Structured, intergroup communication that occurs in a deliberative discussion context can be an effective method for improving intergroup relations. Conceptualizing this unique kind of communication as deliberative contact, this study experimentally examined its effect and mechanisms based on two Deliberative Polling projects, conducted in two different countries: Australia (N = 339) and Bulgaria (N = 230). Results indicated that deliberative contact with a minority group member during small-group discussions increased support for policies that were beneficial to the minority group. This effect of deliberative contact was marginally stronger among those who had more negative contact experiences with the minority group in the past. Furthermore, deliberative contact effects were mediated by altered perceptions about the minority group's structural disadvantages in society, but not by an increase in factual knowledge about the outgroup.

**Keywords:** Deliberation, Intergroup Contact, Contact Hypothesis, Ethnic Minorities, Intergroup Communication, Deliberative Polling.

doi:10.1093/joc/jqy056

Conflict between groups of different ethnic, religious, or ideological backgrounds continues to be one of the most difficult challenges of our time (Amichai-Hamburger, Hasler, & Shani-Sherman, 2015). Deep-seated distrust and conflict between groups often lead to prejudice or discrimination against some groups, particularly those that occupy a lower social status in society (Hewstone et al., 2014; Maoz, 2011). In more serious instances, contentious intergroup relations can result in various forms of violence. In whatever form, deep-seated conflict leaves societies fractured and divided, with a troubling potential for future disputes to spark.

Against this backdrop, some scholars propose that structured, intergroup communication can be a promising method for improving intergroup relations (Amichai-Hamburger et al., 2015; Maoz & Ellis, 2008). Rooted in work on

Corresponding author: Nuri Kim; e-mail: nuri.kim@ntu.edu.sg
intergroup contact theory (Allport, 1954; Pettigrew, 1998), this work examines the processes, challenges, and effects of various, dialogue-based interventions in contexts that exemplify deep conflict (e.g., Hammack, Pilecki, & Merrilees, 2014; Maoz, 2000a, 2002, 2004; Steiner, Jaramillo, Maia, & Mameli, 2017).

This work has contributed greatly to our understanding of how groups in deep conflict actually discuss issues (e.g., Steiner et al., 2017), variations in models of encounter and their implications (e.g., Hammack, 2006; Hammack et al., 2014; Maoz, 2004, 2011), and the outcomes of structured encounters (Caluwaerts & Reuchamps, 2014; Maoz, 2000a; Maoz & Ellis, 2008). For example, Jewish-Israelis that participated in structured, intergroup meetings with Palestinians showed greater support for integrative compromise solutions (Maoz & Ellis, 2008), while Palestinian and Jewish-Israeli high school students who participated in two-day dialogue workshops had improved perceptions of the other group (Maoz, 2000a).

Yet, despite significant theoretical and practical contributions made by this work, there are a limited number of studies on structured, intergroup contact between groups with conflicting social identities, and even fewer that examine these effects in an experimental framework. Much of the literature in this area relies on survey data, qualitative analyses, or analyses of intergroup interventions without a control group. Given the limitations of non-experimental data for establishing causality, it is crucial that the effects of structured, intergroup communication are tested through an experimental framework. Furthermore, much of the work examining structured, intergroup communication focuses on the Israeli-Palestinian conflict (e.g., Maoz, 2002a; Maoz & Ellis, 2008; Ron & Maoz, 2013). While this is undoubtedly an important context that exemplifies “protracted, intractable, asymmetric conflict” (Ron & Maoz, 2013, p. 86), it is necessary to examine other contexts to ensure that the effect of structured, intergroup communication is robust across different contexts.

This paper addresses these gaps in the literature by experimentally examining the effects of structured, face-to-face discussions with outgroup members about policy issues, which we refer to as deliberative contact. We relied on existing data that have been collected from two citizen deliberation projects in two different countries, both of which involved historical or social minority groups (i.e., Aborigines in Australia, Roma in Bulgaria). In both of these events, minority and non-minority participants discussed public issues together in small groups over the period of a weekend. We analyzed the data from the non-minority members who participated in these discussions, comparing those who had a chance to discuss the issue with minority members in their small groups and those who did not have this opportunity. Because these deliberation projects (deliberative polls) were carefully designed to follow a prototypical procedure, they provide comparable case studies for testing our expectations.

In doing so, our study integrates two very different research areas: deliberative theory and intergroup contact research. On the one hand, we tested the boundary conditions of contact effects by focusing on one specific kind of contact that is
different from the intergroup friendships or informal encounters typically examined in the literature. By testing whether, and how, a short-lived contact experience based on reasoned discussion—that is, deliberative contact—affects attitudes toward outgroup-related policies, we clarify the conceptual underpinnings of contact effects in a rarely-observed context.

On the other hand, this paper advances theory and research on deliberation by delineating the effects of one specific experience within the entire process of deliberation: exposure to, and discussion with, someone from the outgroup. As compared to prior work on deliberation that compared attitudes before and after participating in an entire deliberative exercise (e.g., Luskin, O’Flynn, Fishkin, & Russell, 2014), we focused on one event that occurs within the broader deliberation experience. In this sense, this paper extends the work on exposure to difference, disagreement, and cross-cutting views (Mutz, 2006; Wojcieszak & Mutz, 2009) as it tries to focus on one subcomponent that comprises the entire package of deliberation. By focusing on deliberative contact as a conceptual morsel within the larger experience of deliberation, we thus respond to the call for testing middle-range theories of deliberation (Mutz, 2008).

