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Direct vs. Indirect Contact: A Naturalistic Experiment in Teaching Multicultural Competence

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Abstract

This study examines the impact of different types of intergroup contact with diverse others on students' cultural awareness, knowledge, and skills. An undergraduate Multicultural Psychology course required direct intergroup contact by attending at least three multicultural events every semester. However, during the COVID-19 pandemic, this requirement was shifted to allow indirect intergroup contact activities. This paper examined differential shifts on students' cultural competence-related attitudes in sections where students were required to engage in direct intergroup contact (pre-pandemic) versus students who were allowed to engage in indirect intergroup contact (pandemic-transition and pandemic-prepared). Students across all course sections and semesters (N=189) significantly improved on all outcome measures from pre to post. Students did not differ between semesters where students engaged in direct intergroup contact and semesters where students engaged in indirect intergroup contact. Students who engaged in indirect contact experienced equally positive shifts in cultural competence as compared to students who engaged in direct intergroup contact. For educators implementing contact assignments in diversity-focused courses, direct and indirect contact may have similar impacts.

Keywords: multicultural psychology, cultural competence, intergroup contact, contact hypothesis, cultural humility

Direct vs. indirect contact: A naturalistic experiment in teaching multicultural competence

There is a robust literature related to the positive impact of intergroup contact on prejudice reduction. Allport's initial (1954) contact hypothesis focused on direct contact, but in recent decades, researchers have examined the impact of indirect contact on prejudice reduction (Zhou et al., 2019). As educators teaching an upper-division Multicultural Psychology course, we have incorporated intergroup contact activities to bring course material to life and reduce students' prejudicial attitudes. The current study compared shifts in students' scores on multicultural competence-related (MC-related) measures in an undergraduate Multicultural Psychology course when the course required direct intergroup contact (i.e., in-person) to when the course required indirect intergroup contact (i.e., virtual). Multicultural psychology pertains to people of varied ethnicities within one society and is distinct from cross-cultural psychology which pertains to people of different cultures that live in diverse geographical areas.

Allport's (1954) contact hypothesis, that interactions between members of different groups can reduce prejudice, has profoundly influenced social science research and public policy regarding the importance of intergroup contact in the reduction of prejudice (Paluck et al., 2019; Pettigrew & Tropp, 2006). The influence of the contact hypothesis on public policy extends as far back as the late 1950s, when it was utilized as a component of the rationale for desegregation in the United States (Paluck et al., 2019). The reach of the contact hypothesis has since expanded internationally, and contact has been studied as a method to reduce prejudice toward many intersectional aspects of identity, including race, ethnicity, immigration status, religion, gender, sexual orientation, mental illness, age, intellectual ability, and physical ability (Paluck et al., 2019; Pettigrew & Tropp, 2006).

While there is mixed research support for the four optimal conditions of Allport's (1954) classic contact hypothesis— that the contact situation should include equal status between groups, common goals, intergroup cooperation, and support from laws, authorities, or customs— findings from a broad meta-analysis examining 515 studies (Pettigrew & Tropp, 2006), and from a focused meta-analysis of 27 studies (Paluck et al., 2019) provide robust support for the positive impact of intergroup contact in general. Direct intergroup contact is defined by Pettigrew and Tropp (2006) as "actual face-to-face interaction between members of clearly defined groups" (p. 754), however, research has also examined the impact of indirect contact on prejudice reduction (Zhou et al., 2019).

The extended contact hypothesis, which posits that knowing about friendships between in-group and out-group members can reduce prejudice, has also received meta-analytic support. A meta-analysis of 115 studies on the extended contact hypothesis found that indirect extended contact improved intergroup attitudes even when the influence of direct friendship is removed (Zhou et al., 2019). There has also been strong evidence to support improved attitudes from other forms of indirect contact, including vicarious contact (observing ingroup and outgroup members interacting; Di Bernardo et al., 2017) and parasocial/media contact (i.e., exposure to media-based presentations of outgroup members; Schiappa et al., 2005; Di Bernardo et al., 2017), virtual contact (i.e., computer-based contact; Lemmer & Wagner, 2015); virtual contact with outgroup characters in video games (Mulak & Winiewski, 2021), and secondary transfer effects of contact (i.e., when positive attitude changes toward one outgroup transfers to other outgroups; Lemmer & Wagner, 2015; Pettigrew, 2009).

