

Extended Intergroup Contact in Frozen Conflicts: Experimental Evidence from Cyprus

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Abstract

How can ethnic reconciliation be achieved in conflict settings where populations are physically separated? We address this question by examining the role of 'extended contact'—a form of indirect contact which entails learning about the contact experiences of others—in the context of Cyprus' frozen conflict. We field a survey experiment in order to test two pathways through which extended contact works: (1) by helping build a common identity, (2) by activating empathy. We find that our treatments are associated with greater trust in the outgroup, and greater support for cross-ethnic interaction, but only among segments of the population that are initially less favorable toward reconciliation.

1 Introduction

Ethnic and identity-based conflicts are known to be among the world’s most intractable. Underlying any attempt by political elites to negotiate a solution is the essential question of public support for peace settlements. The election of hardliners in frozen conflict zones such as Israel-Palestine, Armenia-Azerbaijan, India-Pakistan and Bosnia Herzegovina attest to the challenge of engineering and sustaining peace agreements without popular support for compromise, particularly when identities are hardened and the two sides interact little. Building support for peace is difficult when underlying prejudice toward the ethnic ‘other’ remains strong (Bar-Tal (2000), 357-359).¹

A long line of research points to the benefits of intergroup contact for promoting tolerance and reducing prejudice (c.f., Allport (1954), Cook (1985), Thomas (1971), Pettigrew and Tropp (2006), Sherif (1966)). But some of the lessons of the ‘contact hypothesis’ are difficult to apply in conflict and post-conflict settings, where rigid political and physical separation mean that social interaction between groups is rare. We theorize how *extended intergroup contact* can foster trust and support for reconciliation in post-conflict divided societies. Different from direct contact, which entails firsthand interaction with a member of the outgroup, extended contact is an indirect form of contact which entails *learning about the contact experiences of others in one’s ingroup* (Wright et al. (1997); Dovidio, Eller and Hewstone (2011)). Drawing insights from social psychology, conflict studies, and our own focus groups in Cyprus, we focus on two mechanisms through which extended contact can influence attitudes: (1) by fostering empathy for the other, and (2) by fostering a common superordinate identity.

We explore these issues in the context of Cyprus, which has been divided since 1974 between the Republic of Cyprus (ethnically Greek Cypriot) in the South and the self-proclaimed Turkish Republic of Northern Cyprus (ethnically Turkish Cypriot) in the North. Since 2003, the UN-administered buffer zone dividing the island has been open for daytime crossings, yet, in 2004, Greek Cypriots resoundingly rejected a peace plan in a referendum, with 76 percent voting against. To this day, approximately one-third of Greek Cypriots report never having crossed into the North, and contact between the two communities remains primarily shallow and transactional. Thus, in Cyprus—as in other physically divided societies—many individuals experience intergroup contact only in an indirect way, that is, by learning of the contact experiences of others.

To test our hypotheses about extended intergroup contact, we design a survey experiment which we administered on a representative national sample of 514 Greek Cypriots, conducted by telephone in July 2015. The experimental vignette included a description of the effects of intergroup contact which cued either (a) empathy for Turkish Cypriots or (b) cultural similarity between Greek and Turkish Cypriots. These are the two treatments in

¹Kijewski and Rapp (2019)’s study of Sri Lanka finds that support for political reconciliation between Tamils and Sinhalese is lower among individuals with higher ethnic prejudice. In North Macedonia, Dyrstad et al. (2011) find that even years after the hot conflict ended, “ethnicity trumps all other individual and contextual factors” in explaining support for reconciliation.

our design, which we then compare with a generic control condition. We assess whether the treatments correlate with subsequent measures of outgroup trust and support for more social interaction between the communities. Our experiment is therefore designed not to test the effect of extended contact in general, but rather to assess the strength of these two pathways—enhancing empathy or building a common identity—through which it may work.

We find that cueing the empathetic and common identity effects of contact is associated with changed attitudes toward the outgroup, but only among certain segments of the population. Among those that are highly religious—an indicator of strong Greek ethnic identification in the Cypriot context—we find that cueing a common identity leads to greater expressed trust in Turkish Cypriots and greater support for intergroup social interaction. Among Greek Cypriots who have never crossed to the other side of the island—a behavioral marker that is associated with opposition to solving the Cyprus problem—we find that the empathy treatment is significantly and positively associated with more positive views about the need for more social interaction. Taken as a whole, these findings indicate that extended contact can have stronger effects among some groups that are *less predisposed toward reconciliation to begin with*. We find limited evidence that some groups respond negatively to the treatments. For example, we find that young respondents, aged 18 to 34—which have no direct experience of living with Turkish Cypriots prior to 1974—respond somewhat negatively to the empathy treatment.

Our inquiry makes at least two contributions to our understanding of extended contact as a means toward resolving ethnic conflicts. First, we join a growing body of research on contact in post-conflict settings that uses experimental methods to address the problem of self-selection.² For example, surveys in Cyprus have shown that individuals who cross to the other side of the island possess more favorable views toward reconciliation and exhibit less prejudice (PRIO 2007, UNDP 2010). There is also evidence documenting a relationship between both quantity and quality of contact with reduced prejudice and increased trust (Psaltis (2012), McKeown and Psaltis (2017), Yucel and Psaltis (2020)). But it is difficult to know whether individuals with more favorable attitudes are more likely to cross and have contact, or whether it is the act of crossing and having contact itself which has an effect on attitudes.³ Our experimental design overcomes this inferential problem. Second, our research design allows us to experimentally manipulate two particular mechanisms—empathy and construction of a shared identity—through which intergroup contact works. We can therefore isolate the effects of each mechanism and identify the conditions under which it may operate more strongly (as well as identify any backlash effects). This is to our

