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Testing a contact intervention based on intergroup friendship between Roma and non-Roma Hungarians: reducing bias through institutional support in a non-supportive societal context

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Abstract

Although intergroup friendships have been shown to reduce prejudice, little research has considered whether interventions fostering intergroup friendship would be effective in highly prejudicial contexts. We conducted a quasi-experiment ($N = 61$) to test whether a contact-based intervention based on intergroup friendship could reduce bias against Roma people among non-Roma Hungarians. Participants in the contact condition engaged in a face-to-face interaction with a Roma person, and responded to questions involving mutual self-disclosure. Through pre- and post-test questionnaires, we observed significant positive change in attitudes and contact intentions among participants in the contact condition, while these effects were not observed among participants in the control condition. Positive change was moderated by perceived institutional norms, which corroborates the potential of contact-based interventions.

Roma people across Europe, but particularly in Eastern European countries, face severe discrimination, social marginalization, and segregation (e.g., Ljujic, Vedder, Dekker, & Van Geel, 2012). Despite the existence of anti-discrimination laws, without strong egalitarian and non-prejudicial social norms, blatant prejudice and even hate-speech is socially sanctioned and widespread (Vidra & Fox, 2014). In Hungary's demographically segregated and highly unequal society, positive intergroup contact is atypical, while the level of anti-Roma prejudice has been identified as the strongest and most openly expressed form of intergroup hatred (Enyedi, Fábián, & Sik, 2004). In this context, contact between non-Roma and Roma people is more likely to predict negative rather than positive attitudes (Kende, Hadarics, & Lášticová, 2016), making it particularly challenging to find effective strategies to combat prejudice. We present a quasi-experiment to test the potential strengths and limits of a contact-based prejudice reduction intervention under these suboptimal societal conditions.

Intergroup friendship as a method of prejudice reduction

One prejudice reduction strategy that has received a great deal of research attention in recent years involves the development of intergroup friendship (Davies, Tropp, Aron, Pettigrew, & Wright, 2011; see also Pettigrew, 1998). Optimal conditions for successful intergroup contact—such as equal status and cooperation between members of different groups (Allport, 1954; Pettigrew & Tropp, 2006)—are exemplified in intergroup friendship (Wright, Aron, & Brody, 2008). A great deal of research evidence also demonstrates an association between intergroup friendship and positive intergroup attitudes, whereby key elements such as enhanced closeness and mutual self-disclosure can contribute to reducing prejudice between groups (Davies et al., 2011; Turner, Hewstone, & Voci, 2007).

Greater closeness between members of different groups typically develops over repeated contact experiences, but it can also be developed during a very short procedure of

reciprocal self-disclosure—sometimes referred to as the "Fast Friends" method (see Aron, Melinat, Aron, Vallone, & Bator, 1997). These newly formed relationships are evaluated as significantly closer and more positive than relationships developed in the same amount of time without reciprocal self-disclosure, and they can lead to experiences and levels of prejudice reduction comparable to longer-standing friendships (Aron et al., 1997; Davies, Wright, Aron, & Comeau, 2013). It should also be noted that intergroup friendships are especially likely to reduce prejudice on affective dimensions (such as feelings or emotions toward the outgroup), while less prejudice reduction may be observed on more cognitive dimensions (e.g., beliefs or stereotypes about the outgroup; see Tropp & Pettigrew, 2005).

Intergroup friendship in hostile intergroup contexts

Although the notion that intergroup friendships can reduce prejudice has received considerable empirical support (see Davies et al., 2011), little research has considered whether such a prejudice reduction strategy would be effective in contexts where groups are segregated and hostile intergroup norms prevail (see Hewstone et al., 2004). Questions remain as to whether interventions involving the building blocks of intergroup friendship can be effective in reducing prejudice when embedded in broader societal contexts that reinforce prejudice, such as in Hungary. A recent study conducted in Hungary has suggested that anti-Roma prejudice can be reduced through contact with trained volunteers (Orosz, Bánki, Bőthe, Tóth-Király, & Tropp, 2016), yet it is still unknown whether contact interventions—and particularly those based on building intergroup friendship—can be effective when tested among non-trained members of the Hungarian public.

