

## Article

# Does Intercultural Contact Increase Anti-Racist Behavior on Social Network Sites?

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**Abstract:** Empirical attention on online intercultural contact and prejudice reduction are increasing. Nevertheless, still little is known on processes that could influence the contact–prejudice relation as well as the relation between online contact and anti-racist behavior. Based on literature on intergroup contact, the present study aims to fill these gaps, focusing on online intergroup relationships between people from different countries. Specifically, it examines whether and to what extent empathic feelings and online community commitment mediate the relationship between online intergroup contact and both perceived ethnic discrimination and anti-racist behavior on Facebook. We collected data from a predominantly Italian sample of 1018 Facebook users ( $M_{age} = 30.03$ ,  $SD_{age} = 11.09$ ; females: 80.01%); participants filled in an online questionnaire. A semi-full Structural Equation Modeling was used to test hypotheses. The results confirmed that when intergroup contact was established, such contact was able to increase the sense of being committed to the online community, which increased the perception of online discrimination towards ethnic and racial minorities, which in turn was able to increase the anti-racist behavior. The ambivalent role of the empathy in online contexts will be discussed.

**Keywords:** online intergroup contact; emphatic feeling; community commitment; perceived discrimination; anti-racist behavior



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## 1. Introduction

Allport (1954) distinguished four optimal conditions through which intergroup contact can reduce prejudice, i.e., equal status, common goals, cooperation and authorities' support, and a considerable number of subsequent studies (e.g., Pettigrew and Tropp 2006) confirmed the positive effect of contact in promoting harmonious intergroup relations, especially when Allport's optimal conditions are met. The contact hypothesis was also applied to more indirect or distant form of contact (Dovidio et al. 2011; Turner et al. 2007; Wright et al. 1997) and more recently to online contact (Amichai-Hamburger and Furnham 2007; White and Abu-Rayya 2012). Studies on online contact demonstrated that the Internet could be used to promote intergroup harmony (Imperato et al. 2021). However, it is not yet clear which variables influence the process by which online intergroup contact reduces prejudice and discrimination toward different cultural groups, and therefore, bring about anti-racist behaviors. Thus, the purpose of this study was to examine how contact between people with different geographical and cultural backgrounds on Facebook increased perception of online ethnic and racial discrimination and reduced online anti-racism behaviors, through the mediating roles of both online community commitment and empathic feelings toward outgroups.

### 1.1. Contact with Ethnic Outgroups in the Online World

In the few last years, the empirical attention on online intergroup contact has increased, as well as online contexts or platforms that facilitate contacts between different cultures or

groups (i.e., Peace Data; [Guadagno et al. 2018](#)). Online intergroup contact ([White et al. 2015](#)) has been defined as “computer-mediated contact involving an engagement of Self in intergroup relations” ([White and Abu-Rayya 2012](#), p. 598). Although online contact shares some features of face-to-face contact, i.e., it is a form of instantaneous and naturalistic communication ([White et al. 2015](#)), there are some characteristics which are typical of this form of contact. The relative anonymity guaranteed by the Internet and the control over communication, i.e., the possibility to interrupt uncomfortable dialogue with an outgroup member, make the web an eligible context for reducing prejudice, making people feel safer and reducing the anxiety related to the self-disclosure, especially for those who are stigmatized and marginalized ([Amichai-Hamburger and Furnham 2007](#)).

Overall, studies suggest that intergroup contact reduced prejudice toward outgroup members in both offline and online environments ([Lissitsa 2017](#); [Mancini and Imperato 2020](#); [Walther et al. 2015](#)). However, the online contact effects are more limited than the effects of direct contact ([Lemmer and Wagner 2015](#)), and online contact only moderately reduced prejudice toward different target groups. The difference between direct and online intergroup contact could be partially explained by the distinction between spontaneous online contact (i.e., contact that occurs when people freely choose to interact with an outgroup member) and induced online contact (i.e., contact that occurs when researchers make people from different groups interact). Moreover, in their meta-analysis, [Imperato et al. \(2021\)](#) underlined that there are differences in terms of prejudice reduction between online contact occurring spontaneously, as happens on Social Network Sites (SNS), and online contact induced in a laboratory context, showing that the prejudice reduction was stronger when people can choose to dialogue with outgroups, i.e., in spontaneous online contacts.

Some authors (e.g., [Lissitsa and Kushnirovich 2018](#)) addressed their research to study online contact in reducing prejudice towards different ethnic groups. Nevertheless, the results obtained were not always congruent. Analyzing online contact between Jews and Arabs in Israel, [Lissitsa \(2017\)](#) found that the frequency of spontaneous intergroup contacts could positively affect closeness towards a minority ethnic group, minimizing social distance more than meeting members of the same minority group offline. [Mor et al. \(2016\)](#) analyzed 85 posts and 3565 comments on the Facebook page “Tweeting Arabs,” which aimed to make Israeli-Jews and Palestinians interact with each other. They found that the posts in which Palestinians portrayed themselves as suffering were mostly followed by negative comments from Israeli-Jews, while posts in which Palestinians portrayed themselves as moderate and peace-seeking were mostly followed by comments of acceptance and sympathy. [Schwab et al. \(2019\)](#) examined the Facebook page “Israel Loves Iran,” born to promote contact between Israeli and Iranian citizens, finding that online contact was negatively correlated with negative attitudes toward the respective outgroup. Interestingly, other authors (e.g., [Cao et al. 2018](#); [Schwab et al. 2019](#)) also found that offline contact between groups did not moderate the results, suggesting that online contact can independently reduce the prejudice when controlling real-life interactions.

Although the number of studies on this topic are increasing, it seems that there is still a lack of evidence that could explain these at least partially contradictory results found, for example by analyzing the process by which online contact reduced ethnic prejudice. As the meta-analysis by [Imperato et al. \(2021\)](#) showed, either spontaneous or induced, the effect of online intergroup contact on prejudice reduction is highly variable and distant from being explicated by the characteristics of samples, studies, types of virtual context and types of contact that studies analyzed. Therefore, further studies are needed to clarify how, i.e., through which mediating mechanisms, online contact has an effect on prejudice. To the best of our knowledge, while research on mediating mechanisms has been prominent in direct (face-to-face direct contact) and indirect (extended, vicarious and imagined) contact studies over the past two decades (e.g., [Dovidio et al. 2017](#)), the same cannot be said for studies on the effect of online contact (e.g., [Mancini and Imperato 2020](#)).