²For a review, see Pettigrew (1998), 69). Some studies of peace workshops in Cyprus (Fisher (1994)), Israel-Palestine (Maoz (2011)), and Sri Lanka (Malhotra and Liyanage (2005)) provide useful insights, but are not designed with causal inference in mind. More recent work that leverages natural, field, or lab-in-the-field experiments in ethnically-divided societies provides new evidence about the positive effects of intergroup contact (Ramiah et al. (2014); Cleven (2020); Karim (2020); Mironova and Whitt (2014); Mironova and Whitt (2016) Samii (2013); Weiss (2019)

³Research in other settings suffers from a similar limitation, for example, in Northern Ireland (Hewstone et al. (2006)) and Israel (Maoz (2011)).

knowledge a novel approach which advances our understanding of how extended contact interventions can be tailored for greater effectiveness. That we find evidence of positive effects of empathy and shared identity via extended contact is therefore consequential, even if only among particular subsets of the population.

We proceed as follows. We begin by introducing the concept of extended contact, its implications for conflict resolution, and we derive hypotheses. We then provide background on the Cyprus case, introduce our research design, and present our findings. In the conclusion, we consider the implications of this study for settings beyond Cyprus.

2 Extended Contact

Extended contact is a form of indirect contact which entails gaining secondhand knowledge of intergroup contact.⁴ When an individual hears about a fellow ingroup member's relationship with an outgroup member, that individual has been exposed to extended contact.⁵ Extended contact is of particular relevance in conflict- and post-conflict contexts, given the frequency with which populations are physically separated by a border, as well as the prevalence of cultural and language barriers that discourage cross-group interaction (Stathi et al. (2012)). In Cyprus, as in other cases of ethno-political partition (e.g., Bosnia, Kosovo, Israel-Palestine), many individuals experience contact with the 'other' only in an indirect way.

While one might presume that the effects of extended contact would be shallow compared to direct contact, research has consistently shown that it is associated with reduced prejudice and greater tolerance for outgroups (Cameron and Rutland (2006); Liebkind and McAlister (1999); Tausch et al. (2011); Cameron et al. (2011); Gómez, Tropp and Fernández (2011); Eller, Abrams and Zimmermann (2011)) and that its effect is independent of direct contact (Turner et al. (2008); Zhou et al. (2019)). In Cyprus, a measure of self-reported extended cross-group friendship (i.e., a respondent reports having a friend with a cross-group friendship) is associated with warmer feelings toward the outgroup even after controlling for direct contact (Yucel and Psaltis (2020)).

Extended contact works in a distinct way, however. Whereas direct contact is an encounter experienced firsthand, extended contact activates *social identity* by imparting information—and potentially challenging prior beliefs—about the ideas of *fellow ingroup members*. In other words, there is an effect on second-order beliefs (what one thinks that others think). If I hear an acquaintance speak positively about her encounter with an outgroup member, this may lead me to update my beliefs not only about the outgroup but also about my fellow co-ethnics. Accordingly, research has shown that extended contact alters beliefs about ingroup norms, produces a more favorable view of the outgroup, and can

⁴Other forms of indirect contact include imagined contact and vicarious contact (see Dovidio, Eller and Hewstone (2011))

⁵Many studies of extended contact focus on knowledge of cross-group friendships, but the processes activated by indirect contact should not necessarily be limited to friendship (Zhou et al. (2019))

lead individuals to espouse a more inclusive identity (Turner et al. (2008); Dovidio, Eller and Hewstone (2011); Cameron et al. (2011)). This can have potentially powerful effects in divided societies, where a history of violent conflict renders social and ethnic identity highly salient (Sambanis and Shayo (2013); Nair and Sambanis (2019)), and where ethnic partition fosters discriminatory behavior toward the outgroup.⁶ Changed ideas about group norms—for example, about the acceptability of viewing the outgroup favorably—can alter every day discourse and behavior. Multiplied many times over, society collectively may dare to support compromises toward the outgroup that had previously been taboo. For example, in Rwanda, a media campaign with positive messages about cross-group friendship and cooperation—akin to an extended contact treatment—led to changed beliefs about social norms, including the desirability of negotiation, open discussion, and even intermarriage (Paluck and Green (2009)).

Which individuals should we expect to respond most strongly to extended contact? Consistent with the idea that it works via *social* norms and identity, studies indicate, first, that extended contact has deeper effects among those for whom ingroup identity is highly salient (Dovidio, Eller and Hewstone (2011)), as well as those who attach high importance to group norms and cohesion (Sharp, Voci and Hewstone (2011)). Second, extended contact has a greater impact among those that have experienced less direct contact (Eller, Abrams and Zimmermann (2011); Dhont and Van Hiel (2011); Cameron et al. (2011)). Intuitively, when an individual does not have her own experience to draw from, she is more likely to be influenced by the experience of fellow co-ethnics. Below, we draw from these ideas when deriving our hypotheses.

3 How Does Intergroup Contact Work?

We draw from prior research, as well as from direct contact sessions in Cyprus that we implemented in 2015, to highlight two mechanisms through which contact reduces intergroup anxiety and prejudice.⁷ These mechanisms will inform our experimental design. First, contact can induce empathy for the outgroup (Stephan and Finlay (1999), Cohen and Insko (2008), Pettigrew (1998), Hodson (2011)).⁸ This can include both cognitive empathy—taking the other’s perspective—and emotional empathy—reacting to the other’s emotions (Stephan and Finlay (1999)).⁹ Of direct relevance to our focus on conflict settings, a number of studies show that empathy reduces feelings of aggression toward the outgroup in soci-

⁶In a study of education groups in Nigeria, Scacco and Warren (2018) find that those in ethnically homogenous groups discriminate more than those in mixed groups, suggesting the negative effects of “in-group bonding.” De Kadt and Sands (2019) relatedly find that more ethnically-isolated Whites in South Africa vote against Black political parties in greater numbers.

