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Why Can't We Be Friends: The Use of Imagined Contact in Changing Negative Attitudes Towards Outgroups

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Cover Page Footnote

We would like to thank Dr. Jill Brown (Creighton University) for providing assistance and feedback on the work. We also would like to thank the Montessori Co-op School in Omaha along with their director Emily Huyck for presenting us with an idea, welcoming us into their school, and encouraging us to pursue our intellectual curiosities.

Why Can't We Be Friends: The Use of Imagined Contact in Changing Negative Attitudes Towards Outgroups

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Abstract

The contact hypothesis states that a person or group is more likely to have a positive attitude towards an outgroup when put into direct contact with a member or several members of an outgroup. Research has shown, however, that simply imagining the contact can illicit the same outcomes in attitude changes. An applied research experiment was conducted to test whether the used of imagined contact scenarios would improve attitudes towards outgroups. Partially replicating an experiment by Bagci, Piyale, Bircek, and Ebcim (2017), seventy-six participants were randomly assigned to one of three groups, including, the control group, the imagined contact group, and the imagined contact with friendship potential group. A self-report questionnaire assessed the dependent variables including outgroup attitudes, behavioral intentions, outgroup trust, perceived threat, and parental trust. After running a one-way ANOVA test on all dependent variables, significant results were found in outgroup attitudes and perceived threat. Pairwise comparison were then conducted between groups, and it was found that there was a significant mean difference between the control group and both experimental groups (imagined contact and imagined contact with friendship potential) of the outgroup attitudes variable and perceived threat variable. However, there was not a significant mean difference between the imagined contact group and imagined contact with friendship potential group in

either dependent variable. This partially supported our research hypothesis that imagined contact would improve attitudes toward outgroups when compared to a neutral condition. Future implications of this study may support the use of imagined contact in increasing positive attitudes towards diversity.

Keywords: Imagined contact hypothesis, contact hypothesis, outgroup bias, prejudice, attitudes, diversity, friendship potential

Introduction

The problem of prejudice and bias in our society has been at the center of much social scientific attention recently (Ferguson, Branscombe, & Reynolds, 2019). One prevalent theory that shows potential to decrease negative biases and prejudices is the contact hypothesis, which states that contact between members of opposing groups would lessen intergroup hostility and lead to more positive intergroup attitudes under the right conditions (Allport, 1954). The contact hypothesis has developed over time to include the possibility of indirect contact with outgroups as well as with the imagined contact hypothesis. This imagined intergroup contact is defined as “the mental stimulation of a social interaction with a member or members of an outgroup category” (Crisp & Turner, 2009). They suggest that simply imagining contact with members of outgroups can reduce negative attitudes towards those groups. Imagining certain social situations and interactions may have a priming effect on individuals, and, therefore, they may carry certain attitudes over to other contexts as well (Turner, Crisp, & Lambert, 2007). Cues present in the imagined contact become part of one’s own schemas and are then associated with other similar situations (Turner et al., 2007).

Many forms of diversity training have utilized the contact hypothesis. Lindsey, King, Membre, and Cheung (2017) tested two main modes of diversity training. The first mode followed the attitudes of 118 university students after they were asked to imagine what it might be like to be in a minority group. Second, they asked 158 undergraduate students to participate in a goal-setting activity which required them to make a commitment to an action. Both of these modes proved to be an effective way to change attitudes and promote diversity (Lindsey et al., 2017).

Turner et al. (2007) found mere imagined contact to be more effective at decreasing negative attitudes compared to actual contact with minority outgroups. Twenty-eight students were randomly assigned to either an experimental or control group. The experimental group was prompted to imagine a scenario in which they came into contact with someone from an outgroup. The control group was simply asked to imagine an unrelated scenario that instead prompted them to imagine an outdoor scene. Results from this study showed that imagining contact with an outgroup positively changed the participants' attitudes towards outgroups (Turner et al., 2007). In order to eliminate the confound of the primacy effect, the researchers conducted a similar experiment that had students imagine ingroup contact with an outgroup individual versus simply imagining the entire outgroup. The results still showed that imagined contact produced a more accepting attitude of outgroups than merely imagining the group itself (Turner et al., 2007). In order to strengthen the results, these experiments were conducted across two different outgroups which certified that the findings were not due to a particular bias towards one group (Turner et al., 2007). The results from these studies suggest that imagined contact helps improve attitudes towards outgroups (Turner et al., 2007).

