Abstract

Objectives: Research on intergroup contact and prejudice reduction has dedicated little attention to relations between minority groups. We examined whether interminority extended contact, that is, the knowledge that a member of the minority ingroup has a friend from the minority outgroup, is associated with positive outgroup attitudes. Affective (outgroup empathy and outgroup trust) and cognitive (ingroup norm) mediators were considered.

Methods: Two correlational studies were conducted. Study 1 ($N = 640$, 50% females, mean age = 44 years) was conducted in Bulgaria among the Bulgarian Turkish and Roma ethnic minorities, while Study 2 ($N = 458$, 67% females, mean age = 44 years) was conducted in Finland among Estonian and Russian immigrants.

Results: Path analyses showed that, over and above the effects of direct contact between the minority groups, interminority extended contact was associated with positive outgroup attitudes in both intergroup settings. These effects occurred through empathy (Study 1), trust and ingroup norms (Study 2).

Conclusions: The two studies highlight interminority extended contact as a means to promote harmonious interminority relationships and suggest the implementation of interventions based on extended contact to reduce interminority prejudice and to foster solidarity among minorities.

Keywords: extended intergroup contact, prejudice, interminority relations
The Dynamics of Interminority Extended Contact:

The Role of Affective and Cognitive Mediators

The main motivation to study prejudice is to detect strategies to reduce it. In research on the *majorities'* prejudice toward minorities, intergroup contact (Allport, 1954; Pettigrew & Tropp, 2006) has emerged as a powerful means of prejudice reduction (e.g., Voci & Hewstone, 2003). Though a growing number of studies has also considered the consequences of *minority* members' interactions with majority group members (e.g., Swart, Hewstone, Christ, & Voci, 2011), *interminority* contact still remains underresearched. Given that multicultural societies are often characterized by the presence of several minority groups, interminority dynamics deserve to be investigated. To date, only few studies (Bikmen, 2011; Bowman & Griffín, 2012; Hindriks, Verkuylten, & Coenders, 2014; Mähönen, Ihalainen, & Jasinskaja-Lahti, 2013) have focused on *direct* contact between minorities and found that it is associated with less prejudice towards minority outgroups. In this article, we contribute to the existing literature on interminority relations by focusing on *extended* contact, that is, the mere knowledge that an ingroup member has one or more outgroup friends (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). Specifically, we investigate whether extended contact with members of another minority group is associated with lower prejudice towards this outgroup.

Studying interminority contact in contemporary diverse societies is relevant and necessary as members of minority groups have often been found to report negative attitudes toward other minorities (e.g., Cummings & Lambert, 1997; Verkuyten, 2007; White & Langer, 1999). Such unfavourable outgroup attitudes can constitute obstacles to intergroup harmony. Even more importantly, they can hamper the sense of interminority solidarity that underlies cooperation as a means to improve minorities’ position in societies and overcome social disadvantages.
Investigating the role of extended contact in interminority relations is even more important, as the occurrence of direct contact between minority groups may be limited for several reasons. First, minority group members generally focus on and benefit from establishing positive relations with the majority group, which can provide them information on and access to society (bridging social capital), and with other members of their minority ingroup, which can provide emotional support and resources (bonding social capital) (Bauer & Zimmermann, 1997; Putnam, 2000). Thus, they may have limited motivation and resources to build networks which include members of other ethnic or immigrant minorities and engage in establishing positive relationships with these minority outgroups. Second, initiating direct contact with other minorities may be impeded by practical barriers such as a lack of fluency in a common language and an inability to speak the mother tongue of other minority groups. Last but not least, as minorities may live in different areas in a country, their opportunities to meet members of other minority communities can be limited. Therefore, when direct contact is lacking, extended contact may be particularly useful to improve intergroup perceptions (Christ et al., 2010; Eller, Abrams, & Gómez, 2012).

In this article, we report the findings on the effectiveness of interminority extended contact on improving intergroup attitudes from two different intergroup contexts. Study 1 was conducted in Bulgaria and examined extended contact between two ethnic minorities (Bulgarian Turks and Roma) that are historically part of the Bulgarian nation. Study 2, conducted in Finland, investigated extended contact between two immigrant groups which presence in Finland is relatively recent, that is, Russian and Estonian immigrants. To the best of our knowledge, our studies are the first to test whether interminority extended contact is associated with more positive attitudes towards other minority groups. Moreover, we aimed at detecting whether the aforementioned relationship is mediated by affective (outgroup empathy; Study 1, and outgroup trust; Study 2) and cognitive (ingroup norm; Study 2) processes, as suggested by previous
research among majorities and minorities (for a review, see Vezzali, Hewstone, Capozza, Giovannini, & Wölfer, 2014).

**Extended Contact**

Since its initial formulation (Wright et al., 1997), the extended contact hypothesis has been well supported by correlational, longitudinal, and experimental studies considering intergroup relations between majority and minority members (for reviews, see Turner, Hewstone, Voci, Paolini, & Christ, 2007; Vezzali et al., 2014). Although the positive effect of direct, personal contact on intergroup attitudes is generally stronger, also extended contact reduces prejudice, especially when direct contact is lacking or limited (Christ et al., 2010; Eller et al., 2012). Moreover, extended contact has some further advantages over direct contact (see Turner et al., 2007; Vezzali et al., 2014). First, the observation of or knowledge about an intergroup interaction elicits less intergroup anxiety (i.e., the feelings of uneasiness during intergroup interactions; Stephan, 2014) than a direct intergroup experience. Second, salience of intergroup categories, which facilitates the generalization of contact effects from encountered outgroup members to the whole outgroup (Brown & Hewstone, 2005), is likely to be higher for an external observer than for the actors involved in the contact situation, who are focused on interpersonal characteristics. Third, a single cross-group friendship or positive intergroup relation can be observed by many people, allowing extended contact to reduce prejudice on a larger scale than direct contact. Given its beneficial effects on prejudice reduction even when there are few direct contact opportunities, we propose interminority extended contact as a strategy to reduce prejudice and improve interminority attitudes.

