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## Reports

Intergroup contact can undermine disadvantaged group members' attributions to discrimination<sup>☆</sup>Tamar Saguy<sup>a,\*</sup>, Lily Chernyak-Hai<sup>b</sup><sup>a</sup> Interdisciplinary Center (IDC), Herzliya, Israel<sup>b</sup> Netanya Academic College, Israel

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## ABSTRACT

In the current research we investigated social settings through which attributions to discrimination are undermined. Drawing on work linking intergroup contact to perceptions of inequality, we tested the prediction that experiences of commonality-focused contact would reduce disadvantaged group members' tendency to attribute negative treatment of fellow group members to discrimination. In Study 1 students were randomly assigned to either a commonality-focused, differences-focused, or no-contact condition, ostensibly with a student from a higher status university. Commonality-focused interactions led participants to view the status hierarchy as more legitimate, and consequently, to be less likely to attribute negative treatment to discrimination. In Study 2 this effect was replicated among Ethiopian-Jews (a disadvantaged minority in Israel) who reported the amount of commonality-focused contact they experience with non-Ethiopian Jews. Theoretical and practical implications regarding intergroup contact and perceptions of inequality are discussed.

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## Introduction

Members of disadvantaged groups often face uncertainty as to why they, and their fellow ingroup members, experience negative outcomes in society (Crocker & Major, 1989; Major & Crocker, 1993). One possibility is that negative outcomes, such as rejection from a desired position, are a result of discrimination and prejudiced views held toward one's group. Another possibility is that such negative outcomes are due to lack of ability or effort which is particular to the individual being treated negatively. These two types of attributions have vastly different psychological consequences. Although blaming negative outcomes on discrimination can be interpersonally costly for disadvantaged group members (e.g., being devaluated as a "complainer"; Kaiser & Miller, 2001; see also Kaiser, Dyrenforth, & Hagiwara, 2006), it can also protect their self-esteem by locating the source of their failure in external rather than internal factors (Crocker, Voelkl, Testa, & Major, 1991; Dion, 1975; Major, Kaiser, & McCoy, 2003). Such external attribution was also found to facilitate disadvantaged group members' performance on intellectual tasks (Mendoza-Denton, Shaw-Taylor, Chen, & Chang, 2009) and to

increase anger (Mendes, Major, McCoy, & Blascovich, 2008), which is a key factor in mobilizing subordinate groups to act for social change (van Zomeren, Postmes, & Spears, 2008; Walker & Smith, 2002). It is therefore valuable, both theoretically and practically, to understand the underpinnings of attributions to discrimination.

Previous research has shown that the beliefs that disadvantaged group members hold about the status hierarchy influence their tendencies to make attributions to discrimination. For example, believing that the social system is "open" such that capable individuals can advance into higher status positions is associated with less likelihood to blame rejection by a high status group member on discrimination (Major et al., 2002). Similarly, merely priming the concept of meritocracy, the notion that social status reflects individual merit and hard work, reduced attributions to discrimination among disadvantaged group members who were treated negatively (McCoy & Major, 2007). Priming meritocracy also led disadvantage group members (women) to perceive less discrimination directed against their group as a whole (McCoy & Major, 2007; Study 2).

The beliefs in meritocracy and in individual mobility, which undermine attributions to discrimination, are part of a broader cluster of legitimizing views through which the hierarchical social system is considered fair and acceptable (Federico & Levin, 2004; Jost, Banaji, & Nosek, 2004; Major, 1994; Sidanius & Pratto, 1999). Our goal in the current work was to identify social settings in which perceptions of the status hierarchy as legitimate are enhanced, and to test whether through this influence, attributions to discrimination are undermined. Most previous research have focused on dispositional predictors of legitimizing views (Crandall, 1994; Katz & Hass, 1988; Sidanius & Pratto, 1999; but see Jost, Kivetz, Rubini, Guermendi, &

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Mosso, 2005), resulting in little understandings of the social situations, and particularly interactive settings, that increase tendencies to view the hierarchy as legitimate. Identifying such settings would advance understandings as to *when* the processes linking legitimizing views to attributions to discrimination are likely to come about, and what is it about social interactions that would further facilitate this process.

