes me very well). 3 of the items were reversed scored (i.e., Sometimes I don't feel very sorry for people of other racial or ethnic groups when they are having problems and an average index was computed where higher values indicate higher empathic concern ($\alpha = .80$))

For SDO, we used the previously validated short scale (Pratto et al., 2013). Participants responded to the 4 questions on a 10-point scale to rate how opposed or in favor of each statement they were. 2 of these questions were reverse scored (e.g., In setting priorities, we must consider all groups). The Cronbach alpha was below the cutoff point ($\alpha = .60$), thus we did not compute an average score of SDO and do not use it as an outcome variable in the analyses.

For the demographic section, participants responded to 12 questions in a multiple choice or fill in the blank response format. The questions assessed age, sex, gender, education level, race/ethnicity, country of birth, country of citizenship, country of birth parents, level of identification with their ingroup, political affiliation, and frequency of theater attendance (Rathje et al., 2021; Cameron & Stinson, 2019; Bauer et al., 2017; Postmes et al., 2013).

Results

3.1 Non Parametric Tests

The results of the study are limited due to an extremely small number of participants (< than 20 per condition). Considering the very small sample size and the non-normality of the data (assessed with Shapiro-Wilk test), we had to use non parametric tests. To test our hypothesis that vicarious intergroup contact through a theater performance would change attitudes towards different social groups, we ran several independent-samples Mann-Whitney U-Test on our dependent variables of interest (see Table 1 for descriptives by experimental conditions). All the tests we ran related to empathic concern and feeling thermometer did not turn up anything of interest. In sum, we found no significant effects of the experimental condition on the evaluation of different social groups, or empathic concern.

We conducted 5 Mann-Whitney U tests to examine if feelings towards different social groups (Immigrants, Muslims, LGBT+, Asians and Blacks) were different in the control and experimental conditions at Time 2. Results showed no significant effects of the experimental condition. Specifically, results showed that favorability toward immigrants at time 2 was not different for participants in the experimental condition than for participants in the control condition with $U = .751, p = .63$. Similarly, ratings of Muslims at time two were not different for participants in the experimental condition than for participants in the control condition $U = .762, p = .64$. Similar findings for LGBT+ people with no differences for participants in the experimental condition and for participants in the control condition $U = .725, p = .53$. Favorability toward Asian people at time 2 was also not different for participants in the experimental condition than for participants in the control condition $U = .708, p = .48$. Finally, ratings of Black people at time 2 were also not different for participants in the experimental condition than for participants in the control condition $U = .724, p = .48$. Finally, The same analyses conducted with empathic concern showed that empathic concern at time 2 was not different for participants in the experimental condition than for participants in the control condition with $U = .857, p = .46$.

Table 1. Median, range, minimum value, and maximum value for participants in the control and experimental condition.

	Control Condition	Experimental Conditon
Empathic concern	<i>Mdn</i> = 4.42	<i>Mdn</i> = 4.42
	Range = 3.00	Range = 3.00
	Minimum value = 2.00	Minimum value = 2.00
	Maximum value = 5.00	Maximum value = 5.00
Favorability towards immigrants	<i>Mdn</i> = 5.00	<i>Mdn</i> = 5.00
	Range = 3.00	Range = 3.00
	Minimum value = 2.00	Minimum value = 2.00
	Maximum value = 5.00	Maximum value = 5.00
Favorability towards Muslims	<i>Mdn</i> = 4.00	<i>Mdn</i> = 4.00
	Range = 2.00	Range = 2.00
	Minimum value = 3.00	Minimum value = 3.00
	Maximum value = 5.00	Maximum value = 5.00
Favorability towards LGBT+ people	<i>Mdn</i> = 5.00	<i>Mdn</i> = 5.00
	Range = 2.00	Range = 2.00
	Minimum value = 3.00	Minimum value = 3.00
	Maximum value = 5.00	Maximum value = 5.00

Favorability toward Asian people	<i>Mdn</i> = 5.00	<i>Mdn</i> = 5.00
	Range = 2.00	Range = 2.00
	Minimum value = 3.00	Minimum value = 3.00
	Maximum value = 5.00	Maximum value = 5.00