Minority groups in diverse societies differ in status and power, and such differences may impact the experience of contact and the desired outcomes of intergroup encounters. For instance, research has recently shown that, among minorities, contact with the majority group leads to less
willingness to engage in actions improving the ingroup’s situation (e.g., Saguy, Tausch, Dovidio, & Pratto, 2009; Dixon, Levine, Reicher, & Durrheim, 2012). Unsurprisingly, the meta-analysis by Tropp and Pettigrew (2005) showed that the relationship between direct contact and prejudice is stronger for majority than minority groups. Status asymmetries were found also in research on interminority contact. The study by Bikmen (2011) conducted among different student groups in the United States showed that intergroup contact was related to reduced prejudice only among the highest status ethnic minority group (Asian students), but not among the lowest status ethnic minority group (Black students).

However, in contrast to direct contact, status differences do not seem crucial for extended contact. In the vast majority of studies reviewed by Vezzali and colleagues (2014), the relationship between extended contact and prejudice did not vary as a function of majority versus minority group status (e.g., Wright et al., 1997; Study 2). We thus expect that, regardless of the status differences, the association between extended contact and outgroup attitudes will be similar among the two ethnic minority and the two immigrant groups examined in our two studies.

**Mediators of Extended Contact Effects**

To understand how extended contact relates to outgroup attitudes, in the following we review affective (outgroup empathy and outgroup trust) and cognitive (ingroup norm) mediators of the association between extended contact and outgroup attitudes tested in the present studies.

**Outgroup Empathy and Outgroup Trust**

Empathy is an emotional response oriented toward another person which is congruent with his or her welfare (Batson et al., 1997) and takes into account his or her perspective (Stephan & Finlay, 1999). In intergroup settings, empathy felt toward outgroup members generalizes into positive outgroup attitudes and helping intentions toward outgroup members (e.g., Batson et al., 1997; Galinsky & Moskowitz, 2000). Trust, on the other hand, is a positive psychological bias
toward others (Yamagishi & Yamagishi, 1994). At the group level, trust has been considered as an emotion (e.g., Brewer & Alexander, 2002) reflecting expectations that the outgroup has good intentions towards one's ingroup and that it will genuinely act in the ingroup's interests (Kelman, 2005; Tropp, 2008).

Outgroup empathy (e.g., Brown & Hewstone, 2005; Pettigrew & Tropp, 2008) and outgroup trust (e.g., Kenworthy et al., 2015) have been identified as key mediators of the relationship between direct intergroup contact and reduced prejudice. Previous research has also shown that both outgroup empathy and outgroup trust mediate the relationship between extended contact and various outgroup perceptions and attitudes. For instance, the positive effects of extended contact among Northern Italian respondents on outgroup humanisation of Southern Italians were mediated by empathy and trust toward the outgroup (Capozza, Falvo, Favara, & Trifiletti, 2013). Enhanced outgroup trust also mediated the association between extended contact with immigrants among majority Dutch and positive attitudes towards these immigrants (Dhont & Van Hiel, 2011), as well as between extended contact and positive behavioural intentions towards the outgroup in the intergroup context of Catholics and Protestants in Northern Ireland (Tam, Hewstone, Kenworthy, & Cairns, 2009). In addition, extended contact was found to be negatively associated with social distance towards the outgroup through stronger empathy among Italian and immigrant children (see Vezzali et al., 2014, p. 365). Therefore, based on previous research, we expect that interminority extended contact is positively linked to both outgroup empathy and outgroup trust and that these two affective states are, in turn, associated with more positive outgroup attitudes.

**Ingroup Norms**

Research has shown that norms guide people's cognition and behaviour (for a review, see Cialdini, Kallgren, & Reno, 1991) and help individuals to orient themselves towards others in
intergroup situations (e.g., Falomir-Pichastor, Muñoz-Rojas, Invernizzi, & Mugny, 2004; Jetten, Spears, & Manstead, 1996).

Extended contact research has widely focused on perceived pro-contact ingroup norms, that is, the extent to which ingroup members seem to approve of contact with outgroup members (e.g., Gómez, Tropp, & Fernández, 2011). Pro-contact ingroup norms play an important role in the relationship between extended contact and intergroup attitudes because individuals can draw conclusions on what is and what is not approved by the ingroup while they observe an intergroup situation. When individuals know an ingroup member who has positive interactions with members of the outgroup, they become aware that outgroup contact is accepted by the ingroup and motivated to act in line with pro-contact norms (Wright et al., 1997). Both experimental and cross-sectional studies have shown that these norms mediate the effects of extended contact on various intergroup perceptions and attitudes among members of majority groups (e.g., De Tezanos-Pinto, Bratt, & Brown, 2010; Liebkind & McAlister, 1999; Turner, Hewstone, Voci, & Vonofakou, 2008; Vezzali, Stathi, Giovannini, Capozza, & Visintin, 2015).

Instead of pro-contact ingroup norms, in the present research we focused on the ingroup norm about attitudes toward the outgroup, that is, the perception that ingroup members have positive or negative outgroup attitudes. This allows us to examine whether a different facet of ingroup norms plays a similar mediating role in the investigated association. Indeed, while pro-contact ingroup norms might reflect the mere observation of cross-group friendships, ingroup norms about attitudes toward the outgroup have a broader significance, depicting perceptions about whether ingroup members have a positive or negative general orientation toward the outgroup. Consequently, the construct of ingroup norms about outgroup attitudes is conceptually more distinct from extended contact than pro-contact ingroup norms. Therefore, by assessing
ingroup norms about outgroup attitudes, this paper provides a stringent test of the mediating role of ingroup norms in the relationship between extended contact and reduced prejudice.