⁷Inter-group anxiety is the worry that interactions will be negative or will have negative outcomes. Stephan and Stephan (1992) pioneered the theory that contact reduces prejudice via its effect on intergroup anxiety.

⁸A lack of empathy has been shown to be associated with prejudice and aggression (Stephan and Finlay (1999), 731).

⁹Cohen and Insko (2008), 91) report results from lab experiments which find that outgroup empathy induces cooperative intergroup behavior.

eties riven by ethno-religious conflict. This includes findings from survey research (Rosler, Cohen-Chen and Halperin (2017)) as well as evaluations of peace workshops in Israel-Palestine (Shechtman and Basheer (2005)), Sri Lanka (Malhotra and Liyanage (2005)) and Northern Ireland (Hewstone et al. (2006)). Fisher (1994)'s analysis of a conflict resolution workshop in Cyprus indicate that Greek and Turkish Cypriots came away from the experience with an enhanced ability to understand the perspective of the other. Research on extended and imagined contact also points to the power of empathy: perspective-taking exercises promote inclusionary behavior toward refugees (Adida, Lo and Platas (2018)) and less prejudice toward ethnic outgroups (Simonovits, Kezdi and Kardos (2018)).

A second pathway through which contact can reduce prejudice is by fostering a common superordinate identity (Dovidio, Gaertner and Saguy (2009), Gaertner et al. (1990)). Gaertner, Dovidio and Bachman (1996) describe this as a changed perception about group inclusiveness, or, in other words, a cognitive shift from us/them to "we" (*ibid.*). In their study of imagined contact between Chinese and Japanese students (a form of indirect contact which asks respondents to imagine an encounter with the outgroup), Wang, Johnston and Wang (2020) find that it reduces perceptions of difference between the two groups. Interestingly, this occurs not only through a change in stereotypes about the outgroup, but also a de-stereotyping of the ingroup, which "produces the potential for a new identity synthesis" and may help dampen the "security dilemma dynamic" (*ibid.*, p.3). This is highly relevant in Cyprus, where individuals may self-identify either using their ethnic identity (Greek Cypriot/Turkish Cypriot) or simply as "Cypriot," which is a more inclusive frame. Ideas about cultural similarity may be particularly important for alleviating perceived symbolic threat to one's culture and way of life Stephan and Stephan (2000).

In sum, through the activation of empathy or through the fostering of a common superordinate identity, we expect intergroup contact to have a prejudice-reducing effect. Here, we explore whether individuals exposed to *extended contact* respond positively to these mechanisms. When a person hears that a fellow ingroup member now has greater empathy for the outgroup or now has new views about her identity, how does the person react?(Adida, Lo and Platas (2018)) We derive an explicit hypothesis:

Hypothesis 1: The prejudice-reducing effects of extended intergroup contact are enhanced when individuals learn of contact's influence on empathy or on shared cultural identity.

Yet, as summarized above, research on extended contact finds that its effects are greater among certain sub-groups. Two traits in particular serve as moderators: (1) a lack of prior experience with direct intergroup contact and (2) high salience of ingroup identity.

Hypothesis 2: Learning of empathy or shared identity through extended contact has a greater effect among individuals for whom salience of ingroup identity is high.

Hypothesis 3: Learning of empathy or shared identity through extended

contact has a greater effect among individuals with less experience of direct contact with the outgroup.

We emphasize that there is nothing obvious about these hypotheses. Research on the psychological effects of intergroup contact also finds evidence of backlash in some circumstances (Riek, Mania and Gaertner (2006)). It may be, as we expect, that learning of others' views about empathy and common identity has a prejudice-reducing effect. But for some, these processes may trigger feelings of threat, cognitive dissonance, or defensive avoidance, leading to a hardening of negative attitudes (Stephan and Finlay (1999), 735-738). Empathy may cut two ways; a recent study of partisanship in the U.S. finds that individuals with high dispositional empathy exhibit less tolerance toward (partisan) outgroups (Simas, Clifford and Kirkland (2020)). Moreover, in societies marked by intractable conflict, deeply-ingrained sociopsychological barriers can "inhibit the penetration of new information that could otherwise facilitate support for peace and reconciliation" (Porat, Halperin and Bar-Tal (2015) 2015, 94). Extended contact may therefore be ineffective; may generate a backlash effect; or may induce divergent effects, reducing prejudice in some and increasing it in others.¹⁰

4 Intergroup Contact in Cyprus

Cyprus was part of the British empire until its independence in 1960. During the independence struggle, Greek Cypriots (then 82% of the population) began to seek union with Greece, which was strongly opposed by the Turkish Cypriot minority (then 18% of the population). In 1974, an uneasy political arrangement between the two communities broke down when a Greece-backed coup prompted the Turkish military to establish control over one-third of the island. A massive transfer of populations ensued, resulting in a near-total partition of the populations, with the Turkish Cypriots residing in the north (later proclaimed as the Turkish Republic of Northern Cyprus) and the Greek Cypriots residing in the internationally-recognized Republic of Cyprus in the south. A UN peacekeeping mission remains on the island to this day to monitor the buffer zone between the two communities. In 2004, Greek Cypriots voted resoundingly to reject an internationally-brokered plan that would unite the island after 30 years of partition. Several attempts to revive internationally-brokered negotiations have since made little progress. Surveys of Greek Cypriots demonstrate support for the idea of a solution in the abstract, but somewhat less support for the specific type of solution—a bizonal, bicommunal federation—that has been the focal point of international negotiations.¹¹

¹⁰Though, existing studies do not generate consistent findings on this point. In a survey experiment conducted on Israeli Jews, Nadler and Liviatan (2006) find that expressions of empathy by a Palestinian leader had a divergent effect: individuals with higher levels of initial trust in the outgroup responded favorably to the empathy treatment, whereas those with low trust responded negatively. Seemingly in contrast, Cohen and Insko (2008), 91) report on an experiment which finds that an outgroup empathy treatment had its strongest positive effect on those with low dispositional empathy.

