Fostering social change among advantaged and disadvantaged group members: Integrating intergroup contact and social identity perspectives on collective action

How to cite:


For guidance on citations see FAQs.

© 2019 The Author(s)

Version: Accepted Manuscript

Link(s) to article on publisher’s website:
http://dx.doi.org/doi:10.1177/1368430219889134

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online’s data policy on reuse of materials please consult the policies page.
Fostering social change among advantaged and disadvantaged group members: Integrating intergroup contact and social identity perspectives on collective action

Abstract

Recent research on intergroup contact has shown how interactions with outgroup members may both decrease and increase motivations to achieve social equality. Similarly, social identity theory has identified the conditions that lead individuals to challenge unequal social systems. Integrating these two major theories, the current study examined the processes underlying the relationship between intergroup contact and participants’ willingness to engage in collective action to challenge social inequality. Specifically, we tested socio-structural variables (status legitimacy and stability, and permeability of group boundaries) as potential mediators of contact in a sample of both advantaged (Italian high-school students, $N = 392$) and disadvantaged (immigrant high-school students, $N = 165$) group members. We found that contact was positively associated with motivation for change, an effect mediated by decreased perceived legitimacy of status differences. Moreover, for the advantaged group, membership salience moderated the effects of quality (but not quantity) of contact. Indirect effects were instead not moderated by content of contact (an index considering the extent to which contact was characterized by a focus on differences vs. commonalities between groups). Theoretical and practical implications of findings are discussed.

Keywords: intergroup contact; social identity theory; social change motivation; collective action; membership salience.
Social psychologists have traditionally sought to develop interventions to produce positive outgroup attitudes, reduce intergroup conflict, and promote equality between groups. Intergroup contact is often portrayed as one of the most effective strategies for reducing prejudice and producing a more equal society. The meta-analysis by Pettigrew and Tropp (2006) and other extensive reviews (e.g., Hodson & Hewstone, 2013; Pettigrew & Tropp, 2011) have demonstrated that higher levels of contact are typically associated with lower levels of prejudice. In so far as prejudice is one of the key determinants of discrimination, intergroup contact may be a central driver of social change in historically unequal societies.

However, recent research casts some doubts on the usefulness of contact in promoting intergroup equality (Dixon, 2017; Wright & Lubensky, 2009). There is emerging evidence that positive contact may inhibit support for action toward social change among members of both advantaged and disadvantaged groups (Saguy, 2018; Saguy, Shchory-Eyal, Hasan-Aslih, Sobol, & Dovidio, 2017). At the same time, however, there is also evidence that contact is associated with positive societal outcomes including civic engagement (McKeown & Taylor, 2017) and increased support for ingroup rights amongst both disadvantaged (Kauff, Green, Schmid, Hewstone & Christ, 2016) and advantaged groups (Vezzali & Giovannini, 2011). Thus, existing research provides mixed results on the association between contact and social change.

In the current research we aim to investigate this issue further by overcoming several limitations in past work. Existing research has typically examined the association between contact and social change among advantaged and disadvantaged groups separately. This separate focus limits the ability to compare across the groups, and also to provide a joint theoretical rational that would be relevant for both. Specifically, in the context of collective action, contact research has not sufficiently been integrated with major intergroup theories of social change, such as social identity theory (SIT; Tajfel & Turner, 1979). We argue that
considering whether or not contact effects are driven by processes underlying collective action as identified by SIT can be critical in developing a fuller understanding of contact effects, and of the way they might operate differently, or similarly, among advantaged and disadvantaged groups.

Thus, in the current research we integrated intergroup contact theory and social identity theory (SIT; Tajfel & Turner, 1979) to examine the processes that underly the association between contact and social change among both advantaged and disadvantaged group members. More specifically, our study operationalized variables derived from both SIT and contact theory that, though relevant to understanding social change, have commonly been considered independently. In particular, drawing on SIT, we investigated if the perceived legitimacy and stability of status differences and permeability of group boundaries mediate the association between contact and motivation for social change. As a secondary aim, we also explored whether the salience of group membership during contact (Brown & Hewstone, 2005) and the content of the contact (focused on differences vs. commonalities; Vezzali, Andrighetto, Capozza, Di Bernardo, & Saguy, 2017) moderate the association between contact and social change, and the predicted indirect effects.

**Intergroup contact and social change**

The literature on intergroup contact has mainly focused on its effectiveness in reducing prejudice among advantaged group members, providing consistent evidence that positive interactions with outgroup members can improve intergroup relations (Hodson & Hewstone, 2013). Surprisingly, until comparatively recently, the relation between contact and broader forms of social change has been relatively under-investigated. Emerging research on this topic has raised concerns about the potential limits of the contact hypothesis both when considering advantaged and disadvantaged group members’ tendencies to promote social change (e.g., Becker, Wright, Lubensky, & Zhou, 2013; Çakal, Hewstone, Schwär, & Heath,
As Wright and Lubenksy (2009) highlight, the prejudice reduction model of social change that underlies contact research contrasts with classic research on collective action. This indicates that the collective action taken by disadvantaged groups is promoted by factors that in fact disrupt positive intergroup relations (see van Zomeren, Postmes, & Spears, 2008), such as strong ingroup identification (Stürmer & Simon, 2004), negative outgroup emotions (Simon & Klandermans, 2001), awareness of structural inequalities (van Zomeren, Spears, Fischer, & Leach, 2004), and a heightened sense of injustice (Ellemers & Barreto, 2009). Ironically, by promoting positive intergroup feelings and reducing identity salience, intergroup contact may sometimes undermine the collective action orientation of members of historically disadvantaged groups.

Saguy and collaborators (2009) provided initial evidence for this so-called ‘irony of harmony’ effect of intergroup contact on social change, showing that contact inhibited social change by promoting disadvantaged group members’ ‘unrealistic’ expectations of equality. Positive contact may therefore encourage people to like one another more, whilst reducing the motivation to challenge the status quo, a finding supported by a growing body of research (see McKeown & Dixon, 2017, for a review). For instance, in a recent study examining the relations between disadvantaged (Blacks, Hispanics) and advantaged (Whites) groups in the U.S. from the perspective of disadvantaged members, Hayward, Tropp, Hornsey, and Barlow (2018) found that positive contact was associated with reduced collective action intentions and behaviour via reduced anger toward the advantaged group and lower perceived discrimination.

On the other side, however, contact effects have also been found to foster social change motivations among disadvantaged members. In two cross-sectional general population
surveys, Kauff et al. (2016) showed that, in contexts where advantaged group members have more positive intergroup contact, disadvantaged group members are *more* rather than *less* likely to support their own rights. In the study by Hayward et al. (2018) reported above, results also revealed direct positive associations between *positive* contact and collective action.