**Overview of the Present Studies**

In 2014, we conducted two studies in which we investigated the role of interminority extended contact in the development of positive intergroup attitudes among two ethnic minority groups in Bulgaria and two immigrant groups in Finland. In both studies, two types of outgroup attitudes were measured: outgroup prejudice and social distance towards the outgroup, that is, the desire to avoid closeness with outgroup members (Bogardus, 1967). The two studies also aimed at testing the mediators of the relationship between extended contact and outgroup attitudes. Due to some differences in the survey instruments used, they differed, however, with respect to the mediators tested: While Study 1 focused on the role of outgroup empathy, Study 2 focused on outgroup trust and ingroup norms as factors explaining the association between extended contact and intergroup attitudes.

Examining the relationship between extended contact and outgroup attitudes in interminority contexts is the first novelty of the present research, as previous studies on extended contact have only focused on this relationship in majority-minority contexts. This study is also among the first (see Vezzali et al., 2014) to investigate the link between extended contact and social distance among members of ethnic minority groups and immigrants. Another contribution to the existing knowledge on interminority relations in plural societies is the focus on two different minority settings: ethnic minorities (Study 1: Roma and Bulgarian Turks) and immigrants (Study 2: Estonians and Russians) in two different interminority contexts (Bulgaria and Finland, respectively). Both Bulgaria and Finland are European Union (EU) member states, but they differ drastically in terms of, for example, the share of ethnic minorities/immigrants in the total population and the history and presence of cultural diversity in the country.
In Bulgaria the two largest ethnic minorities of Roma and Bulgarian Turks account for around 14 per cent of the total population (around 5% and 9% respectively; Bulgarian Census, 2011). Bulgarian Turks are the descendants of Turks who settled in Bulgaria during the Ottoman Rule, that is, the historical period from the conquest of Bulgarian territories by Turks until the liberation of Bulgaria (1396-1878). Also the presence of Roma in Bulgaria dates back to at least the 14th century (Crampton, 1997). Bulgarian Turks and Roma are thus considered as ethnic minorities and not as immigrants, because they have been in Bulgaria prior to the formation of the present Bulgarian nation. Both minorities have a disadvantaged position in society and face discrimination, but Roma have a particularly low status due to their low educational level, high unemployment and poor living conditions (e.g., ECRI, 2009). The findings of the representative social survey Public Perceptions of Interethnic Relations in Bulgaria (Yanakiev, 2004) further suggest that interminority attitudes in the country are rather negative: While a large proportion of Roma perceived Bulgarian Turks as religious fanatics, Bulgarian Turks considered Roma to be lazy, untrustworthy, adverse to education and highly likely to become criminals.

In Finland, the two most numerous immigrant groups are Estonians and Russians, and their share in the total population is around 1 and 1.2 per cent, respectively (Statistics Finland, 2014). Compared to the two ethnic minorities in Bulgaria, these two immigrant groups have resided in Finland for a relatively short period: While the majority of Russian immigrants have come to the country after the collapse of the Soviet Union in the early 1990s, the majority of Estonian immigrants have started coming to Finland only after Estonia joined the EU in 2004. The two immigrant groups differ in social status in Finnish society and these differences are reflected mostly in their position in the labour market and attitudes towards these groups among majority Finns. In 2013, the unemployment rate among Russian immigrants (15 %) was twice as high as among Estonian immigrants (8 %) and three times higher than among majority Finns (5
Moreover, while Estonians are among the most accepted and wanted immigrants in Finland, Russians are among the least welcome newcomers (Jaakkola, 2005, 2009).

Regardless of the aforementioned contextual differences, we argue that extended contact will be associated with more favourable mutual intergroup perceptions of out-group minority members in both intergroup settings. In the current studies, first, we posit that interminority extended contact will be associated through stronger outgroup empathy (Study 1) with less outgroup prejudice and lower social distance towards the outgroup (Hypothesis 1). Second, we expect interminority extended contact to be associated through stronger outgroup trust (Study 2) with less outgroup prejudice and lower social distance (Hypothesis 2). Third, we predict that interminority extended contact will be associated through a positive ingroup norm (Study 2) with less outgroup prejudice and lower social distance towards the outgroup (Hypothesis 3). It is worth mentioning that the operationalization of ingroup norm as the norm about outgroup attitudes, that is, the perception that the ingroup has a favourable or unfavourable attitude toward the outgroup, constitutes a further novelty in the research on extended contact, as previous studies focused mainly on the mediating role of pro-contact ingroup norms (e.g., De Tezanos Pinto et al., 2010; Gomez et al., 2011; Turner et al., 2008; Vezzali et al., 2015).

All the hypothesized mediation processes (indirect effects) in Study 1 and 2 are expected to occur when controlling for direct contact with the relevant outgroup. In addition, we inspected whether the paths proposed in the models for Study 1 and 2 differed between the two minority groups studied to ensure that the minority group status does not moderate the effects of extended contact on outgroup attitudes.