Pettigrew and Tropp's (2006) review of over 526 papers written between 1940 and 2000 shows the magnitude of scholarly attention to intergroup contact. In contrast, Paluck et al.'s

(2019) review of only 27 intervention studies that included random assignment and delayed outcome measures highlights the gap between scholarly attention to intergroup contact and rigorous experimental study of intergroup contact, and the need for more controlled experimental studies. Further, while Paluck et al. (2019) note the general positive effects of contact in the studies they reviewed, they also raised several concerns about the literature, including: the dearth of studies examining prejudice in adults over the age of 25, concerns about variation in the magnitude of impact based on prejudice type (i.e., greater impact on disability prejudice than racial/ethnic prejudice), weaker effects in larger studies, lack of transparency about the type of contact being examined, and the lack of studies measuring outcomes over time.

A meta-analysis of processes which contributed to how intergroup contact reduces prejudice from Pettigrew and Tropp (2008) focused on three mediators: (a) increasing knowledge about the outgroup, (b) reducing anxiety about contact, and (c) increasing empathy and perspective-taking. Results of the meta-analysis found statistical support for all three processes, meaning that knowledge, anxiety reduction, empathy, and perspective taking appeared to play a role in the effectiveness of intergroup contact in decreasing prejudice. These results from the intergroup contact literature are congruent with those of diversity training and multicultural competence training literature. Two mediators –knowledge and empathy—map directly onto knowledge and skills. Empathy is considered a skill that is particularly relevant in multicultural encounters (Hardee, 2003; Riess, 2017). The anxiety moderator maps on to knowledge and self-awareness: self-awareness allows a person to examine their fears about “the other” and knowledge about others narrows perceived gaps between people.

Systematic reviews (Beach et al., 2005) and meta-analyses (Gallagher & Polanin, 2015) of multicultural competence trainings for nurses and healthcare providers respectively found that

the majority of multicultural competence interventions were effective at increasing knowledge, awareness, and skills. In a meta-analysis of 260 diversity training studies (Bezrukova et al., 2016), the positive effects of trainings were greater among interventions that targeted both awareness and skills, rather than awareness or skills alone, meaning that interventions more in-line with the tripartite model of multicultural competence resulted in greater improvements.

The Current Study

Previous research has shown that a semester-long multicultural psychology course can increase students' multicultural competence-related attitudes in both in-person synchronous (Patterson et al., 2018) and online asynchronous (Alvarez & Domenech Rodríguez, 2020) sections of the course on a battery of measures of multicultural competence-related constructs (MC-related measures). These findings are particularly inspiring in light of evidence showing that students overestimate their ratings at the outset of the semester as compared to the end of the semester, suggesting that evidence of impact is likely a conservative estimate of impact (Soto et al., 2023). The Multicultural Psychology course assessed in the current study was designed based on the tripartite model of multicultural competence (Sue 2001). In addition to standard classroom activities like lectures, reading material, and homework assignments, the course also included completing a battery of MC-related measures at the beginning and end of the course to inform a self-reflection essay assignment, and students in the course were also required to attend at least three in-person multicultural events/activities based on a particular dimension of diversity pertaining to race/ethnicity, nationality, sexual orientation, and/or disability in order to promote direct intergroup contact experiences. As a result of the COVID-19 pandemic, alterations to this last aspect of the course had to be made.

The current study examined the effect of COVID-related curriculum changes on student outcomes in a Multicultural Psychology course taught in-person (synchronous) and on-line (asynchronous) across three semesters. The course was designed to facilitate students' development of multicultural competence knowledge, awareness, and skills. Although the course was already taught in-person and online, the COVID-19 pandemic forced a unique change across both class modalities, namely, removal of the direct intergroup contact requirement of attending three in-person multicultural events/activities. In order to adapt to the pandemic, the course requirement across both sections was shifted to allow indirect intergroup contact, such as virtual contact events (e.g., socials, lectures, webinars, festivals), and parasocial or media contact events (e.g., watching movies/documentaries, reading books, or listening to podcast episodes that were approved by instructors to ensure the content was relevant to course requirement). Requirements for contact activities were the same across both course modalities for each semester. For example, in the Fall of 2019, all students were required to engage in direct contact regardless of whether they enrolled in the in-person or online course.