Although less numerous, some studies have also investigated the relationship between contact and social change tendencies among advantaged group members. Findings from these studies generally point to a positive association between contact and support for benefitting the relevant disadvantaged outgroup. For example, Reimer et al. (2017, Study 1b) found among heterosexual participants that positive contact was associated with greater collective action intentions supporting LGBT people, an effect mediated by identification with the LGBT movement. The positive association between positive contact and collective action was replicated in Study 2b, using a longitudinal approach. Selvanathan, Techakesari, Tropp, and Barlow (2017) showed in three studies that positive interracial contact was associated with stronger intentions of Whites to engage in collective action on the behalf of Blacks, largely through its indirect effects on intergroup empathy and anger toward injustice. Further evidence shows that contact is sometimes positively associated with social change orientations and support for social policies favouring the disadvantaged group (Dixon, Durrheim, & Tredoux, 2007; Vezzali & Giovannini, 2011).

There are, however, also studies showing that contact effects are not particularly strong when it comes to advantaged group members support for equality. For instance, friendships with South-African Blacks related to Whites' sense that they cannot do much to change the situation of Blacks, which in turn related to weaker tendencies to act for promoting equality (Çakal et al., 2011, Study 2). These findings echo much earlier work (Jackman & Crane, 1986): among a nationally representative sample of White Americans, experiences of
positive contact with Blacks predicted better racial attitudes, but less support for policies
designed to redress racial inequalities in housing and employment (see also Durrheim &
Dixon, 2004; Dixon, Durrheim, & Tredoux, 2005).

Together, existing research on contact and social change can be summarised as
indicating a negative association among the disadvantaged and, for the most part, a positive
association among the advantaged (but with some mixed evidence). What is missing from
current work is the question of mechanisms accounting for these different effects, and a
simultaneous examination of an advantaged and a disadvantaged group. The current research
addresses both of these gaps.

**Social Identity Theory, Intergroup contact and Social Change**

We situated our theoretical understanding of the relationship between contact and
social change motivations within SIT (Tajfel & Turner, 1979), a theory focused on
understanding when and why individuals engage in collective actions aimed at changing the
hierarchical structure of the society. According to SIT, a relevant part of individuals’ self-
esteeem derives from their social identity, which depends on the position of the ingroup in
society. Being a member of an advantaged, high-status group should foster positive self-
esteeem, while being a member of a disadvantaged, low-status group should be related to lower
self-esteem. According to Tajfel and Turner (1979), when social identity is devalued because
the ingroup has low status, individuals may decide to adopt an individual (social mobility) or
a collective (social change) strategy in order to improve self-esteem. The choice of the
strategy largely depends on three socio-structural variables that influence individuals’
perception of social hierarchies: the legitimacy and stability of status differences and the
permeability of group boundaries.

Legitimacy of status differences indicates the extent to which disparities are perceived
as appropriate and fair; stability of status differences indicates the extent to which group
position is seen as modifiable; permeability of group boundaries indicates whether or not one can freely move from the ingroup to the outgroup as an individual.

Research has demonstrated that members of subordinate groups are more likely to adopt a collective strategy when the relations with the higher status group are perceived as unstable and illegitimate and group boundaries are perceived as impermeable (Ellemers, 1993; Ellemers, Wilke, & van Knippenberg, 1993; Mummendey, Klink, Mielke, Wenzel, & Blanz, 1999; Tajfel, 1978; Turner & Brown, 1978; van Zomeren, Leach, & Spears, 2012). Considering the relations between East and West Germans from the perspective of East Germans, for example, Mummendey and collaborators (1999) found a positive relationship between the perception that intergroup relations were unstable, illegitimate and impermeable, and increased social competition. Based on these considerations, we predicted that among disadvantaged group members increased instability, illegitimacy and impermeability will be associated with greater intentions to engage in actions for social change.

Existing research has focused mainly on the conditions that encourage disadvantaged group members to engage in collective action. Tajfel and Turner (1979) acknowledged that advantaged groups’ perceptions that the existing status relations are illegitimate can threaten collective moral image, and lead advantaged group members to support actions for social change that can reduce the conflict of values as well as their shame and guilt over unfair ingroup advantages (e.g., Iyer, Leach, & Crosby, 2003; Lickel, Schmader, & Barquissau, 2004; Miron, Branscombe, & Schmitt, 2006; Stewart, Latu, Branscombe, & Denney, 2010; Swim & Miller, 1999; see also Banfield & Dovidio, 2013). Our prediction is therefore that, among advantaged group members, higher perceptions of status illegitimacy will be related to higher intentions to engage in actions for social change on the behalf of the disadvantaged group.
INTERGROUP CONTACT AND SOCIAL CHANGE

Concerning status stability perceptions, research suggests that perceiving status relations as unstable may threaten advantaged group members position in the status hierarchy (Scheepers & Ellemers, 2005; Scheepers, Röell, & Ellemers, 2015), which may in turn motivate them to preserve their own advantage via increased ingroup bias. Given that greater levels of ingroup bias can be equated to lower levels of motivation to engage in actions on the behalf of the disadvantaged groups, we predicted that greater instability will be associated with lower social change motivation amongst the advantaged.

We further predicted that, among advantaged group members there would be a negative association between permeability and social change motivation for two reasons. First, perceiving group boundaries as highly permeable may threaten the distinctiveness and superiority of the advantaged group in some contexts (Jetten, Spears, & Postmes, 2004), increasing their resistance to social change. Second, permeability may feed into the individualistic ideology of meritocratic advancement, which is at the heart of the ‘American Dream’. If boundaries between classes are seen as permeable, why do we need collective action to redress class inequality, either on the part of the historically advantaged or on the part of the historically disadvantaged?

Research investigating the relation between contact and the three socio-structural variables associated with SIT is limited, especially research that considers the behaviours of both advantaged and disadvantaged group members. A partial exception is provided by Tausch, Saguy, and Bryson (2015), who examined the relation between Whites and Latino-Americans in the U.S. from the perspective of ethnic minority group members. The authors found that the negative relation between cross-group friendships and collective action orientation was mediated by decreased identification with the disadvantaged group, but not by changes in perceived permeability of group boundaries. Instead, higher permeability mediated the relationship between cross-group friendships and individual mobility orientation.
INTERGROUP CONTACT AND SOCIAL CHANGE

Unfortunately, the authors only focused on the disadvantaged group, and did not consider perceived legitimacy and status stability in their model. The present study aims to address this gap.

Broadly, our hypothesis is that contact influences perceptions of the three socio-structural variables, which in turn mediate contact effects on intentions to engage in collective action.

With respect to disadvantaged groups, research shows that intergroup contact can lead members to expect a fairer treatment by the advantaged group and to pay less attention to intergroup inequalities (Saguy et al., 2009). Therefore, we expect positive contact to be associated with increased perceptions of disadvantaged group members that the system is legitimate and stable. Moreover, if contact deflects attention away from inequalities, it may also foster perceptions of permeability. Thus, for disadvantaged group members, contact may be associated with reduced motivation for social change via increase in perceptions of the social system as legitimate and stable, and of group boundaries as permeable.