**Study 1**

**Method**
Participants and Procedure

Data used in this study were part of a larger survey on interethnic relations in Bulgaria conducted in three Bulgarian districts (Stara Zagora, Montana and Kardzhali) in June and July 2014. The survey was conducted in compliance with the code of ethics of the American Psychological Association and with the Law for Protection of the Personal Data in Bulgaria. A quota cluster sampling method was used, with eight respondents per cluster. Data collection points were selected on the basis of self-reported ethnicity data from the Bulgarian National Statistical Institute. The sample was stratified by gender, age and urban versus rural residence. The questions were administered in face-to-face interviews in Bulgarian language by professional interviewers. Respondents were provided with all the necessary information for giving informed consent and guaranteed anonymity and that they could stop the interview at any time. The current study utilizes the data collected among Bulgarian Turkish ($n = 320$) and Roma ($n = 320$) respondents. In both subsamples, half of the respondents were women. Mean age was 44.60 ($SD = 17.36$) for Bulgarian Turks and 43.33 ($SD = 16.67$) for Roma. Regarding educational level, 7.5 per cent of Bulgarian Turks had not completed primary education, 37.5 per cent had completed primary or lower secondary education, 42.5 per cent had completed upper secondary education, and 12.5 per cent had a degree above secondary education. For Roma, 15.3 per cent had not completed primary education, 60.3 per cent had completed primary or lower secondary education, 23.1 per cent had completed upper secondary education, and 1.3 per cent had a degree above secondary education. Due to the quota sampling method, the Bulgarian Turkish and the Roma subsamples did not differ regarding gender, $\chi^2(1) = 0.02$, $p = .937$, and age, $t(638) = 0.94$, $p = .346$. Instead, the differences in the educational level of the respondents were observed between the two subsamples, $\chi^2(3) = 73.35$, $p < .001$, with Bulgarian Turkish respondents being more educated than Roma respondents.
Materials

Predictors.

**Extended contact with the outgroup** was measured with an item adapted from De Tezanos-Pinto et al. (2010) assessing how many ingroup members are known to have friends from the relevant outgroup: "To your knowledge, how many <INGROUP> do you know have <OUTGROUP> friends"? The response options were 1 (none), 2 (one), 3 (a few), and 4 (many). Higher scores indicate having more extended contact with the relevant outgroup.

**Direct contact with the outgroup** (control variable) was measured with an item adapted from Voci and Hewstone (2003) which assessed the number of individuals from the outgroup who are well-known to the participant: "How many <OUTGROUP> do you know well"? with the same response scale as the extended contact item. Higher scores indicate having more direct contact with the relevant outgroup.

Mediator.

**Outgroup empathy** felt by Bulgarian Turks and Roma minority members towards each other was measured with two items adapted from Capozza et al. (2013): "Can you share joys and sorrows with <OUTGROUP>"? and "Can you understand the feelings of <OUTGROUP>"? The response scale ranged from 1 (no, not at all) to 5 (yes, very much). The items were integrated into a reliable scale of outgroup empathy (Spearman-Brown reliability statistic for a two-item measure: \( \rho = .82 \) for Bulgarian Turkish and \( \rho = .93 \) for Roma participants), where higher scores indicate more empathy toward the outgroup.

Outgroup attitudes.

**Outgroup prejudice** was measured with a single item, a so called ‘feeling thermometer’ (Haddock, Zanna, & Esses, 1993). Participants were asked about their general feelings towards the other minority group. The answering scale ranged from 1 (extremely negative) to 7 (extremely
positive). The mid-point of the scale (4 = indifferent) indicated a neutral attitude. The item was reverse-coded, so that higher scores reflect stronger prejudice towards the other group.

**Social distance** towards the outgroup was measured with three items adapted from Bogardus (1967). The items reflect the perception of social distance felt towards the other group among Bulgarian Turkish and Roma minority members. The items were: "Would you accept <OUTGROUP> as neighbours"?, "Would you agree to work together with a <OUTGROUP>"? and "Would you marry or cohabitate with a <OUTGROUP>"?. The response scale ranged from 1 (completely disagree) to 5 (completely agree). All items were reverse-coded and aggregated into a reliable scale (α = .84 for Bulgarian Turks and α = .80 for Roma) with higher scores indicating that participants perceived greater social distance towards the outgroup.

**Results and Discussion**

The dataset contained 0.58 per cent of missing data that we imputed with the maximum likelihood (ML) estimation method. Correlations among the variables, their means and standard deviations are shown in Table 1. From the mean of the variables, it appears that both Bulgarian Turks and Roma reported quite low levels of direct and extended contact with members of the other minority. However, while Roma reported more extended than direct contact, $t(319) = 5.69, p < .001$, no such difference occurred for Bulgarian Turks, $t(319) = 1.42, p = .156$. Moreover, Bulgarian Turks reported more direct ($t(633) = 6.58, p < .001$) and extended contact ($t(636) = 2.62, p = .009$) with members of the other minority group than Roma. Both Bulgarian Turks and Roma reported quite low empathy toward the outgroup with no significant difference between the groups, $t(612) = 1.19, p = .234$. Bulgarian Turks were more prejudiced toward Roma than vice versa, $t(621) = 5.90, p < .001$, and perceived more social distance toward the other ethnic community than Roma, $t(623) = 9.04, p < .001$. 

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[i] Positive attitudes were indicated by higher scores on the scale.
[ii] The response scale ranged from 1 (completely disagree) to 5 (completely agree).
[iii] Superiority was indicated by higher scores on the scale.
To investigate the hypothesized relationships, we conducted a path analysis in *Mplus 6* (Muthén & Muthén, 1998-2010). Preliminary analyses suggested that the clustered structure of the data (the 640 respondents were nested in 80 clusters; each cluster included 8 respondents) needs to be accounted for (ICC of outgroup empathy = .32, ICC of outgroup prejudice = .39, ICC of social distance = .42). Furthermore, while extended contact is by definition the knowledge of the behavior of significant others, it is more likely that respondents from the same cluster know each other than that they know respondents from other clusters. In light of these premises, the path analysis was conducted with a multilevel approach. All the main hypotheses were however tested at the individual level. We included gender (0 = male, 1 = female), age, and educational level as socio-demographic control variables. We further controlled for the effects of direct intergroup contact. A dummy variable representing the district of data collection was included as a cluster-level control variable. Also the direct paths from extended contact to the outcome variables were estimated. The coefficients and indirect effects are reported in an unstandardized form (*B*).