Contact in deliberative contexts: challenges and promises

Contact reconsidered

Contact between members of different ethnic groups under optimal conditions is thought to reduce prejudice and improve attitudes towards the opposing group (Allport, 1954). This simple idea inspired extensive empirical research across different contexts and social groups (see Brown & Hewstone, 2005; Harwood, Hewstone, Amichai-Hamburger, & Tausch, 2012; Pettigrew, 1998 for reviews) and found robust effects of contact on reducing prejudice and bettering intergroup attitudes (Pettigrew & Tropp, 2006).

But what exactly is contact? From the perspective of communication, the term contact is curiously ambiguous, as it can refer to intergroup relationships or interactions that are very different in terms of the actual communicative activities (see also Harwood, 2010). In the intergroup contact literature, contact is primarily conceived of as an actual face-to-face interaction between members of clearly-defined groups. According to one meta-analysis (Pettigrew & Tropp, 2006), more than 500 studies were identified under this definition, in which contact could mean anything from being close friends with an outgroup member (e.g., Sigelman & Welch, 1993), encountering outgroup members where they live or work (e.g., Sigelman & Welch, 1993), encountering outgroup members as tourists (e.g., Amir & Ben-Ari, 1985), or participating in discussion workshops with outgroup members on political issues (e.g., Maoz, 2000a). Needless to say, these are very different communication contexts that entail very different communicative activities.

Along this wide spectrum of contact experiences lies one particular kind of contact that occurs during deliberative discussions. Deliberation is discussion based on
argumentation and reason on issues of collective interest, with the aim towards arriving at procedurally-legitimate decisions (Cohen, 1997; Gutmann & Thompson, 1996; Habermas, 1962/1989). Encountering outgroup members in deliberative contexts is a unique form of contact. Deliberative contact contrasts with everyday contact, as it is not organic (i.e., does not occur naturally) and is typically short-term. For example, well-known deliberative forums, such as consensus conferences (Anderson & Jæger, 1999) or deliberative polls (Fishkin, 2009), gather citizens that have no prior history of knowing one another and engage them in discussion over a period of a weekend or two. In such a setting, the chances of cultivating long-term friendships with other participants are likely to be slim.

Moreover, the deliberative discussions involve intense, task-oriented communication about relevant issues, but in a manner that emphasizes civility and the common good. In this sense, deliberative contact lies somewhere in between what Maoz (2004, 2011) theorizes as the coexistence and confrontational models of encounter. The coexistence models involve structured encounters where both groups are collectively engaged in collaborative tasks and commonalities are emphasized, while encounters in the confrontational models emphasize direct and explicit discussions of relevant issues and, potentially, even the power dynamic itself (Maoz, 2004, 2011; see also Hammack et al., 2014). Deliberative discussions have elements of both, since they often require participants to work together on certain tasks (e.g., creating a statement, report, questions for experts) while also directly engaging in debate over potentially controversial issues. This kind of communication may be helpful for forming more informed and enlightened preferences (Mansbridge et al., 2010), but it can also interfere with affective reactions. Since affective mechanisms are central to bringing about positive contact effects (e.g., Pettigrew, 1998; Pettigrew & Tropp, 2008), one may question whether deliberative contexts offer authentic opportunities for contact.

Nevertheless, well-designed deliberation contexts closely resemble the optimal contact conditions originally proposed by Allport (1954): the equal status of groups in the contact situation, common goals and goal-oriented efforts, cooperation in a context of interdependence, and institutional or normative support. Good deliberative forums also strive to achieve equality among participants (Benhabib, 1996; Cohen, 1997), where deliberating parties are “fundamentally and substantively equal” (Cohen, 1997). This principle is often manifested through clearly-communicated norms of equality and respect, and sometimes enforced by moderators or facilitators. Moreover, because the purpose of deliberation is to deal with problems of collective concern (Habermas, 1962/1989; Fishkin, 1995), the participants have to think through the issues together and discuss matters that have consequences for everyone. In other words, participants in deliberative forums are oriented towards the common goal of finding mutually-agreeable solutions. Also, deliberation relies upon the process of justification, which requires citizens to go beyond self-interests and adopt a publicly-oriented mindset (Chambers, 2003; Cohen, 1997; Habermas, 1996), creating a highly-conducive environment for
contact. And finally, deliberative interventions often occur under the auspices of formal organizations, with great attention directed to the deliberating parties and their decisions (Fishkin, 2009).

Because contact in settings that meet these specialized conditions show strong effects on bettering group-based attitudes (Pettigrew & Tropp, 2006), we thus hypothesized:

**H1:** Deliberative contact with minority group members in a small-group discussion increases support for policies that support the minority group.

**Deliberative versus everyday contact**

Deliberative contact might be differentially effective for people with different contact experiences in the past. This is because structured, intergroup contact in deliberative settings might be a different experience altogether for those who had more (or more positive) and those who had little (or more negative) contact with outgroup members in the past. For those who have had more frequent (or more positive) interactions with outgroup members—perhaps as friends, neighbors, or colleagues—deliberative contact offers yet another opportunity to interact with outgroup members. Though it may still be a unique experience compared to their casual encounters in the past, it is nothing completely out of the ordinary and they know what to expect. For these individuals, any single interaction may do little to confirm or disconfirm expectations about the outgroup (see Paolini et al., 2014).