Favorability toward Black people	<i>Mdn</i> = 5.00	<i>Mdn</i> = 5.00
	Range = 2.00	Range = 2.00
	Minimum value = 3.00	Minimum value = 3.00
	Maximum value = 5.00	Maximum value = 5.00

CHAPTER 4

Discussion

4.1 Summary

Is the experience of watching a theater performance involving intergroup contact enough to decrease prejudice, and if so, what kind of transfer effects will we observe? Our study aimed to fill a gap in the prejudice literature by focusing on positive intergroup contact using live theater and how this influences attitudes toward a variety of outgroups. This study aimed at testing if parasocial intergroup contact via a live theatre performance about immigrants would reduce prejudice and raise positive attitudes towards immigrants and result in transfer effects to other outgroups. We examined if intergroup contact through a theater performance reduced prejudice toward the group (immigrants) depicted in the play. We used the feeling thermometer and empathic concern scale to examine if these positive effects of indirect contact generalizes to other outgroups (i.e. secondary transfer effects) that are not depicted in the play. By using the SDO scale we examined if there were any outcomes like an increase in tolerance or cognitive flexibility in general (i.e. tertiary transfer effects).

We partnered with two theater companies in Arizona that were already planning to have play performances in the summer of 2022. We contacted dozens of theater companies to inquire about a collaboration and chose Arizona Theatre Company and Live Theatre Workshop due to their size, theater plot, and proximity to each other. Arizona Theatre Company was showing a contact based play called *How to Make an American Son*, so participants who watched this play were part of the experimental group. Live Theatre Workshop was showing a neutral play called *The Nina Variations*, so participants who watched this play were part of the control group.

Contrary to the expected participants attending the play focusing on immigrants did not show more positive attitudes neither towards immigrants in general, nor towards other minority groups. This is not in line with previous research showing that various forms of theater can decrease prejudice to the outgroup contacted, non-contacted outgroups, and have effects of increased tolerance, mental flexibility, and other cognitive effects (Rathje et al., 2021; Greene et al., 2018; Greene et al., 2014; Gimmestad & de Chiara, 1982).

The lack of significant findings is most probably due to the extremely low sample size with less than 40 participants completing both Time 1 (pre show) and Time 2 (post show) measures and did not have enough power to detect any effects. Also, because of this we were limited in the statistical analyses that we could do, and we could not run more sophisticated mixed models, comparing participants between conditions at T1 and T2. With the non-parametric data analysis that we ran, the results showed no significant effects on prejudice reduction or empathic concern.

4.2 Limitations and future research

The sample that we had was 37 participants and thus this was a severe underpowered study. Our aim was to examine if parasocial, indirect intergroup contact through theater performance would decrease prejudice and raise positive attitudes toward immigrants as well as similar outgroups, but we did not have enough participants to come to any meaningful conclusions.

It was interesting to see that 72% of participant responses said they were 65 years or older, possibly meaning older individuals are more likely to attend theater or maybe a survey bias (older people more likely to take email surveys for example). We had double the number of female participants vs. male participants, possibly meaning that females are more likely to attend theater, or being another survey sampling bias.

We had a very educated sample in terms of the highest completed level of education, with only 1 respondent having less than a bachelor's degree. It has been well established in research that people with higher education and more liberal beliefs have an increased likelihood of attending theater (Rathje et al., 2021; Logie et al., 2019; Greene et al., 2018; Greene et al., 2014). Considering the major limitation of the sample size we can not draw any conclusions from the current research. It is crucial that future studies attempt to replicate and extend the recent findings showing that theatre can be used as a tool to promote parasocial contact (Rathje et al., 2021; Greene et al., 2018; Greene et al., 2014; Gimmestad & de Chiara, 1982).