The final study examined by Bagci, Piyale, Bircek, & Ebcim (2017) focused on ingroup and outgroup biases between Syrian refugees and citizens of Turkey. Through three experiments, the researchers suggested that imagined contact through what they call “perceived friendship potential” greatly influences positive attitudes towards the outgroup (Bagci et al., 2017). The first experiment examined if imagined contact with friendship potential increases overall trust towards the outgroup, and the second experiment focused on promoting intimacy and interaction through giving money. They found that imagined contact with friendship potential increases overall feelings of trust towards the outgroup. Furthermore, they found that imagined intimacy in conjunction with the interaction was even more effective at increasing positive attitudes than a mere interaction scenario in which the participant only hands someone some money (Bagci et al., 2017). The third experiment focused on the influence that suggestibility has over attitudes towards outgroups. By suggesting that friendship was possible between the groups versus not addressing this, people were more open and positive towards the outgroup (Bagci et al., 2017).

Within the literature of imagined contact theory, there are gaps surrounding which populations are being studied. There is also a lack of research specifically targeting parents and parental trust towards outgroups, which measures how much one would be willing to supervise another child of the outgroup or have one of the outgroup members supervise their own child.

After visiting a local Montessori Co-op school, we realized that openness to diversity was one of the main obstacles they were encountering when considering Title XX, a child subsidy (Nebraska DHHS, 2020). Some parents were reluctant towards and some adamantly against increasing diversity because it could potentially take time and attention away from their own child. It is also possible that they expressed negative attitudes towards increasing diversity because of preexisting prejudices and biases. This led us to wonder if we could change parental

attitudes to become more accepting of increasing diversity at the school. From this we asked, will imagined contact with more diverse groups change parental attitudes towards diversity and inclusion? We hypothesized that ingroup members engaging in imagined contact exercises involving outgroup members will improve their attitudes towards the outgroup. Ingroup members who engage in an imagined contact exercise that also includes friendship potential with the outgroup members will improve their attitudes towards outgroups more than ingroup members who engage in a basic imagined contact exercise with outgroup members.

Methods

Participants

To apply the results of this study to the Montessori Co-Op School, our target population is potential parents. The participants of this study were part of a convenience sample, recruited through SONA systems. Our sampling frame of undergraduate psychology students with a requirement to participate in studies had the option to sign up for the study which was named “Imagination and Attention” on the online system as a level of deception. Twenty available spaces were filled for four different study sessions; the first to sign up were then part of the selected sample. In each of the four experimental sessions, the participants were split using random assignment between three groups: the control, experimental group one, and experimental group two. Out of the 80 total participants in the selected sample, 76 were part of the data sample as four participants did not show up for the study. All of them gave their informed consent. Out of this sample, 51 were female and 25 were male. Ages ranged from 18 to 25 years with a mean age of 18.96 years. Ethnicities included Caucasian (55 participants), Asian/Pacific Islander (13 participants), Hispanic (5 participants), mixed race or other (2 participants), and African American (1 participant). The large majority of participants in the sample consisted of those

whose familial yearly income was more than \$45,000. For the majority of their friends and the people they associate with, 31 participants responded with them being the same race, four with different race, and 41 with a mix. This data was collected from the demographics questionnaire completed by the participants and is presented in Table 1.

Materials

The study was conducted in a laboratory setting on campus and participants were given a paper packet with a demographics section, one of three vignettes, and a questionnaire. A cellular device was used to time each section of the study. The questionnaire included deception questions about the scenario as participants were led to believe the study was about imagination and attention by the title of the study they signed up for. The initial questions were also used to ensure that the participants thoroughly read the vignette and included a manipulation check with a 7-point Likert Scale for realism of the vignette.

Various validated 7-point Likert scales were adapted in this study to measure the dependent variables of outgroup attitudes, outgroup trust, behavioral intentions, and perceived threat. Outgroup attitudes were measured with a scale used in previous research by asking participants to report their feelings using bipolar adjectives (Swart, Hewstone, Christ, & Voci, 2010; Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Outgroup trust was measured with Voci's (2006) Outgroup Trust Scale. Behavioral intentions were measured by the approach towards African Americans near the poverty line, which is based off of approach intentions towards Syrian refugees using the Approach Behavioral Tendency Scale (Turner, West, & Christie, 2013). Perceived threat was measured with the Symbolic Threat Scale adapted from Florack, Piontkowski, Rohmann, Balzer, and Perzig (2003). The final dependent variable we measured was parental trust which was picked specifically for the Montessori Co-op School.

Therefore, we created a novel Parental Trust Scale that asked participants to imagine themselves as a parent and about trusting an African American person living near the poverty line to supervise their own child, trusting an African American child living near the poverty line to be friends with their own child, and if they would be willing to supervise the child of an African American living near the poverty line.