¹¹Nevertheless, evidence from the Round 9 of European Social Survey released in 2019 shows that 65 per cent of Greek Cypriots are either in favour of BBF or could 'tolerate it if necessary'.

In 2003, authorities lifted travel restrictions at the UN-monitored “Green Line” that divides the island, allowing for single-day crossings. After almost 30 years, individuals were allowed to see parts of their country that had heretofore existed only in their memory or imagination. Millions of peaceful crossings have since occurred. Yet, the impact of open borders on societal attitudes toward reconciliation and a political solution may be quite limited. One reason is that those who cross are likely already more favorably disposed toward Turkish Cypriots. At the same time, a sizeable minority on each side—about 25% of Turkish Cypriots and 35% of Greek Cypriots have never crossed. Among Greek Cypriots, this is due both to political views (the notion that if one crosses, one would recognize an illegitimate state), but also, particularly for young people, to a lack of curiosity or prior social relations with members of the other community. Generations of Cypriots have now grown up on a divided island and know no other reality. Perhaps for this reason, survey research has persistently demonstrated that attitudes toward reconciliation are less favorable among the young than among the old in the Greek Cypriot community in Cyprus (‘Cyprus 2015’ 2011, 2013; Georgiades (2007); PRIO 2007; Yucel and Psaltis (2020)). Second, the type of contact that Cypriots engage in upon crossing tends to be shallow and transactional. Typical purposes for crossing are for sight-seeing, shopping, gambling, or (for Turkish Cypriots) to seek out health care or other administrative services. Few Cypriots report having a friendship with someone from the other community (about 25 per cent of Greek Cypriots and about 40 per cent of Turkish Cypriots in our survey) and meaningful intergroup contact within one’s own neighborhood is low. The communities differ by religion (Orthodox Christian and Muslim) and by language (Greek and Turkish, though English is widely spoken). This poses some challenges for building a shared identity, though leaders on both sides frequently reference the history of living together peacefully prior to the struggles of the 1950s and 60s, which were fueled by outside forces.

Yet, forty years on, a political solution to the ‘Cyprus problem’ (the term used to describe the division of the island since 1974) remains dogged by both sides’ inability or unwillingness to compromise on key issues. These include the presence of Turkish troops in Northern Cyprus, the property rights of refugees from the 1974 conflict, and the nature of political quotas and guarantees for the Turkish Cypriot minority. Sixteen years since the opening of the check points, there has been little progress, and the public remains pessimistic about the prospects for peace and reconciliation (Cyprus 2015 2011, PRIO 2007). In a 2010 survey, only a minority of respondents in both communities expressed a belief that the Cyprus problem would be solved (UNDP 2010). Our survey of Greek Cypriot adults, implemented in 2015, reveals a minority of respondents who would either “lean toward” or “almost certainly” vote ‘Yes’ on a hypothetical solution to the Cyprus problem; and we find lower expressed preference (34% of Greek Cypriots) for the type of solution that is the focal point of negotiations between the two sides, that of a bizonal, bicomunal federation. An interesting feature of public opinion among Greek Cypriots is that women and young people consistently express lower support for a solution, as we discuss further below. The question remains: if meaningful, large-scale intergroup contact could be achieved, how might it change these underlying attitudes?

Our own research using bicomunal discussion groups in Cyprus lends support to the importance of the two mechanisms: *empathy* and *common identity*.¹² First, among Greek Cypriot participants, empathetic perspective-taking was common. For example, one expressed that *“Turkish Cypriots don’t have as many [economic] opportunities as we do”*,¹³ another that *“from what I know, even TCs lost their homes and fled. Some of them lived the same thing”*,¹⁴ and another that *“it’s not just us who suffered in 1974. Turkish Cypriots also had a lot of struggle before and after that”*.¹⁵ In another instance, a 20-year old Greek Cypriot female expressed empathy after her realization of the difficulties that Turkish Cypriots face from living in a society that is under economic sanctions and is not recognized by the international community. She stated:

“I can understand. I never thought of it that way. I agree that to not be recognized is wrong. People who were born there [in Northern Cyprus], it is not their fault. This has changed my mind. I never thought of it this way. As a Greek Cypriot, I always thought that we are not supposed to recognize the other side, but to hear you say that this situation doesn’t allow you to use your potential, it makes me think that this is an injustice to you.”

Second, through the expression of cultural similarity, identification with a common pan-Cypriot identity often emerged. One female Turkish Cypriot participant expressed that: *“[W]e eat the same food, we have the same history, we have the same traditions and functions. I know that Cypriots all talk loud. . . . Apart from the language, I see ourselves as the same.”* To which another Turkish Cypriot interjected, *“. . . even the tone of voice we use. We have lots of things in common even though it is not always that visible.”*

A Greek Cypriot explained the importance of recognizing commonalities: *“Once I became close with one or two Turkish Cypriots, I came to realize how similar we are, how what I have been told has another side. . . .”* Such proclamations were typically met by expressions of affirmation. A Greek Cypriot related her experience thus:¹⁶ *“It’s actually once we travel outside Cyprus and see how different we are from other cultures. . . . even though sometimes we don’t want to accept it, we are very very similar to Turkish Cypriots.* Below, we build from this inductive evidence to design an experiment to test the impact of empathy and a common identity via extended contact.