In contrast, for those who have had little opportunities or more negative experiences with the outgroup in the past, getting together and seriously debating policy issues with members of the outgroup can seem quite extraordinary. To the extent that the deliberative contact creates a space for positive contact, this event can be singularly powerful for those who expect it least. Indeed, some studies provide indirect support for this idea. Focusing on indirect forms of contact, some scholars found that the effects of these indirect forms of contact were greatest among people who lived in segregated areas or had little chance for direct face-to-face contact (Christ et al., 2010; Dhont & Van Hiel, 2011). We thus expected parallel moderation effects for deliberative contact:

**H2:** The effect of deliberative contact on support for outgroup-related policies is greater among those who previously had (a) less contact with the outgroup and (b) more negative contact with the outgroup.

**Explaining deliberative contact effects**

If deliberative contact promotes support for policies designed to help the outgroup, then what might be the underlying mechanisms? Though generally affective mechanisms are considered stronger mediators of contact effects (e.g., Pettigrew & Tropp, 2008), we focused on two cognitive processes in our study, given the unique features of deliberative forums that emphasize information and justification in the course of a reason-based discussion.
**Outgroup knowledge**

Learning about the outgroup has long been thought to be one of the main mechanisms through which contact reduces prejudice (Allport, 1954; Pettigrew & Tropp, 2008; Stephan & Stephan, 1984). Underlying this idea is the view that segregation is a source of ignorance and “ignorance is the breeding ground for derogatory stereotypes and hostility” (Sigelman & Welch, 1993, p. 781). Deliberative contact provides especially fertile grounds for acquiring knowledge about the outgroup because the discussion is based on facts and reasons, at least more explicitly than in everyday conversations. Many deliberative discussions utilize pre-assembled information booklets that provide some background facts about the issues and points of contention to facilitate meaningful deliberation (Fung, 2003). Moreover, experts are often involved in some capacity in deliberative events, either directly, as panelists, or indirectly, as experts that contributed to the information booklets. Most importantly, the expectation of participating in discussion can heighten attention to, and processing of, various kinds of information among deliberation participants (Pingree, 2007). Since knowledge reduces uncertainty and discomfort about how to interact with others (Dovidio, Gaertner, & Kawakami, 2003), we expected that greater knowledge about the outgroup would be a mediator of deliberative contact effects in deliberative settings:

\[ H3: \text{Deliberative contact with minority group members in small-group discussion increases outgroup knowledge, which in turn mediates the effects of deliberative contact on policy support.} \]

**Perceptions of disadvantage**

Structurally-disadvantaged minority groups across the globe have less power, wealth, and health, relative to more advantaged groups (Sidanius & Pratto, 1999). Disadvantage is often the result of a long and tortured history of oppression and discriminatory practices that get entrenched as norms and various forms of prejudice (Pettigrew, 2016). This situation can systematically reduce the life opportunities of disadvantaged groups, either through direct practices or through the psychological distress caused by perceiving these disadvantages (Cooper et al., 2008).

With its emphasis on equal status and reason-based dialogue, deliberative contact can facilitate understanding of the structural disadvantages faced by the minority group. Deliberative discussions emphasize mutual understanding and civility, which cultivate an awareness of how others experience the world and, thus, how they come to hold certain views (Cappella, Price, & Nir, 2002). Unlike ordinary conversational contexts that eschew talk about uncomfortable topics like politics (e.g., Eliasoph, 1998), deliberative discussion explicitly touches upon issues of self- or group-based interests or grievances in the process of a cooperative searching for mutually-acceptable solutions (Mansbridge et al., 2010; see also confrontational models of contact, Maoz, 2004, 2011). This contrasts with informal, everyday contact situations, which are beneficial for cultivating affective ties with one another.
(Pettigrew & Tropp, 2008), but perhaps are not a suitable venue for minority groups to share their experiences regarding the structural disadvantages in society. Research shows that those who recognize group-based disadvantages and perceive them as unfair tend to support policies and actions that rectify this inequity (Dixon et al., 2015; Walker & Smith, 2002). Thus, we proposed that understanding the disadvantages of the minority group would be a mediator of deliberative contact effects:

H4: Deliberative contact with minority group members in small-group discussion increases perceptions of disadvantages, which in turn mediates the effects of deliberative contact on policy support.

The context: two “experiments” of deliberative contact

This study utilized existing data collected for two deliberative polls: one in Bulgaria (Center for Deliberative Democracy, 2007) and another in Australia (Center for Deliberative Democracy, 2001). Deliberative polling is a method that combines public deliberation with opinion polling, by first polling a representative sample of a population, inviting them to deliberate with their fellow citizens, and finally polling their opinions again at the end (see Fishkin, 1995, 2009). Briefing documents containing information about the issue are sent to those who indicate interest in attending the event. During the event, participants alternate between small-group discussions, where they discuss the topic with other participants, and plenary sessions, where all participants congregate and pose the questions that emerged in the group discussions to a panel of experts composed of policymakers, advocates, and researchers. After this weekend of thinking and talking about the issue, participants are polled again at the end. Both the Australian and Bulgarian deliberative polls closely followed the procedures of a typical deliberative poll.