In particular, we propose that one setting which could strengthen the perceived legitimacy of social hierarchy is intergroup contact, specifically contact that is focused on cross-group commonalities. In this setting, separate group memberships are de-emphasized and people come to perceive themselves as members of one, inclusive category (Eller & Abrams, 2003; Gaertner & Dovidio, 2000; Gaertner, Mann, Murrell, & Dovidio, 1989). The blurring of group boundaries can shift people's focus away from intergroup comparisons (Tajfel, 1978; Turner, Oakes, Haslam, & McGarty, 1994), rendering their separate social identities and associated group differences less salient. Such recognition, of group-based differences, is necessary in order to advance awareness to the illegitimate aspects of social hierarchy. As observed by Wright and Lubensky (2009) in their work on collective action, "when disadvantaged group members compare their group to an advantaged outgroup, the resulting negative collective self-evaluation serves as the impetus for further analysis of the intergroup context and sets the stage for collective action" (p.300).

Indeed, recent evidence suggests that a focus on commonalities can distract group members from noticing differences in power between groups. After engaging in commonality-focused contact (relative to differences-focused contact) members of both high and low power groups rated the power differences between the groups as less pronounced, and low power group members came to think of the high power group as more fair (Saguy, Tausch, Dovidio, & Pratto, 2009). Experiences of intergroup contact in various cultural settings were further shown to be associated with less support for social change among member of disadvantaged groups (Dixon, Durrheim, & Tredoux, 2007; Saguy et al., 2009, Study 2; Wright & Lubensky, 2009). This evidence suggests that an emphasis on commonalities can influence the extent to which members of disadvantaged groups are attending to, and concerned about group-based hierarchy.

We therefore propose that intergroup contact that focuses on commonalities can strengthen legitimizing views of the hierarchy, and in turn undermine disadvantaged group members' tendency to make attributions to discrimination. In Study 1 we experimentally examined the causal effect of commonality-focused contact on disadvantaged group members' legitimizing views and tendency to attribute negative treatment to discrimination (and/or to internal characteristics). In Study 2 we examined the effect among a different disadvantaged group and also tested whether it holds after taking into account additional factors which are likely to play a mediating role in the relationship between contact and attributions to discrimination.

## Study 1

Participants in Study 1 were students at a private college in Israel. Relative to the public universities, the colleges in Israel are unsubsidized and are associated with less academic prestige, often regardless of the actual level of the program. Thus, students who attend a private college need to pay more tuition and often encounter challenges by having to "prove themselves" when applying for jobs or for prestigious graduate program in Israel. Participants were randomly assigned to one of three contact conditions with a student from a higher status university (actually a confederate). In one condition the interaction emphasized commonalities between the institutions, in another condition the emphasis was on differences, and in a third condition there was no-contact involved. We hypothesized that experiences of commonality-focused contact, relative to differences-

focused contact and to the no-contact condition, would result in weaker tendency to attribute negative treatment of a fellow ingroup member to discrimination – and that this effect would be mediated by stronger perceptions of the status hierarchy as legitimate. In addition, because a focus on commonalities may lead participants to be less likely to provide group-based explanations for rejection, we expected attributions to internal factors to be most pronounced in the commonality-focused contact, relative to the two other control conditions in which commonalities were not emphasized.

## Method

### Participants

Participants, who earned research credit for their introductory psychology course, were 79 undergraduate students at a private college in Israel (19 men, 60 women; mean age = 23.29,  $SD = 2.01$ ).

### Procedure

Participants, who were run individually, signed up for a study about "attitudes regarding academic institutions in Israel". An experimenter explained that the study would involve a short online interaction with someone from another university. To make the status hierarchy among academic institutions in Israel salient, all participants were then presented with a short article in which the status of their academic institution was described as lower than that of the Hebrew University (the flag-ship public university in Israel) in aspects such as subsidies and chances of graduates to enter prestigious programs<sup>1</sup>. The experimenter then explained that the interaction with the Hebrew-University student will be done by chatting through "Skype", and that due to time limits, the participant will first ask the partner specific questions determined by the experimenter. The participant was then handed a list of 5 questions to ask his/her partner. In fact, the participant had the conversation with a confederate, who was sitting in another room and answered each question in accordance to a specific script. These questions and scripted answers were used to manipulate contact type such that in the commonality-focused condition, all questions and answers emphasized commonalities between the participants' college and the Hebrew university and in the differences-focused condition, all questions and answers emphasized differences between the schools (see Table 1). Following the interaction, participants completed the measures and were debriefed. In the no-contact condition participants were told that due to technical problems the interaction cannot take place after all, and were handed the questionnaires without going through an interaction.