¹²The discussion groups brought individuals from the two sides of the island together in a neutral space: the Home for Cooperation, a meeting space in the UN-administered buffer zone in central Nicosia. Subjects, aged 18-30, were recruited from both the Greek Cypriot and Turkish Cypriot communities, and were randomly assigned to either an ethnically mixed or homogenous group. Subjects were guided by a moderator to work together to (a) identify the most important challenges facing young people in Cyprus today, and (b) discuss opposing views about the importance of finding a “solution” to the Cyprus problem. Further details on results of the study will be featured in a separate manuscript.

¹³Subject 5, Track 3.

¹⁴Subject 1, Track 1.

¹⁵Subject 6, Track 5.

¹⁶Track 5

5 Experimental Design

We conducted a survey of 518 Greek Cypriot adults in July 2015. The survey was administered by the University of Cyprus Centre for Field Studies using stratified random sampling and was nationally representative with respect to gender, education, age and region of residence.¹⁷ It was conducted in Greek by telephone (both land line and mobile phones), with an average length of 12 minutes. Survey questions covered basic demographic information, views about Turkish Cypriots, and views about the Cyprus Problem. The experiment was embedded into the survey following initial questions about demographics and moderating variables. The experimental design is as follows. All respondents were informed about a hypothetical scenario in which young people from the Greek and Turkish Cypriot communities came together.¹⁸ This basic information constituted the control condition:

Control: Recently a program was held in the buffer zone in Nicosia to promote interaction between young Greek Cypriots and Turkish Cypriots. After the program, the participants mostly had positive things to say.

One-third of respondents were read the control condition and nothing else. Those randomly assigned to one of the two treatments were then read the following:

Treatment 1 (Empathy): For example, many Greek Cypriots said that interacting with Turkish Cypriots made them realize that Turkish Cypriots have suffered greatly as a result of the Cyprus problem.

Treatment 2 (Cultural Similarity): For example, many Greek Cypriots said that interacting with Turkish Cypriots made them realize that Greek and Turkish Cypriots have similar cultures and values.

We designed the vignettes to mirror how extended contact is experienced in the real world. When an individual tells fellow co-ethnics about her contact experience, she is likely to describe the feelings and reactions that the encounter produced; she may express how it changed her perspective, or how it fostered new beliefs about cultural similarities.

We emphasize that because all of our respondents receive the basic description of the intergroup contact program, our experiment is not designed to assess the effect of extended contact relative to a control condition of no information. The general impact of extended contact has been the subject of substantial prior research which we do not seek to re-evaluate here (though we do present descriptive evidence on this point using an

¹⁷Strata were defined by region and urban-rural. Men and women were equally represented within each strata, and the overall sample was nationally representative with respect to age and education. See Appendix Table A2 for details.

¹⁸The experiment contains no deception, as it provides only general information about the real contact sessions that had been held that year.

outcome variable that was administered before and after the experiment on our survey). Rather, the goal of our experimental design is to assess reaction to the pathways—empathy and shared identity—through which extended contact may work relative to the control condition which does not describe the specific effects of the program. Our treatments may therefore be considered by design weak, in the sense that any baseline negative (or positive) reaction to intergroup contact would already be elicited by our control condition, which features a generic positive description of contact. An essential advantage of this research design is that it should eliminate experimenter demand effects. That is, social desirability bias—if present—should manifest itself even in the control group: if individuals perceive that we desire positive reactions to intergroup contact, and seek to answer accordingly, this type of bias would be present across both treatment and control groups. The effect of our treatments represents an additional reaction (positive or negative) to learning about the specific influence that the contact program had on its participants.

We also note that, by design, both of our treatments cue social identity, by referencing what “many Greek Cypriots” said about their contact experiences. This is consistent with prior findings that extended contact works by activating social identity and altering beliefs about ingroup norms (Turner et al. (2008); Dovidio, Eller and Hewstone (2011); Cameron et al. (2011)). Thus, social pressure may contribute to the effect of our treatments (collectively) relative to the control, but would not explain any difference between the two treatments.

In total, 186 respondents were assigned to the control group, 178 to Treatment 1 (empathy) and 150 to Treatment 2 (cultural similarity). A power analysis confirms that this sample size is appropriate for detecting even small treatment effect sizes at a power level of 0.8 (see Appendix 1). Table A1 (Appendix 2) shows that the randomization process was sound. There were no statistically significant differences in gender, age, political orientation or income across the treatment and control groups. For this reason, control variables are not needed in our models in order to assess the effect of the treatments. We nevertheless include controls for age, gender, rural residence, education and income in our models, in order to show their relationship with the outcome variables.¹⁹

6 Outcome Variables and Moderators

We employ two primary outcome measures. (1) Immediately following the experiment, we asked respondents to rate on a 5-point scale whether they agree or disagree with the statement: “More social interaction between Greek and Turkish Cypriots is a good thing.” This question is intended to elicit the subject’s immediate response to the experiment by directly asking their views on the desirability of greater contact between the two communities. (2) Next, later in the survey, we asked the respondents whether they believed

¹⁹See Appendix 1 for a detailed description of how the control variables are coded. Appendix B1 and B2 report results of models with no control variables.

that “most Turkish Cypriots can be trusted.”²⁰ For both variables, higher values indicate stronger agreement with the statement. Taken together, these outcome variables measure attitudes that are important for building public support for a political solution to the ‘Cyprus problem,’ and for promoting reconciliation. Numerous studies have documented a decline in social and intergroup trust as a consequence of civil war (De Luca and Verpoorten (2015), Ingelaere and Verpoorten (2020), Kijewski and Freitag (2018)), although ingroup trust is less affected and may even increase in response to violence (Gilligan, Pasquale and Samii (2014); Bauer et al. (2016)). If trust *among groups* can be strengthened, this may contribute to solving the credible commitment problems that so often plague negotiations after civil conflict.