Although we relied on existing data, our approach is different from previous work using these data (e.g., Center for Deliberative Democracy, 2007), which primarily compared attitudes before and after participating in the deliberation event. Instead, we utilized the “experimental” treatment of deliberative contact among the non-minority members across the two deliberative polls. The Australian poll was a true experiment, as non-Aboriginal participants were randomly assigned to either the treatment or control condition. The Bulgarian poll was a quasi-experiment, as participants were randomly assigned to the discussion groups—and not to treatment and control conditions—which incidentally resulted in deliberative contact for some participants and not for others. Since participant characteristics were unrelated to group assignments in both cases, we perceive them to be comparable “experiments” of deliberative contact.

Both polls focused on issues related to a prominent ethnic minority group in their country: the Roma in Bulgaria and Aboriginals in Australia. The Roma are descendants of Indians that settled in the Balkans around the 13th–14th centuries.
They currently comprise about 4.9% of the population (National Statistical Institute of Bulgaria, 2011), with most of them living under harsh living conditions without basic necessities, such as a sewage system, running water, and electricity (Gheorgiev, 2000). The Roma face public intolerance and neglect; they are easy scapegoats for social problems, which leads to targeted acts of racism and abuse. Illiteracy and low educational standards are common among the Roma, and many end up as unskilled manual laborers or criminals (Vassilev, 2004).

Aboriginal Australians, on the other hand, are descendants of the native population of the Australian continent and comprise less than 2.8% of the Australian population (Australian Bureau of Statistics, 2017). Aboriginal Australians historically faced massacres, severe discrimination, and some had their children removed from them during different periods since British colonization (Evans & Thrope, 2001). Due to this tortured history, Aboriginal Australians face difficulties compared to non-Aboriginal Australians in terms of employment and physical and mental health. They are three times more likely to face unemployment than non-Aboriginals, twice as likely to commit self-harm than non-Aboriginals, and their life expectancy is significantly shorter (Aboriginal and Torres Strait Islander Social Justice Commissioner, 2006; Australian Institute of Health and Welfare, 2003).

Examining deliberative contact in these two contexts presented a unique opportunity for comparison. Despite the government’s efforts, the non-Roma Bulgarians see the Roma as “inferior people who have to know their place” (Marushiakova & Popov, 2000, p. 8). This contributes to a climate of intolerance, discrimination, and violence (Vassilev, 2004). In contrast, the Australians have mixed feelings toward the indigenous people, along dimensions of sympathy, subtle racism, and collective guilt (Halloran, 2007). Moreover, the Aboriginals comprise a smaller portion of the population and live in remote areas, making it hard for majority Australians to have contact with Aboriginals. Bulgarians, on the other hand, tend to have greater everyday contact with the Roma (Ryder, Rostas, & Taba, 2014). By testing the effects of deliberative contact across these two different contexts with minority groups that face very different levels of hostility, we can test the robustness of deliberative contact effects.

**Method**

**Bulgarian deliberative poll**

The 2007 Bulgarian National Deliberative Poll (hereafter Bulgarian DP) was organized around the policies related to the Roma in Bulgaria and focused mainly on the issues of housing and education with regards to the Bulgarian Roma communities. The study sample consisted of 230 non-Roma Bulgarians who participated in the Bulgarian DP. This sample was polled twice: initially as part of a nationally-representative sample of face-to-face interviews, and then again immediately after the two-day deliberation in April 2007. Our study sample overrepresented females (60.1%), and the average age was 46.2 years.
As previously mentioned, the Bulgarian DP was a quasi-experiment. Participants assigned to groups that had Roma participants were considered to be in the deliberative contact condition (coded as 1; \( n = 189, 82.1\% \)) while others were considered to be in the no deliberative contact condition (coded as 0; \( n = 41, 17.8\% \)).

**Measures**

In addition to the main effect of deliberative contact (H1), the Bulgarian DP contained measures that allowed us to examine whether prior contact frequency and positivity moderated these effects (H2).

*Support for government programs to help the Roma ghettos.* Three questions probed attitudes toward proposed programs to help the impoverished Roma ghettos: “The government should help people living in illegal housing to get and repay loans to build new houses”; “The government should build new housing to replace illegal housing”; and “In the process of legalization of buildings the government should cover the legalization expenses for the disadvantaged people.” All were measured on a 5-point scale, ranging from disagree strongly (1) to agree strongly (5), and were rescaled to range from 0 to 1. The three items were combined into a single attitudinal index (pre-Bulgarian DP \( M = .55, SD = .30, \alpha = .67; \) post-Bulgarian DP \( M = .59, SD = .29, \alpha = .71 \)).

*Prior contact frequency.* A single-item measure in the pre-deliberation survey asked “How often would you say you personally communicate with [the Roma] in your everyday life?” Responses were measured on a 4-point scale ranging from never (1) to very often (4), and were rescaled to range from 0 to 1 (\( M = .54, SD = .34 \)).

*Prior contact positivity.* Another single-item measure in the pre-deliberation survey assessed the positivity of prior contacts with the Roma: “How would you describe most of your contacts with the Roma?” Responses ranged from extremely negative (1) to extremely positive (5), on a 5-point scale, which were later rescaled to range from 0 to 1 (\( M = .61, SD = .23 \)).