### 1.2. Mediators of the Contact–Prejudice Relation

As contact research has highlighted (Davies et al. 2011; Dovidio et al. 2017; Lemmer and Wagner 2015), cross-group friendship can enhance positive intergroup attitudes by increasing empathy and perspective taking both in direct (Pettigrew and Tropp 2008) and in indirect forms of contact (Vezzali et al. 2014). Perspective taking and empathy increased the perception of overlap between self and other; thus, a greater number of traits used to describe the self will be attributable to the outgroup member, and this attribution will likely lead to a more positive evaluation of the other (Kenworthy et al. 2005; Klimecki 2019). In their three-step model about empathy and negative attitudes reduction, Batson et al. (1997) pointed out that empathic feelings for an outgroup member first develop on an interpersonal level. Nevertheless, studies on direct contact showed that empathic feelings toward outgroup member may be generalized to the outgroup as a whole (Fuochi et al. 2020). In this sense, feeling empathy towards an outgroup member with whom one interacts could be linked to a decrease in prejudice towards the other group, and therefore, to the tendency to engage in anti-racist behaviors. Analyzing literature focused on online contexts, the role of “digital empathy” is still controversial (Powell and Roberts 2017). In fact, given the specific characteristics of computer-mediated communication, it is not yet clear whether and to what extent individuals can feel empathy towards an outgroup member online, and whether these feelings could be generalized to the outgroup as a whole. While some authors pointed out that most of online content was emotive (e.g., Bollen et al. 2011) and people developed empathic relationships online (Preece and Ghozati 2001), others demonized computer-mediated communication, underlining its lack of nonverbal clues necessary for intimate interpersonal communications (e.g., Social Presence Theory; Short et al. 1976).

Alternatively, spontaneous online intergroup contact can lead to more positive outgroup attitudes by changing how people categorize others in a situation (Dovidio and Gaertner 2010). Studies on direct contact showed that enhancing the salience of existing superordinate membership, i.e., creating a sense of a “common identity” (Gaertner et al. 2016), increased positive attitude toward the outgroup. Specifically, creating a sense of common identity can guarantee and improve some of the Allport’s optimal conditions, such as cooperation and shared goals, thus increasing the probability that intergroup contact could reduce prejudice (Dovidio et al. 2017). Furthermore, in studying offline contact, some authors found that intergroup contact encouraged prosocial behaviors toward the outgroup directly (e.g., Meleady and Seger 2017) and indirectly, through the mediation of empathy (e.g., Eisenberg et al. 2010) and categorization processes (e.g., Dovidio et al. 2009).

Some studies analyzed the role of online contact in reducing prejudice and discrimination, underlining which variables mediated this relation. Analyzing the dialogic shifts in internal and external I-positions activated in an online dialogue with a member of an ethnic/racial outgroup, Imperato and Mancini (2021a, 2021b) verified that dialogic Self affects online intercultural relationships. Specifically, they found that ethnic/racial identity and intergroup bias increased when participants positioned themselves and others at social level of inclusiveness, i.e., as a member of own ethnic/racial group, compared to when they positioned themselves and the other at individual level of inclusiveness, i.e., as a specific person. Considering prejudice and discrimination target groups other than the ethnic/cultural ones, Mancini and Imperato (2020) demonstrated that it was by increasing identity exploration that online intergroup contact increased the perceptive sensitivity of the participants towards discrimination against sexual minorities on Facebook. Based on studies on the secondary transfer effect providing evidence of an attitude generalization mechanism whereby intergroup contact with immigrants predicted more positive attitudes towards immigrants, as well as towards homosexual people (Pettigrew 2009; Vezzali and Giovannini 2012), we can suppose a similar mechanism also occurs in the case of online contact with members of an ethnic/racial outgroup. However, this study specifically focused on anti-racist behavior, because, to the best of our knowledge, no study has analyzed

the relation between intergroup contact and positive behaviors toward the outgroup in online contexts, i.e., anti-racist behaviors.

### 1.3. The Present Study

The purpose of this study was to explore whether and how online contact with outgroup members, i.e., people from countries other than their own, is associated with both empathic feelings and the sense of commitment to the online “common identity,” i.e., to the Facebook community, and how these variables associated with both the perception of discrimination (mediated and vicarious) toward ethnic and racial minorities and anti-racist behavior on Facebook.

Starting from online and offline literature on contact hypothesis above reviewed, we formulated the following hypotheses:

**Hypothesis 1.** *Online intergroup contact is positively associated with both the perception of discrimination (mediated and vicarious) and anti-racist behavior.*

**Hypothesis 2.** *Online intergroup contact is positively associated with both empathic feelings and the sense of commitment to the online community.*

**Hypothesis 3.** *Empathic feelings and a sense of commitment to the online community is positively associated with both the perception of discrimination (mediated and vicarious) and anti-racist behavior.*

**Hypothesis 4.** *Empathic feelings and the sense of commitment to the online community mediated the relationship between online intergroup contact and both the perception of discrimination (mediated and vicarious) and anti-racist behavior.*

**Hypothesis 5.** *The perception of discrimination (mediated and vicarious) mediated the relationship between online intergroup contact and anti-racist behavior through empathic feelings and commitment to the online community.*

## 2. Methods

### 2.1. Procedure and Participants

An online survey was distributed via advertisements posted on Italian Facebook groups dedicated to university students with the support of Qualtrics software ([www.qualtrics.com](http://www.qualtrics.com), accessed on April 2020). The advertisements invited Facebook users to voluntarily participate in a survey by compiling an anonymous questionnaire, which was in line with the ethical code of the Italian Association of Psychology (AIP). Participants were informed that the aim of this study was to investigate their online interactions and their behaviors on Facebook, not specifying that we were interested in interactions between individuals from different countries, in order to not discourage participation by those who had little contact with outgroup members. Only those who were of age and had at least one Facebook account could fill out the questionnaire. Data were collected as part of a methodology course by a group of undergraduate psychology students, who did not receive extra credits. Following a protocol, undergraduate students sent the link to their contacts via e-mail and WhatsApp and posted it on their social network profiles. After 3 days, the students were instructed to do a recall using the same platforms, and to track in detail the channels used for sending the link and feedback received by participants.