### Measures

As a manipulation check, we first assessed *perceptions of commonalities* among participants who went through an interaction, using the following items: "To what extent the conversation made you feel there are similarities between students from you college and from the Hebrew university?", and "To what extent the conversation made you feel there are differences between students from your college and from the Hebrew university?" (reversed-coded),  $r(56) = .46$ ,  $p < .001$ . To assess *perceptions of the hierarchy as legitimate*, all participants (including those in the no-contact condition) were asked: "To what extent do you think that the status inequality between the schools is a result of logical reasons?" and "To what extent do you find the differences in tuition fees and in graduate acceptance opportunities to be acceptable?" ( $r = .34$ ,  $p = .002$ ).

<sup>1</sup> Pilot data collected during pre-screening session at the beginning of the academic year showed that students from this particular private college perceive their group to be of lower status relative to the Hebrew University. For more information about the pilot study please contact the first author.

**Table 1**  
Questions and scripted answers for contact conditions in Study 1.

Commonality-focused contact	Differences-focused contact
Q: What things do you think Hebrew University and IDC students share in common? A: Lots of similarities. We have similar curricula. We are also required to do experiments for credit, study tons of statistics. I am sure you guys also study introduction to psychology and physiological physiology. Same same.	Q: Each academic institution in Israel has its own ways. How are the studies in the Hebrew university? A: I think it is quite different than at the IDC. We have full courses on perception and learning in the 1st year, and we study research methods in the 1st year.
Q: How many experimental credits are you required to have? A: I think same as yours. About 12 hours.	Q: How many experimental credits are you required to have? A: We have a different system here. We count number of experiments and not hours.
Q: We have a course on positive psychology. Do study such course during the 1st year too? A: Yes, we have an expert for it, and we study this course in our 1st year. I heard it is similar to the IDC course	Q: We have here a course on positive psychology. Do study such course during the 1st year too? A: No, we don't have such course in our B.A program.
Q: Lots of resources are invested here for "Students' Day". How does it work at the Hebrew University? A: Yes, it is crazy. I think that IDC and the Hebrew University invest in "Students' Day" and students' parties the most.	Q: Lots of resources are invested here for "Students' Day". How does it work at the Hebrew University? A: Actually it is arranged in cooperation with the local municipality, so it is different from the IDC. We also have concerts which start at night time.
Q: How do you like your fellow students? A: I like them. Really "Psychology" students.	Q: How do you like your fellow students? A: I like them. Really "Hebrew University" Students.

Participants then judged a hypothetical scenario through which attributions to discrimination and to internal factors were assessed. The scenario did not involve clear signs of discrimination to maintain attributional ambiguity (Major & Crocker, 1993), and read as follows:

Graduates from your college who go through the application procedure for graduate schools in Israel report the process to be extremely difficult, with having to go through standardized tests and a long interview about their undergraduate studies and goals for graduate work. For example, Eyal, a graduate from your college, tells the following story: "I was optimistic about getting accepted to graduate school in one of the big universities. My numbers fit the criteria and I went through all the steps in the process of applying. At the end I was rejected".

We then asked participants to indicate their agreement with different statements referring to the reasons for Eyal's rejection (adapted from Major et al., 2002). The first reason assessed *attributions to discrimination*: "The reason why Eyal got rejected is probably the discrimination that graduates from my college encounter relative to graduates from public universities". Another reason assessed *attributions to internal factors*: "The reason why Eyal got rejected is probably him not putting enough effort in the application process".

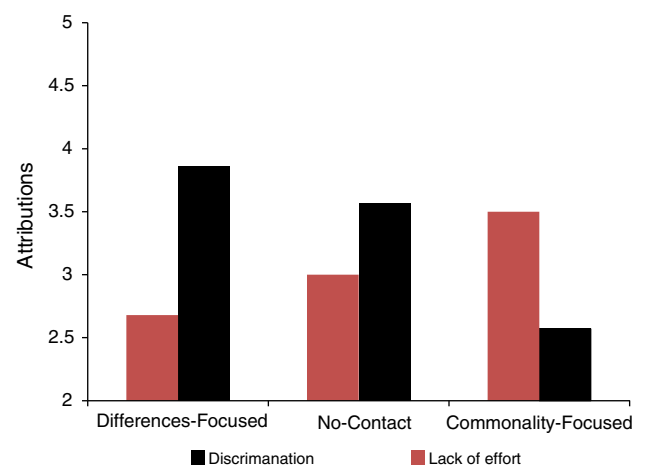
## Results

We first ran an analysis of variance (ANOVA) on the *perceptions of commonalities* index, with contact type (commonality vs. difference) as a between-subjects factor. As intended by the manipulation, participants who went through commonality-focused contact reported stronger perceptions of commonalities with Hebrew university students ( $M = 5.36$ ,  $SD = 1.17$ ) than participants who went through the differences-focused contact ( $M = 3.82$ ,  $SD = 1.21$ ),  $F(1,54) = 23.30$ ,  $p < .000$ ,  $\eta^2_p = .30$ .