In this paper, we compared shifts in multicultural competence in relation to removing the direct intergroup contact requirement and allowing indirect intergroup contact on students' scores on MC-related measures across both in-person and online sections of the course by examining data from three semesters: Fall 2019 (pre-pandemic), Spring 2020 (pandemic-transition), and Fall 2020 (pandemic-prepared). Each semester the course was taught both online and in-person, thus, we collected data from a total of six courses taught across three semesters. To assess shifts in multicultural competence, we measured ethnocultural empathy, colorblind racial attitudes, beliefs about diversity, and multicultural experiences. These measures were selected based on the findings in the literature regarding the importance of empathy (Pettigrew &

Tropp, 2008), colorblindness (Whitley et al., 2023), beliefs about diversity (Richeson & Nussbaum, 2003), and multicultural experiences (Paluck et al., 2019) on prejudicial attitudes. As the pandemic pushed educators to adapt and more widely implement virtual classroom activities, the context provided a natural opportunity to examine differential impacts of engaging in in-person versus online multicultural events, and of direct versus indirect contact course requirements. We expected that the indirect contact activities would be associated with lesser shifts in MC-related constructs than direct contact activities.

Method

Participants

We collected data from 189 undergraduate students enrolled in a semester-long Multicultural Psychology course at a large, public, Predominantly White Institution (PWI) in the Mountain West region of the United States during the semesters of Fall 2019 (pre-pandemic), Spring 2020 (pandemic-transition), and Fall 2020 (pandemic-prepared). Each semester, the course was offered in-person (synchronous) and online (asynchronous). During Spring 2020, students enrolled in the synchronous in-person course were shifted to synchronous on-line delivery in response to the pandemic. For all semesters, students from in-person synchronous (n = 97) and online asynchronous (n = 92) courses who completed MC-related self-assessment measures at two points in time were included in analysis. For the in-person class sections, students provided their own demographics, and for the online sections of the course, demographic information was obtained from university records, which only reflected a binary gender.

In the online asynchronous class sections, participants' age ranged from 18 and 48 years (M = 24.23, SD = 5.71). Most (90.2%) students identified as white, non-Hispanic, 2.2% as Black, non-Hispanic, 12% as Hispanic or Latino/a, 1.1% as Asian, and 3.3% as multi-racial. All

university records reflected a binary gender; 37% of students identified as men and 63% identified as women. Due to the restricted options that students have when disclosing identities to the university, these records may not fully reflect the range of demographics represented in our sample.

In the in-person synchronous class sections, participants' ages ranged between 18 and 26 years (M = 21.64, SD = 1.85). Most (82.5%) students identified as white, non-Hispanic, 4.1% as Hispanic or Latino/a, and 9.3% as multi-racial. 32% of students identified as men and 65% identified as women; one student additionally endorsed gender-questioning, and one student additionally endorsed transgender identity.

Statistical Power

Power analysis was conducted using G*Power (Faul et al., 2009) for a Repeated Measures ANOVA between factors, with the effect size set at .25, alpha at .05, and power at .80 for three groups (pre-pandemic, pandemic-transition, pandemic-prepared) and two repeated measures (pre, post). The analysis returned a needed sample size of 120, suggesting sufficient power to conduct planned analyses.

Procedure

Prior to conducting analyses, we secured approval from the Utah State University IRB for the use of deidentified data collected as part of regular course activities. Students completed a battery of self-report MC-related measures during the start of the course (pre), and near the conclusion of the course (post). Pre- and post- scores were calculated and returned to students; after receiving their scores for the post-assessment, students were asked to complete a written self-reflection assignment.