**Australian deliberative poll**

The 2001 Australian National Deliberative Poll (hereafter Australian DP) was organized around the central theme of reconciliation between the Aboriginal and non-Aboriginal Australians with respect to the historical treatment of Aboriginal Australians. Data collected from 339 non-Aboriginal Australian participants were used for this study. This sample was also polled twice: initially as part of a nationally-representative sample of respondents in face-to-face interviews, and then again immediately after the weekend-long deliberation event in February 2001. Once again, we only used data from the non-Aboriginal Australians (\( N = 339 \)).

Approximately half of the non-Aboriginal participants were randomly assigned to interact with Aboriginals in the small groups (deliberative contact condition; \( n = 185, 54.3\% \)), while the rest were assigned to deliberate in small groups that did not have any Aboriginals (no deliberative contact condition; \( n = 155, 45.7\% \)). This resulted in an experimentally-manipulated, dichotomous measure of deliberative contact in small groups at the individual level.
Measures
In addition to the deliberative contact effect (H1), the Australian study contained measures that allowed us to test whether and how deliberative contact effects were mediated (H3, H4).

Support for formal acknowledgment. Four questions asked whether there should be a formal acknowledgment of historical wrongdoings regarding the treatment of Aboriginals (pre–Australian DP $M = .57$, $SD = .32$, $\alpha = .83$; post–Australian DP $M = .72$, $SD = .25$, $\alpha = .76$). The question items were: “The nation should formally acknowledge that Australia was occupied without the consent of Aboriginal people”; “The nation should formally acknowledge that Aboriginal people were the original owners of traditional lands and waters”; “Governments should apologize to Aboriginal people for what's happened in the past”; and “Everyone should stop talking about the way Aboriginal people were treated in the past, and just get on with the future” (reverse coded). All were asked on a 5-point scale ranging from “strongly disagree” (1) to “strongly agree” (5), and were later rescaled to range from 0 to 1.

Support for education about Aboriginals in schools. Two items asked about Aboriginal education in schools: “There should be more education in Australian schools about the historical events surrounding Aboriginal culture” and “There should be more education in Australian schools about the historical events surrounding Aboriginal people.” Both were measured on the same 5-point scale as above (pre–Australian DP $M = .83$, $SD = .23$, $\alpha = .84$; post–Australian DP $M = .94$, $SD = .15$, $\alpha = .90$).

Support for government assistance to Aboriginals. Two items asked about whether the government should provide assistance to the Aboriginals: “The nation should be trying to improve Aboriginal people’s situation concerning health, education, housing, employment and so on” and “The nation should be trying to help the Aboriginal people become more financially independent and self-reliant.” These were also measured on the same 5-point scale as above (pre–Australian DP $M = .76$, $SD = .26$, $\alpha = .68$; post–Australian DP $M = .87$, $SD = .19$, $\alpha = .72$).

Knowledge about Aboriginals. Several quiz-style items in the post-deliberation survey assessed participants’ knowledge after deliberation. We used three of these items that were related to Aboriginal history as a measure of knowledge about the outgroup: the approximate year in which Aboriginal people were first counted in the census as part of the Australian population (1960s); the approximate time in which the practice of removing Aboriginal children from their families was generally considered to have ceased (1960s); and the result of the Mabo case (which resulted in native title claims being allowed under certain circumstances). Each was coded 1 if correct and 0 otherwise (e.g., if incorrect or declined to answer), and the composite knowledge index calculated the proportion of correct answers ($M = .77$, $SD = .25$).

Perceptions of disadvantage. Perceptions of disadvantage are typically measured by asking about the extent to which a particular group is disadvantaged: that is, the
extent to which the members of this group do not have the same economic, educational, or job employment opportunities as other members of society (Lambert & Chasteen, 1997). We used 10 items in the post-deliberation questionnaire that tapped into the respondents’ understanding about the living conditions and life prospects of the Aboriginal population. The first question asked respondents to compare the Aboriginal people to other groups in the community on whether the respondents “[thought] of Aboriginal people as being disadvantaged, or not disadvantaged” (dichotomous measure: 0 = not disadvantaged, 1 = disadvantaged). Next, a series of questions asked respondents to rate whether the Aboriginal people were better off, worse off, or about the same as other Australians in terms of: living conditions; the opportunity to get ahead in life; health; housing; opportunities for employment; education; life expectancy; jail or imprisonment rates; and income (5-point scale: 1 = a lot better off, 5 = a lot worse off; rescaled to range from 0 to 1 for analysis). Altogether, these 10 items showed high reliability (M = .82, SD = .20, Cronbach’s α = .92).

Analytic strategy
We used regression models to test all hypotheses. As some of our hypotheses posit moderating and mediating relationships, it was more appropriate to estimate effects consistently, using regression models for all hypothesized effects. In all models, post-deliberation policy attitudes were predicted by a dichotomous measure of deliberative contact (H1), along with other moderator (H2) or mediator variables (H3, H4). All models controlled for pre-deliberation attitudes. The indirect effects were estimated by calculating bias-corrected confidence intervals (CIs), based on 5000 bootstrapped samples (Hayes, 2013). As we relied on existing data, we could only test our hypotheses when relevant data were available. As such, only H1 was tested with both datasets, and H2, H3, and H4 were tested in one of the two datasets.