In segregated societies, physical separation becomes an additional barrier to the development of such close relationships (Festinger, Back, & Schachter, 1950). In the case of Roma people who face segregated demographic and institutional practices in Hungary (Greenberg, 2010; Kende, 2000; Kovács, 2012), permissive legislation allows school segregation, and leads to an almost complete absence of Roma pupils in higher education institutions (Kertesi & Kézdi, 2011). Nonetheless, historical examples—such as the African American Civil Rights Movement, the end of the Apartheid system in South Africa, the Troubles in Northern Ireland, and attempts at reconciliation in post-war Bosnia—all point out that close, positive relations between members of different groups can lead to positive outcomes even in the context of severe intergroup hostility, segregation, and conflict (Cehajic, Brown, & Castano, 2008; Cook & Sellitz, 1955; Dixon et al., 2010; Hewstone et al., 2004). In particular, the causal relationship between intergroup contact and positive shifts in intergroup attitudes is underlined by successful interventions in major conflict zones (see Al Ramiah & Hewstone, 2013). We therefore implemented a contact-based intervention, based largely on the "Fast Friends" procedure (see Davies et al., 2013[1]) to test whether intergroup friendship can lead to prejudice reduction even in the highly segregated and hostile context of relations between Roma and non-Roma in Hungary.

The role of supportive institutional norms in prejudice reduction

Moreover, the present research adds to prior work by testing the effectiveness of a friendship-based contact intervention in this highly segregated and hostile context, while also testing how institutional norms of non-prejudice might moderate the effects of the contact intervention. Institutional norms can define both opportunities for positive intergroup contact and the consequent effects of contact on attitude change (Ata, Bastian, & Lusher, 2009; Lewis, Chesler, & Forman, 2000). Given the structure they provide to interactions between groups, institutional norms play an important role in achieving positive attitude change, and reinforcing other conditions for positive contact, such as cooperation and equal status (Pettigrew & Tropp, 2006). Consistent with Allport's (1954) analysis at a time when racial segregation was widely accepted in the United States, institutional norms that explicitly support contact between groups can help to reduce prejudice. Thus, even in the midst of intergroup segregation and hostility that exemplify non-supportive societal contexts, interventions that encourage contact between groups should be especially likely to yield reductions in prejudice to the extent that they highlight institutional norms of non-prejudice.

Research goals

The present research examines these issues, by testing the effects of a contact intervention based on intergroup friendship between Roma and non-Roma in Hungary. Using a modified version of the "Fast Friends" procedure (Aron et al., 1997), we tested whether building friendship between non-Roma and Roma university students could lead non-Roma Hungarians to develop more positive attitudes toward Roma people, and whether the effect of the intervention can be reinforced by the perception of supportive institutional norms.[2]

[1]The study was presented by Davies and Aron at the SPSSI-EASP Small Group Meeting on Proactive Behavior across Group Boundaries in Port Jefferson, NY, in 2012. Details of the procedure acquired from Kristin Davies personally.
[2]We were particularly concerned with the problem of prejudice against Roma people and focused primarily on the attitude change of non-Roma Hungarians. Therefore, we did not analyze the influence of the intervention on Roma participants, but debriefed them after the intervention.

Despite the limited opportunities for casual contact between non-Roma and Roma students in higher education, the "Fast Friends" procedure seemed suitable because it involved interpersonal contact that was relatively easy to attain, and that we expected to be acceptable to those Hungarian students who are otherwise reluctant to engage with Roma or be confronted with the issue of anti-Roma prejudice. Moreover, the university context, and especially the particular course from which non-Roma participants were recruited, provided an opportunity for this rare intergroup contact, while offering institutional support that might counter the effect of the dominant prejudicial societal norms and public discourse.