With respect to advantaged groups, in line with the idea that it fosters social harmony by reducing the conditions that lead to intergroup conflict (cf. Wright & Lubensky, 2009), contact can predict lower social change motivation by increasing perceptions that the system is stable and that group boundaries are permeable. Predictions are less straightforward for legitimacy perceptions. On the one hand, contact may reduce attention to inequalities, therefore increasing perceptions of legitimacy (and in turn lowering social change motivation). On the other hand, contact might also lead advantaged members to recognize that status relations are characterized by social inequalities and therefore are illegitimate, in turn leading to greater social change motivation (Iyer et al., 2003). Note that this latter possibility would be in line with the finding that contact is generally associated with greater intentions.
for social change among the advantaged group (Saguy et al., 2017). Both possible directions between contact and legitimacy perceptions were explored in the current work.

Our predictions regarding the effects of contact on the social change motivations of historically advantaged group members involve seemingly contradictory paths. In fact, we predict that contact will lead to lower social change motivation via increased status stability and permeability, but to higher social change motivation via reduced legitimacy. We would argue, however, that this inconsistency is only apparent. In fact, as we have argued above, research on advantaged group members has produced somewhat mixed findings, even if more studies have shown that contact is associated with greater willingness to engage in social change on the behalf of the disadvantaged group than vice versa. The examination of underlying processes, which is a strong aspect of this study, may shed light on this relationship. In particular, it is possible that contact has differential effects produced by different processes, potentially leading both to perceptions of system stability, therefore inhibiting social change, and to perceptions of injustice, therefore motivating collective action.

**The moderating role of membership salience and content of contact**

There is reason to believe that both membership salience and content of contact might moderate the effects of contact on collective action. Various authors have noted that salience of social identity is key to fostering collective action (e.g., van Zomeren et al., 2008; Wright & Lubensky, 2009). Generally, membership salience has been operationalized in the contact literature (and in this research) as the interactants’ awareness during contact of belonging to different groups (see, e.g., Greenland & Brown, 1999; Harwood, Hewstone, Paolini, & Voci, 2005; Voci & Hewstone, 2003). Contact research has repeatedly found that membership salience moderates contact effects, such that contact effects are stronger and more generalisable when membership salience is high (Brown & Hewstone, 2005). Indirect
evidence for the moderating role of membership salience when collective action is concerned is provided by work showing that dual identity (where membership salience is preserved within a common identity representation) is associated with greater motivation for social change and willingness to protest against blatant discrimination among both advantaged and disadvantaged group members (Banfield & Dovidio, 2013, Study 3; Glasford & Dovidio, 2011; Glasford & Calcagno, 2012).

Similarly, positive contact focused on commonalities between groups might obscure group differences and undermine the motivation to act for a more equal society (Saguy & Chernyak-Hai, 2012; Saguy et al., 2009). Conversely, focusing the attention on group differences, in terms of inequality of the status relationship, may foster collective action intentions. As an example, some studies showed that supportive contact, defined as contact where advantaged group members acknowledge status inequality by communicating respect to the disadvantaged group, is associated with stronger intentions to engage in collective action among disadvantaged group members (Becker et al., 2013; Droogendyk, Louis, & Wright, 2016; Glasford & Johnston, 2018). More direct evidence, in this case for advantaged group members, was provided by Vezzali et al. (2017), who conducted a correlational study among Italian university students. They found that the number of friendships with immigrants was associated with greater social change motivation only when differences (vs. commonalities) between groups were salient during contact. This study however did not include the perspective of disadvantaged group members and did not examine potential mediators of the effects found.

The current research

Our primary aim was to test whether socio-structural variables identified by SIT (status legitimacy and stability, permeability of group boundaries) mediate the relationship between contact and social change motivation among both advantaged and disadvantaged
INTEGROUP CONTACT AND SOCIAL CHANGE

group members. In addition, we tested membership salience and content of contact (difference-focused vs. commonality-focused) as potential moderators of these relationships with exploratory purposes.

Participants were Italian and immigrant high-school students in Emilia-Romagna, a region that at the time of data collection was characterized by a growing high percentage of immigrants (11.2%) compared to the general Italian context (7.3%), a difference that has constantly increased over the last 10 years. In this context, immigrants qualify as the disadvantaged group, as indicated for instance by an indicator of risk of poverty, that reached 22.7% in families composed by immigrants, compared to 2.9% of families of Italians (Italian National Institute of Statistics, 2015). Relationships between Italians and immigrants are conflictual (Pew Research Center, 2007), as also demonstrated by research conducted in educational contexts (Di Bernardo, Vezzali, Stathi, Cadamuro, & Cortesi, 2017; Vezzali, Stathi, & Giovannini, 2012). However, although attitudes toward immigrants are quite negative, they have remained relatively stable in the last years (European Commission, 2018); according to data derived from the Eurobarometer in 2014, 42% of respondents indicated having fairly negative feelings toward non-EU immigrants; in 2018, the corresponding percentage was 40%. Regarding immigrants attending high-schools, the difference between Emilia-Romagna and Italy generally (where data collection took place) is large (15.3% vs. 7.0%; Regione Emilia-Romagna, 2017). Therefore, we believe the examination of this context is topical and can contribute significantly to understanding social change processes. We also highlight that our sample comprised of adolescent participants, a target group that has generally been under-investigated in contact research related to social change; this way we can provide evidence on how to mobilize young people toward the attainment of racial equality.

To outline, based on the literature reviewed above, our hypotheses are the following:
H1a: among the advantaged group, contact should be associated with lower intentions to engage in social change, via heightened perceptions of status stability, legitimacy, and permeability of group boundaries.

H1b: among advantaged group members, the potential effects of perceived status stability and permeability of group boundaries should be offset by lower perceptions of status legitimacy, which will in turn predict higher social change motivation.

H2: among the disadvantaged group, contact should be associated with higher status stability, legitimacy and permeability of group boundaries, which in turn should mediate contact effects on lower motivation for social change.

We also explored membership salience and content of contact as potential moderators. The two concepts, although linked, are conceptually distinct. Membership salience per-se does not necessarily entail discussion of commonalities, differences or inequalities, which are instead captured by measures of commonality-focused and difference-focused contact (see, e.g, Saguy et al., 2009; Vezzali et al., 2017). However, given the exploratory nature of this test, we do not make specific hypotheses.

Although we consider both quantity and quality of contact, we do not make specific predictions about their differential effects. However, we acknowledge that, since quality of contact is especially relevant to attitude change (Hodson & Hewstone, 2013), effects may be stronger for quality than for quantity of contact.

Method

Participants and Procedure

First, we discussed the study and its aims with representatives of the city municipality involved directly in the educational domain. Second, we contacted the school governors to obtain their initial approval for the research (provided by the school councils of the schools involved), after disclosing full procedures and material. Third, we provided informed consent
to parents (in the case of participants who were under age) and to students, clarifying the aims and procedures of the study, assuring that participation was voluntary and that they could withdraw from the study at any time without consequence. Participants included in the final sample (two students refused participation) were 557 high-school students (256 males, 295 females, 6 data missing; age ranged from 14 to 21 years, $M_{age} = 17.08, SD = 1.36$) from different high-schools situated in Emilia-Romagna, a Northern Italian region. The Italian sample consisted of 392 participants (194 males, 194 females, 4 data missing; $M_{age} = 16.94, SD = 1.34$), while the immigrant sample included 165 respondents (62 males, 101 females, 2 data missing; $M_{age} = 17.41, SD = 1.36$). The distinction between Italian and immigrant participants was made on the basis of the information provided by the schools, taking into account the students’ family background (i.e., whether participants had immigrant parents). Immigrants were predominantly from Africa (40.6%), followed by Eastern Europe (32.7%), Asia (23%) and South America (3%) (1 missing, 0.6%). Questionnaires were administered to the students during class time.