Results
H1 predicted that deliberative contact would increase support for outgroup-related policies. Across two countries, we found partial support for the hypothesized effect (see Figure 1). In the Bulgarian DP, deliberative contact with the Roma significantly increased support for policies that proposed government assistance to restructure the illegal housing structures by 10% (b = .10, p < .05). In the Australian DP, deliberative contact with Aboriginal Australians significantly increased support for official acknowledgment by 8% (b = .08, p < .001). However, deliberative contact did not directly predict attitudinal differences in support for more Aboriginal education in schools (b = .01, p = .401) or support for general government assistance to Aboriginals (b = .03, p = .167). Thus, H1 was only partially supported.

H2 posited that deliberative contact effects would be especially strong among those with little (H2a) or negative (H2b) contact in the past. In Bulgaria, prior contact frequency did not moderate the effects of deliberative contact (see Table 1,
Model 1; $b = -0.18, p = .478$; H2a not supported); everyone—regardless of their prior contact frequency level—was equally and significantly impacted by deliberative contact. At the same time, prior contact positivity moderated effects of deliberative contact: the effect of deliberative contact was strongest when prior contact positivity was at the lowest level (i.e., extremely negative [0]; $b = 0.31, p < .10$), and marginally decreased as prior contact positivity increased ($b = -0.44, p < .10$; H2b marginally supported). To examine this interaction effect more closely, the effect of deliberative contact was plotted at one standard deviation above and below the mean of prior contact positivity. The deliberative contact effect was found to be marginally significant only when prior contact positivity was one standard deviation below the mean ($b_{-1sd} = 0.14, p < .10$; see Figure 2). When prior contact positivity was one standard deviation above the mean, deliberative contact did not have a significant impact on attitudes ($b_{+1sd} = -0.06, p = .504$; see Figure 2).

Next, the mediating mechanism was assessed using the Australian data. The two potential mediators—outgroup knowledge and perceptions of disadvantage—were collectively examined as mediators of deliberative contact effects on three policy-attitude measures (see Figure 3). As expected, deliberative contact had a marginally significant effect on outgroup knowledge ($b = 0.05, p < .10$) and a significant effect on perceptions of disadvantage ($b = 0.07, p < .01$). However, while perceptions of disadvantage significantly affected attitudes towards policies (formal

![Figure 1](https://academic.oup.com/joc/article-abstract/10.1093/joc/jqy056/5146304)
Table 1  Effects of Prior Contact (Frequency and Positivity) and Deliberative Contact on Support for Government Assistance to Roma Ghettos (Bulgaria)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>SE</td>
</tr>
<tr>
<td>Pre-deliberation support for assistance to Roma ghettos</td>
<td>.31**</td>
<td>.06</td>
</tr>
<tr>
<td>Deliberative contact</td>
<td>.20*</td>
<td>.09</td>
</tr>
<tr>
<td>Frequency of prior contact</td>
<td>.30*</td>
<td>.13</td>
</tr>
<tr>
<td>Frequency × Deliberative contact</td>
<td>−.18</td>
<td>.15</td>
</tr>
<tr>
<td>Positivity of prior contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positivity × Deliberative contact</td>
<td>−.44†</td>
<td>.26</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>$F (p)$</td>
<td>5.53 (.000)</td>
<td>9.46 (.000)</td>
</tr>
<tr>
<td>$N$</td>
<td>176</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, †p < .10

Figure 2  Deliberative contact effect by prior contact positivity level. Predicted estimates for post-deliberation policy support were obtained from the regression model presented in Table 1, which controls for pre-deliberation attitudes. Estimates for “prior contact was negative” were calculated based on prior contact levels one standard deviation below the mean; estimates for “prior contact was positive” were calculated based on prior contact levels one standard deviation above the mean. Bulgaria $N = 230$. Error bars represent 95% CI. n.s. = not significant.

acknowledgment, $b = .29, p < .001$; Aboriginal education, $b = .11, p < .05$; government support to Aboriginals, $b = .32, p < .001$), outgroup knowledge did not predict any of the policy attitudes (formal acknowledgment, $b = .00, p = .989$; Aboriginal education, $b = −.03, p = .377$; government support to Aboriginals, $b = −.04, p = .319$). A mediation analysis revealed that the effect of deliberative contact was not mediated by outgroup knowledge (H3 not supported): this indirect route
Figure 3 Indirect effects of deliberative contact on post-deliberation attitudes through outgroup knowledge and perceptions of disadvantage. All models controlled for pre-deliberation attitudes and demographics. Australia $N = 339$. *$p < .05$, **$p < .01$, ***$p < .001$, †$p < .10$. 
was not significant for any of the three dependent variables (formal acknowledgment 95% CI -0.01–0.01; Aboriginal education 95% CI -0.01–0.00; government support to Aboriginals 95% CI -0.01–0.00). On the other hand, consistent with H4, deliberative contact effects were significantly mediated via perceptions of disadvantage for all three dependent variables (H4 supported; formal acknowledgment 95% CI 0.01–0.04; Aboriginal education 95% CI 0.00–0.02; government support to Aboriginals 95% CI 0.01–0.04).