The proposed model with all the paths constrained equal between the two ethnic groups fit the data well, corrected Satorra-Bentler scaled $\chi^2(9) = 4.85, p = .686$; RMSEA $\cong .000$, SRMR$_{\text{within}} = .016$, SRMR$_{\text{between}} = .018$, CFI = 1.000 and TLI = 1.014. In order to test whether the proposed model differs between the two ethnic groups, a set of multigroup comparisons was conducted. Specifically, the paths initially constrained equal between the two groups were one by one released, so that each time the released path could be freely estimated between the two groups while the other paths were kept constrained equal. Releasing of the equality constrains of the paths did not improve the model's fit, Satorra-Bentler scaled $\Delta \chi^2(1)s \leq 1.82, ps \geq .178$, thus suggesting the invariance of the strength of the associations in the two samples. The
unstandardized regression coefficients, their standard errors and confidence intervals for the model are presented in Figure 1.

As predicted, having more extended contact with members of the other minority group was positively associated with outgroup empathy which, in turn, was negatively associated with outgroup prejudice and with social distance perceptions \((H1)\) among both Roma and Bulgarian Turks. The indirect effect of extended contact on outgroup prejudice via outgroup empathy was significant, \(B = -0.07, SE = 0.03, p = .008, 95\% \text{ CI} (-0.118, -0.018)\), as well as the indirect effect of extended contact on social distance via empathy, \(B = -0.06, SE = 0.02, p = .010, 95\% \text{ CI} (-0.109, -0.015)\). The direct effects of extended contact on outgroup prejudice and on social distance were not significant, \(B = -0.02, SE = 0.05, p = .671, 95\% \text{ CI} (-0.118, 0.076)\) and \(B = -0.02, SE = 0.04, p = .563, 95\% \text{ CI} (-0.107, 0.058)\), respectively.

As regards direct contact, it was positively associated with outgroup empathy, \(B = 0.41, SE = 0.05, p < .001, 95\% \text{ CI} (0.311, 0.502)\), and negatively with outgroup prejudice, \(B = -0.14, SE = 0.04, p = .001, 95\% \text{ CI} (-0.226, -0.059)\), and social distance, \(B = -0.17, SE = 0.04, p < .001, 95\% \text{ CI} (-0.244, -0.090)\). Direct contact had also significant indirect effects via empathy on outgroup prejudice, \(B = -0.22, SE = 0.04, p < .001, 95\% \text{ CI} (-0.288, -0.145)\), and on social distance, \(B = -0.20, SE = 0.03, p < .001, 95\% \text{ CI} (-0.261, -0.136)\).

Study 1 thus showed that, over and above interminority direct contact, interminority extended contact is associated with more positive outgroup attitudes, with this effect mediated by outgroup empathy. Furthermore, as expected, the examined relationships did not differ between the two ethnic minorities—Roma and Bulgarian Turks—though they have different status positions in Bulgarian society.

**Study 2**

**Method**
Participants and Procedure

Data used in this study were collected through a postal survey that took place between May and October 2014 and included a variety of social psychological measures related to immigration. In the introduction to the survey, participants were provided with all the necessary information for giving informed consent. They were also instructed that informed consent is regarded as given if the questionnaire is filled in and sent back to the research team. The study design was developed and conducted in accordance to the guidelines of the American Psychological Association and of the Ethical Review Board in the Humanities and Social and Behavioural Sciences at the University of Helsinki. Participation in the study was voluntary and anonymous. Questionnaires were sent to the representative samples of Estonian and Russian immigrants in Finland, drawn by the Finnish National Population Register Centre. Participants from both groups were selected according to their mother tongue (Estonian or Russian, respectively), country of residence before moving to Finland (Estonia or the Russian Federation, respectively), and the time of their relocation to Finland, which was no later than the end of 2010. Participants received questionnaires in their respective mother tongues; the questionnaires were translated by native speakers of the Estonian and the Russian language. The response rate to the survey was 26.9 per cent (n = 212; 68 % female, \( M_{age} = 46.09, SD = 11.38 \)) for the Estonian and 30.8 per cent (n = 246; 65 % female, \( M_{age} = 43.01, SD = 11.80 \)) for the Russian sample. Estonians reported on average 14.18 (SD = 3.23) years education, while for Russians the average years of education were 15.88 (SD = 4.92). While the two subsamples did not differ regarding their gender composition, \( \chi^2(1) = 0.69, p = .428 \), the Russian respondents were younger, \( t(456) = 2.84, p = .005 \), and had a longer education, \( t(456) = 4.30, p < .001 \), than the Estonian respondents.

Materials

Predictors.
Extended and direct contact with the outgroup were both measured with similar items to those used in Study 1. The items were "To your knowledge, how many people you know have <OUTGROUP> immigrants as friends"? for extended contact and "How many <OUTGROUP> immigrants do you know well"? for direct contact. The response options were 1 (none), 2 (one), 3 (a few), 4 (some), and 5 (many). Higher scores indicate that participants have more extended and direct contact with the outgroup.

Mediators.

Outgroup trust was measured with two items adapted from Turner, West, and Christie (2013) and an answering scale ranging from 1 (completely disagree) to 5 (completely agree). The items were: "I would be able to trust a <OUTGROUP> immigrant as much as any other stranger" and "I would be able to trust a <OUTGROUP> immigrant with personal information about myself". The items comprise a reliable scale of outgroup trust (Spearman-Brown reliability statistic for a two-item measure: $\rho = .84$ for Estonian and $\rho = .70$ for Russian immigrants), with higher scores indicating greater levels of trust.

Ingroup norm, that is the perceived attitude of a typical ingroup member living in Finland towards the outgroup, was assessed with a single item: "What do you think would be the general attitude of a typical <INGROUP> living in Finland towards <OUTGROUP> immigrants"? and answered on the scale ranging from 1 (extremely negative) to 7 (extremely positive). Higher scores denote that attitudes towards the outgroup held by a typical ingroup member living in Finland are perceived to be more positive.