The online instructor of record, Domenech Rodríguez, developed the course content based on Sue's Tripartite Model of Cultural Competence (Sue, 2001). The course included a requirement for students to attend three in-person multicultural events/activities based on a particular dimension of diversity pertaining to race/ethnicity, nationality, sexual orientation, and/or disability in order to promote direct intergroup contact. To fulfill the multicultural event requirement, students could choose from events shared by course instructors (i.e. local campus and community events, such as: a university-hosted Powwow, Luau, or Day of the Dead celebration; university-hosted talks, film screenings, or conferences related to multicultural topics; community-hosted pride or cultural heritage festivals, rallies, or celebrations), multicultural events students found on their own, or multicultural events that students created or hosted themselves. During the Spring 2020 and Fall 2020 semesters, as an adaptation to the COVID-19 pandemic, this requirement was altered to require three indirect intergroup contact events such as virtual contact events (e.g., socials, lectures, webinars, festivals), and parasocial or media contact events (e.g., watching movies/documentaries, reading books, or listening to podcast episodes); see Table 1 for full assignment prompt and Table 2 for grading rubric.

Measures

All measures are available on Open Science Framework (https://osf.io/3dte5/?view_only=0629bd76dd4b40b088008dea09b76fdb).

Colorblindness

Colorblind racial attitudes were measured with the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000). The CoBRAS is a 20-item self-report measure of color-blind racial attitudes with a 6-point response scale (1= *strongly disagree*, 6 = *strongly agree*) in which higher scores indicate greater levels of color-blind racial attitudes. The score is calculated as a

sum of items with scores ranging from 20 to 120 and higher scores indicating higher colorblind ideology. In a sample of 594 undergraduates and community members, the CoBRAS was found to have adequate validity and reliability (α = .86; Neville et al., 2000). Our alpha was excellent at .95.

Empathy

The Scale of Ethnocultural Empathy (SEE; Wang et al., 2003) is a 31-item self-report measure of empathy toward people of different racial and ethnic backgrounds. It has a 6-point response scale (1 = s*trongly disagree that it describes me*, 6 = *strongly agree that it describes me*) and higher scores indicate higher levels of ethnocultural empathy. The score is calculated as a mean of items ranging from 1 to 6, with higher scores indicating higher empathy ratings. In a sample of 340 undergraduates, the SEE demonstrated adequate validity and reliability (α = .91; Wang et al., 2003). Our alpha was excellent at .93.

Multicultural Experiences

Actual and desired multicultural experiences were measured using the 15-item Multicultural Experiences Questionnaire (MEQ; Narvaez & Hill, 2010). The MEQ utilizes several scale ranges (e.g., 1 = *never*, 5 = *always*; 1 = *not true at all,* 5 = *very true*). The score is calculated as a sum of items (range: 15 - 72), with higher scores indicating higher experiences and desires for experiences, in multicultural contexts. The MEQ demonstrated adequate reliability and validity (α = .80; Narvaez & Hill, 2010). Our alpha was adequate at .75.

Beliefs About Diversity

The Personal Beliefs About Diversity Scale (PBADS; Pohan & Aguilar, 2001) measures beliefs and knowledge of diversity with a 15-item self-report scale (1 = *strongly disagree* and 5 = *strongly agree*). The score is calculated as a sum of items that range from 15 to 90; higher scores

indicate higher openness/acceptance of diversity. The PBADS has demonstrated adequate reliability (α = .84; Pohan & Aguilar, 2001). Our alpha was strong at .88.

Analysis Plan

We designed and delivered the Multicultural Psychology course to increase students' multicultural competence. Thus, we hypothesized that student's scores on MC-related measures would improve from pre to post, yet we hypothesized that the indirect contact activities would lessen the impact of the shifts in MC-related constructs. To answer our research question, we conducted a mixed factorial Repeated Measures ANOVAs (RM ANOVA).We compared shifts in scores between students in the Fall 2019 (pre-pandemic), Spring 2020 (pandemic-transition), and Fall 2020 (pandemic-prepared) semesters on MC-related measures (SEE [empathy], CoBRAS [colorblind racial attitudes], PBADS [beliefs about diversity], and MEQ [multicultural experiences]) from pre (Time 1) to post (Time 2) using mixed repeated measures analysis of variance (mixed RM ANOVA).