The questionnaire started with an Informed Consent form that participants had to expressly accept by clicking on “yes, I agree to participate”; otherwise, they were redirected to the end of the questionnaire. Complying with the Italian ethical standards, Informed Consent gave information on the aim of the study. Furthermore, participants were assured the confidentiality and the anonymity of their responses, also informing them on data protection, and that they could withdraw from the study at any time. Through a filter,

participants who were not of age or who did not have a Facebook account were not able to fill out the questionnaire, and they were redirected to the acknowledgement page.

An initial sample of 1209 adult Facebook users agreed to participate in the study. However, 191 participants were excluded from the data analyses because of missing values on items related to each of the study's five constructs (online intergroup contacts with people from different countries, online empathic feelings, online community commitment, online perceived ethnic discrimination and anti-racist behaviors). The final sample was composed of 1018 participants (19.9% males, 7 missing) aged between 18 and 72 years. Most participants composing the sample were born in Italy and had Italian parents. The majority were students and workers (28 missing). Sample characteristics are presented in Table 1.

**Table 1.** Sample characteristics ( $n = 1018$ ).

Variable	Number (Percent)
Age, $M$ ( $SD$ )	30.03 (11.09)
Females	810 (80.01)
Males	201 (19.90)
Country of birth:	
Italy	970 (97.80)
Other countries	22 (2.20)
Parents:	
Italian	941 (95.00)
One from other countries	28 (2.80)
Both from other countries	22 (2.20)
Occupation:	
students	456 (46.00)
employees	408 (41.20)
unemployed	44 (4.40)
housewives	18 (1.8)
retirees	11 (1.1)

As far as Facebook contacts and usage, participants had an average of 301 or more contacts, and they spent an average timeframe varying from 10 to 30 or more minutes per day on Facebook.

## 2.2. Measures

Participants completed an anonymous questionnaire composed of different scales related to their experience on Facebook, specifically with respect to their online contacts with people from different countries, on their empathy, their online community commitment and their perception of online discrimination towards ethnic and racial minorities. All scales were administered in Italian. For those scales for which there was no Italian validation and the items were not created ad hoc, the items of the original scales were translated by two independent judges and adapted both to the context (i.e., Facebook) and to the group (i.e., individuals from countries other than their own) considered.

**Online intergroup contacts.** This was measured through three ad hoc items assessing participants' network heterogeneity. The scale was on a five-point Likert-type scale (1 = no one, 5 = everyone; i.e., "How many of your friends on Facebook live in a country other than yours?"; "How many of your friends on Facebook live in a non-European country?"; "How many of your friends on Facebook speak a language other than yours?";  $\alpha = 0.77$ ).

**Online empathic feelings.** This was measured through items adapted from [Carpenter \(2012\)](#). The scale was composed of four items on a five-point Likert-type scale (1 = never, 5 = always) measuring how often and to what extent participants engaged in online be-



havior to offer emotional support to their Facebook friends (e.g., “I use Facebook to offer emotional support to people I know when they are worried about something”;  $\alpha = 0.90$ ).

**Online community commitment.** This was measured through the Italian version (Mancini and Imperato 2020) of the attitudinal items adapted from the Facebook Intensity Scale (FIS; Ellison et al. 2007). The six items on a five-point Likert-type scale (1 = strongly disagree, 5 = strongly agree) measured participants’ emotional connection to Facebook and the extent to which Facebook was integrated into their life (e.g., “I feel I am part of the Facebook community,” “Facebook is part of my everyday activity”;  $\alpha = 0.79$ ).

**Perceived Online Discrimination.** A short form of the Perceived Online Ethnic Discrimination scale (POEDS), adapted from the Perceived Online Racism Scale (PORS; Keum and Miller 2017), was used. The scale is composed by eight items on a five-point Likert-type scale (from 1 = never to 5 = always), four of which measured Mediated Discrimination (e.g., “Did you read on Facebook a news or post about inequalities in access to the health system for ethnic minorities?”;  $\alpha = 0.82$ ), and four of which measured Vicarious Discrimination (e.g., “Have you seen posts where Facebook users belonging to racial minorities are treated as second-class citizens?”;  $\alpha = 0.89$ ) towards ethnic and racial minority groups.

**Anti-racist behavior.** We asked “When a person posts a racist post online, how do you usually behave?” Participants had to select two behaviors from a list of seven, three of which were anti-racist (e.g., “I comment to defend the target group”), one was neutral (e.g., “I scroll further”) and three were pro-racist (e.g., “I comment to support his/her idea”). We assigned a score of 1 to each anti-racist behavior, 0 to the neutral behavior and  $-1$  to each pro-racist behavior. Then, a composite score was computed, in which high levels indicated high levels of anti-racist behaviors.

### 3. Results

#### 3.1. Data Analyses

For all scales, we computed a composite score by computing the mean of the related items, so that higher scores indicate higher levels of the measured constructs. Preliminary analyses, with means and bivariate correlations among design measures, and gender (male = 1), age, ethnicity and frequency of Facebook use (range 1–6), are presented first (Table 2). Analyses of the structural equation models follow.

Gender (female = 1) was weakly and positively related to frequency of Facebook use, online empathic feelings, online community commitment, mediated discrimination and anti-racist behavior. Online empathic feelings positively related with age, while age was moderately and negatively related to mediated and vicarious discrimination and to anti-racist behavior. With the exception of online intergroup contact, participants’ ethnicity was uncorrelated to all model variables. Instead, frequency of Facebook use was positively related to all variable models, except online intergroup contact. Online intergroup contact was positively correlated with online community commitment, mediated and vicarious discrimination and anti-racist behavior, but not with online empathic feelings. Online community commitment was positively correlated with online empathic feelings, mediated and vicarious discrimination and anti-racist behavior. Lastly, anti-racist behavior was positively related with both mediated and vicarious discrimination.