Outgroup attitudes.

Outgroup prejudice was measured as in Study 1. Higher scores reflect stronger prejudice towards the other immigrant group.
Social distance was measured with three items largely corresponding to those used in Study 1 and the same response scale. Since many Estonian and Russian immigrants have relocated to Finland in an adult age with their families started in the country of origin, the item about intergroup marriage used in Study 1 was not very relevant in the Finnish context. Thus, it was replaced with an item about the acceptance of minority outgroup members as close friends. The items were: "Would you accept an <OUTGROUP> immigrant as a close friend"?, "Would you work together with an <OUTGROUP> immigrant"? and "Would you accept <OUTGROUP> immigrants as neighbours"?. All items were reverse-coded and aggregated into a reliable scale (α = .89 for Estonians and α = .86 for Russians), where higher scores indicate greater social distance towards the outgroup.

Results and Discussion

Missing data (1.38 %) were imputed with the ML estimation method. Correlations among the variables, their means and standard deviations are shown in Table 2. Both Estonian and Russian immigrants reported quite low levels of direct and extended contact with members of the other immigrant group. However, while Russian immigrants reported having significantly more extended than direct contact with the outgroup, $t(245) = 3.72, p < .001$, no such difference occurred among Estonian immigrants, $t(211) = 1.26, p = .208$. Moreover, there were no statistically significant differences between the two groups in the level of reported extended, $t(456) = 0.95, p = .341$, and direct, $t(422) = 0.23, p = .817$, contact with the outgroup. While both Estonians and Russians expressed modest levels of outgroup trust with no statistically significant difference between the groups, $t(423) = 1.07, p = .285$, Russian respondents reported having a more positive ingroup norm about the outgroup than Estonians did, $t(456) = 5.56, p < .001$. Estonians and Russians reported similarly low levels of social distance, $t(456) = 0.27, p = .784$, but Estonians were more prejudiced towards Russians than vice versa, $t(456) = 4.80, p < .001$. 
To examine the hypothesized models, we conducted path analysis in *MPlus* 6 with ML estimation. The significance of the indirect effects was assessed with 95% bias-corrected bootstrap confidence intervals based on 5,000 bootstrapped resamples (e.g., Preacher, Rucker, & Hayes, 2007). As in Study 1, in this model, we also controlled for the effects of age, gender (0 = male, 1 = female), years of education and direct contact with the outgroup, and estimated the direct paths from extended contact to the outcome variables.

The proposed model with all the paths constrained equal between the two immigrant groups fit the data relatively well, $\chi^2(14) = 21.68, p = .085$; RMSEA = .049, SRMR = .031, CFI = 0.987 and TLI = 0.952. However, in order to test whether the proposed model differs between the two immigrant groups, a set of multigroup comparisons was conducted. Specifically, as in Study 1, the paths initially constrained equal between the two groups were one by one released, so that each time the released path could be freely estimated between the two groups while the other paths were kept constrained equal.

As shown by the significant chi-square difference, $\Delta \chi^2(1) = 14.18, p < .001$, the model in which the path from direct contact to outgroup trust was freely estimated between the groups presented a significantly better fit than the initial, fully-constrained model. This improved the goodness-of-fit indices, $\chi^2(13) = 7.50, p = .875$, RMSEA $\cong .000$, SRMR = .017, CFI = 1.000 and TLI = 1.037. Releasing of the equality constraints of the other paths did not further improve model fit, $\Delta \chi^2(1)s \leq 2.44, ps \geq .118$, suggesting the invariance of the strength of the associations in the two samples, except of the association between direct contact and outgroup trust. The unstandardized path estimates for the final model are presented in Figure 2.

The results show that all the hypothesized associations between extended contact and outgroup prejudice and social distance were confirmed. As predicted, having more extended contact with members of the other minority group was associated with less prejudice towards this
group, and this occurred by virtue of stronger outgroup trust, indirect effect of $B = -0.08$, 95% CI (-0.118, -0.045) ($H_2$), and more positive ingroup norms, indirect effect of $B = -0.11$, 95% CI (-0.172, -0.058) ($H_3$). Similarly, extended contact with the other minority group was associated with the perception of lower social distance towards this group, and this occurred via stronger outgroup trust, indirect effect of $B = -0.09$, 95% CI (-0.134, -0.054) ($H_2$), as well as via more positive ingroup norms, indirect effect of $B = -0.11$, 95% CI (-0.172, -0.058) ($H_3$). In addition, extended contact was directly and negatively associated with social distance, $B = -0.11$, $SE = 0.04$, $p = .003$, 95% CI (-0.189, -0.040), but it was not associated directly with outgroup prejudice, $B = 0.00$, $SE = 0.05$, $p = .985$, 95% CI (-0.087, 0.094).