Since the number of participants depended on school’s availability (e.g., number of classes provided, students’ absences in the day of data collection), we calculated 246 participants as an a-priori minimum sample size allowing a power of 0.8 to detect a medium to small effect size employing structural equation models with six latent variables and 12 observed variables (Cohen, 1988), and with the goal of conducting a mediation analysis, where we would be testing indirect effects employing bias-corrected bootstrapped estimates (Fritz & MacKinnon, 2007). Since the aimed sample size was not reached for the immigrant sample, a post-hoc power analysis revealed that 165 respondents allowed a power of 0.8 with a medium to small effect size for testing the hypothesized model employing structural equation with observed variables.

**Measures**
Italian students completed measures involving contact with immigrants, whereas immigrants completed measures involving contact with Italians. The full list of items used is presented in the online supplementary material. Unless otherwise specified, all items had a 5-step scale ranging from 1 (not at all) to 5 (very much).

**Quantity of contact.** Quantity of contact was assessed by using five items. Participants were asked to indicate the extent to which they had contact with immigrants [Italians] at school, in the neighbourhood, during free time, and in general, and how many immigrants [Italians] they spent time with. For the first four items responses ranged from 1 (none) to 5 (very much); for the latter item, possible responses were: 1 (none), 2 (one or two), 3 (three or four), 4 (five or six), 5 (more than six) \((\alpha = .88)\).

**Quality of contact.** Participants were asked to evaluate their interactions with immigrants [Italians] on four bipolar words (e.g., competitive/cooperative; rude/kind) adapted from previous studies (e.g., Capozza, Trifiletti, Vezzali, & Favara, 2013). On a 5-step scale, 1 was assigned to the negative pole, 5 to the positive pole, 3 was the neutral point (neither/nor) \((\alpha = .83)\).

**Status stability.** A 2-item scale \((r = .21, p < .001)\), adapted from Mummendey et al. (1999), was employed to measure the perception of stability of the status relationship (e.g., “Do you think that the living conditions of Italians and immigrants will be the same in the next years?”).

**Status legitimacy.** The perception of legitimacy of status differences was measured with three items (e.g., “Are differences in the society between Italians and immigrants legitimate?”) adapted from Saguy and collaborators (Saguy, Dovidio, & Pratto, 2008; see also Vorauer & Sakamoto, 2008) \((\alpha = .78)\).

**Permeability of group boundaries.** Participants rated their perceptions of permeability using two items (reverse-coded) adapted from Major et al. (2002) (e.g., “How easy is that
immigrant individuals improve their status in Italian society?”). Correlations between items was .48, \( p < .001 \).

*Social change motivation.* Participants were asked to respond to four items that measured their willingness to engage in collective action on behalf of immigrants (e.g., “Do you think you should take part in actions toward equality between Italians and immigrants?”) adapted from Saguy et al. (2008) and from Glasford and Dovidio (2011) \( (\alpha = .85) \).

*Membership salience.* Two items \( (r = .28, \ p < .001) \), taken from Vezzali and Capozza (2011), assessed membership salience during contact with the outgroup (e.g., “When you have contact with immigrants [Italians], on average, do you think about the fact that you belong to different cultures?”).

*Content of contact.* In order to assess commonality-focused and difference-focused contact, six items were adapted from Saguy and Dovidio (2013) and Saguy et al. (2009); three items \( (\alpha = .76) \) assessed commonalities (e.g., “In general, when you have contact with immigrants, do you speak about things that Italians and immigrants have in common?”,) and three items \( (\alpha = .72) \) measured differences (e.g., “In general, when you have contact with immigrants, do you discuss about inequalities between Italians and immigrants?”) during contact.

**Results**

For each variable, a composite score was created by averaging the relative items. For the content of contact measure, along with the two separate means, an index of content of contact was created by calculating the difference between differences and commonalities scores: the higher the score, the greater the focus on differences rather than similarities. Descriptive statistics are reported in Table 1. Correlations for the Italian and the immigrant sample are provided in Table 2.

**Main analyses**
To test the hypothesized relationships, we used multi-group structural equation model.

**Italian sample (Advantaged group)**

A multi-group structural equation model with latent variables was applied. For each latent construct, two parcels were created, corresponding to the two original items for measures composed by two items, or using the item-to-construct balance method (Little, Cunningham, Shahar, & Widaman, 2002) for measures where more than three items were used (i.e., the items were separated in order to create two parcels with similar loadings). Employing item aggregation instead of keeping items separated is generally convenient (e.g., higher reliability and commonality, increased model stability) and, since parcelling decreases the number of parameters to be estimated (thus reducing the number of participants required), it is useful for small sample sizes (for a comprehensive explanation of the advantages and disadvantages of parcels, see Little et al., 2002; see also, Hau & Marsh, 2004). We allowed correlations between the three mediators.

The model presented a good fit to data, $\chi^2(41) = 62.67, p < .05; \chi^2/df = 1.53; CFI = .99; SRMR = .03$. As can be seen in Figure 1, supporting H1b, both quality and quantity of contact were associated with lower legitimacy; in turn, higher levels of legitimacy were negatively associated with support for social change. Regarding the other two potential mediators, results showed, in line with the literature (Wright & Lubenski, 2009), a positive association between contact (quality and quantity) and both stability and permeability of group boundaries. However, no relations emerged between these two mediators and respondents’ social change motivations Therefore, H1a and H1b received mixed support as regards status stability and permeability perceptions.

To test the effect of quality and quantity of contact on social change motivation through the indirect effect of perceived legitimacy, a bootstrap method with 5,000 resamples was applied. For quality of contact, the point of estimate was .22 and the 95% confidence
INTERGROUP CONTACT AND SOCIAL CHANGE

interval fell 0.07 and 2.72. For quantity of contact, the point of estimate was .12 with a confidence interval of between 0.01 and 0.49. Since neither interval included 0, the indirect effect on greater social change motivation via reduced legitimacy was significant for both quality and quantity of contact. Therefore, our findings supported H1b according to which a meaningful mediator for the association between contact and increased social change is legitimacy perceptions.

Immigrant sample (Disadvantaged group)

The model presented above was also tested for the immigrant sample. However, since the sample size was too small to perform the multigroup analysis with latent variables (see Participants section), we applied structural equation modeling with observed variables. The model showed an adequate fit to data, $\chi^2(2) = 3.94, p = .14; \chi^2/df = 1.97; CFI = 0.98; SRMR = .03$. As can be seen in Figure 2, a negative relation between quantity of contact and perceived legitimacy emerged. In addition, legitimacy was negatively associated with motivation for social change. Surprisingly, positive associations between stability and permeability with motivation for social change also emerged. These relationships do not support H2.