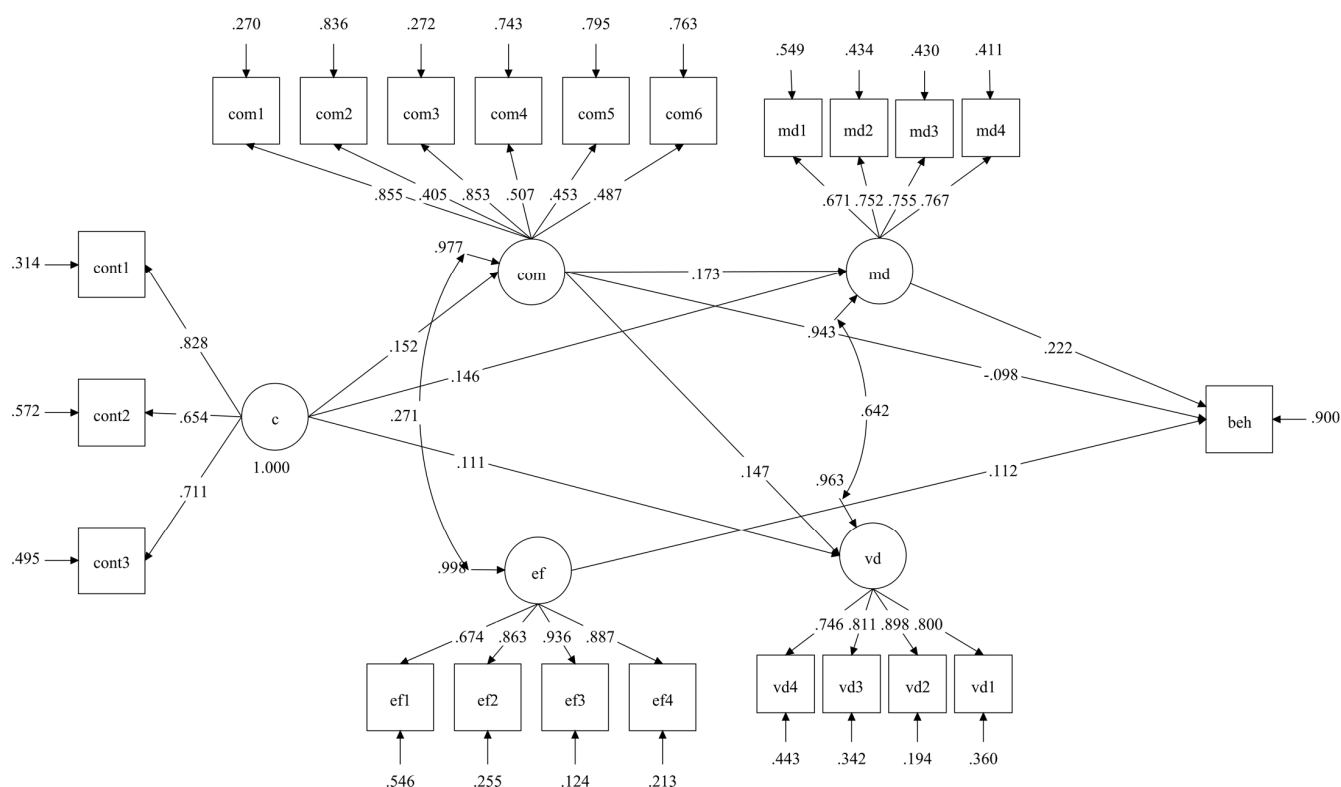
**Table 2.** Mean, standard deviation, Cronbach's  $\alpha$  and zero-order correlations of the considered measures ( $n = 1018$ ).

Variable	<i>M</i>	<i>SD</i>	Cronbach's $\alpha$	1	2	3	4	5	6	7	8	9
1. Gender (1 = F)	0.80	0.40	-	1								
2. Age	30.03	11.09	-	-0.01	1							
3. Ethnicity	1.09	0.45	-	0.00	-0.05	1						
4. Frequency of Facebook use	3.00	1.45	-	0.07 *	-0.06	0.06	1					
5. Intergroup contacts (C)	1.84	0.46	0.77	-0.03	-0.06	0.16 **	0.05	1				
6. Online empathic feelings (EF)	1.92	0.85	0.90	0.07 *	0.31 **	0.03	0.23 **	0.04	1			
7. Online community commitment (COM)	3.61	1.07	0.79	0.09 **	0.02	-0.00	0.49 **	0.12 **	0.30 **	1		
8. Mediated discrimination (MD)	1.49	0.88	0.82	0.08 **	-0.22 **	0.04	0.14 **	0.15 **	0.04	0.13 **	1	
9. Vicarious discrimination (VD)	1.91	0.90	0.89	0.00	-0.19 **	0.05	0.11 **	0.11 **	0.01	0.11 **	0.58 **	1
10. Anti-racist Behavior (BEH)	0.79	0.76	-	0.09 **	-0.08 *	0.00	-0.01	0.09 **	-0.01	0.09 **	0.25 **	0.22 **

F= female; \*  $p < 0.05$ ; \*\*  $p < 0.01$ .

### 3.2. Testing the Online Intergroup Contact–Perceived Discrimination Relation

To test our hypothesis, we performed a semi-full model using M-PLUS (Muthen & Muthen, Los Angeles, USA), v. 8.1 statistical package (Muthén et al. 2017). Although they have been little used in the online contact literature (e.g., Mancini and Imperato 2020), semi-full structural equation models allow us to explore relationships among variables free of random error. Furthermore, they allow to perform a model in which some mediating variables (i.e., online community commitment and empathic feelings and mediated and vicarious discrimination) are considered in parallel and not in a consequential way, unlike other statistical techniques (i.e., Hayes' mediation models; Hayes 2017). In addition, being Structural Equation Models combinations of factor analysis and multiple regression, they can be particularly useful, also considering that some measures were adapted or ad hoc created for this study. To determine the sample size, according to Kline (2015), we needed at least 20 participants per parameter (720). In the model, all variables were latent variables with the exception of anti-racist behavior. We constructed a semi-full model and we considered online intergroup contact as exogenous variable, online empathic feelings, online community commitment, mediated and vicarious discrimination and anti-racist behavior as endogenous variables; online empathic feelings and online community commitment, as well as mediated and vicarious discrimination, were allowed to co-vary. Maximum likelihood estimation with robust standard errors (MLR) was performed, because the departure from normality in the sample was statistically significant. To assess the goodness of fit of the model, we used Multiple indices of Comparative fit index (CFI), Tucker Lewis index (TLI), Root mean square error of approximation (RMSEA) and Standardized root mean square residual (SMSR). According to Byrne (2012) and Kenny (2015) suggestions, CFI and TLI values greater than 0.95 and SMSR value lower than 0.05 denote an excellent model fit; CFI values higher than 0.90 and RMSEA values smaller than 0.08 indicate an acceptable fit. Model results are reported in Figure 1 and in Table 3.