Given the context, some adjustments to the "Fast Friends" intervention were necessary. We had to frame the intervention as a meeting between psychology students and members of a Roma university organization; this was necessary because of the low proportion of Roma students in any particular university group. This meant that both the intergroup nature of the contact intervention, and the shared identity of being university students would be salient. While the enhanced salience of ethnic identities and a common group identity could promote the generalization of any positive change in attitudes (see Brown & Hewstone, 2005; Gaertner & Dovidio, 2000), the explicit intergroup nature of the intervention could also potentially activate reluctance or reactance given the generally hostile attitudes toward Roma people in society (see, e.g., Cavazza & Butera, 2008; Dixon, Durrheim, & Tredoux, 2007). We take these potential effects into account in the interpretation of the results.

Hypotheses

Consistent with earlier work (see Davies et al., 2011) we predicted that a positive contact experience elicited through the friendship-based contact intervention would increase Hungarians' positive feelings toward Roma people and create an openness toward future contact with Roma. We also tested whether such a positive contact experience would affect Hungarians' negative beliefs about Roma people. More specifically, we expected a condition x time interaction effect, such that Hungarian participants assigned to the contact intervention condition would report more positive change in attitudes toward Roma following the intervention than participants assigned to the control condition. Additionally, we tested whether perceived institutional norms would moderate the effects of the contact intervention, such that those who participated in the intervention and perceived stronger institutional norms supporting non-prejudice would show greater attitude change than those who perceived weaker institutional norms supporting non-prejudice. We included perceived norms in the study as a moderator based on the expectation that pre-existing norm perceptions independent from the contact situation also play a role in how the intervention affects attitude change.

Methods

Study design and procedure

The study was carried out in 2015, following IRB approval. We used a 2 (condition) × 2 (time) mixed factorial design with one experimental condition (contact intervention) and one control condition (no contact), and measuring changes in intergroup outcomes over time through comparisons of pre-test and post-test scores. Introductory social psychology courses were used as sites of recruitment, and different sections (seminar groups) of the courses were randomly chosen to recruit participants for either the experimental (contact) condition or the control (no contact) condition. This procedure was used to ensure that participants in the control condition would not be aware of the contact intervention. Hungarian students enrolled in the social psychology courses were recruited as participants in the study, and they received course credit for their participation.[3] Roma interaction partners for the intervention were recruited through a Roma university organization; they participated voluntarily, and the intervention took place at the time and location of their organization's regular meetings (see section "Contact Intervention," below).

The intervention took place either 2 or 6 weeks after the pre-test,[4] and the post-test was administered 5 weeks after the second intervention for all participants. Respondents were not aware of the connection between the questionnaires and the intervention, which was ensured by administering the tests and the intervention by different researchers and recruiting participants from different course sections. All questionnaires were completed on paper, in Hungarian. Measures originally in English were translated to Hungarian and back-translated to English.

Students in course sections randomly chosen for the experimental condition were informed that they would have an opportunity to meet a Roma student from another university, the purpose of the meeting was to get to know each

[3]According to the 2011 census, less than 1% of Roma people hold a higher education degree. Given that direct questions regarding ethnic background are unacceptable in the Hungarian context, we were not able to verify that none of the psychology students was of a Roma background; nevertheless, it is highly unlikely that any psychology students were Roma, and none of the psychology students indicated that they were Roma over the course of the study. We therefore worked from the assumption that psychology students were non-Roma.

[4]Participants joined one of the two intervention sessions only; it was for logistical reasons (e.g., students' schedules and availability) that the intervention took place on two separate occasions rather than at once.

other, and it required no advance preparation. They were debriefed only after completion of the post-test.