The significance of the mediation path from quantity of contact to motivation for social change via decreased legitimacy was evaluated with a bootstrapping procedure that used 5,000 resamples. As the 95% confidence interval did not include 0 [0.003, 0.12; point of estimate =.03], the indirect effect was significant.

Secondary analyses

Italian sample

The moderation effect of membership salience and of content of contact was investigated by applying the multiple group analysis simultaneously for high and low levels of membership salience, as determined by a median split. This way of testing moderation is generally considered reliable (see, e.g., Iacobucci, Posavac, Kardes, Schneider, & Popovich,
INTERGROUP CONTACT AND SOCIAL CHANGE

2015) and is commonly used in psychological research when applying structural equation modelling (see, e.g., Her, Shin, & Pae, 2018; Vezzali, Cadamuro, Versari, Giovannini, & Trifiletti, 2015; Voci & Hewstone, 2003).

For membership salience, the model in which coefficients were not constrained showed an excellent fit to data, $\chi^2(82) = 85.31, p = .38; \chi^2/df = 1.04; CFI = 1.00; SRMR = .04$. In order to test the invariance of the measurement model, and to obtain a baseline model, we constrained the factor loadings. From the chi-square difference test it emerged that the two models were equivalent, $\chi^2(88) = 89.62, \Delta \chi^2(6) = 4.31, ns$. In the second step, when all parameters were constrained, a significant difference between the two models was found, $\chi^2(119) = 149.17, \Delta \chi^2(31) = 59.55, p < .001$. From the analysis of the single paths, we found a moderating effect of membership salience on the relationship between quality of contact and perceived legitimacy, $\chi^2(89) = 96.70, \Delta \chi^2(1) = 7.08, p < .01$. In line with expectations, quality of contact was associated with reduced legitimacy when membership salience was high ($\beta = -.48, p < .001$), but not when it was low ($\beta = -.40, ns$). The indirect effect of legitimacy with high membership salience was significant (point of estimate = .63, confidence interval between 0.07 and 4.31).

For content of contact, the analysis did not converge, thus the moderator effect could not be interpreted since the data did not fit the model. Thus, for the Italian sample, performing a moderation analysis using content of contact as the moderating variable was not possible.

Immigrant sample

Similarly, in the case of the immigrant sample, a multiple group analysis with observed variables was conducted. Concerning membership salience, in the first step, coefficients were allowed to be freely estimated. This model showed a reasonable fit to data, $\chi^2(4) = 11.54, p < .05; \chi^2/df = 2.89; CFI = 0.94; SRMR = .03$. Then, we constrained all other coefficients in order to test whether differences emerged with the baseline model. Findings
INTERGROUP CONTACT AND SOCIAL CHANGE

showed that group salience did not moderate the relation between contact and motivation for social change, $\chi^2(23) = 35.52$, $\Delta \chi^2(19) = 23.98$, $ns$.

Regarding the content of contact index, the model where the coefficients were estimated without any constraint presented excellent fit indexes, $\chi^2(4) = 5.26$, $p = .26$; $\chi^2/df = 1.31$; CFI = 0.99; SRMR = .01. When constraining all coefficients, the chi-square difference test was significant, $\chi^2(23) = 51.86$, $\Delta \chi^2(19) = 46.60$, $p < .001$. When each path was individually constrained, a moderating effect on the relationship between contact quality and status stability was observed, $\chi^2(5) = 10.49$, $\Delta \chi^2(1) = 5.23$, $p < .05$: the association between contact quality and stability was significant when the interaction was focused on differences rather than on similarities ($\beta = .36$, $p < .01$), while the coefficient turned out to be nonsignificant for low levels of the moderator ($\beta = -.03$, $ns$). No other relevant differences emerged. However, when bootstrapping was applied, testing the significance of the indirect effect of contact quality on social change motivation via stability for high levels of the moderator, the 95% CI did include 0 ([-0.0423, 0.1982], point of estimate = 0.0543), thus the mediation was nonsignificant.$^1$

Discussion

The current research attempted to integrate contact research on collective action with research on SIT, by testing socio-structural variables as mediators between contact and social change motivation. It did so by considering a sample of both advantaged ( Italians) and disadvantaged (immigrants) group members. As both theories speak to the problem of intergroup inequality, it is surprising that research on intergroup contact has generally neglected the contribution of SIT in explaining collective action (for exceptions, see e.g., Çakal, Hewstone, Guler, & Heath, 2016; Tausch et al., 2015), even if SIT has informed a substantive body of work on how intergroup contact can reduce intergroup prejudice and stereotyping (cf. Brown & Hewstone, 2005; Hodson & Hewstone, 2013). As a secondary and
INTERGROUP CONTACT AND SOCIAL CHANGE

exploratory aim, we investigated membership salience and content of contact (focus on differences vs. commonalities) as moderators, to test whether contact effects were stronger when salience of group identity, or a greater focus on differences than on commonalities, were high.

Among advantaged group members, both frequency and quality of contact were associated with the three socio-structural variables: positively with status stability and permeability, and negatively with legitimacy. In line with the notion that contact may sometimes inhibit social change, contact was associated with increased perceptions of permeability and stability. Both variables were expected to inhibit social change, however we did not find support for this prediction.

Support for our hypotheses was especially provided by perceptions of legitimacy: quantity and quality of contact were associated with reduced perceptions that the system is legitimate; in turn, greater illegitimacy perceptions were associated with stronger intentions to engage in actions for social change. Note that we had also acknowledged the possibility that contact would be associated with greater legitimacy, in line with research arguing for a sedative effect of contact, but in contrast with the majority of research showing that, among advantaged group members, contact is associated with greater support for social change on the behalf of disadvantaged (Dixon, Durrheim, & Thomae, 2017). In fact, supporting the beneficial effect of contact on social change for the advantaged, this does not appear to be the case: the fact that contact is associated with stronger awareness of stability of the system does not seem to be in contrast with awareness of societal injustices, which in this study were found to be the determinants of one’s intentions to act to support intergroup equality.

Surprisingly, we did not find associations of stability and permeability with social change motivation within our structural model. Note that both stability and permeability were associated with social change motivation (cf. Table 2). Possibly, in this context, legitimacy
perceptions were considered as more relevant to the choice to engage in action to support the disadvantaged group, such that when the three variables were entered as simultaneous predictors of social change only the effects of legitimacy emerged as significant.

Also, note that these correlations were in the opposite prediction than expected, namely stability and permeability were both positively related to social change motivation. Possibly, the more that advantaged group members perceived the hierarchical situation as stable, the more they recognized the need to engage in actions to change the status quo. Also, the more the group boundaries were perceived as permeable, but within a broader context in which immigrants clearly represented the disadvantaged group, the more advantaged group members were motivated to reinforce actions that would ultimately lead to social equality.