**Figure 1.** Predicted model ( $n = 1018$ ). Note: C, online intergroup Contact; COM, online community commitment; EF, empathic feelings; MD, Mediated Discrimination; VD, Vicarious Discrimination; BEH, anti-racist behavior.

The results only partially supported what we expected. Partially confirming hypothesis 1, the online intergroup contact was positively related to mediated and vicarious discrimination, but not with anti-racist behavior. Moreover, online intergroup contact was positively associated with online community commitment, but not with empathic feelings, thus only partially supporting the hypothesis 2. In line with hypothesis 3, online community commitment was positively associated with mediated and vicarious discrimination, but contrary to what we expected, online community commitment was negatively associated with anti-racist behavior. Furthermore, empathic feelings was positively related only to anti-racist behavior. As far as hypothesis 4, the results only partially supported mediation assumption: a significant mediation was observed for online community commitment and not for empathic feelings, i.e., online intergroup contact was positively associated with online community commitment, which in turn was positively associated with participants' perception of both mediated and vicarious discrimination and with anti-racist behavior. Empathic feelings did not significantly associate with online intergroup contact, nor perceived mediated and vicarious discrimination nor anti-racist behavior. Nevertheless, empathic feelings positively associated with online community commitment. Furthermore, as for hypothesis 5, only the path intergroup contact  $\rightarrow$  online community commitment  $\rightarrow$  mediated discrimination  $\rightarrow$  anti-racist behavior was significant in the expected direction. Coefficients are presented in Table 3.

The full model showed a good fit (Byrne 2012; Kenny 2015),  $\chi^2(195) = 535.390$ ,  $p < 0.001$ , CFI = 0.96, TLI = 0.95, RMSEA = 0.04,  $p = 1.000$ , 90%CI [0.037, 0.046], SRMR = 0.040. The model explained 10% of anti-racist behaviors, 5.7% of mediated discrimination and 3.7% of vicarious discrimination.



**Table 3.** Standardized estimates of the direct and indirect effects of the tested model ( $n = 1018$ ).

Path	<i>B</i>	<i>SE</i>	<i>Z</i>	95% <i>CI</i>
MD on				
EF	−0.019	0.037	−0.518	[−0.092, 0.054]
COM	0.173	0.039	4.462 ***	[0.097, 0.249]
C	0.146	0.042	3.483 ***	[0.064, 0.228]
VD on				
EF	−0.037	0.036	−1.029	[−0.106, 0.033]
COM	0.147	0.036	4.097 ***	[0.077, 0.218]
C	0.111	0.037	2.980 **	[0.038, 0.183]
EF on				
C	0.049	0.037	1.324	[−0.023, 0.121]
COM on				
C	0.152	0.039	3.896 ***	[0.076, 0.229]
BEH on				
MD	0.222	0.048	4.652 ***	[0.128, 0.315]
VD	0.092	0.047	1.941	[−0.001, 0.185]
COM	−0.098	0.036	−2.690 **	[−0.169, −0.027]
EF	0.112	0.034	3.257 **	[0.045, 0.179]
C	0.059	0.034	1.710	[−0.009, 0.126]
EF with				
COM	0.271	0.032	8.494 ***	[0.208, 0.333]
MD with				
VD	0.642	0.028	22.607 ***	[0.586, 0.698]
Indirect effects				
C→EF→MD	−0.001	0.002	−0.468	[−0.005, 0.003]
C→EF→VD	−0.002	0.002	−0.783	[−0.006, 0.003]
C→EF→BEH	0.005	0.005	1.216	[−0.003, 0.014]
C→COM→MD	0.026	0.009	2.937 **	[0.009, 0.044]
C→COM→VD	0.022	0.008	2.824 **	[0.007, 0.038]
C→COM→BEH	−0.015	0.007	−2.215 *	[−0.028, −0.002]
C→EF→MD→BEH	0.000	0.000	−0.464	[−0.001, 0.001]
C→EF→VD→BEH	0.000	0.000	−0.729	[−0.001, 0.000]
C→COM→MD→BEH	0.006	0.002	2.514 *	[0.001, 0.010]
C→COM→VD→BEH	0.002	0.001	1.575	[−0.001, 0.005]

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . Note: C, online intergroup contact; COM, online community commitment; EF, Empathic Feelings; MD, Mediated Discrimination; VD, Vicarious Discrimination; BEH, anti-racist behavior.

#### 4. Discussion

The present work examined the relationship between online intergroup contact, perception of discrimination towards ethnic and racial minority groups and anti-racist behavior. Specifically, we explored the process by which spontaneous online intergroup contact on Facebook makes users more sensitive to detect ethnic discrimination, and in turn, to behave in an anti-racist manner, analyzing the mediation role of empathic feelings and online community commitment.

The results are in line with some of our hypotheses, which showed that when individuals interacted with an outgroup member on Facebook, they felt more committed to the online community, and this commitment in turn increased people's sensitivity to detect online discrimination toward ethnic and racial minorities and their willingness to engage in anti-racist behaviors. Starting from the "common identity" theory applied to offline contexts (Dovidio and Gaertner 2010), to feel committed to one online community could be considered a more inclusive form of categorization that could increase the positive attitude towards the outgroup. Our results showed that the more participants interacted with a Facebook user from a country different from their own, the more they tended to consider themselves as members of a superordinate category, i.e., "Facebook users,"

the more they perceived both vicarious and mediated online ethnic discrimination and the more they declared anti-racist behavior. Therefore, we can speculate that it occurs because of the re-categorization process, i.e., a process that includes both the own ingroup and the outgroup (users of another country) into a more inclusive group. We can also suppose that this re-categorization result had been strengthened by the characteristics of online environments. As the social identity model of the deindividuation effect (SIDE; [Spears et al. 2000](#)) argues, the visual anonymity of the digital communication can create an individual identity suspension or vacuum in which users can gravitate towards the group identity. Interacting on a social network may have made the sense of belonging to the same community salient, thus determining the shift from personal identity to the more inclusive group of the Facebook community and suppressing the ingroup/outgroup dynamics. As some authors pointed out (e.g., [Amichai-Hamburger and McKenna 2006](#)), the Internet creates a protected context for users, potentially reducing anxiety related to intergroup contacts.