Contact intervention

The contact intervention lasted approximately 60 minutes, during which participants in the experimental condition were randomly assigned to interact with a Roma university student. They were seated in pairs in a large hall which allowed them to engage in conversation privately; they were also informed that no recording of their conversations would be made. They were instructed to take turns in asking and answering three sets of closeness-generating questions, entailing increasing levels of self-disclosure, which were translated and adapted from Aron et al. (1997). Sample questions from the different sets include: "*What would constitute a 'perfect' day for you?*" (set 1), "*What is your biggest fear in life?*" (set 2), and "*Alternate sharing something you consider a positive inner characteristic of your partner*" (set 3). Each set of questions was discussed for about 20 minutes.

Measures

Measures of attitudes toward Roma, anti-Roma beliefs, and contact intentions were included in both the pre-test and post-test questionnaires administered to participants.

Attitudes toward Roma

Attitudes toward Roma were measured by a 6-item semantic differential scale. Items included the following word pairs presented on opposite ends of 5-point semantic differential scales: *cold–warm, negative–positive, hostile–friendly, contempt–respect, suspicious–trusting, disgust–admiration* ($\alpha_{\text{pre-test}} = .81$; $\alpha_{\text{post-test}} = .81$; see Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Higher scores correspond with more positive attitudes toward Roma.

Anti-Roma beliefs

Anti-Roma beliefs were assessed using four items from a measure widely used in Hungary (Enyedi et al., 2004), including: "*The problems of Roma people would dissolve if they had started working,*" "*Roma people must get more help than others,*" "*Many Roma people do not work, because they don't get work (reverse scored),*" and "*There are so many children in Roma families, because they want to live on the allowances they get for having children.*" ($\alpha_{\text{pre-test}} = .67$; $\alpha_{\text{post-test}} = .75$).

Contact intentions

Contact intentions were measured using a single item developed for this study regarding willingness to encounter Roma people: "*Would you attend an informal social event with Roma people around?*". Responses to the anti-Roma beliefs and contact intentions items were scored on 5-point scales ranging from 1 (completely disagree) to 5 (completely agree).

Pre-existing friendships

Pre-existing friendships with Roma people were measured by asking: "*Are there any Roma people among your close friends?*" The answer options were *yes*, *no* and *I don't know*, and the "yes" response was considered as indicative of pre-existing friendships.

Three additional items were included in the post-test questionnaire to assess students' **perceptions of anti-prejudice norms**, two in relation to institutional norms at the university and in the course (i.e., "*[The university/The social psychology course] supports interventions to decrease anti-Roma prejudice*", $r = .55$, $p < .001$), and one item in relation to Hungarian society more generally (i.e., "*In Hungary, state institutions, like courts, schools, healthcare institutions, support interventions to decrease anti-Roma prejudice*"). Responses to these items were scored on 5-point scales ranging from 1 (completely disagree) to 5 (completely agree).

Finally, the post-test questionnaire included an item to assess students' **perceptions of attitude change** since the pre-test (i.e., "*Has your opinion concerning Roma people changed since you completed this questionnaire for the first time?*"). The response scale ranged from 1 (not at all) to 5 (very much). We used a manipulation check to examine whether participants correctly identified their partner as a member of the Roma student organization.

In addition to pre-test and post-test questionnaires, we asked participants to complete a separate questionnaire immediately after the intervention which included five items regarding the quality of the interaction, scored on a scale ranging from 1 (not at all) to 5 (very much). These items included: "*How much do you like your conversation partner*?", "*How close would you rate the relationship between you and your conversation partner?*", "*How much did you enjoy the conversation with your partner?*", "*If you had the chance, would you continue the conversation with your partner?*", and "*Can you imagine getting in contact with your conversation partner again in the future?*" ($\alpha = .71$).