Future research might investigate whether any of the other findings in the theater-prejudice reduction literature can be replicated. It would be interesting to test a similar study design to the 1982 study by Gimmestad and de Chiara and see if findings replicate in another

states, countries, or continents. It would also be interesting to see how different contact based plays could have different effects on prejudice reduction. It's possible that other parasocial intergroup contact activities, in addition to live theater performance (such as script reading, discussion activities, reflections, etc.), may also have a similar impact on prejudice reduction. Future research might take this step further and test for different variations of the same theater performance (location, cast, community vs. professional, time of year, school vs. public activity, etc.) and how it affects the research findings.

CHAPTER 5

Conclusion

Our study was unable to come to any conclusions due to our small number of participants. Other studies suggest that theater may be a powerful vehicle to reduce prejudice, change social attitudes, or increase pro-sociality and that using theater to reach greater populations of people, especially those who don't normally attend, may be beneficial (Rathje et al., 2021; Greene et al., 2014; Iverson & Seher, 2014; Heide et al., 2012; Harvey & Miles, 2009; Gimmestad & Chiara, 1982). This is important because live theatre can be used as an intervention tool with large numbers of participants to reduce prejudice and facilitate other positive attitude changes like tolerance and mental flexibility. Although we had hoped to extend this research, we did not have enough participants to make any meaningful conclusions.

We do not regard this research project as a complete flop however, as we came up with a well-designed study and collaborated with two theaters, Arizona Theatre Company and Live Theatre Workshop, to test the effects of indirect intergroup contact. The failure to find any significance may be related to the fact that we only had 37 participants in total, across the two conditions and including T1 and T2 survey completion. Future research could follow a similar study design, but engage in more outreach or participant recruitment in order to draw more participant responses. Future research could also investigate how various forms of direct and indirect contact could affect minority and majority groups differently (if at all). Using theater as a social intervention to reduce prejudice and raise positive attitudes toward outgroup individuals and groups is certainly an avenue worth exploring further.

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Appendix A

Informed Consent

This study is part of a master thesis research project taking place at **Iscte – Instituto Universitário de Lisboa**. The study aims to understand people’s perceptions about cultural activities and social attitudes.

The study is conducted by Colten Schmidt (cksth@iscte-iul.pt) and supervised by Dr. Rita Guerra (ana_rita_guerra@iscte-iul.pt), who you may contact to clear up any doubts or share comments.

Your participation in the study, which is highly valued as it will contribute to the advancement of knowledge in this field of science, consists of responding to a number of survey questions. This survey is part of a longitudinal study. You will be asked to complete one **SHORT** survey **TWO** times in the **NEXT** two weeks. Each of the surveys will take about 5 minutes to complete, meaning it should take you about 10 minutes total to complete your participation in this longitudinal study. If you choose to complete this task, you will be invited through [NAME OF THEATER COMPANY] to participate in the survey one more time.

DISCLAIMER: Please note that it is very important for us that you **COMMIT TO COMPLETE ALL TWO SURVEYS**. If you think you will not be able to participate two times, please do not take this initial survey.

There are no expected significant risks associated with participation in the study.

Participation in the study is strictly **voluntary**: you may choose freely whether to participate or not to participate. If you have decided to participate, you may stop your participation at any time, without having to provide any justification. In addition to being voluntary, your participation is also **anonymous** and **confidential**. The obtained data are merely intended for statistical processing and none of the answers will be analysed or reported individually. At no point of the study will you be asked to identify yourself.

I declare that I have understood the aims of what was proposed to me, as explained by the investigator, that I was given the opportunity to ask any questions about this study and received a clarifying reply to all such questions, and **accept** participating in the study.

Yes

No

Appendix B
Questionnaire

Feeling Thermometer

Indicate below how favorable (positively or negatively) you feel towards each of the following individuals or groups:

A. Immigrants

1	2	3	4	5
Very Unfavorable				Very Favorable

B. Muslims

1	2	3	4	5
Very Unfavorable				Very Favorable

C. Christians

1	2	3	4	5
Very Unfavorable				Very Favorable

D. Jews

1	2	3	4	5
Very Unfavorable				Very Favorable

E. White people

1	2	3	4	5
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Very Unfavorable

Very Favorable

F. Black people

1

2

3

4

5

Very Unfavorable

Very Favorable

G. Asian people

1

2

3

4

5

Very Unfavorable

Very Favorable

H. LGBT+ people

1

2

3

4

5

Very Unfavorable

Very Favorable

Empathic Concern

Please indicate the extent to which the following sentences describe you well or not, choosing the number that represents your personal opinion

1. I often have tender, concerned feelings for people from another racial or ethnic group who are less fortunate than me.