Consistent with SIT predictions (e.g., Ellemers, 1993), results concerning the disadvantaged group revealed that illegitimacy was associated with greater social change motivation. The positive association between stability and social change motivation, although unpredicted, is not totally surprising. Scheepers and colleagues (Scheepers, Spears, Doosje, & Manstead, 2006), for instance, demonstrated that extreme actions to change the status hierarchy can be enacted by the disadvantaged group as an ultimate measure. In other words, when the status hierarchy is perceived as stable, low status group members may believe that only extreme acts can change it. In the case of our study, possibly, disadvantaged members perceived social change actions as the extreme but still appropriate ways to face their unfair position. An important point of future research is to include measure of normative and non-normative collective action (Becker & Tausch, 2015), and test when status (in)stability stemming from contact is associated with collective action intentions, and specifically with what type of collective action (normative or non-normative).

Unexpectedly, among disadvantaged group members, permeability was positively associated with social change motivation. Possibly, in this particular context, the more
participants perceive that their group can advance in the society at the individual level (given the permeable intergroup boundaries), the more they perceive the situation as granting rights to them despite their low status (since they can advance, individually, in the society), thus leaving the space for obtaining even more rights and motivating them to engage in actions for social change.

Notably, among disadvantaged group members, quantity of contact was indirectly associated with greater social change motivation via reduced legitimacy. The first explanation for this finding parallels the one provided for advantaged members, namely that repeated interactions demonstrate that the unequal position in the status hierarchy is not fair (an effect even reinforced by the fact that disadvantaged members display a higher contact quantity; see Table 1). Future research can explore the role of fairness as an alternative underlying factor of the above relationship. Results are also in line with research showing that in some cases contact can increase awareness of group discrimination (Poore et al., 2002). In the case of our study, (quantity of) contact may have increased perceptions of unequal intergroup relationships, therefore making salient group distinctions and fostering perceptions of status illegitimacy. The fact that contact quality was not significantly related to social change motivation is in line with studies showing that contact is less effective among disadvantaged members (Tropp & Pettigrew, 2005) and, more specifically, that this differential effect especially applies to quality of contact (Vezzali, Giovannini, & Capozza, 2010). Note however that this finding is specific to research on prejudice, and additional research is needed to understand the direction of moderation by group for quantity and quality of contact, when the outcome is represented by measures relating to collective action).

It is worth noting that, both for advantaged and disadvantaged group members, legitimacy of status differences emerged as the key mediator of the association between contact and greater social change motivation. These results are in line with findings showing
that legitimacy is an especially relevant factor in determining the likelihood that individuals will engage in actions aimed at social change (e.g., Becker et al., 2013; Sweetman, Spears, Livingstone, & Manstead, 2013; van Zomeren et al., 2012, Wellman, Liu, & Wilkins, 2016). We argue that results regarding advantaged group members, considering the high percentage of variance explained (77%) are especially interesting in that they show that, consistent with SIT predictions, when superior status is perceived as illegitimate (as a function of heightened intergroup contact), advantaged group members may act against their ingroup, either by leaving it or (as in the case of the present study) supporting actions for redressing inequality (see also Hays & Blader, 2017; Saguy & Dovidio, 2013; Saguy et al., 2008).

Results concerning moderation by membership salience and content of contact were less clear. Among advantaged group members, we found that the indirect effect of quality of contact on social change motivation was only significant when membership salience was high. This result is in line with the role that membership salience has in the generalization of contact effects (Brown & Hewstone, 2005), and reveals that positive contact has an empowerment function on collective action primarily when individuals are aware of group distinctions during contact. Our interpretation is that positive interactions with outgroup members, when group salience is high and therefore individuals are more likely to address group differences (cf. Table 2), cultivate the idea that the subordinate position of immigrants in Italy is unfair, which in turn promotes the intention to act for social change (Tajfel & Turner, 1979). In addition, quality of contact with high membership salience may have increased participants’ sensitivity to inequalities by enhancing perception of guilt (cf. Swim & Miller, 1999). By contrast, effects of quantity of contact were unmoderated, both for the advantaged and the disadvantaged group, revealing a limited role of membership salience in the context of repeated interactions irrespective of group valence. Tests of moderation for
content of contact were not relevant to mediation effects for either group. No moderated mediation effect instead emerged when content of contact was the moderator.

Note that the present results do not support the sedative effect of contact (Çakal et al., 2011), which has been found in other studies, mostly among disadvantaged group members (Saguy et al., 2017). Rather, they support evidence that positive contact can foster social change among advantaged (Vezzali et al., 2017) and disadvantaged group members (Kauff et al., 2016). This may be due to contextual factors, for instance the moderate level of membership salience and the general positive relations between groups of adolescents in our research setting. Similarly, the fact that only legitimacy was associated with social change motivation among advantaged group members, and that stability and permeability were associated with social change motivation in an unpredicted direction among disadvantaged members may reflect the specific features of our research context and intergroup relations.

These findings help to reconcile the two bodies of literature on intergroup contact and on social change. Despite that, the very factors that promote collective action can also disrupt intergroup relations (e.g., ingroup identification, perceived injustice; see Dixon, 2017; van Zomeren et al., 2008; Wright & Lubensky, 2009), the present study suggests that collective action may also be promoted by maintaining positive relations between groups.

**Limitations and future research**

A limitation of the current research is its correlational design. Another limitation concerns the sample that consisted only of high-school students from a specific geographical location. Furthermore, the number of participants in the immigrant sample was quite low and did not allow the use of SEM analyses with latent variables. Therefore, caution should be taken when interpreting results for this group (see also the relatively low portion of variance explained, $R^2 = .13$; Figure 2).
Our measure of social change may pose an additional limitation, since it measures the motivation for change instead of ‘real’ action. Although this approach to measuring social change is common in literature (see, e.g., Çakal et al., 2011; Glasford & Dovidio, 2011; Tausch et al., 2015), we highlight the need for future research on contact and social change to take into account behavioural measures of social change. Future research should also consider different forms of action considering both action intentions and behaviour as well as aggressive and non-aggressive forms of action, as the processes underlying these may be different depending on the socio-political context.

We further acknowledge the limitation of our difference-focused contact measure, that assessed both perceptions of differences and of inequalities (see online supplementary material). Although the two aspects are related (note that reliability of the measure is good), they are not the same, and this distinction is especially relevant in light of the other variables we used. As an example, discussions on inequalities may have stronger associations with legitimacy perceptions than discussions regarding differences in general. Future studies should distinguish the two aspects and investigate in detail the role of content of contact in shaping social change motivations.