To test the influence of commonality-focused contact on legitimizing views we ran an ANOVA on the measure of *perceptions of the hierarchy as legitimate*, with contact type (commonality-focused, differences-focused, no-contact) as a between-subjects factor. The analysis revealed a significant effect for contact type,  $F(2, 76) = 5.31$ ,  $p = .007$ ,  $\eta^2_p = .12$ . As expected, after commonality-focused contact participants perceived the hierarchy between the schools as more legitimate ( $M = 4.18$ ,  $SD = 1.07$ ), relative to differences-focused condition ( $M = 3.10$ ,  $SD = 1.46$ ),  $t(54) = -3.13$ ,  $p = .003$ ,  $d = 0.84$ , and importantly, also relative to the no-contact condition ( $M = 3.41$ ,  $SD = 1.21$ ),  $t(49) = -2.39$ ,  $p = .02$ ,  $d = 0.67$ . There was no significant difference between the latter two conditions.

We next ran an ANOVA on the attribution items with contact type (commonality-focused, differences-focused, no-contact) as a between-subjects factor and type of attribution (discrimination vs. internal factors) varying within subjects. The analysis revealed a significant interaction,  $F(2, 76) = 5.42$ ,  $p = .006$ ,  $\eta^2_p = .13$  (see Fig. 1). To interpret this interaction, we first tested the effect of contact type separately for each type of attribution. The effect of contact type on attribution to discrimination was significant,  $F(2, 76) = 4.64$ ,  $p = .013$ ,  $\eta^2_p = .11$ . Pairwise comparisons revealed that, as expected, participants who went through commonality-focused contact were less likely to attribute the rejection to discrimination ( $M = 2.57$ ,  $SD = 1.60$ ), relative to those who went through the differences-focused contact ( $M = 3.86$ ,  $SD = 1.72$ ),  $d = 0.78$ ,  $p = .005$ , and also relative to participants who did not experience any form of contact ( $M = 3.57$ ,  $SD = 1.62$ ),  $d = 0.62$ ,  $p = .033$ . There was no significant difference between the latter two conditions. As for attributions to internal factors, although the overall effect of contact type was not significant,  $F(2,76) = 1.90$ ,  $p = .156$ ,  $\eta^2_p = .05$ , participants who went through commonality-focused contact were somewhat more likely to attribute the rejection to lack of effort ( $M = 3.50$ ,  $SD = 1.77$ ), relative to participants who were in the differences-focused condition ( $M = 2.68$ ,  $SD = 1.61$ ),  $d = 0.48$ ,  $p = .06$ . The ratings in the no-contact condition fell in between the two contact conditions ( $M = 3.00$ ,  $SD = 1.28$ ), but did not reveal a significant difference in relation to each of them.

We further examined whether within each contact condition, there were significant differences between the two types of



**Fig. 1.** Attributions to discrimination and to lack of effort as a function of contact type (Study 1).

attributions. After differences-focused contact, participants were more likely to attribute the rejection to discrimination ( $M = 3.86$ ,  $SD = 1.72$ ), than to lack of effort ( $M = 2.68$ ,  $SD = 1.61$ ),  $t(27) = 2.39$ ,  $p = .03$ ,  $d = 0.71$ , while after commonality-focused contact the pattern was reversed: participants were somewhat more likely to attribute the rejection to lack of effort ( $M = 3.50$ ,  $SD = 1.77$ ), than to discrimination ( $M = 2.57$ ,  $SD = 1.60$ ),  $t(27) = -1.97$ ,  $p = .06$ ,  $d = 0.55$ . In the no contact condition the pattern of means was in the same direction as the one in the difference-focused condition, but it was not significant.