Thirty four of the 53 students (64%) enrolled in sections randomly chosen for the experimental condition voluntarily participated in the contact intervention, by meeting with a Roma student outside of regular university hours. The recruitment procedures and voluntary participation of participants make the design for this research a quasi-experiment rather than a randomized field experiment. Mean comparisons revealed that there were no significant differences in pre-test scores between those who chose to participate in the intervention ($n = 34$) and those who chose

Table 1 Means and Standard Deviations of the Variables Measured in the Pre- and Post-Test

	Pre-test Mean (*SD*)	Post-test Mean (*SD*)
Attitudes toward Roma		
Contact Group	2.44 (0.61)	2.89 (0.72)
Control Group	2.67 (0.50)	2.77 (0.42)
Anti-Roma beliefs		
Contact Group	3.16 (0.83)	2.94 (0.86)
Control Group	2.78 (0.80)	2.65 (0.74)
Contact intentions		
Contact Group	3.11 (1.15)	3.44 (1.08)
Control Group	3.50 (1.01)	3.35 (1.15)

not to participate in the intervention ($n = 19$) in terms of attitudes toward Roma ($M = 2.49$ and 2.54, respectively, $t = -0.27$, $p = .79$), anti-Roma beliefs ($M = 3.13$ and 3.44, respectively, $t = -1.35$, $p = .31$), and contact intentions ($M = 3.18$ and 2.79, respectively, $t = 1.25$, $p = .39$).

Of those who agreed to participate in the study, 7 participants in the experimental (contact intervention) condition and 2 participants in the control condition did not complete the post-test questionnaire; this left a total of 27 participants in the experimental condition and 35 participants in the control condition. Based on estimates of the effects of friendship contact provided by meta-analytic results of Pettigrew and Tropp (2006; mean $r = .246$) and Davies and colleagues (2011; mean $r = .258$), the optimal sample size for observing a similar effect would have been around 130 participants. Thus, the current sample size is smaller than what the G-power analysis for the expected effect size would suggest (Faul, Erdfelder, Buchner, & Lang, 2009); consequently the results of our tests should be viewed conservatively.

Results

Responses to the manipulation check showed that all psychology students in the contact intervention correctly identified their partner as a member of the Roma student organization. The results of the brief questionnaire administered immediately after the intervention showed that, overall, psychology students evaluated their contact experiences with Roma partners positively ($M = 4.26$, $SD = 0.46$ on the 5-point scale).[5]

[5]In addition to asking psychology students to rate the quality of their interaction, Roma partners were asked to complete the same 5-item measure to rate the quality of the interaction. Roma partners who volunteered to interact with psychology students were even more positive in their evaluations of their interactions ($M = 4.53$, $SD = 0.42$; $t(60) = -2.47$, $p = .017$).

Table 2 Effects of Condition and Time on Dependent Variables

	F	*p*	Partial η^2
Attitudes toward Roma			
Condition	0.21	.65	.00
Time	16.38	.00	.22
Interaction	6.68	.01	.10
Anti-Roma beliefs			
Condition	3.03	.09	.05
Time	5.90	.02	.09
Interaction	0.30	.58	.01
Contact intentions			
Condition	0.32	.58	.01
Time	0.77	.39	.01
Interaction	5.09	.03	.08

Scores on the pre-test questionnaire showed that psychology students' initial attitudes toward the Roma were fairly negative. Moreover, pre-test scores did not significantly differ between participants in the contact intervention and control conditions in terms of attitudes toward Roma ($M = 2.44$ and 2.67, respectively, $t = -1.61$, $p = .11$, *Cohen's d* = .41), anti-Roma beliefs ($M = 3.16$ and 2.78, respectively, $t = 1.81$, $p = .08$, *Cohen's d* = .46), and contact intentions ($M = 3.11$ and 3.15, respectively, $t = -1.46$, $p = .15$, *Cohen's d* = .37).

Reported pre-existing friendships with Roma also did not differ between participants in the contact intervention condition (11.5%) and the control condition (14.7%, $\chi^2(1) = 0.13$, $p = .72$). We conducted the analyses that follow both with and without controlling for pre-existing friendships with Roma people; the results were virtually identical, and here we report the analysis without controlling for friendship to simplify the presentation of results.