It should be noted that, according to SIT (see Tajfel, 1981), an alternative prediction could have been made with respect to the role of (il)legitimacy. In fact, when threat (in the case of illegitimacy, threat to the advantaged group identity as a fair and positive group) is not high, advantaged group members might react to the threat with increased bias (in terms of our study, with reduced social change motivation). In other words, advantaged members may perceive that the level of illegitimacy is not sufficiently high to threaten their positive self-image as group members and motivate them to address the inequality; in this case, they may perceive illegitimacy of the status relation as a threat to their group position, and react with increased bias (in our case, less motivation to engage in social change). Therefore, there is
likely a threshold of the threat to the group image that, if crossed, may lead members to disidentify from their group and/or to take action to restore the positivity of its image (e.g., by supporting social change to the benefit of the disadvantaged group). Unfortunately, in this study there is no way to empirically assess this threshold, and whether the association between increased illegitimacy and greater social change motivation may be explained by having crossed it (although note that perceptions of legitimacy in the Italian sample were lower than the mid-point, $t(391) = 11.00, p < .001, d = 0.55$, thus suggesting a moderate-to-high level of perceived illegitimacy). Future studies should address this key point, in order to provide useful indications on the threshold above or below which advantaged members will start supporting disadvantaged members’ rights or instead will react to the threat to group image with greater bias (cf. Schmid, Hewstone, Kupper, Zick, & Tausch, 2014).

Recent research (e.g., Reimer et al., 2017) highlighted the possibility that negative contact would influence social change motivation. In fact, even if the vast majority of recent research has focused on positive forms of intergroup interactions, recently, also the effects of negative contact in affecting social change should be taken into account. Our research focused on the conditions and mechanisms under which positive contact promotes social change, and did not include measures of negative contact. On the other hand, recent work assessing the relationship of positive and negative contact with collective action (e.g., Hayward et al., 2018; Reimer et al., 2017) did not examine possible moderators. Future studies should, thus, try to disentangle the relation between social change, positive and negative contact and relevant variables identified by SIT, including the moderating conditions that allow or inhibit the effects of contact on collective action considered in the present research.

Finally, future research should investigate other factors that may contribute to a better understanding of the relations between contact, SIT and social change. For example, it may be important to explore the role of group representations: it is possible that, when dual identity is
INTERGROUP CONTACT AND SOCIAL CHANGE

Salient, contact will stimulate social change (see Ufkes, Calcagno, Glasford, & Dovidio, 2016). Guilt and threat should also be more carefully considered. For example, guilt could represent another key factor allowing contact to positively ignite support for change among advantaged members whilst threat may play a different role, preventing individuals from engaging in social change or promoting more aggressive types of social change. A further variable to consider in future research is group identification. According to SIT, when identification is high, individuals are more likely to opt for group instead of individual strategies (Tajfel & Turner, 1979). For instance, it may be that highly identified individuals from the advantaged group are less sensitive to illegitimacy of status relationships and therefore more resistant to social change. In addition, the role of contact between members of different disadvantaged groups in promoting common social identification, and thus political solidarity and joint collective action, is another potential area for future research (cf. Dixon et al., 2017).

Conclusion

Earlier contact theorists were interested not merely in making people from different groups more positive toward one another, but also in how to foster social change, an idea that received less attention in subsequent years (Dixon, 2017). By integrating intergroup contact theory and SIT, our findings provide new insights on the processes driving contact to trigger motivation for social change among both advantaged and disadvantaged groups. We encourage researchers to consider integrating intergroup theories that speak to social change such as SIT and intergroup contact theory, and examine the very conditions that allow maintaining positive relations and, at the same time, promote equality.
Footnotes

1. In addition to the main models, we ran two alternative models, where membership salience or content of contact were not tested as moderators, but (also in light of the correlations emerged; cf. Table 1) they are instead integrated into the mediation chain (see Table 2). Results revealed moderated indirect effects in the Italian sample for the model where social change motivation and membership salience were tested as mediators in the chain from socio-structural factors to contact: stability/legitimacy → social change motivation → membership salience → contact quantity/quality. Note that, as shown in Table 3, when comparing both main and alternative models using the AIC and CAIC indexes, it emerged that main models showed a better adaptation to the data compared with the other models (for further details, data are available upon request from the corresponding author).
References


INTERGROUP CONTACT AND SOCIAL CHANGE


Asia Pacific Management Review. Advanced online publication.
doi:10.1016/j.apmrv.2018.02.001


Retrieved from http://sociale.regione.emiliaromagna.it/documentazione/pubblicazioni/ricerche-e-statistiche/la-poverta-in-italia-

doi:10.1016/j.jcps.2015.06.014

doi:10.1177/0146167202238377

doi:10.1086/268998


INTERGROUP CONTACT AND SOCIAL CHANGE


## Table 1. Means (standard deviations) of the constructs.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Italians $(N = 392)$</th>
<th>Immigrants $(N = 165)$</th>
<th>$t(555)$</th>
<th>Cohen’s $d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity of contact</td>
<td>2.78 (1.01)</td>
<td>3.84 (1.03)</td>
<td>11.25***</td>
<td>1.04</td>
</tr>
<tr>
<td>Quality of contact</td>
<td>3.61 (0.86)</td>
<td>3.94 (0.70)</td>
<td>4.69***</td>
<td>0.39</td>
</tr>
<tr>
<td>Stability</td>
<td>2.73 (0.73)</td>
<td>2.94 (0.63)</td>
<td>3.41***</td>
<td>0.31</td>
</tr>
<tr>
<td>Permeability</td>
<td>2.88 (0.98)</td>
<td>3.11 (1.00)</td>
<td>2.56*</td>
<td>0.23</td>
</tr>
<tr>
<td>Legitimacy</td>
<td>2.43 (1.03)</td>
<td>1.99 (0.82)</td>
<td>5.28***</td>
<td>0.47</td>
</tr>
<tr>
<td>Social change motivation</td>
<td>2.91 (1.03)</td>
<td>3.79 (0.78)</td>
<td>11.13***</td>
<td>0.96</td>
</tr>
<tr>
<td>Membership salience</td>
<td>2.78 (0.97)</td>
<td>2.99 (0.99)</td>
<td>2.31*</td>
<td>0.20</td>
</tr>
<tr>
<td>Content of contact</td>
<td>-0.50 (1.16)</td>
<td>-0.61 (1.13)</td>
<td>1.03</td>
<td>0.10</td>
</tr>
</tbody>
</table>

*Note.* All measures had a 5-step scale. Content of contact = difference between difference-focused contact scores and commonality-focused contact scores: higher scores reflect more difference-focused than commonality-focused contact.

* $p < .05$. *** $p < .001$. 
### Table 2. Zero-order correlations between constructs for Italian and immigrant samples

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Italian sample (N = 392)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Quantity of contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of contact</td>
<td>.51***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Membership salience</td>
<td>-.10</td>
<td>-.21***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Content of contact</td>
<td>-.37***</td>
<td>-.40***</td>
<td>-.32***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Stability</td>
<td>.04</td>
<td>.10*</td>
<td>-.13**</td>
<td>.20***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Legitimacy</td>
<td>-.30***</td>
<td>-.35***</td>
<td>-.35***</td>
<td>-.33***</td>
<td>-.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Permeability</td>
<td>.25***</td>
<td>.21***</td>
<td>-.11*</td>
<td>.20***</td>
<td>.01</td>
<td>-.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Motivation for social change</td>
<td>.43**</td>
<td>.45***</td>
<td>-.23***</td>
<td>.39***</td>
<td>.17***</td>
<td>-.58***</td>
<td>.19***</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immigrant sample (N = 165)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Quantity of contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of contact</td>
<td>.45***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Membership salience</td>
<td>-.02</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Content of contact</td>
<td>-.25***</td>
<td>-.22**</td>
<td>.22***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Stability</td>
<td>.04</td>
<td>.11</td>
<td>.09</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Legitimacy</td>
<td>-.26***</td>
<td>-.23**</td>
<td>.00</td>
<td>-.18*</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Permeability</td>
<td>.16*</td>
<td>.17*</td>
<td>.11</td>
<td>.09</td>
<td>.19*</td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Motivation for social change</td>
<td>.23**</td>
<td>.20*</td>
<td>.27***</td>
<td>-.05</td>
<td>.14</td>
<td>-.17*</td>
<td>.20**</td>
<td></td>
</tr>
</tbody>
</table>

*Note*: Content of contact = higher scores reflect more difference-focused than commonality-focused contact.