Pooling across the experimental conditions, we find that baseline support for social interaction between the two communities (our first dependent variable) is an average of 3.8, on a scale from 1 to 5. The average for the view that Turkish Cypriots can be trusted is 3. Thus, responses for trust skew more negative than support for social interaction.

To test hypotheses 2 and 3, we employ three survey questions as moderating variables,²¹ and we investigate whether they condition the effect of our treatments. Our goal in selecting these moderators is to explore the insight that extended contact may have a greater effect among individuals for whom in-group identity is highly salient (hypothesis 2), and among those with little experience of direct contact (hypothesis 3). We note that these factors should, on the whole, capture individuals that are less favorably predisposed toward the outgroup, and we focus on behavioral or demographic indicators that do not reflect self-reported attitudes toward Turkish Cypriots.

Informed by contextual knowledge of Cyprus, we capture the salience of ingroup (ethnic Greek) identity with a self-reported measure of religiosity. We create a dummy variable for respondents who report that religion is ‘very important’ to them, approximately 50% of the sample.²² Research on the relationship between religion and prejudice has shown that strong religious identification is generally associated with intolerance towards out-groups (Altemeyer (2009); Whitley Jr (2009); Hall, Matz and Wood (2010); Batson (2013); Kanas, Scheepers and Sterkens (2017))²³ and resistance to compromise in ethno-political conflicts (Canetti et al. (2019)). Religion is a salient feature of the Cyprus conflict, and there is close association between religion and nationalism among Greek Cypriots. “Hellenism and Orthodoxy are interlinked and form part of [Greek Cypriot] national identity” (Hadji-pavlou (2007), 357). In addition, the Church of Cyprus—a wealthy and politically powerful institution—has played a prominent and largely obstructive role in the conflict, with its historical advocacy of enosis—unification with Greece (*ibid.*) and more recent anti-federalist attitude. As expected, in our survey, religiosity is associated with more negative feelings

²⁰In survey research from Northern Ireland and Cyprus, McKeown and Psaltis (2017) and Kenworthy et al. (2016) similarly focus on future contact intentions and outgroup trust as key outcomes of interest.

²¹These questions appeared on the survey before the experiment.

²²Respondents indicated how important religion is for them on a scale from 1 (unimportant) to 5 (very important).

²³Though some studies highlight that the negative impact of religion may be mediated by specific beliefs. See Burch-Brown and Baker (2016)

towards the ‘other’. Among those with high religiosity, 28% support the idea that Turkish Cypriots can be trusted, compared to 44% among the less religious.

Second, to capture a lack of contact with Turkish Cypriots, we create a dummy variable for respondents who report never having crossed to the North (approximately 35% of our sample). This is a key behavioral indicator of resistance to intergroup contact. Many Greek Cypriots refuse to visit the North for political reasons such as not wanting to legitimize the government in the North, as well as pay money to local merchants there (Dikomitis (2005)). It has long been argued that ethnic boundaries are more easily maintained when there is little contact between social groups (Allport (1954)). Our survey confirms that Greek Cypriot respondents that have never crossed to the north are less likely to find Turkish Cypriots trustworthy (25% compared to 42% among those that have crossed). It is, of course, difficult to ascertain the direction of the causal arrow. It is possible that those who already hold negative views about the Turkish Cypriots refrain from visiting the North.

Third, we analyze age as a moderating variable. Young generations in Cyprus have grown up on a divided island, with no direct experience of living with Turkish Cypriots. We use a dummy variable for respondents aged 18-34. Expectedly for the Cyprus context (though perhaps unexpectedly in general), surveys consistently find that older Greek Cypriots hold more positive views toward Turkish Cypriots than the young.²⁴ This is largely due to the idea among older Greek Cypriots of peaceful inter-ethnic coexistence prior to the 1974 conflict. The education system may also be deepening the ethnic divide among young people. On both sides of the island, youth has been exposed to a heavily nationalist curricula (Hadjipavlou (2007) 2007). In our discussion groups, for example, some young participants criticized the “Greek-centered idea of history” that they have been exposed to in schools and how the Turkish Cypriots are portrayed as enemies. This result also mirrors those of Hodson, Sekulic and Massey (1994)’s study of former Yugoslavia, where they find that younger respondents are less tolerant of other ethnic groups.

7 Findings

Because our dependent variables take the form of 5-point ordinal scales, we use ordered probit models. Recall that higher values indicate stronger support for social interaction and stronger intercommunal trust. Our base model simply includes a dummy variable for each treatment (with the control group as the omitted category), as well as the control variables.²⁵ Subsequent models include interaction terms between the treatments and our moderating variables, in the following form:

²⁴Yet, interestingly, for Turkish Cypriots the opposite is true: older Turkish Cypriots are more opposed to a solution than the younger (Psaltis et al. (2019))

²⁵Appendix B1 and B2 present models without controls and all results for the treatments and moderators are substantively the same

$$\begin{aligned}
Y_i = & \alpha + \beta_1 \text{CultureTreatment}_i \\
& + \beta_2 \text{EmpathyTreatment}_i \\
& + \beta_3 \text{Moderator}_i \\
& + \beta_4 \text{Culture} * \text{Moderator}_i \\
& + \beta_5 \text{Empathy} * \text{Moderator}_i \\
& + \beta_x \text{Controls}_i + \epsilon_i
\end{aligned}$$

The coefficients on the interaction terms is central to testing our hypotheses, because these tell us whether the treatment exhibits a different effect across the moderator groups.