Finally, we examined whether perceptions of the hierarchy as legitimate mediated the effect of contact type on attributions to discrimination. We first tested the model among participants who went through either the differences-focused condition (coded as 0) or the commonality-focused condition (coded as 1). Results revealed that the direct effect of contact type on attributions to discrimination ( $b = -1.286$ ,  $SE = .44$ ,  $t = -2.90$ ,  $p = .005$ ) became non-significant after perceptions of the hierarchy were included in the model ( $b = -.780$ ,  $SE = .45$ ,  $t = -1.72$ ,  $p = .091$ ), and that the indirect effect through perceptions of the hierarchy was significant (point estimate:  $-.51$ ; 95% confidence intervals:  $-.98$ ,  $-.11$ ; Preacher & Hayes, 2004). Thus, consistent with predictions, after commonality-focused, relative to differences-focused contact, participants viewed the hierarchy as more legitimate, and as a result were less likely to attribute negative treatment to discrimination. The same model comparing the no-contact condition (coded as 0) to the commonality-focused condition (coded as 1) revealed that, again, the direct effect of contact type on attributions to discrimination ( $b = -.99$ ,  $SE = .45$ ,  $t = -2.20$ ,  $p = .03$ ) become non-significant after perceptions of the hierarchy were included in the model ( $b = -.80$ ,  $SE = .47$ ,  $t = -1.68$ ,  $p = .10$ ). However, the indirect effect did not reach significance (point estimate:  $-.19$ ; 95% confidence intervals:  $-.73$ ,  $.19$ ).

## Discussion

Study 1 provided experimental support for our hypotheses. After engaging in a commonality-focused (relative to difference-focused) encounter with a member from the high status group, members of low status groups came to view the inequality as relatively more legitimate, and in turn, were less likely to blame negative outcome of a fellow ingroup member on discrimination. The effect of commonality-focused contact on attributions to discrimination was also evident when using a no-contact condition as a control condition. This indicates that even relative to a default condition, in which no interaction takes place and no differences are emphasized, a focus on commonalities can produce perceptions of the status quo as legitimate and undermine attributions to discrimination. Although significant, when using the no-contact condition (rather than the differences-focused condition) as a comparison to the commonality-focused condition, the size of the effect of contact type on attributions to discrimination was weaker – this might explain why the mediation model did not reach significance.

The pattern of results further suggests that commonality-focused encounters might not only undermine attributions to discrimination, but also lead people to blame negative outcomes on internal factors. The analysis conducted within each contact condition lends support to this idea by showing that whereas after differences-focused contact participants were more likely to attribute rejection to discrimination rather than to internal attributes, after commonality-focused contact this tendency was reversed such that attributions to discrimination were somewhat less likely than attributions to lack of effort.

In Study 2 we aimed to provide further support to our predictions using a different intergroup context and different operationalizations of our theoretical constructs. Our second goal in Study 2 was to examine whether legitimizing views continue to mediate the effect of contact type on attributions to discrimination after taking into account other variables that were not included in Study 1, and can

theoretically serve as additional mediators of this effect. Particularly, we considered two other known outcomes of contact, reductions in ingroup identification and increased outgroup trust, both likely to influence attributions to discrimination. We examined whether after considering these two additional factors as mediators of the effect of contact type on attributions to discrimination, we still get the hypothesized effect through legitimizing views.

## Study 2

In Study 2 we surveyed Ethiopians living in Israel about their contact experiences with non-Ethiopians, inequality perceptions and attributions to discrimination. This enabled us to examine our predictions using a more naturalistic measure of contact type, relative to the short-lived interaction which was used to manipulate type of contact in Study 1. Ethiopian Jews constitute less than 2% of Israeli population. Compared to Non-Ethiopians, Ethiopians suffer notable, enduring disadvantage in living conditions, average income, and educational level (Central Bureau of Statistics, 2007; Offer, 2004, 2007). For example, whereas in 2007 the poverty rate in the general Israeli population was 14.5%, among Ethiopians it was 51.7%. In addition, prejudice toward Ethiopians in Israel is prevalent as indicated by recent battles against the segregation between Ethiopian and non-Ethiopian pupils in some schools in Israel (a phenomenon labeled “Ethiopian ghetto”; Nesher, 2011). Given their negative outcomes in society, and the discrimination they encounter, it is quite possible that Ethiopians would tend to make attributions of negative treatment to discrimination. In Study 2 we investigated whether experiences of commonality-focused contact would undermine this tendency through the mediating influence of legitimizing views.