Interestingly, the results also showed that online community commitment negatively related with anti-racist behaviors. It is possible to argue that individuals strongly committed to Facebook's online community reported fewer anti-racist behaviors to conform to the racist norms they perceived emerging in the online context ([Turner and Killian 1987](#)). As [Deutsch and Gerard \(1955\)](#) stated, conformity could occur in a normative or in an informational manner. Thus, it is possible that commitment per se acted in a normative way and participants conformed to the "perceived" racist norms of the online community, acting out fewer anti-racist behaviors. However, when online contact with people from other countries enhanced individuals' sense of commitment to Facebook community, online commitment acted in an informational way, thus increasing the participants' sensitivity to detect mediated ethnic and racial discrimination and their willingness to behave more pro-socially.

No results were instead found regarding intergroup contact and online empathic feelings; thus, online intergroup contact is not related with empathic feelings towards the outgroup nor with perceived discrimination. Nevertheless, online empathic feelings positively related with the sense of being committed to the online community and to anti-racist behavior. Thus, in the context of disputes with respect to the role of "digital empathy" in online relations ([Powell and Roberts 2017](#)), our results suggest that online empathic feelings and a sense of being committed to the online community both probably satisfy the same relational need. The relational need is one of the main reasons why people use social networks ([Ellison et al. 2014](#)), and probably, it is also the engine that pushes people to build authentic and harmonious online relationships and to behave in an anti-racist manner or more generally in a prosocial manner, regardless of the type and number of contacts that users may have.

The literature also showed that the effectiveness of online contact in promoting cross-group friendships depends on the frequency and duration of online interactions ([Tidwell and Walther 2002](#)). In our sample, as well as according to other authors' results (e.g., [Lissitsa 2017](#)), the frequency of online intergroup contacts with people from different countries was relatively low. The low frequency of intergroup contacts could suggest that individuals on Facebook tend to connect to users who belong to their own ethnic group, rather than to outgroup members, in line with a process of homophilia ([Mislove et al. 2010](#)). Therefore, the potential of making spontaneous inter-personal contact with an outgroup member is more difficult to occur online, probably also due to language barriers. Despite this, when intergroup contact is established, such contact increases the perception of online discrimination towards ethnic and racial minorities as well as anti-racist behavior by increasing the sense of being committed to the online community.

These findings appear particularly useful for understanding intergroup dynamics in online contexts, especially since we examined the "conative" component linked to relations between groups (i.e., anti-racist behaviors) and not only attitudes or prejudice. In this sense, considering how online intergroup contact related with individuals' engagement

in “positive” behaviors towards the outgroup represents one of the novelty elements of this study compared to the literature reviewed. Similarly, although our results partly confirmed the controversial role of empathy in online contexts, analyzing this conative component allowed us to highlight how individuals empathizing with the outgroup tend to engage in anti-racist behaviors in a direct way, and therefore, without the influence of perceived discrimination, demonstrating the strength of empathic feelings for building a more democratic and harmonious virtual context.

## 5. Conclusions and Limitations

This study explored the role of digital empathy and online community commitment in influencing the relationship between online intergroup contact, perceived ethnic and racial discrimination and anti-racist behavior. The results confirmed the relevance of relational motives for the use of SNSs and specifically the central role of online community commitment. Thus, the results of this study are in line with that obtained by direct contact literature showing that intergroup contact theory can be successfully applied to online platforms, such as social networking sites. This finding could be particularly relevant, suggesting researchers should study intergroup contact in more ecological contexts (e.g., SNSs, videogames, instant messaging platforms) rather than experimental contexts. More specifically, the results of the present study confirm that creating a sense of “common identity” (Gaertner et al. 2016), i.e., enhancing the salience of existing superordinate membership, such as belonging to the Facebook community, can lead to more positive relations with minorities with whom users are in contact. In this process, however, the role of digital empathy remains ambivalent.

Certainly, the study has some limitations related to the correlational nature of the study, the limited heterogeneity of the sample and the self-reported nature of the study. Furthermore, our sample consisted mostly of Italians, and thus, a majority group. Hence, the current findings could explain a specific online intergroup contact–perceived discrimination and anti-racist behaviors that could be culturally bounded. A cross-cultural study could better highlight the effect of the culture on the online contact across samples with different ethnicities, testing the generalizability of the current results to other ethnic and racial samples. In the current study, the potential ethnic and racial discrimination and anti-racist behaviors were not directed toward a given outgroup. Thus, future studies have to consider that discrimination can vary according to the specific ethnic and cultural group towards which discrimination is directed as well as according to participants’ life experiences, family environments, education and role in society. For example, future studies could investigate the mediating role of online community commitment in specific ethnic minorities, analyzing whether there are differences between the majority and minority group. In addition, further studies could explore the effects of intergroup contact on different types of social networks, such as those more based on non-textual communication (e.g., Instagram), on the logic of followers (e.g., Twitter) or those who guarantee a higher level of anonymity than what is guaranteed by Facebook and other “mainstream” social networks. Lastly, future studies could investigate online intergroup contact by also considering the quality of the first encounter with the outgroup member, given that such first encounters could be particularly relevant to influence both individuals’ attitudes towards the outgroup and the quality of future interactions.

Despite its limitations, this study goes a step further in understanding how contact can foster harmonious relationships between different groups in online contexts. The findings obtained will be relevant for platform designers and practitioners interested in the development of cyberspaces aimed to attenuate conflicts and online hate phenomena.