Results

Data were normally distributed, as assessed by Normal Q-Q Plots and by examining skewness and kurtosis. There was homogeneity of variances (Levene's test of homogeneity of variances, $p > .05$) and covariances (Box's M test, $p > .001$). See Table 3 for *n*s, *M*s, and *SD*s for MC-related measures for each semester.

To test whether we could analyze data by semesters (e.g., all of Fall 2019) rather than by section (e.g., Fall 2019 in person, Fall 2019 online), we examined the time and time by course delivery modality for Fall 2019, Spring 2020, and Fall 2020. For each semester, we ran a RM ANOVA with all the outcome variables (empathy, colorblindness, personal beliefs, and multicultural experiences). The within subject factor was time (pre, post) and the between subject factor was course modality (online, in-person). Findings were consistent with significant

effects for time: Fall 2019 $F(4, 52) = 19.045$, $p < .001$, $n_p^2 = .594$; Spring 2020 $F(4, 50) = 14.193$, $p < .001$, $n_p^2 = .532$; Fall 2020 $F(4, 65) = 9.531$, $p < .001$, $n_p^2 = .370$. The time by course modality interaction was non-significant: Fall 2019 $F(4, 52) = 1.408$, $p = .244$, $n_p^2 = .098$; Spring 2020 $F(4, 50) = 1.479$, $p = .223$, $n_p^2 = .106$; Fall 2020 $F(4, 65) = 0.297$, $p = .879$, $n_p^2 = .018$) across all semesters. Given that there were no statistically significant differences due to teaching modality, we collapsed the course data across modalities and proceeded with analyses to detect differences by semester.

We ran a 2 (within: pre, post) x 3 (course semester: Fall 2019, Spring 2020, Fall 2020) RM ANOVA with all outcome variables (empathy, colorblindness, personal beliefs, and multicultural experiences). We found a statistically significant main effect of time for all outcome measures across all semesters, with scores showing decreases in colorblindness and increases in personal beliefs about diversity and multicultural experiences, $F(4, 176) = 40.098$, $p < .001$, $n_p^2 = .477$. There was no statistically significant interaction between the semester and time, $F(4, 176) = 1.463$, $p = .169$, $n_p^2 = .032$, indicating no difference in students' multicultural competence growth related to direct vs. indirect contact.

Posthoc Analyses

While students across sections moved in the desired direction of MC-related variables, a visual inspection of the means in Figures 1, 2, 3, and 4 suggested that there might have been baseline differences of MC-related measures. A one-way ANOVA comparing T1 means across semesters for each outcome showed significant between group differences in empathy, $F(2, 184) = 3.876$, $p = .022$, $n^2 = .040$, and colorblindness, $F(2, 184) = 6.401$, $p = .002$, $n^2 = .065$, but not beliefs about diversity, $F(2, 184) = 1.855$, $p = .159$, $n^2 = .020$, or multicultural experiences, $F(2, 184) = 0.942$, $p = .392$, $n^2 = .041$.

The small to medium effect of empathy showed Fall 2020 students had significantly higher scores than either Fall 2019 or Spring 2020 students (see Table 3). Tukey HSD post hoc tests show that mean differences in empathy total score at Time 1 were statistically significantly lower in the Fall 2019 (M_{diff} = -0.25, SE_{diff} = 0.11, p = .050) and Spring 2020 class (M_{diff} = -0.25, SE_{diff} = 0.11, p = .048) as compared to the Fall 2020 semester, meaning that students in the Fall 2020 semester had significantly higher baseline empathy than students in the Fall 2019 and Spring 2020 semesters. Mean difference in empathy total score in the Fall 2019 was not significantly different than the Spring 2020 class (M_{diff} = -0.00, SE_{diff} = 0.11, p = 1.0; see Figure 1).