Separate 2 (condition: intervention vs. control) × 2 (time: pre- vs. post-test) repeated-measures mixed model analyses of variance were then conducted to predict each of the main dependent measures (attitudes toward Roma, anti-Roma beliefs, and contact intentions), and we compared the post-test scores of the contact and the control conditions to test our hypothesis about the effect of the intervention. Descriptive statistics for the two conditions are presented in Table 1, and ANOVA results in Table 2.

Attitudes toward Roma

The analysis predicting attitudes toward Roma showed a significant main effect of time ($F(1, 59) = 16.38$, $p < .001$, partial $\eta^2 = .22$), but no main effect for condition ($F(1, 59) = 0.21$, $p = .65$, partial $\eta^2 < .01$); these effects were qualified by a significant condition × time interaction ($F(1, 59) = 6.68$, $p = .01$, partial $\eta^2 = .10$). Post-hoc comparisons showed that participants in the intervention condition reported more positive attitudes toward the Roma following the contact intervention ($M_{pre} = 2.44$, $M_{post} = 2.89$,

$t = -3.47$, $p = .002$, *Cohen's d* = .67), while there was no significant difference in attitudes toward Roma over time among participants in the control condition ($M_{pre} = 2.67$, $M_{post} = 2.77$, $t = -1.89$, $p = .068$, *Cohen's d* = .32).

Anti-Roma beliefs

The analysis predicting anti-Roma beliefs showed a significant main effect of time ($F(1, 59) = 5.90$, $p = .02$, partial $\eta^2 = .09$), but no main effect for condition ($F(1, 59) = 3.03$, $p = .09$, partial $\eta^2 = .05$), and there was no significant condition x time interaction ($F(1, 59) = 0.30$, $p = .58$, partial $\eta^2 = .01$). Post-hoc comparisons showed that beliefs about Roma did not change significantly over time either in the contact intervention group ($M_{pre} = 3.16$, $M_{post} = 2.95$, $t(60) = 1.70$, $p = .10$, *Cohen's d* = .32), or in the control group ($M_{pre} = 2.78$, $M_{post} = 2.64$, $t(60) = 1.68$, $p = .10$, *Cohen's d* = .29).

Contact intentions

The analysis predicting contact intentions showed no main effect of time ($F(1, 59) = 0.32$, $p = .58$, partial $\eta^2 = .01$), and no main effect for condition ($F(1, 59) = 0.77$, $p = .39$, partial $\eta^2 = .01$). However, the condition × time interaction effect was significant ($F(1, 59) = 5.09$, $p = .03$, partial $\eta^2 = .08$). Post-hoc comparisons showed that participants in the contact intervention condition reported higher intentions for casual contact with the Roma following the intervention ($M_{pre} = 3.11$, $M_{post} = 3.44$, $t(60) = -2.21$, $p = .036$, *Cohen's d* = .42) while there was no significant difference over time among participants in the control condition ($M_{pre} = 3.51$, $M_{post} = 3.37$, $t(60) = 1.00$, $p = .324$, *Cohen's d* = .17).

Additionally, pairwise comparisons were conducted between participants in the contact intervention and control conditions at post-test. Although significant condition × time interaction effects were observed on both attitudes toward Roma and contact intentions, these pairwise comparisons revealed that, at post-test, mean scores on attitudes toward Roma and contact intentions did not significantly differ among participants in the two conditions (attitudes toward Roma: $t(60) = 0.57$, $p = .58$, *Cohen's d* = .14; contact intentions: $t(60) = 0.26$, $p = .80$, *Cohen's d* = .07).