Discussion

Can contact in deliberative settings help overcome the tensions and hostilities between historically-conflicted groups? The current study attempted to answer this important question by examining national-scale, deliberative forums in two countries, and found some promising evidence regarding the role of deliberation in improving intergroup relations. In both Australia and Bulgaria, deliberative contact with minority group members increased support for policies designed to support the minority group, either directly or indirectly, through intervening mechanisms. In line with H1, when they discussed the issue together with Aboriginal members of the public, non-Aboriginal Australians were more likely to support a policy that would formally acknowledge past wrongdoings and apologize to the Aboriginal people. Likewise, non-Roma Bulgarians were more likely to support government assistance to restore or replace illegal housing when they discussed the issue face-to-face with Roma Bulgarians in their small groups. Although the direct effect of deliberative contact was not significant for some policy attitudes in Australia (e.g., greater education of Aboriginal history and culture in schools), perhaps due to a ceiling effect of these two indices, deliberative contact had an indirect effect on all of the policy measures through greater acknowledgment of the minorities’ disadvantages (i.e., H4). In sum, deliberative contact had a positive impact on supportive policies for the minority group, either directly, indirectly, or both.

These results are in line with past work that showed the effectiveness of face-to-face contact in structured settings (e.g., Maoz, 2000a, 2011; Maoz & Ellis, 2008; Steiner et al., 2017). Moreover, given our experimental design, it provides strong evidence that these effects are indeed causal: structured encounters with members of a historically-disadvantaged group causes attitudes to be more sympathetic towards this group. It is important to note that these effects occurred on top of any general attitudinal shifts following deliberation. In the two cases examined, post-deliberation attitudes were more supportive of pro-minority group policies on the whole (Center for Deliberative Democracy, 2001, 2007), yet discussing the issue together with minority group members, as opposed to just discussing an issue about the minority group, had an impact above and beyond this general attitudinal trend. These results invite us to consider the unique power of deliberation that involves direct discussion with outgroup members. As the deliberative context
embodies elements of both the confrontational and coexistence approaches (see Maoz, 2004, 2011), we believe it provided a safe space for participants to directly and explicitly discuss issues, leading to greater support for conciliatory or supportive policies for the outgroup.

We acknowledge that deliberation settings are highly-specialized contexts for intergroup encounters, compared to those that occur naturally in everyday life. As with the case of any contact interventions, our study also presents a context that is not organic to everyday life and may be difficult to sustain (see Dixon, Durrheim, & Tredoux, 2005), especially given the informal segregation prevalent in natural settings (Dixon & Durrheim, 2003). Thus, some scholars suggest that it may be more valuable to study mundane encounters rather than contacts in idealized settings (Dixon et al., 2005). However, we note that structured, intergroup encounters are becoming more popular with a growing number of policymakers and scholars interested in various forms of structured encounters (see Maoz, 2011). One study notes that there are more than 100 interventions of planned contact every year between Jews and Palestinians, for instance (Maoz, 2004). Also, potentially enduring and transformative effects may emerge from single encounters that occur in specialized settings (e.g., Maoz, 2000a). In their recent book, Steiner et al. (2017) examined deliberative group discussions in particularly hard cases, such as discussions between ex-paramilitaries and ex-guerrillas in Colombia. Natural discussions in safe settings may be extremely difficult to achieve in these situations, yet structured settings may offer opportunities for transformative moments in deliberation that last beyond the immediate discussion context (Steiner et al., 2017).

Our study finds inconsistent support for the moderation hypothesis. There was some, although marginally significant, evidence that deliberative contact effects are stronger among people who have had more negative contact experiences in the past (H2b marginally supported), yet there was no moderation by frequency of past contact (H2a not supported). In other words, deliberative contact was equally effective for those with more or less contact with the outgroup before the deliberative event, and was marginally more effective for those who had more negative contact in the past. One interpretation of these results is that valence of contact is a more meaningful measure of people’s past encounters with the outgroup, as it shows how the past contact differentially colors reactions to the new contact. This is in line with the growing emphasis on contact valence, as opposed to mere contact frequency, in the contact literature (Paolini, Harwood, & Rubin, 2010; Pettigrew, 2008), and suggests that deliberative contact can be a remedy in situations where people actively avoid outgroup members (see Brown & Hewstone, 2005). A more conservative interpretation, however, might be that deliberative contact effects are not substantially moderated by past contact experiences, whether measured in frequency or valence, and instead are more or less uniform for everyone. Our data do not allow us to supply a conclusive answer to this. Whether or not deliberative contact is equally effective for everyone or depends on past contact is a question that should be further explored in future studies.
Our findings strongly support the idea that positive effects of contact come from an increased understanding of the disadvantages faced by minority groups. Those who had direct deliberative contact with the Aboriginals gained a better understanding of the disadvantages that these minorities faced, which, in turn, led to greater support for pro-Aboriginal policies. Although it was not explicitly tested in this study, we believe that altered perceptions might trigger alternative attributions about the minority group’s current situation. In other words, being able to see the unjust disadvantages might lead to a situational attribution of their plight (e.g., the historical mistreatments of the Aboriginals), which provides a basis for supporting policies that help the outgroup (see Vescio, Sechrist, & Paolucci, 2003). Further investigation could illuminate these more nuanced mechanisms.