Similarly, the large magnitude of differences in colorblind racial attitudes showed Fall 2020 students had significantly lower scores than either Fall 2019 or Spring 2020 (see Table 3). Tukey HSD post hoc tests show that mean differences in colorblind racial attitude total score at Time 1 were statistically significantly greater in the Fall 2019 (M_{diff} = -7.92, SE_{diff} = 2.81, p = .015) and Spring 2020 class (M_{diff} = -9.08, SE_{diff} = 2.81, p = .004) as compared to the Fall 2020 semester, meaning that students in the Fall 2020 semester had significantly lower baseline colorblind racial attitudes than students in the Fall 2019 and Spring 2020 semesters. Mean difference in colorblind racial attitude total score in the Fall 2019 was not significantly different than the Spring 2020 class (M_{diff} = 1.15, SE_{diff} = 2.95, p = .919; see Figure 1).

Discussion

Students across all course sections and semesters significantly improved on all outcome measures from pre to post, which was consistent with previous research findings (Alvarez & Domenech Rodríguez, 2020; Patterson et al., 2018). These decreases in colorblind racial attitudes (CoBRAS; Neville et al., 2000) and increases in empathy (SEE; Wang et al., 2003), multicultural experiences (MEQ; Narvaez & Hill, 2010), and beliefs about diversity (PBADS; Pohan &

Aguilar, 2001) did not differ between semesters where students engaged in direct intergroup contact and semesters where students engaged in indirect intergroup contact, suggesting that indirect contact was no less effective than direct contact in relation to improvements in MC-related attitudes when combined with the rest of the course content. This also suggests that the teaching adaptations made in response to the COVID-19 pandemic were effective, as there were no losses in typically observed gains in MC-related attitudes for the class.

Students' colorblind racial attitudes scores were significantly lower and ethnocultural empathy scores were significantly higher at baseline in the Fall 2020 (pandemic-prepared) semester than they were in the Fall 2019 (pre-pandemic) and Spring 2020 (pandemic-transition). The lower baseline colorblind racial attitudes and higher baseline ethnocultural empathy in the Fall 2020 in comparison to the other semesters does not appear to be related to pandemic-related shifts, but the authors' wonder if the scores could perhaps be explained by the events of the summer of 2020, where the United States saw a large increase in participation in the Black Lives Matter movement in response to the murders of Breonna Taylor, George Floyd, Ahmaud Arbury, and many others, and to what some have referred to as the "Summer of Racial Reckoning" (Chang et al., 2020). It is notable that the mean baseline scores for Fall 2020 were within the range of the mean post-scores for other semesters, suggesting that the multicultural events of the summer of 2020 could potentially have had a similar impact on colorblind racial attitudes and ethnocultural empathy as a semester long course in multicultural psychology. Considering the media coverage, public discourse, increased consumption of Black literature, TV, and film, and/or participation in marches/rallies/protests, it seems possible that the events of the summer of 2020 may have provided many opportunities for both direct and indirect intergroup contact that

could have helped individuals to decrease their colorblind racial attitudes and increase their ethnocultural empathy.

Limitations

Our operational definition for intergroup contact, attending three multicultural events over the course of a 15-week semester, differed from Allport's (1954) conceptualization of contact with his four optimal conditions. While we encouraged students to incorporate some of Allport's (1954) optimal conditions (i.e., choose events that are social, in a power even situation, and where the student represents a numerical minority or an outgroup member), we also had to be flexible with what events we allowed students to engage in to fulfill the course requirements. However, considering the wide range of types and dosages of direct and indirect intergroup contact interventions that resulted in positive outcomes in the literature (e.g., Lemmer & Wagner, 2015; Paluck et al., 2019; Pettigrew & Tropp, 2006; Zhou et al., 2019), we believe that our operational definition for the current study adds a useful and simple option for implementing intergroup contact, particularly for an educational setting. By allowing students to choose three multicultural events of their choice, students had some control over their engagement in a manner that is consistent with our adage to "start where you're at and grow from there". When a learning activity is perceived as controllable and positively valued, enjoyment and curiosity are more likely to be experienced (Pekrun, 2006), and positive emotions may also help to prevent a backfire effect (Trevors et al., 2016).