Comparisons of responses to the post-test measures showed that participants in the two conditions significantly differed from each other in perceived attitude change ($M = 2.89$ and 2.29, respectively, $t(60) = 2.02$, $p = .048$, *Cohen's d* = .51), with the contact intervention group reporting a higher degree of attitude change, although quite low overall. Perception of societal support for non-prejudice was equally low for both groups ($M = 2.65$ and 2.63, respectively, $t(45) = 0.07$, $p = .94$, *Cohen's d* = .02), while perceived institutional support for non-prejudice was significantly higher among participants in the contact intervention condition than among those in the control condition ($M = 4.56$ and 3.98, respectively, $t(53) = 3.27$, $p = .002$, *Cohen's d* = .89).

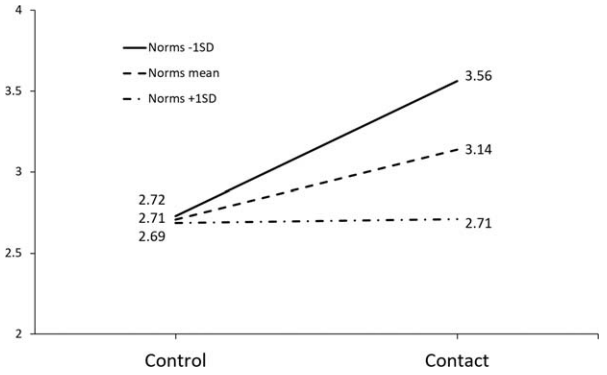

Figure 1 Interaction effect of the intervention on post-test scores of attitudes toward Roma with low, average and high levels of perceived non-prejudiced institutional norms, with attitudes toward Roma pre-test scores controlled at $M = 2.54$. $p < .05$. Lower scores indicate more positive attitudes toward Roma people.

Additionally, we tested whether perceived institutional norms would moderate effects of the contact intervention. Two moderation models were tested, to examine perceived institutional norms as a moderator in the influence of the intervention on attitudes toward Roma and contact intentions in the post-test phase with pre-test scores controlled—the two dependent variables for which significant effects of the intervention were observed. We conducted two-way regression analyses with the post-test scores of attitudes toward Roma and contact intentions entered as dependent variables, the conditions entered as independent variables, and after centering the perceived institutional norm variable, it was entered as a covariate with pre-test scores of attitudes toward Roma and contact intentions as control variables in their respective tests. Results of these analyses showed that perceived institutional norms moderated the effect of the intervention on attitudes toward Roma ($F(1, 54) = 4.32$, $p = .043$, partial $\eta^2 = .08$; see Figure 1), but not on contact intentions ($F(1, 54) = 0.11$, $p = .74$, partial $\eta^2 < .01$); thus, the more that participants in the contact intervention perceived non-prejudiced institutional norms, the more positive their attitudes toward the Roma at post-test.

Discussion

The present quasi-experiment examined the effects of a contact-based intervention, to determine whether intergroup friendship can promote prejudice reduction in the segregated and highly prejudicial context of relations between Roma and non-Roma in Hungary. In line with predictions, we found condition (contact intervention vs. control) × time (pre vs. post) interaction effects predicting changes in attitudes and contact intentions in relation to the Roma among

non-Roma Hungarians. However, we did not find a significant condition × time interaction predicting change in anti-Roma beliefs. This finding is in line with previous research suggesting that contact-based interventions predicated on intergroup friendship are generally more likely to change attitudes toward outgroup members rather than beliefs about outgroup members; generally, the affective ties forged through intergroup friendships are more likely to predict affective dimensions of prejudice (e.g., liking and evaluations) than cognitive dimensions (e.g., beliefs and stereotypes; see Tropp & Pettigrew, 2005).

At the same time, results from this study showed a significant main effect of time for anti-Roma beliefs, such that beliefs about the Roma generally became less negative over time. One possible explanation for this effect is that both participants in the contact intervention and control conditions were recruited from social psychology courses that dealt with the topic of prejudice. Coupled with the finding that participants in both conditions perceived that non-prejudicial institutional norms were high (although even higher in the contact condition), it is possible that attending the social psychology course and discussing the topic of prejudice at a broad level affected participants' responses through an enlightenment effect (Gergen, 1973).