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## References

- Allport, Gordon Willard. 1954. *The Nature of Prejudice*. Reading: Addison-Wesley.
- Amichai-Hamburger, Yair, and Adrian Furnham. 2007. The positive net. *Computers in Human Behavior* 23: 1033–45. [\[CrossRef\]](#)
- Amichai-Hamburger, Yair, and Katelyn Y. A. McKenna. 2006. The Contact Hypothesis Reconsidered: Interacting via the Internet. *Journal of Computer-Mediated Communication* 11: 825–43. [\[CrossRef\]](#)
- Batson, C. Daniel, Marina P. Polycarpou, Eddie Harmon-Jones, Heidi J. Imhoff, Erin C. Mitchener, Lori L. Bednar, Tricia R. Klein, and Lori Highberger. 1997. Empathy and Attitudes: Can Feeling for a Member of a Stigmatized Group Improve Feelings Toward the Group? *Journal of Personality and Social Psychology* 72: 105–18. [\[CrossRef\]](#)
- Bollen, Johan, Huina Mao, and Alberto Pepe. 2011. Modeling Public Mood and Emotion: Twitter Sentiment and Socio-Economic Phenomena. Paper presented at the International AAAI Conference on Web and Social Media, Barcelona, Spain, July 17–21; vol. 5. Available online: [www.aaai.org](http://www.aaai.org) (accessed on 24 February 2021).
- Byrne, Barbara M. 2012. *A Primer of LISREL: Basic Applications and Programming for Confirmatory Factor Analytic Models*. New York: Springer Science & Business Media.
- Cao, Chun, Qian Meng, and Liang Shang. 2018. How can Chinese international students' host-national contact contribute to social connectedness, social support and reduced prejudice in the mainstream society? Testing a moderated mediation model. *International Journal of Intercultural Relations* 63: 43–52. [\[CrossRef\]](#)
- Carpenter, Christopher J. 2012. Narcissism on Facebook: Self-promotional and anti-social behavior. *Personality and Individual Differences* 52: 482–86. [\[CrossRef\]](#)
- Davies, Kristin, Stephen C. Wright, and Arthur Aron. 2011. Cross-group friendships: How interpersonal connections encourage positive intergroup attitudes. In *Moving beyond Prejudice Reduction: Pathways to Positive Intergroup Relations*. Washington, DC: American Psychological Association, pp. 119–38.
- Deutsch, Morton, and Harold B. Gerard. 1955. A study of normative and informational social influences upon individual judgment. *The Journal of Abnormal and Social Psychology* 51: 629–36. [\[CrossRef\]](#) [\[PubMed\]](#)
- Dovidio, John F., and Samuel L. Gaertner. 2010. Intergroup bias. In *Handbook of Social Psychology*. Hoboken: John Wiley & Sons.
- Dovidio, John F., Samuel L. Gaertner, Nurit Shnabel, Tamar Saguy, and James D. Johnson. 2009. Recategorization and prosocial behavior: Common ingroup identification and a dual identification. In *Psychology of Helping: New Directions in Intergroup Prosocial Behaviour*. Hoboken: Wiley-Blackwell.
- Dovidio, John F., Anja Eller, and Miles Hewstone. 2011. Improving intergroup relations through direct, extended and other forms of indirect contact. *Group Processes & Intergroup Relations* 14: 147–60. [\[CrossRef\]](#)
- Dovidio, John F., Angelika Love, Fabian M. H. Schellhaas, and Miles Hewstone. 2017. Reducing intergroup bias through intergroup contact: Twenty years of progress and future directions. *Group Processes & Intergroup Relations* 20: 606–20. [\[CrossRef\]](#)
- Eisenberg, Nancy, Natalie D. Eggum, and Laura Di Giunta. 2010. Empathy-related responding: Associations with prosocial behavior, aggression, and intergroup relations. *Social Issues and Policy Review* 4: 143–80. [\[CrossRef\]](#)
- Ellison, Nicole B., Charles Steinfield, and Cliff Lampe. 2007. The Benefits of Facebook "Friends": Social Capital and College Students' Use of Online Social Network Sites. *Journal of Computer-Mediated Communication* 12: 1143–68. [\[CrossRef\]](#)
- Ellison, Nicole B., Jessica Vitak, Rebecca Gray, and Cliff Lampe. 2014. Cultivating Social Resources on Social Network Sites: Facebook Relationship Maintenance Behaviors and Their Role in Social Capital Processes. *Journal of Computer-Mediated Communication* 19: 855–70. [\[CrossRef\]](#)
- Fuochi, Giulia, Alberto Voci, Jessica Boin, and Miles Hewstone. 2020. Affective generalization from intergroup contact: Associations between contact-related and outgroup-related empathy, anxiety, and trust. *Group Processes & Intergroup Relations*. [\[CrossRef\]](#)
- Gaertner, Samuel L., John F. Dovidio, Rita Guerra, Eric Hehman, and Tamar Saguy. 2016. A common ingroup identity: Categorization, identity, and intergroup relations. In *Handbook of Prejudice, Stereotyping, and Discrimination*. New York: Psychology Press, pp. 433–54.
- Guadagno, Rosanna E., Mark Nelson, and Laurence Lock Lee. 2018. Peace Data Standard: A Practical and Theoretical Framework for Using Technology to Examine Intergroup Interactions. *Frontiers in Psychology* 9: 28. [\[CrossRef\]](#)
- Hayes, Andrew F. 2017. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Publications.