Further, while the students were required to submit proof of attendance and complete a written report about the events they attended at the end of the semester in order to ensure that the students actually attended three multicultural events (see Table 1 for full assignment prompt and Table 2 for grading rubric), we did not directly observe event attendance or engagement, which

is a limitation. Future research could directly measure engagement. It would also add a richness to the results to add qualitative data; future research could code the types of events students attended and the depth of self-reflection and engagement in their written reports to assess how this relates to MC-related shifts or reductions in prejudice. Additionally, in our comparison of semesters that required direct contact to semesters that required indirect contact, we did not randomly assign students to these conditions, which limited our ability to make conclusions about causality. This study instead offered a naturalistic, quasi-experimental examination of the differences between groups to evaluate the teaching adaptations made in response to the COVID-19 pandemic.

Implications

The current study examined the impact of COVID-related curriculum changes on student outcomes in multicultural psychology courses that were designed to facilitate students' development of multicultural competence by improving their knowledge, awareness, and skills. More specifically, we examined the impact of removing the direct intergroup contact requirement and allowing indirect intergroup contact on students' multicultural competence. Results suggested that indirect intergroup contact was no less effective than direct intergroup contact in relation to students' improvements on MC-related measures. Results also add research support for benefits of engaging in multicultural events, and that virtual contact events (e.g., socials, lectures, webinars, festivals), and parasocial or media contact events (e.g., watching movies/documentaries, reading books, or listening to podcast episodes that were approved by instructors) can be as enriching and beneficial as engaging in in-person multicultural events when combined with content-learning. These results may need to be replicated for non-pandemic

times to ensure stable findings in a non-pandemic context where indirect intergroup contact events are not the only available option.

This study also adds to the intergroup contact literature. Paluck et al. (2019) noted that more studies were needed that included adults over the age of 25 as participants, that there was a lack of transparency about the type of contact being examined, and that there was a lack of studies measuring outcomes over time. While the mean age of our sample was about 23 years old, participant ages ranged from 18-48. We also offered a clear operational definition of the type and dosage of intergroup contact, as well as a comparison between indirect and direct intergroup contact. While our study only had two time points, Time 2 being at 15-weeks from Time 1 offers a longer post-score follow-up than many other studies in the literature.

Conclusion

Overall, the findings from our evaluation are valuable for multiple reasons. First, seizing the opportunity to evaluate a shift in the class due to a global pandemic provided us with a naturalistic opportunity to examine pedagogical strategies without turning the classroom into an experimental chamber. What we lost in scientific precision, we gained in ethicality. Second, the understanding that approaching expectations for multicultural contact with flexibility is great for all students, but can be especially helpful in engaging a more inclusive pedagogy. Students that are unable to attend in-person events due to health, mobility, disabilities, or developmental demands (e.g., parents to young children), financial limitations, or other important contextual considerations, might be equally well served by events that use indirect contact. Further, we believe this paper offers a valuable example of evidence-based teaching of multicultural psychology, and helpful strategies for fellow instructors. We hope these findings provide a useful resource for anyone advocating the value of providing funding for on-campus multicultural

events at their institutions, for these events provide an opportunity for student growth. Finally, we appreciated grappling with the observation about significantly lower colorblindness scores along with significantly higher ethnocultural empathy in the Fall of 2020. It was powerful for us to witness the observable impact of seismic social shifts in our students, and even more inspiring to see that the course still had impact above and beyond those social shifts. Indeed, this finding provides powerful information about the need to target color awareness at social and individual levels simultaneously.

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Table 1

Cultural Event Assignment Prompt

Assignment Name	Assignment Prompt
Cultural Activity Report	**Structure.** The Cultural Activities Report will be 1500 – 3000 words. Cultural Activities Reports must be returned in a Word or similar file format so that the instructor or TA can provide comments on your paper. Proof of attendance to the events (e.g., a photo of you at the event or an event program) must be submitted as well. **Content.** This report will provide information on: (a) the three events you attended (what was the event? what made it "cultural"? why did you select it for attendance?). Please provide evidence of attendance. (b) Your experience at the events with a particular focus on self-awareness (what did you learn about yourself as a cultural being?), knowledge (what did I learn about the "cultural other"?), and skills (what cultural competence skills did I practice? what went well? what could you improve?). **Grading.** See grading rubric for specific points and requirements for proof of attendance. Please keep in mind that your responses should not be comprised of opinion or conjecture. We expect students to develop and share insights that are based on the course content (reading, videos, etc.) and that utilize concepts taught in class. You should have a minimum of 5 citations from assigned readings. Citations can be from the same source (e.g., the book, or even the same chapter) but point to a variety of content. **Pedagogical rationale.** Meaningful exposure to diversity is critical in the development of cultural competence. This experience will provide students with the opportunity to practice Mio et al.'s recommendations from Chapter 10.