Furthermore, Study 2 enabled us to establish the validity of our hypothesized mediation model by testing whether it remains significant after considering additional outcomes of contact, likely to further undermine attributions to discrimination. Specifically, we measured outgroup trust, which was shown to increase by experiences of positive contact (Hewstone, Cairns, Voci, Hamberger, & Niens, 2006; Saguy et al., 2009), and could further undermine the extent to which disadvantaged group members view the advantaged group as discriminatory. Additionally, we measured levels of ingroup identification. Due to the blurring of intergroup boundaries, commonality-focused contact can weaken one's identification with the ingroup (Wright & Lubensky, 2009), which in turn might also undermine attributions to discrimination. Indeed, Major, Quinton, and Schmader (2003) demonstrated that the more they identified with their group the more likely were women to attribute negative feedback from a man (a feedback which was ambiguous enough to be interpreted as either due to discrimination or not), to discrimination. Thus, Study 2 enabled us to examine whether the predicted mediation path through legitimizing views operates independently from these theoretically relevant factors.

We hypothesized, analogous to Study 1, that more experiences of commonality-focused contact with Non-Ethiopians would be associated with Ethiopians' weaker tendencies to blame negative outcomes on discrimination, and that this effect would be mediated by stronger perceptions of the status hierarchy as legitimate. Moreover, we tested whether this mediated effect would remain significant after considering ingroup identification and outgroup trust as additional mediators. Finally, in Study 2 we further tested whether commonality-focused contact would increase attributions to internal factors.

## Method

### Participants

Participants, were 74 Ethiopian Jews living in Israel (36 men, 38 women; mean age = 28.76,  $SD = 3.69$ ). Due to extremely limited access to this population, part of the sample was recruited though

snow-ball sampling (originating with an Ethiopian research assistant), and the rest were recruited through special training programs aimed at advancing Ethiopians in Israeli society. The majority of participants had at least a bachelor's degree (80%; out of which 20% had an MA or PhD) while 20% had a high school diploma. 4% reported their economic status to be very bad relative to the average population, 45% reported it to be relatively bad, 34% reported it to be the same as in the average population, and the rest (18%) reported it to be relatively good. These variations (in education level and SES) were controlled for in all analyses reported.

#### Procedure and measures

Participants completed a questionnaire which included all measures. Unless otherwise indicated, responses were given on a scale from 1 (not at all) to 7 (very much).

To assess the frequency of *commonality-focused contact* we created an index consisting of indicators of both quantity and quality of contact (Brown, Maras, Masser, Vivian, & Hewstone, 2001; Voci & Hewstone, 2003), which were adapted to the current context. Specifically, to assess *quantity* of interactions, participants indicated the frequency of friendly interactions with Non-Ethiopians on a scale from 1 (not at all frequent) to 7 (very frequent). Because such interactions can involve discussion of differences, we multiplied this quantity item with a score assessing the extent to which the interactions were commonality-focused in quality. Specifically, participants indicated the extent to which different topics (adapted from Saguy, Dovidio, & Pratto, 2008) come up in their interactions with their Non-Ethiopian friends. Three topics were focused on cross-group commonalities (e.g., "Things that Ethiopian and Non-Ethiopians in Israel share in common";  $\alpha = .61$ ) and three were focused on status differences between the groups (e.g., "The different socio-economic status of Ethiopians and Non-Ethiopians in Israel";  $\alpha = .75$ ). We subtracted the differences topics from the commonality topics and obtained a single score for which 0 indicates equivalent amount of addressing both commonalities and differences, and higher numbers indicate stronger focus of commonalities *over* differences.<sup>2</sup> The product of this score with the quantity item provided us with an ultimate index which takes into account both the frequency of encounters, and their commonality-focus nature. Indeed, the use of the product of quantity and quality of contact was adopted by others (Brown et al., 2001; Voci & Hewstone, 2003), and is considered to be generally a good predictor of outgroup orientation.

We assessed *perceptions of the hierarchy as legitimate* with the following item, which was tailored to the specific context of Ethiopians in Israel demanding change in legislation initiatives: "New legislative measures should be taken so that Ethiopians will be guaranteed equal opportunities as Non-Ethiopians in Israel". This item was reversed coded such that higher scores reflected more acceptance of the current status hierarchy. *Outgroup trust* was assessed with the following four items: "I trust Non-Ethiopian Jews", "I believe Non-Ethiopian Jews would help me in times of need", "Non-Ethiopian Jews tend to be fair toward Ethiopians", "I believe I can rely on Non-Ethiopian Jews" ( $\alpha = .83$ ), and *ingroup identification* was assessed with the following items: "I identify with Ethiopian Jews", "Being an Ethiopian is an important part of who I am", "My ethnic group is important to me", ( $\alpha = .76$ ).