Procedures

For the four time slots, the researchers followed the same scripts to ensure ongoing equivalence. All participants received an informed consent sheet prior to the study and were given the choice to leave at any point during the study. The participants were randomly assigned to one of three groups and given one minute to read their vignette. The control group had the neutral control condition which received the vignette with an imagined neutral and non-relevant scenario. Experimental group one had the imagined contact condition which received the vignette with positive imagined contact with an African American living near the poverty line, and experimental group two had the imagined contact with friendship potential condition which received the vignette with positive imagined contact plus friendship potential with an African American living near the poverty line. The vignettes in experimental group one with imagined contact condition (IC group) and experimental group two with the imagined contact with friendship potential condition (IC with friendship group) were adapted from Bagci et al. (2017) and modified to include African Americans living near the poverty line. This demographic was chosen because it represents the majority population receiving Title XX funds and is applicable to the Montessori Co-op School (Nebraska DHHS, 2020). All were instructed to and given one more minute to reread and reflect upon the scenario, then they filled out the questionnaire.

Results

See Table 1 for a summary of demographics with univariate statistics for the data set. The analysis showed an imbalance in gender, income, and friends (find exact values in Table 1).

A one-way ANOVA between the manipulation checks and the conditions found no significant mean difference between all the means. See Table 2 for a summary of manipulation check ratings with univariate statistics for the data set. The means show that all independent variable conditions were above average on perceived realism of the given scenarios.

A one-way between groups k groups ANOVA was conducted to compare the effect of imagined contact on the five dependent variables in the three conditions. A summary of dependent variable ratings can be found in Table 3. Out of the five dependent variables, we found a significant mean difference between outgroup attitudes ($F(2,73) = 5.600$, $MSe = 15.668$, $p = .005$) and perceived threat ($F(2,72) = 3.552$, $MSe = 25.536$, $p = .034$). As hypothesized, pairwise comparisons using LSD ($mmd = 2.22$) showed that participants in both the IC group and IC with friendship group showed an increase in positive attitudes compared to the control group. Contrary to the hypothesis, there was no significant mean difference between the IC group and the IC with friendship group. For perceived threat, pairwise comparisons using LSD ($mmd = 2.84$) showed that participants in both the IC group and IC with friendship group displayed lower scores on perceived threat compared to the control group. This was in line with the hypothesis. However, contrary to the hypothesis, there was also no significant mean difference between the IC group and IC with friendship group. There was no significant mean difference between behavioral intentions ($F(2,73) = 0.388$, $MSe = 10.934$, $p = 0.680$), outgroup trust ($F(2,71) = 1.697$, $MSe = 18.118$, $p = 0.191$), and parental trust ($F(2,71) = 1.115$, $MSe = 9.738$, $p = 0.334$).

An exploratory analysis was conducted using a factorial ANOVA to explore the impact of the friends demographic (see in Table 1) and the three conditions on outgroup attitudes; this finding was not significant but was approaching significance.

Discussion

The results from this study allow us to expand upon the existing body of literature surrounding both imagined contact and decreasing bias. Data analysis showed that there were significant mean differences in outgroup attitudes and perceived threat among the IC group, IC with friendship group, and the control group. There were no significant mean differences found in outgroup trust, behavioral intentions, or parental trust. Using pairwise comparisons to further analyze the differences found in outgroup attitudes and perceived threat, no significant differences were found between the IC group and IC with friendship group. This suggests that friendship potential does not have a significant effect on attitude change. Overall, these findings support part of our research hypothesis that imagined contact with an outgroup improves attitudes towards outgroups. They do not support the part of the research hypothesis that states the introduction of friendship potential is even more effective in improving attitudes than a mere imagined contact exercise. Therefore, we cannot fully reject the null hypothesis due to the insignificant results found between the IC group and the IC with friendship group.

Compared to the existing literature on imagined contact, these results both support and refute previous findings. Turner et al. (2007) found that imagined contact scenarios were more effective at positively changing attitudes towards outgroups compared to neutral scenarios. We also achieved this result in our own study with both outgroup attitudes and perceived threat. However, we further tested this theory by also including an imagined contact scenario with friendship potential. This was based off of the Bagci et al. (2017) study, which found that

introducing friendship potential significantly improved attitudes towards outgroups compared to a mere imagined contact exercise. Unfortunately, we did not find a significant mean difference between the IC group and IC with friendship group. This finding does not correspond with our research hypothesis or the findings of the Bagci et al. (2017) study.