- Imperato, Chiara, and Tiziana Mancini. 2021a. A constructivist point of view on intergroup relations. Online intergroup contact, Dialogical Self and prejudice reduction. Submitted.
- Imperato, Chiara, and Tiziana Mancini. 2021b. Intergroup dialogues in the landscape of the mind. How does Dialogical Self affect intergroup relations in online contexts? Submitted.
- Imperato, Chiara, Barry H. Schneider, Luca Caricati, Yair Amichai-Hamburger, and Tiziana Mancini. 2021. Allport meets internet: A meta-analytical investigation of online intergroup contact and prejudice reduction. *International Journal of Intercultural Relations* 81: 131–41. [\[CrossRef\]](#)
- Kenny, David. 2015. SEM: Fit (David A. Kenny). Available online: <http://davidakenny.net/cm/fit.htm> (accessed on 10 January 2021).
- Kenworthy, Jared B., Rhiannon N. Turner, Miles Hewstone, and Alberto Voci. 2005. Intergroup contact: When does it work, and why. In *On the Nature of Prejudice: Fifty Years after Allport*. Malden: Blackwell, pp. 278–92.
- Keum, Brian T. H., and Matthew J. Miller. 2017. Racism in digital era: Development and initial validation of the perceived online racism scale (PORS v1.0). *Journal of Counseling Psychology* 64: 310–24. [\[CrossRef\]](#)
- Klimecki, Olga M. 2019. The role of empathy and compassion in conflict resolution. *Emotion Review* 11: 310–25. [\[CrossRef\]](#)
- Kline, Rex B. 2015. *Principles and Practice of Structural Equation Modeling*. New York: Guilford Publications.
- Lemmer, Gunnar, and Ulrich Wagner. 2015. Can we really reduce ethnic prejudice outside the lab? A meta-analysis of direct and indirect contact interventions. *European Journal of Social Psychology* 45: 152–68. [\[CrossRef\]](#)
- Lissitsa, Sabina. 2017. Online political participation, online contacts with out-groups members and social distances. *Asian Journal of Communication* 27: 18–32. [\[CrossRef\]](#)
- Lissitsa, Sabina, and Nonna Kushnirovich. 2018. Secondary transfer effect of positive and negative online contact between groups involved in high-intensity conflict. *International Journal of Intercultural Relations* 67: 71–80. [\[CrossRef\]](#)
- Mancini, Tiziana, and Chiara Imperato. 2020. Can Social Networks Make Us More Sensitive to Social Discrimination? E-Contact, Identity Processes and Perception of Online Sexual Discrimination in a Sample of Facebook Users. *Social Sciences* 9: 47. [\[CrossRef\]](#)
- Meleady, Rose, and Charles R. Seger. 2017. Imagined contact encourages prosocial behavior towards outgroup members. *Group Processes & Intergroup Relations* 20: 447–64.
- Mislove, Alan, Bimal Viswanath, Krishna P. Gummadi, and Peter Druschel. 2010. You are who you know: Inferring user profiles in online social networks. Paper presented at WSDM 2010—3rd ACM International Conference on Web Search and Data Mining, New York, NY, USA, February 4–6; pp. 251–60. [\[CrossRef\]](#)
- Mor, Yifat, Yiftach Ron, and Ifat Maoz. 2016. “Likes” for Peace: Can Facebook Promote Dialogue in the Israeli-Palestinian Conflict? *Media and Communication* 4: 15–26. [\[CrossRef\]](#)
- Muthén, Bengt O., Linda K. Muthén, and Tihomir Asparouhov. 2017. *Regression and Mediation Analysis Using Mplus*. Los Angeles: Muthén & Muthén.
- Pettigrew, Thomas F. 2009. Secondary transfer effect of contact: Do intergroup contact effects spread to noncontacted outgroups? *Social Psychology* 40: 55. [\[CrossRef\]](#)
- Pettigrew, Thomas F., and Linda R. Tropp. 2006. A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology* 90: 751–83. [\[CrossRef\]](#) [\[PubMed\]](#)
- Pettigrew, Thomas F., and Linda R. Tropp. 2008. How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology* 38: 922–34. [\[CrossRef\]](#)
- Powell, Philip A., and Jennifer Roberts. 2017. Situational determinants of cognitive, affective, and compassionate empathy in naturalistic digital interactions. *Computers in Human Behavior* 68: 137–48. [\[CrossRef\]](#)
- Preece, Jennifer, and Kambiz Ghazati. 2001. Experiencing Empathy Online. In *The Internet and Health Communication: Experiences and Expectations*. Thousand Oaks: Sage Publications, pp. 147–66.
- Schwab, Anne Katrin, Christina Sagioglou, and Tobias Greitemeyer. 2019. Getting connected: Intergroup contact on Facebook. *Journal of Social Psychology* 159: 344–48. [\[CrossRef\]](#)
- Short, John, Ederyn Williams, and Bruce Christie. 1976. *The Social Psychology of Telecommunications*. Hoboken: Wiley-Blackwell Publishing Ltd.
- Spears, Russel, Martin Lea, and Tom Postmes. 2000. Onside: Purview, problems and prospects. In *SIDE Issues Centre Stage: Recent Developments in Studies of de-Individuation in Groups*. Amsterdam: KNAW, pp. 1–16.
- Tidwell, Lisa Collins, and Joseph B. Walther. 2002. Computer-Mediated Communication Effects on Disclosure, Impressions, and Interpersonal Evaluations: Getting to Know One Another a Bit at a Time. *Human Communication Research* 28: 317–48. [\[CrossRef\]](#)
- Turner, Ralph H., and Lewis M. Killian. 1987. *Collective Behavior*, 3rd ed. Englewood Cliffs: Prentice-Hall.
- Turner, Rhiannon N., Richard J. Crisp, and Emily Lambert. 2007. Imagining Intergroup Contact Can Improve Intergroup Attitudes. *Group Processes & Intergroup Relations* 10: 427–41. [\[CrossRef\]](#)
- Vezzali, Loris, and Dino Giovannini. 2012. Secondary transfer effect of intergroup contact: The role of intergroup attitudes, intergroup anxiety and perspective taking. *Journal of Community & Applied Social Psychology* 22: 125–44.
- Vezzali, Loris, Miles Hewstone, Dora Capozza, Dino Giovannini, and Ralf Wolfer. 2014. Improving intergroup relations with extended and vicarious forms of indirect contact. *European Review of Social Psychology* 25: 314–89. [\[CrossRef\]](#)
- Walther, Joseph B., Elaine Hoter, Asmaa Ganayem, and Miri Shonfeld. 2015. Computer-mediated communication and the reduction of prejudice: A controlled longitudinal field experiment among Jews and Arabs in Israel. *Computers in Human Behavior* 52: 550–58. [\[CrossRef\]](#)



- White, Fiona A., and Hisham M. Abu-Rayya. 2012. A dual identity-electronic contact (DIEC) experiment promoting short- and long-term intergroup harmony. *Journal of Experimental Social Psychology* 48: 597–608. [[CrossRef](#)]
- White, Fiona A., Lauren J. Harvey, and Hisham M. Abu-Rayya. 2015. Improving Intergroup Relations in the Internet Age: A Critical Review. *Review of General Psychology* 19: 129–39. [[CrossRef](#)]
- Wright, Stephen C., Arthur Aron, Tracy McLaughlin-Volpe, and Stacy A. Ropp. 1997. The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology* 73: 73. [[CrossRef](#)]