1

2

3

4

5

Does Not

Describes

Describe Me Well

Me Very Well

2. Sometimes don't feel very sorry for people of other racial or ethnic groups when they are having problems. (Reverse Score)

1	2	3	4	5
Does Not				Describes
Describe Me Well				Me Very Well

Social Dominance Orientation:

There are many kinds of groups in the world: men and women, ethnic and religious groups, nationalities, political factions. How much do you support or oppose the ideas about groups in general? Next to each statement, write a number from 1 to 10 to show your opinion.

1. In setting priorities, we must consider all groups.

Extremely Oppose 1 2 3 4 5 6 7 8 9 10 Extremely Favor

2. We should not push for group equality.

Extremely Oppose 1 2 3 4 5 6 7 8 9 10 Extremely Favor

3. Group equality should be our ideal.

Extremely Oppose 1 2 3 4 5 6 7 8 9 10 Extremely Favor

4. Superior groups should dominate inferior groups.

Extremely Oppose 1 2 3 4 5 6 7 8 9 10 Extremely Favor

Demographic Information.

1. What is your age?

1) 18-24 y

2) 25-34 y

- 3) 35-44 y
- 4) 45-54 y
- 5) 55-64 y
- 6) 65 and more

2. What sex were you assigned at birth, meaning on your original birth certificate?

- Male
- Female

3. What is your gender?

- Woman
- Man
- I identify my gender as: _____ (please specify)

4. What is your highest level of education?

- A. Some High School
- B. High School or GED
- C. Bachelor's Degree
- D. Master's Degree
- E. Ph.D. or higher
- F. Trade School
- G. Prefer not to say

5. Country of birth:

6. Country of birth of parents:

Mother _____

Father _____

7. Country of citizenship:

Appendix C

Debriefing/Explanation of the Research

Thank you for having participated in this study. As indicated at the onset of your participation, the study is about cultural activities and social attitudes. Specifically, this study aimed to examine if watching a play about a discriminated group (immigrants) reduces prejudice and raises positive attitudes towards immigrants and if the effects will extend to other similar social groups. We asked participants to fill in a survey before and after attending a theatre play. Some participants attended a play about immigrants in America (How to Make an American Son; Arizona Theatre Company) and others attended an unrelated play (Steel Magnolias; Northern Star Theatre Company). This allowed us to compare the social attitudes of participants attending different types of plays, a procedure common in experimental studies.

Prejudice can lead to harmful and destructive consequences for individuals, groups, and nations and by better understanding how prejudice works we can help to prevent its negative outcomes. Ultimately our research aims to test a novel way of prejudice reduction, theatre as a vehicle for prejudice reduction. We thank you for completing the surveys and further emphasize that your contribution to this research is valuable.

We remind that the following contact details can be used for any questions that you may have, comments that you wish to share, or to indicate your interest in receiving information about the main outcomes and conclusions of the study: Colten Schmidt, master's student (cksth@iscte-iul.pt) and Dr. Rita Guerra, research supervisor (ana_rita_guerra@iscte-iul.pt).

If you wish to access further information about the study topic, the following sources can also be consulted:

Rathje, S., Hackel, L., & Zaki, J. (2021). Attending live theatre improves empathy, changes attitudes, and leads to pro-social behavior. *Journal of Experimental Social Psychology*, 95(March), 104138. <https://doi.org/10.1016/j.jesp.2021.104138>

White, F. A., Borinca, I., Vezzali, L., Reynolds, K. J., Blomster Lyshol, J. K., Verrelli, S., & Falomir-Pichastor, J. M. (2021). Beyond direct contact: The theoretical and societal

relevance of indirect contact for improving intergroup relations. *Journal of Social Issues*, 77(1), 132–153. <https://doi.org/10.1111/josi.12400>

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Once again, thank you for your participation.