The data analysis between the manipulation checks and all conditions also found no significant mean difference between IC group, IC with friendship group, and the control group. All means were above average on perceived realism of the imagined contact exercise. Since there were no mean differences between the groups and all groups were above average, we can conclude that the perceived realism of the imagined contact exercise had no effect on the results of the study.

The exploratory data analysis on the effect of the friends demographic and the three conditions on outgroup attitudes was approaching significance. Interestingly, participants who characterized their friend groups as mixed-race scored higher than participants with friends groups of the same race on outgroup attitudes in the IC group and IC with friendship group. However, this was not the case for the control group, as the mixed-race group scored lower on outgroup attitudes than the same race group. While not significant, this finding implies that the cultural and social background of participants may have an effect when it comes to changing attitudes with imagined contact. Expanding upon this analysis in further research would offer insight into the effect of prior mental schemas of participants.

It is also important to note that these mixed findings could be attributed to the participants used in the study. Our study was conducted with undergraduate psychology students, while Bagci et al. (2017) conducted their study with a non-student convenience sample aged between 25-45 years old. This is not the same for participants in the Bagci et al. study (2017).

Additionally, it is necessary to recognize the age difference between the participants in each study. Our sample included a much younger demographic compared to that of Bagci et al. (2017), which may affect results.

Results of the study should be taken into account with the limitations. The first of these limitations includes the small number of subjects in the study. Given our available time and resources, we were only able to conduct the study with 76 participants in which 67.1% were female. Additionally, running the study with students and not parents is another limitation. While our results show that use of imagined contact can create positive changes in outgroup attitudes and perceived threat, this could be attributed to the fact that students come from an environment that promotes positive attitudes towards outgroups. This exposure to inclusive environments may be a confounding variable in the study. The use of student participants also proves difficult when trying to measure parental trust. It is possible that we found no significant mean differences in parental trust because the study was not conducted with participants who have children.

Future research surrounding imagined contact should focus on expanding the sample used to include non-students, parents, and those of different outgroups. This would make the results more generalizable to a larger population. Additionally, further research on the exploratory data analysis would help to understand the effect of prior mental schemas and participant background in imagined contact exercises. A longitudinal field study using imagined contact to create positive attitudes should be considered by researchers. Expanding on these ideas would greatly contribute to literature on imagined contact in addition to aiding the Montessori Co-op and other schools searching for similar solutions.

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Table 1.

Summary of Demographics

Variable	Univariate Statistic		
Age in years	<u>M</u> = 18.96	<u>S</u> = 1.17	<u>N</u> = 76
Gender	f	(%)	
Male	25	(32.9%)	
Female	51	(67.1%)	
Race			
Caucasian	55	(72.4%)	
Hispanic	5	(6.6%)	
African American	1	(1.3%)	
Asian/Pacific Islander	13	(17.1%)	
Other	2	(2.6%)	
Income			
< \$20,000	2	(2.6%)	
\$20,000 – \$44,000	4	(5.3%)	
\$45,000 – \$149,000	30	(40.0%)	
\$150,000 – \$199,000	22	(29.3%)	
> \$200,000	17	(22.7%)	
Friends			
Same race	31	(40.8%)	
Different race	4	(5.3%)	
Mixed/both	41	(53.9%)	

Table 2.

Means and Standard Deviations of Manipulation Check in Each Condition

Variable	Condition			
	Control	Experimental 1	Experimental 2	Total
Manipulation 1	M = 5.75	M = 5.58	M = 5.46	M = 5.59
	S = 0.94	S = 1.17	S = 0.95	S = 1.02
Manipulation 2	M = 5.17	M = 5.15	M = 5.62	M = 5.32
	S = 1.31	S = 1.22	S = 1.67	S = 1.24

Table 3.

Means and Standard Deviations of Dependent Variables in Each Condition

Variable	Condition		
	Control	Experimental 1	Experimental 2
Outgroup Attitudes	M = 23.23	M = 23.28*	M = 20.04*
	S = 3.42	S = 3.99	S = 4.44
Behavioral Intentions	M = 15.54	M = 16.35	M = 15.92
	S = 3.28	S = 3.17	S = 3.48
Outgroup Trust	M = 27.44	M = 26.52	M = 25.21
	S = 4.55	S = 4.43	S = 3.73
Perceived Threat	M = 27.12	M = 27.77*	M = 24.17*
	S = 5.88	S = 4.50	S = 4.67
Parental Trust	M = 16.72	M = 17.24	M = 15.92
	S = 3.43	S = 2.65	S = 3.23

*Significant at the 0.05 level