Additionally, we found only partial support for the prediction that effects of the contact intervention would be moderated by perceived institutional norms. Here, we found moderation only when predicting attitudes toward Roma, such that the prejudice-reducing effect of the contact intervention was especially pronounced among participants who perceived stronger institutional norms countering prejudice against the Roma. Consistent with earlier theorizing on contact effects (e.g., Allport, 1954; Pettigrew & Tropp, 2006), this finding suggests that change in intergroup attitudes is especially likely to occur when groups interact in the presence of supportive institutional norms. The present research adds to prior work by testing experimentally how supportive institutional norms may bolster the effects of a contact intervention in a highly prejudicial and segregated societal context.

Along with the general effect of supportive institutional norms, instructors' encouragement to participate in the intervention may have added to participants' confidence about participating in contact, which has also been identified as a source of successful engagement in cross-group friendships (Turner & Cameron, 2016). Yet, perceived institutional norms did not moderate the influence of the intervention on contact intentions. A potential explanation is that the way we measured contact intentions had more to do with a general willingness to be around Roma rather than one's sense of efficacy or confidence about interacting with Roma people.

Results of the post-test questionnaire further reveal that participants in the contact intervention condition were more likely to report that their attitudes had changed over time relative to participants in the control condition. We also observe pre-post change in anti-Roma attitudes and contact intentions among participants in the contact intervention, yet pairwise comparisons at post-test revealed no significant differences between the conditions. It is therefore difficult to determine the extent to which participants' perceptions of change in their attitudes actually correspond to shifts in their attitudes toward the Roma. In part, participants in the contact intervention condition may have experienced attitude change due to changes in the perceived importance of intergroup contact resulting from participation in the intervention (see, e.g., Van Dick et al., 2004). Alternatively, it is possible that participation in the intervention made participants more conscious of anti-Roma bias, such that they developed inhibitions about openly expressing prejudicial attitudes (see, e.g., Crandall & Eshleman, 2003).

Nonetheless, in this highly prejudicial societal context, our findings suggest that the contact intervention was not met with resistance among participants, but instead achieved some positive changes. This may have been precisely because it offered participants a positive *interpersonal* experience with an outgroup member, while making both their distinct ethnic identities and the shared identity of being university students salient. This approach is in line with previous research suggesting that enhancing identity salience can facilitate the generalization of positive attitude change, from positive contact experiences with individual outgroup members to positive shifts in attitudes toward the outgroup as a whole (see Brown & Hewstone, 2005; Gaertner & Dovidio, 2000).

More broadly, we recognize that the results from this study cannot fully answer the question of whether contact interventions based in intergroup friendship (such as through the "Fast Friends" procedure) are to be recommended as an effective method for prejudice reduction in all segregated societies with openly prejudicial societal norms. The present sample consisted of university students, one of the least prejudiced subgroups of Hungarian society (Enyedi et al., 2004), and the intervention took place in a social environment where participants were likely to have had little or no prior experience of direct conflicts with members of the outgroup. These facts could limit the generalizability of our findings. Nevertheless, the general level of prejudice against Roma reported by participants in the pre-test suggests that the studied population was not entirely different from the general population of Hungary (see Enyedi et al., 2004); as such, the positive intergroup contact experience elicited by this intervention could potentially have comparable effects if implemented in other university or school settings, or in community contexts.

Additionally, we acknowledge that the results provide limited information regarding the durability of the contact intervention's effects. Nevertheless, the post-test measures were administered at least 1 month after the contact intervention,

therefore clearly showing an influence beyond an immediate effect.

The results indicate that the positive contact experience established through a friendship-building exercise led to positive change in Hungarian students' attitudes and intentions toward the Roma, showing these effects at least 1 month after their participation in the intervention. In sum, the contact-based intervention was successful in taking initial steps toward facilitating positive cross-group interactions and promoting non-prejudicial norms in the immediate social context, thereby enhancing the potential for generalized attitude change.

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