In Tables 1 and 2 (model 1), we find that neither the empathy nor culture treatments have a direct, unmediated effect on attitudes, relative to the control condition. Recall, as discussed, that our treatments may not engender a large difference on average, since the control group already receives generic information about a positive encounter between ingroup and outgroup members. Results for the controls also consistently show that young respondents (age 18-34) and women are less supportive of interaction with Turkish Cypriots and are less likely to view Turkish Cypriots as trustworthy (the variable for ‘male’ gender is positive and statistically significant in both Tables). This is consistent with longstanding findings in survey research about the attitudes of women and young people in Cyprus,²⁶ as discussed further below. The more negative attitudes among women have been linked to their stronger fear of renewed conflict and identity erosion.²⁷

We now explore whether our treatments have heterogeneous effects depending on the salience of ingroup identity (hypothesis 2) and the level of prior intergroup contact (hypothesis 3). Models 2-4 in Tables 1 and 2 show the results. Recall that the baseline (omitted) category in these models is the control group. Thus, the coefficient for each treatment is relative to the control. The key test of our hypotheses 2 and 3 is represented by (1) the interaction terms, which indicate whether the treatment exhibited an effect that was significantly different across the moderator groups. We also test (2) the significance of the treatments *within* groups, by testing the sum of the constituent and interaction terms, i.e., we test whether the culture treatment was significant within the high religiosity group. We adjust all tests for multiple comparisons using the Bonferroni method.

We do find evidence of heterogeneous effects which indicate that our treatments have a positive effect in sub-groups that are initially more negatively disposed towards Turkish Cypriots. Most notably, the effect of cueing cultural similarity differs depending on

²⁶The “Score” project provides public access to a number of surveys (<https://www.scoreforpeace.org/en/cyprus/2015-General>).

²⁷See the “Cyprus 2015” policy brief on gender participation in peace talks: https://www.scoreforpeace.org/files/publication/pub_file/PB_Cyprus13_GenderPolicyBrief_20190107.pdf. We investigated whether our treatments are moderated by gender, but did not find any significant results. We conclude that Greek Cypriot women hold more negative views toward Turkish Cypriots on average, but that the empathy and cultural treatments do not exert a different effect on women.

TABLE 1: Effect of Treatments on Support for Intergroup Social Interaction

Independent Variable	Models			
	I	II	III	IV
Treatment: Culture	-0.076 (0.128)	-0.473*** (0.180)	-0.115 (0.159)	-0.109 (0.154)
Treatment: Empathy	-0.135 (0.120)	-0.265 (0.175)	-0.259* (0.151)	-0.013 (0.148)
Religiosity		-0.469*** (0.176)		
Culture*Religiosity		0.812*** (0.259)		
Empathy*Religiosity		0.236 (0.244)		
Never Crossed			-0.678*** (0.187)	
Culture*Never Crossed			0.180 (0.272)	
Empathy*Never Crossed			0.436* (0.259)	
Culture*Age(18-34)				0.112 (0.275)
Empathy*Age(18-34)				-0.362 (0.256)
Age (18-34)	-0.352*** (0.109)	-0.395*** (0.111)	-0.360*** (0.111)	-0.251 (0.181)
Male	0.415*** (0.102)	0.386*** (0.105)	0.404*** (0.104)	0.435*** (0.103)
Rural	-0.029 (0.114)	-0.033 (0.115)	-0.036 (0.115)	-0.026 (0.114)
Education	0.167 (0.116)	0.102 (0.120)	0.187 (0.118)	0.168 (0.116)
Income	0.003 (0.046)	0.010 (0.047)	0.008 (0.046)	0.001 (0.046)
Location (Non-nicosia)	0.030 (0.105)	0.032 (0.107)	0.095 (0.107)	0.019 (0.105)
N	454	453	454	454

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

TABLE 2: **Effect of Treatments on Intergroup Trust**

Independent Variable	Models			
	I	II	III	IV
Treatment: Culture	-0.030 (0.125)	-0.385** (0.174)	-0.067 (0.153)	-0.044 (0.149)
Treatment: Empathy	-0.039 (0.118)	-0.298* (0.168)	-0.062 (0.147)	0.117 (0.143)
Religiosity		-0.778*** (0.174)		
Culture*Religiosity		0.711*** (0.254)		
Empathy*Religiosity		0.518** (0.240)		
Never Crossed			-0.495*** (0.184)	
Culture*Never Crossed			0.149 (0.271)	
Empathy*Never Crossed			0.148 (0.256)	
Culture*Age(18-34)				0.058 (0.274)
Empathy*Age(18-34)				-0.501** (0.256)
Age (18-34)	-0.217** (0.109)	-0.266** (0.111)	-0.206* (0.110)	-0.052 (0.179)
Male	0.437*** (0.102)	0.384*** (0.104)	0.430*** (0.102)	0.464*** (0.102)
Rural	0.071 (0.113)	0.043 (0.113)	0.065 (0.113)	0.072 (0.113)
Education	0.172 (0.115)	0.046 (0.119)	0.187 (0.115)	0.178 (0.114)
Income	-0.029 (0.045)	-0.031 (0.046)	-0.026 (0.046)	-0.033 (0.045)
Location (Non-nicosia)	-0.117 (0.104)	-0.114 (0.105)	-0.071 (0.105)	-0.131 (0.103)
N	450	449	450	450

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

religiosity, and this difference is significant at $p=0.001$ and 0.036 respectively (Bonferroni adjusted tests of the interaction terms, Tables 1 and 2).²⁸ Examining within groups, although the culture treatment has a negative effect on non-religious respondents (a result about which we did not have an a priori expectation), it has a positive effect on both dependent variables among the very religious (model 2, Tables 1 and 2).²⁹ Recall that this is a substantial number of people: nearly 50% of our sample report that religion is ‘very important’ to them. In sum, among the religious, respondents who received the culture treatment were more likely to support social interaction with Turkish Cypriots and to express trust in the other community, compared to those in the control group. Figures 1A and 1C illustrates these findings, graphing predicted probabilities of support for interaction and trust across treatment groups *among the very religious*. In Figure 1A, for example, there is an increase of 0.09 (or 9% of respondents) in the probability of agreeing with the statement that “more social interaction between Greek and Turkish Cypriots is a good thing.” In fact, this effect is driven primarily by a large increase of 13% in those that *strongly* agree. (We collapse the 5-point response scale to three categories in Figure 1 for ease of interpretation). Figure 1C shows that the culture treatment is associated with a 7% decline in those disagreeing with the statement “most Turkish Cypriots can be trusted” and a 6% increase in those agreeing.