Participants were then asked to judge a hypothetical scenario, which had the same wording as the one used in Study 1, only that the person who got rejected was an Ethiopian-Jew (named Abbaba), and the context of rejection was a desirable job. After reading the

scenario, participants rated their agreement with the same two statements used in Study 1, the first assessing *attributions to discrimination* for Abbaba's rejection and the second *attributions to internal factors*.

#### Results and discussion

Means, standard deviations, and zero-order correlations among all measures are presented in Table 2. To examine our predictions, we tested a multiple mediation model (Preacher & Hayes, 2008) with the independent variable being commonality-focused contact (the product of quantity and quality), the outcome being attributions to discrimination, and the following three mediators: perceptions of the hierarchy, outgroup trust and ingroup identification (see Fig. 2).

Results revealed a direct effect of commonality-focused contact on attributions to discrimination ( $b = -.13$ ,  $SE = .05$ ,  $t = -2.77$ ,  $p = .007$ ), which became non-significant after the three mediators were included in the model ( $b = -.06$ ,  $SE = .05$ ,  $t = -1.28$ ,  $p = .21$ ). As further hypothesized, and consistent with Study 1, this effect was mediated by stronger legitimacy perceptions (point estimate:  $-.03$ ; 95% confidence interval:  $-.09$ ,  $-.001$ ). In line with previous findings, experiences of contact also predicted greater trust in the outgroup (Saguy et al., 2009), which in turn was associated with less tendency to make attributions to discrimination (point estimate:  $-.03$ ; 95% confidence interval:  $-.08$ ,  $-.002$ ). Further consistent with prior work (Major, Quinton, et al., 2003), ingroup identification was associated with stronger tendencies to attribute the rejection to discrimination, though it did not mediate the relationship between contact and attributions to discrimination. Thus, both perceptions of the outgroup in the form of outgroup trust, and of the hierarchy as a whole, independently mediated the association among commonality-focused contact and attributions to discrimination, also controlling for levels of ingroup identification. Although the correlation between attributions to discrimination and attributions to internal factors was in the expected negative direction (see Major, Quinton, et al., 2003), none of the predictors had a significant relationship with attributions to internal factors. It could be the case that the small sample in Study 2 made it difficult to detect effects involving internal attributions, which Study 1 showed to be generally weaker in size than those involving attribution to discrimination. Future research can shed more light on predictors of internal attributions within this particular population.

#### General discussion

In this work we examined whether experiences of contact that is focused on commonalities can reduce disadvantaged group members' tendencies to blame negative outcomes of fellow ingroup member on discrimination. We hypothesized and found that experiences of commonality-focused contact induced stronger perceptions of the hierarchy as legitimate, which in turn predicted weaker tendencies to make attributions to discrimination. The effects were obtained and replicated among different disadvantage groups and across different methodologies. In Study 1 our participants were low in status, but in a context in which prejudice is less apparent and attributions to discrimination are not readily made. In Study 2, participants were members of a severely disadvantaged ethnic minority, likely to be less inclined to "buy into" the system. Across these different experiences of low status, commonality-focused contact was found to undermine attributions to discrimination. Additionally, Study 2 revealed that the effect was obtained after controlling for other relevant mediators, ingroup identification and outgroup trust, and for key demographic variables such as socio-economic status and education.

This work extends previous research in important ways. It is of the first to document social settings, and particularly interactive settings, in which the process linking legitimizing views to attributions to discrimination is likely to come about. In addition, although several emerging lines of work documented the association between contact

<sup>2</sup> The correlation between the commonality topics and the differences topics was positive ( $r = 0.36$ ,  $p < .01$ ) suggesting that indeed, people can discuss both commonalities and differences with their outgroup friends. Because our goal was to capture the extent to which commonalities are discussed *over* differences, we created the difference score subtracting the differences topics from the commonality topics.

**Table 2**  
Means, standard deviations and zero-order correlations among variables in Study 2.

	Mean (SD)	2	3	4	5	6	7	8
1. Quantity of contact	4.44 (1.90)	.89**	.25*	.19	.42**	-.24*	-.27*	.03
2. Quality of contact	2.46 (1.36)		.63**	.24*	.47**	-.24*	-.34**	.01
3. Quantity*Quality	0.73 (4.68)			.24*	.31**	-.08	-.30**	-.06
4. Perceptions of the hierarchy as legitimate	2.21 (1.63)				.05	-.28*	-.41**	.06
5. Outgroup trust	4.34 (1.36)					.02	-.29*	.05
6. Ingroup Identification	6.12 (1.04)						.25*	.05
7. Attributions to discrimination	4.20 (1.89)							-.19
8. Attributions to lack of effort	2.92 (1.69)							

To compute the product of quantity and quality of contact the quality score was standardized.