In contrast, knowledge about the outgroup failed to significantly account for deliberative contact effects. Although learning has been theorized, from the very beginning, as an important mediator of contact effects (e.g., Allport, 1954), it should be noted that learning can mean anything from acquiring information that is entirely new to correcting mistaken beliefs that already existed. The measurement of knowledge in this study was an adapted version of a conventional political knowledge measure (i.e., adding up pieces of information about the outgroup), but this may have been limited in capturing the kind of knowledge that is essential for contact effects. For example, measuring knowledge in terms of what feminist scholars call “situated knowledge” (Young, 1997), the sort of learning that comes from taking the perspective of others (e.g., understanding their plight and disadvantages), may have been more effective. Whatever the case, the current study demonstrates that the effect of contact is established through this latter component, leading us to a new appreciation for empathetic understanding of others, as opposed to merely knowing more about them.

Limitations
There are some limitations that are worth noting. First, because the study used existing data from past deliberation projects, we were bound by the measures included in the surveys at the time. Our measure for perceptions of disadvantage, for instance, was created post hoc by relying on available perception-based measures. Future studies might examine this mediator by using more established scales that relate to shifted perceptions, such as perspective taking or cognitive empathy. Also due to using secondary data, other potentially important mediating variables were not assessed. Although we theorize cognitive mechanisms as central to explaining deliberative contact effects, affective reactions to the contact situation, such as anxiety, empathy, or guilt, could still have played a role in shaping attitudes towards policies (e.g., Maoz & Ellis, 2008).

Second, as discussion transcripts were unavailable for the two polls, we were not able to study whether the discussion content differed between the deliberative contact and control groups. Did the minority participants bring in new perspectives, stories, and arguments that would not be available in the control groups? We
speculate that this may well be the case, but we cannot confirm, through our study, whether and how the discussions differed. Similarly, we could not examine whether the group dynamics differed between the treatment and control groups (e.g., group cohesion may have been stronger in some groups), affecting participant’s individual attitudes after deliberative contact. As such, we do not claim to isolate the effects of persons, social identities, or group dynamics with those of ideas, arguments, and opinions shared in the different conditions. As it is natural for discussion content to vary with different individuals involved, we hope future studies could further explore this important issue to study the effects of deliberative contact on the process and content of discussions.

Finally, this study does not address how deliberative contact is experienced by, and affects attitudes of, the minority group members. Contact can affect members of majority and minority groups differently, especially when there are disparities in power (Maoz, 2000b; Saguy, Dovidio, & Pratto, 2008). Members of minority groups have different motivations, strategies, and content preferences during the discussions (see Maoz, 2000b; Saguy et al., 2008), rendering the entire deliberative contact experience as something altogether different from that of the majority group. Also, any intergroup intervention can be perceived, by members of the minority group, as promoting a common, superordinate identity over their subgroup identity, and thus potentially be met with resistance (Dovidio, Gaertner, & Saguy, 2009). Future studies might examine how such differences between majority and minority groups might affect the processes and effects of deliberative contact.

Acknowledgements

We thank Jane Mansbridge, Lynn Sanders, Jon Krosnick, Shanto Iyengar, Pierangelo Isernia, Ifat Maoz, and three anonymous reviewers for their helpful comments on the manuscript. We also thank Dr. Pamela Ryan, Managing Director of Issues Deliberation Australia, and Ivan Krastev, Chairman of the Centre for Liberal Strategies in Bulgaria, for their leadership in creating the two deliberative polls discussed here.

Notes

1 The project was co-organized by the Centre for Liberal Strategies, Alpha Research, Bulgarian National Television, the Open Society Institute, and the Center for Deliberative Democracy at Stanford University. We only examined policy items related to housing in this study, because the policies proposed for education were highly specific and could not be summarized into a reliable scale. Moreover, the Roma had such varying, and sometimes conflicting, attitudes towards education policies (e.g., closing down Roma schools) that it was unclear what effect contact might have had.

2 Data from the 25 Roma participants and 51 Aboriginal Australians were not analyzed, as the sample sizes were too small to permit statistical testing.
3 The treatment and control groups were similar in terms of pre-deliberation attitudes \( (M_{\text{contact}} = .55, SE = .02; M_{\text{control}} = .58, SE = .05; p = .556) \), as well as demographics (age \( p = .197 \); gender \( p = .299 \); education level \( p = .369 \); and income \( p = .429 \)). The lack of differences between the two groups suggests that our quasi-random assignment worked well to produce comparable treatment and control conditions. We do acknowledge, however, that the unbalanced cell size of the two conditions is a limitation and that our standard error estimates will be inflated as a result of this imbalance, leading to more conservative tests of our hypotheses.

4 For both polls, we examined the intraclass correlation (ICC) statistics of post-deliberation attitudes of the full sample (not just our study sample of majority members) and found little evidence of data clustering at the group level (Australia formal acknowledgement = .04; Australia Aboriginal education = .05; Australia government assistance = .01; Bulgaria help Roma ghettos = .01). These low ICC values suggest that most of the variance in pre-deliberation attitudes is at the individual level and that group-to-group variation was, comparatively, very small.

5 The pre-deliberation attitudes for support for more Aboriginal education and support for government assistance were both higher to begin with (education \( M = .83, SD = .23 \); assistance \( M = .76, SD = .26 \)), as compared to the pre-deliberation attitudes for support for a formal apology (\( M = .57, SD = .32 \)), which was the only variable that showed a significant total effect. Given that there was little room for increases in public support for the former two variables, it is possible that there was not enough variance to be explained by our experimental conditions.

References