As regards direct contact, for the Estonian immigrant respondents it was positively associated with outgroup trust, $B = 0.13$, $SE = 0.06$, $p = .033$, 95% CI (0.008, 0.249), which resulted in its negative indirect effects on outgroup prejudice, $B = -0.04$, 95% CI (-0.075, -0.004), and social distance, $B = -0.04$, 95% CI (-0.087, -0.004). Unexpectedly, for Russian immigrants direct contact was instead negatively associated with outgroup trust, $B = -0.14$, $SE = 0.06$, $p = .025$, 95% CI (-0.257, -0.017). This negative association resulted in the positive indirect effects of direct contact on outgroup prejudice, $B = 0.04$, 95% CI (0.005, 0.077), and the perception of social distance, $B = 0.05$, 95% CI (0.006, 0.090). The association between direct contact and ingroup norms, not different between the two groups, was not significant, $B = -0.04$, $SE = 0.05$, $p = .411$, 95% CI (-0.140, 0.049), as well as the indirect effects of direct contact via ingroup norm on outgroup prejudice, $B = 0.02$, 95% CI (-0.023, 0.068), and social distance, $B = 0.01$, 95% CI (-0.007, 0.029). Finally, direct contact was directly associated with prejudice, $B = -0.12$, $SE = 0.04$, $p = .001$, 95% CI (-0.190, -0.047), but not with social distance ($B = 0.00$, $SE = 0.03$, $p = .922$, 95% CI (-0.058, -0.066), for both groups.
The unexpected negative relationship between direct contact and outgroup trust for Russian immigrant respondents needs to be addressed. This finding may have two explanations. First, it may be due to status differences between the groups (Bikmen, 2011; see also Tropp & Pettigrew, 2005): Members of a disadvantaged group are likely to feel they are targets of prejudice in direct contact situations and develop negative expectations. In Finland, Russians have a significantly lower social status and are less accepted by majority Finns than Estonians (Jaakkola, 2005, 2009). Because of these differences, Russian immigrants may feel anxious about being the target of prejudice during direct interactions with Estonians and may perceive Estonians as closer to Finns than to them and other, less privileged immigrant groups. Consequently, Estonians may be seen as representing the interests and political agenda of majority Finns rather than as showing trust-enhancing solidarity with other, lower status immigrant groups. Thus, Estonians are not seen as trustworthy, even by Russians who have personal knowledge of Estonians. Second, it is likely that the current relations between Estonians and Russians in Estonia underlie the obtained results. Specifically, Russians perceive Estonians as perpetrators of civil rights violations: The civil rights of the Russian minority in Estonia have been substantially limited by the Estonian national majority after the country gained its independence from the Soviet Union in 1991. This might have contributed to the absence of positive effects of direct contact on trust toward Estonians.

To recap, the findings of Study 2 demonstrate the beneficial role of extended contact on outgroup prejudice and social distance enabled by the affective and cognitive mechanisms. As the effects of extended contact on outgroup attitudes occurred over and above the effects of direct contact, extended intergroup interactions seem to be a promising path to prejudice reduction when direct contact with other minority groups is not possible or restricted. Moreover, the effects of interminority extended contact on outgroup attitudes were not different between the two
immigrant groups, further suggesting the efficacy of interminority extended contact irrespectively of status differences.

**General Discussion**

Our studies contribute to the literature on interminority relations and interminority contact in several ways. First, we examine for the first time the relationship between extended contact and outgroup attitudes among members of different ethno-cultural minority groups. Second, we investigate the affective (outgroup empathy and outgroup trust) and cognitive (ingroup norm) mediators of the relationship between interminority extended contact and prejudice, and operationalize ingroup norms in a novel way for intergroup contact research: Instead of pro-contact ingroup norms, we assess norms about attitudes toward the outgroup. Third, to study these phenomena, we analyse non-student data from previously underexplored interminority and national contexts: Roma and Bulgarian Turkish minority members in Bulgaria (Study 1) and Estonian and Russian immigrants in Finland (Study 2). Fourth, we examine two intergroup contexts in which the minority groups differ in societal status to understand whether the effectiveness of interminority extended contact is universal and not affected by status differences.

Our two studies have shown that even the mere knowledge of ingroup members having friends from another minority group is beneficial for outgroup attitudes. In the present research, extended contact has been found to be associated with less prejudice and social distance towards the other minority group over and above the effects of direct contact. This contribution is particularly important when one takes into account that interminority relations and perceptions can be conflictual and negative (see e.g., Verkuyten, 2007; White & Langer, 1999) and direct interminority interactions might be restricted due to the lack of interest and resources, language barriers and limited contact opportunities. Even more importantly, we have shown that extended
contact was associated with more positive outgroup attitudes among all four groups of respondents; therefore, the strength of this relationship did not differ depending on the social status of the studied groups. This result attests to the wide applicability of extended contact as a prejudice-reducing tool in various national settings and among different minority groups and to the beneficial effects of extended contact even for the lowest status minority groups.

Moreover, the relationships between extended contact and outgroup prejudice and social distance, respectively, were largely indirect and occurred via outgroup empathy (Study 1), outgroup trust and positive ingroup norms (Study 2), as suggested by previous research examining these relationships in majority-minority contexts (see e.g., Vezzali et al., 2014). Thus, both affective and cognitive processes seem to play an important role in fostering more positive intergroup relations through the effects of interminority extended contact. It is noteworthy that, while pro-contact ingroup norms, usually operationalized as the perception that the ingroup supports intergroup contact, might reflect the simple observation of the occurrence of extended contact, attitudinal ingroup norms have a broader social significance tapping the general evaluation of the outgroup by ingroup members. Thus, it is particularly relevant to focus on attitudinal norms. Considering a facet of ingroup norms conceptually more distant from extended contact, our study constitutes a stringent test of the role of ingroup norms as mediators of the extended contact effects. Our research further encourages intergroup contact research to acknowledge the role of both attitudinal and contact norms (see Allport, 1954). In addition, the occurrence of the mediating effects of ingroup norms for extended but not for direct contact (for similar results when considering majority-minority relationships see De Tezanos-Pinto et al., 2010; Turner at al., 2008) attests the prominent role of indirect contact experiences on the cognitive facets of interminority prejudice (see Paolini, Hewstone, & Cairns, 2007). Moreover, the findings show that the empirical and conceptual distinction between direct and extended
contact experiences, that are associated with reduced prejudice through different mechanisms, is relevant also in interminority contexts.