\*  $p < .05$ .

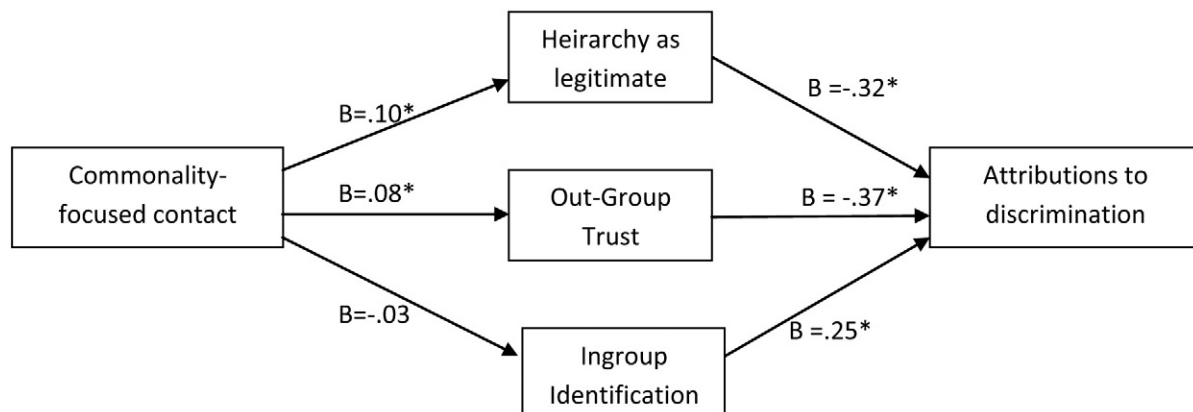
\*\*  $p < .01$ .

and perceptions of inequality (Dixon et al., 2007; Saguy et al., 2009; Wright & Lubensky, 2009), that research was largely cross sectional and did not refer to the process proposed in this work linking contact through legitimizing views to attributions to discrimination. Furthermore, in the current work we experimentally induced commonality-focused contact and compared it to a no-contact condition, in addition to a differences-focused comparison (Saguy et al., 2009). This allowed us to establish experimentally that it is the focus on commonalities that increases perceptions of the hierarchy as legitimate relative to the default no-contact state, and not a focus on differences that reduces such perceptions. Thus, although several scholars have pointed to this possibility, the current work is the first to demonstrate experimentally that experiences of commonality-focused contact drive perceptions of the hierarchy as legitimate. As such, the current research lends more support to the emerging notion that despite the benefits of a commonality-focus (mainly positive attitudes), it should be viewed as a practice that might also inadvertently impact the way people view, and are committed to resolve, social inequality (Dixon, Tropp, Durrheim, & Tredoux, 2010; Reicher, 2007; Saguy et al., 2009; Wright & Lubensky, 2009).

Although we established legitimizing perceptions of the hierarchy as a mediator of the effect of contact on attributions to discrimination, even controlling for other relevant factors, additional variables might further account for this relationship. Those group members that have commonality-focused ties with members of the advantaged group

might experience less discrimination themselves, and as a result, be less likely to view fellow in group members as victims of discrimination (Dixon et al., 2010). This possibility can be examined in future work. Future research can further test whether the effects obtained in this work also generalize to incidents in which the self (and not an ingroup member) is the potential target of discrimination. Given that experiences of contact lead low status group members to expect more fairness from the high status group (Saguy et al., 2009), one possibility is that when the self is the target of negative treatment one would be even less likely to make attributions to discrimination. A different possibility, however, is that due to the increase expectations for outgroup fairness, low status group members experiencing negative treatment would be highly sensitive to potential discriminatory behavior coming from the outgroup. These competing predictions are another avenue for future work.

Finally, the current findings add to the practical dilemma as to contact interventions and how they can succeed in improving attitudes while not undermining commitment to social change. Whereas a sole emphasis on commonalities may deflect attention from issues of group disparities, encounters that emphasize *both* common connections and the problem of unjust group inequalities may promote intergroup understanding as well as recognition of the need for change (Saguy et al., 2008). The challenge is to come up with ways to construct such programs so that they would not further intensify tension between the groups, but would rather allow for both the creations of positive attitudes, and the recognition that discrimination plays a role in social life.



**Fig. 2.** Multiple mediation model associating commonality-focused contact with attributions to discrimination through legitimizing views, outgroup trust and ingroup identification (controlling for economic situation, education and age).

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