Note: All assignments in the course were given to students with information under the headings: "Structure", "Content", "Grading", and "Pedagogical Rationale". See Table 2 for the rubric tied to the "Cultural Activity Report" assignment.

Table 2

"Cultural Activity Report" Assignment Rubric

Criteria	Points
Attendance	10
Evidence of attendance to events. Evidence can be a ticket stub, an event program, or a photograph of you at the event.	
Rationale	5
Responses to the questions: what was the event? what made it "cultural"? why did you select it for attendance? Full points are awarded when there is a clear and relevant response.	
Self-Awareness	10
Response to the question: what did you learn about yourself as a cultural being? Be sure to identify dimensions of diversity that are addressed in class (e.g., race/ethnicity, gender, SES, sexual orientation, gender identity, ability status) and that are relevant to the events that you attended.	
Knowledge	10
Response to the question: what did I learn about the "cultural other"? Specificity in this domain is key. Did you learn about new cultural practices? Cultural beliefs? Cultural values? How did you gain this knowledge and what specifically did you learn? It doesn't matter if you report on simple behaviors (e.g., I learned to take my shoes off before coming into the eating space) or complex concepts (e.g., I learned of the importance of oral traditions not just to transmit knowledge but to build relationships between family members across generations).	
Skills	5
Responds to the questions: what cultural competence skills did I practice? what went well? what could I improve? Again, specificity here is key. We are looking for you to address how you engaged in the exercise. It is easy to focus on what you did during the event, but consider also what you did before (e.g., read up on the cultural group before attending) or after (e.g., sough consultation to understand something I saw there) that can also be a marker of a skill. During events you may do something proactive (e.g., I greeted people in a manner consistent with the group's practices) or not (e.g., I listened instead of asking tons of questions so I could just be present in the moment and observe).	
Sources	5
At least 5 sources cited. (1 point for each of first 5 citations)	

Note: See description of "Cultural Activity Report" assignment in Table 1.

Table 3

Means and Standard Deviations at Time 1 and Time 2 by Semester.

Measures	Semester	Time	*M*	*SD*	*n*
Color-Blind Racial Attitudes Scale (CoBRAS)	Fall 2019	Time 1	57.78	16.68	58
		Time 2	47.72	14.40	57
	Spring 2020	Time 1	58.93	16.27	58
		Time 2	50.91	15.36	57
	Fall 2020	Time 1	49.85	14.81	71
		Time 2	45.17	15.35	70
Scale of Ethnocultural Empathy (SEE)	Fall 2019	Time 1	4.34	0.66	58
		Time 2	4.66	0.69	57
	Spring 2020	Time 1	4.35	0.56	58
		Time 2	4.60	0.54	57
	Fall 2020	Time 1	4.60	0.56	71
		Time 2	4.79	0.59	70
Multicultural Experiences Questionnaire (MEQ)	Fall 2019	Time 1	46.47	6.11	58
		Time 2	48.61	6.68	57
	Spring 2020	Time 1	46.26	6.27	59
		Time 2	48.56	6.61	57
	Fall 2020	Time 1	47.66	6.62	71
		Time 2	49.31	6.97	70

Personal Beliefs about Diversity Scale (PBADS)	Fall 2019	Time 1	73.43	8.54	58
		Time 2	75.42	9.63	57
	Spring 2020	Time 1	72.05	8.56	58
		Time 2	73.82	8.11	57
	Fall 2020	Time 1	74.89	8.05	71
		Time 2	75.31	9.21	70

Figure 1

Interactions Between Time and Semester on Ethnocultural Empathy, Colorblindness, Beliefs About Diversity, and Multicultural Experiences.