With growing ethnic, cultural, and religious diversity in contemporary societies, the demand for reliable strategies reducing intergroup prejudice is on the rise. However, previous research on interminority attitudes which focused mainly on the role of superordinate and subgroup identification (Martinovic, Verkuyten, & Weesie, 2011), perceived similarity with the minority outgroup and discrimination by the majority (Craig & Richeson, 2012) offer limited solutions for improving interminority relations. Indeed, interventions based on altering individuals’ identification or their perception of discrimination by majority members may be difficult to implement and ethically questionable if for example discrimination is minimized. We believe that, in contrast to the previously studied factors, extended contact is a more practical strategy to utilise in prejudice reduction: It occurs naturally, is quite common and relatively easy to observe. Our results show the beneficial role of extended contact on outgroup attitudes and perceived social distance towards the outgroup in two national settings and irrespective of status differences between minorities. This attests to the possibly universal applicability of extended contact and interventions based on it as a valuable mean to improve interminority relations. As previously suggested (Christ et al., 2010; Eller et al., 2012), extended contact could be particularly useful in settings in which different minority groups do not have much direct interactions with one another.

We must further note that while the effectiveness of interminority extended contact shows that knowing minority outgroup members personally is not essential for prejudice reduction, it still points to the importance of promoting contact opportunities between different minority groups. More specifically, at least a minimal level of interminority interactions in a culturally diverse social context is necessary for the development of cross-group friendships that
can be known and observed by several people and then contribute to prejudice reduction on a larger scale (see Turner, Tam, Hewstone, Kenworthy, & Cairns, 2013 for the relationship between diversity experiences and extended contact).

**Limitations and Future Directions**

Notwithstanding the novel contributions which our study makes to the existing literature on interminority relations, we need to address the limitations of the present research. As our data are cross-sectional and definitive causal conclusions of the tested models cannot be drawn, the interpretation of relationships examined in both studies heavily rely on previous theorisations and empirical research on intergroup contact (e.g., Pettigrew & Tropp, 2006, 2008; Vezzali et al., 2014; Wright et al., 1997). Nevertheless, we believe that our results obtained with non-student correlational data offer good insights of interminority group dynamics in contemporary societies. Future research could, however, benefit from a longitudinal design which would verify the causality of the associations found in the present study (e.g., Swart et al., 2011).

As our measures of outgroup prejudice and social distance were self-reported, we cannot make any conclusions about the participants' actual behaviour towards the other minority group. Moreover, some constructs in these studies were measured with single items, which may be a potential drawback of this research. Thus, in future we recommend the use of multiple items measures, so that the investigated theoretical constructs could be assessed more accurately.

The results of this paper provide the first empirical evidence of potential effectiveness and wide applicability of extended contact for prejudice reduction among members of different minority groups in interminority settings. We, therefore, encourage future research to further examine the conditions under which extended contact can lead to the improvement of interminority relations in diverse societies and test the effectiveness of interventions based on extended contact. Future extended contact interventions might be based, for instance, on the
portrayal of positive intergroup interactions in books or mass-media (Cameron & Rutland, 2006; Paluck, 2009) or the disclosure of information about existing cross-group friendships (Vezzali et al., 2015).

Another promising avenue for future research on extended contact between minority groups would be to investigate whether this type of contact fosters interminority solidarity and support for collective action of another minority group. Thus far, research has demonstrated that direct intergroup contact of minority group members with members of the majority group may hamper collective action (e.g., Dixon et al., 2012; Saguy et al., 2009). This would imply that intergroup contact is incompatible with minorities’ potential to improve their situation by collective action aimed at reducing social inequality (Wright & Lubensky, 2009). Our studies showing that interminority contact is associated with positive attitudes toward other minorities suggest that contact between minorities may also be related to the perceptions of more permeable boundaries between minority groups and reduced interminority competition. These perceptions may further facilitate the undertaking of interminority collective actions aimed at improving societal position of minorities and achieving more equality between disadvantaged minorities and majorities. As mutual trust is the basis for intergroup cooperation (e.g., Kramer & Carnevale, 2001), our findings propose that interminority extended contact – associated with outgroup trust regardless of the characteristics of the intergroup contexts and status differences between minority groups – can be an important boost for interminority cooperative collective actions.
References


Endnotes:

i Data of Bulgarian Turkish respondents were collected in Stara Zagora (n = 160) and in Kardzhali (n = 160) districts, and data of Roma respondents were collected in Stara Zagora (n = 160) and in Montana (n = 160) districts. While Stara Zagora is characterized by the presence of both ethnic minorities (of the total population, 4.9 % Bulgarian Turks and 7.8 % Roma; Bulgarian Census, 2011), in Kardzhali there is a high proportion of Bulgarian Turks (66.2 %) and almost no Roma (1 %), and in Montana there is a relatively high proportion of Roma (12.7 %) and almost no Bulgarian Turks (0.1 %).

ii A principal component analysis (PCA) with oblimin rotation, conducted separately for the two groups, supported the empirical distinctiveness between outgroup empathy (mediator) and social distance (dependent variable). The extracted two factors explained 82 per cent and 80 per cent of the variance for the Roma and Bulgarian Turkish samples, respectively. The individual loadings of the items on their respective factors were between .67 and .97 for the Roma and .65 and .98 for the Bulgarian Turkish sample.

iii The degrees of freedom for t tests vary because, for some of the t tests, the Levene test suggested that variances were not homogeneous.

iv The region characterized by the presence of both ethnic minorities, Stara Zagora, was dummy coded as 1, while the other two districts, Kardzhali and Montana were dummy coded as 0.
In Study 1, the indirect effects were calculated as the product between the regression coefficient of the predictor on the mediator and the regression coefficient of the mediator on the outcome variable. The multilevel regression analysis of Study 1 did not allow the implementation of bootstrapping procedures (Muthén & Muthén, 1998-2010, p. 548).

The empirical distinctiveness between outgroup trust (mediator) and social distance (dependent variable) was corroborated with a PCA with oblimin rotation, conducted separately for the two groups. The extracted two factors explained 85 per cent and 79 per cent of the variance for the Estonian and Russian samples, respectively. The individual loadings of the items on their respective factors were between .90 and .94 for the Estonian and .75 and .95 for the Russian sample.