*p < .05. **p < .01. ***p < .001.
Table 3. Model comparisons for the Italian and immigrant samples

<table>
<thead>
<tr>
<th>Type</th>
<th>Model</th>
<th>df</th>
<th>$\chi^2$</th>
<th>$\chi^2/df$</th>
<th>CFI</th>
<th>SRMR</th>
<th>AIC</th>
<th>CAIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italian sample ($N = 392$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM</td>
<td>41</td>
<td>62.67*</td>
<td>1.53</td>
<td>.99</td>
<td>.03</td>
<td>135.23</td>
<td>319.17</td>
</tr>
<tr>
<td>Main Multi</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM (Low Salience)</td>
<td>41</td>
<td>33.15</td>
<td>0.81</td>
<td>1.00</td>
<td>.03</td>
<td>105.98</td>
<td>263.31</td>
</tr>
<tr>
<td>Main Multi</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM (High Salience)</td>
<td>41</td>
<td>52.16</td>
<td>1.27</td>
<td>.99</td>
<td>.04</td>
<td>125.03</td>
<td>284.25</td>
</tr>
<tr>
<td>Main Multi</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM (Low Diff.)</td>
<td>41</td>
<td>57.75</td>
<td>1.41</td>
<td>.99</td>
<td>.04</td>
<td>130.45</td>
<td>288.17</td>
</tr>
<tr>
<td>Main Multi</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM (High Diff.)</td>
<td>41</td>
<td>53.63</td>
<td>1.31</td>
<td>.99</td>
<td>.04</td>
<td>125.56</td>
<td>283.28</td>
</tr>
<tr>
<td>Alternative</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ Salience $\rightarrow$ SCM</td>
<td>60</td>
<td>73.28</td>
<td>1.22</td>
<td>1.00</td>
<td>.03</td>
<td>162.06</td>
<td>385.77</td>
</tr>
<tr>
<td>Alternative</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ Content $\rightarrow$ SCM</td>
<td>49</td>
<td>61.28</td>
<td>1.25</td>
<td>1.00</td>
<td>.03</td>
<td>143.45</td>
<td>352.24</td>
</tr>
<tr>
<td>Alternative</td>
<td>SSF $\rightarrow$ SCM $\rightarrow$ Salience $\rightarrow$ Contact</td>
<td>64</td>
<td>107.26***</td>
<td>1.68</td>
<td>.98</td>
<td>.04</td>
<td>193.09</td>
<td>396.91</td>
</tr>
<tr>
<td>Alternative</td>
<td>SSF $\rightarrow$ SCM $\rightarrow$ Content $\rightarrow$ Contact</td>
<td>53</td>
<td>139.74***</td>
<td>2.64</td>
<td>.98</td>
<td>.10</td>
<td>204.27</td>
<td>393.18</td>
</tr>
<tr>
<td>Immigrant sample ($N = 195$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM</td>
<td>2</td>
<td>3.94</td>
<td>1.97</td>
<td>.98</td>
<td>.03</td>
<td>41.90</td>
<td>119.91</td>
</tr>
<tr>
<td>Main Multi</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM (Low Salience)</td>
<td>2</td>
<td>8.92</td>
<td>4.46</td>
<td>.93</td>
<td>.05</td>
<td>46.51</td>
<td>114.24</td>
</tr>
<tr>
<td>Main Multi</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM (High Salience)</td>
<td>2</td>
<td>2.62</td>
<td>1.31</td>
<td>.97</td>
<td>.03</td>
<td>40.57</td>
<td>10.02</td>
</tr>
<tr>
<td>Main Multi</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM (Low Diff.)</td>
<td>2</td>
<td>5.95</td>
<td>2.97</td>
<td>.94</td>
<td>.05</td>
<td>43.74</td>
<td>109.15</td>
</tr>
<tr>
<td>Main Multi</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ SCM (High Diff.)</td>
<td>2</td>
<td>0.08</td>
<td>0.04</td>
<td>1.00</td>
<td>.01</td>
<td>38.08</td>
<td>102.34</td>
</tr>
<tr>
<td>Alternative</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ Salience $\rightarrow$ SCM</td>
<td>4</td>
<td>6.41</td>
<td>1.60</td>
<td>.98</td>
<td>.03</td>
<td>54.30</td>
<td>152.84</td>
</tr>
<tr>
<td>Alternative</td>
<td>Contact $\rightarrow$ SSF $\rightarrow$ Content $\rightarrow$ SCM</td>
<td>4</td>
<td>14.56**</td>
<td>3.64</td>
<td>.92</td>
<td>.06</td>
<td>61.94</td>
<td>160.48</td>
</tr>
<tr>
<td>Alternative</td>
<td>SSF $\rightarrow$ SCM $\rightarrow$ Salience $\rightarrow$ Contact</td>
<td>8</td>
<td>33.14***</td>
<td>4.14</td>
<td>.82</td>
<td>.11</td>
<td>70.26</td>
<td>152.37</td>
</tr>
<tr>
<td>Alternative</td>
<td>SSF $\rightarrow$ SCM $\rightarrow$ Content $\rightarrow$ Contact</td>
<td>8</td>
<td>45.86***</td>
<td>5.73</td>
<td>.73</td>
<td>.11</td>
<td>81.40</td>
<td>163.51</td>
</tr>
</tbody>
</table>

Note: ‘Contact’ includes both quality and quantity (tested separately as in the main models); SSF = Socio-structural Factors (i.e., legitimacy, stability and permeability); SCM = Social Change Motivation; Diff. = Index of content of contact (the higher the score, the greater the focus on differences rather than similarities).

* $p < .05$. ** $p < .01$. *** $p < .001$
INTERGROUP CONTACT AND SOCIAL CHANGE

Figure captions

Figure 1. Path analysis with latent variables, Italian sample (N = 392). Standardized regression coefficients are presented. Only significant paths are included. *$p < .05$. **$p < .01$. ***$p < .001$.

Figure 2. Path analysis with observed variables, Immigrant sample (N = 165). Standardized regression coefficients are presented. Only significant paths are included. *$p < .05$. **$p < .01$. ***$p < .001$. 