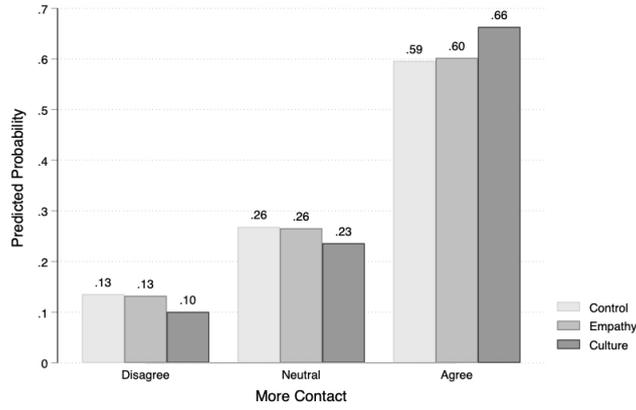
Results for the empathy treatment are more mixed. On the one hand, it does exert a significantly different effect depending on whether the respondent has crossed to the North (interaction term, model 3, Table 1).³⁰ Among those that have never crossed (which, recall, are less favorably disposed toward contact to begin with), the empathy treatment is positively associated with increased support for intergroup social interaction. Figure 1C illustrates this effect. Compared to the control group, the empathy group exhibits 12% higher support for intergroup social interaction. On the other hand, the empathy treatment exhibits a negative impact on trust among the young (Table 2 model 4). This is the only evidence of ‘backlash’ that we find. As mentioned above, the young generation of Greek Cypriots has no experience of interethnic co-habitation, and they have been subject to nationalist school curricula. The findings from our discussion groups (where the participants were between ages 18-30) provide suggestive evidence that direct, more meaningful contact with outgroup members, in a non-threatening setting, can help reduce the biases of Greek Cypriot youth (see also Yucel and Psaltis (2020) for similar findings).

On the whole, these results support prior research which finds that extended contact works best on those for whom ingroup identity is salient (Dovidio, Eller and Hewstone (2011)), who attach high importance to social norms (as our highly religious sub-sample does) (Sharp, Voci and Hewstone (2011)), and which have less experience with direct contact (Eller, Abrams and Zimmermann (2011); Dhont and Van Hiel (2011); Cameron et al. (2011)). These are groups which we might otherwise expect to be resistant to changing

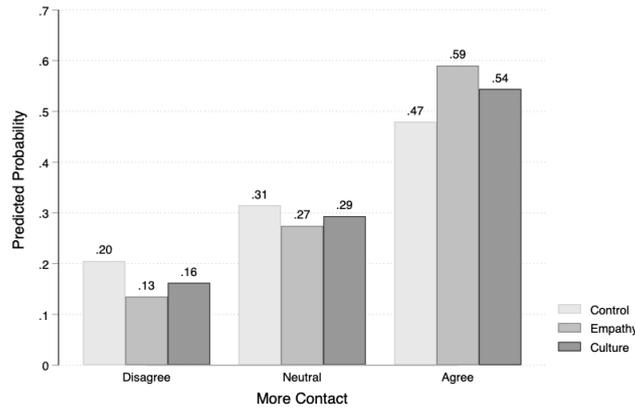
²⁸This result also holds when we use a feeling thermometer as the dependent variable. Results available by request.

²⁹We confirmed that this effect is marginally significant at $p=0.1$ and $p=0.14$, testing the sum of the constituent and interaction terms for the culture treatment.

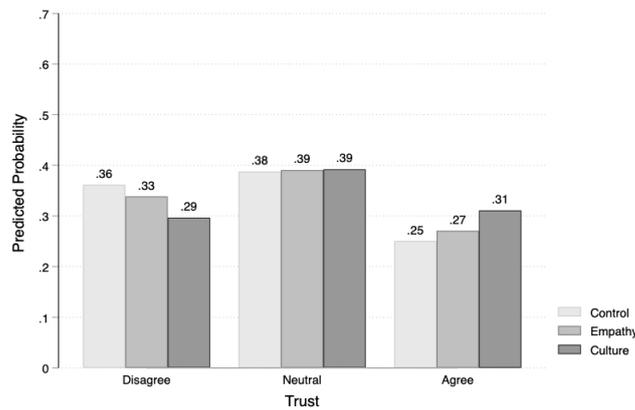
³⁰the interaction term is significant at $p=0.09$ using the Bonferroni adjustment for multiple comparisons.



(A) Dependent Variable: Support for Interaction (High Religiosity)



(B) Dependent Variable: Support for Interaction (Never Crossed)



(C) Dependent Variable: Trust (High Religiosity)

FIGURE 1: Marginal Effects of Treatments for Different Subgroups. *Disagree* indicates 'disagreeing' or 'strongly disagreeing', *Neutral* indicates 'neither disagreeing nor agreeing', and *Agree* indicates 'agreeing' or 'strongly agreeing' with the following statements: "Do you feel that more social interaction between Greek and Turkish Cypriots is a good thing?" (**Interaction**) "Would you say that most Turkish Cypriots can be trusted?" (**Trust**)

their views. This is encouraging from a peacebuilding perspective and is in contrast with findings from some studies of *direct* contact (e.g. [Yogev, Ben-Yehoshua and Alper \(1991\)](#), [Nadler and Liviatan \(2006\)](#)), which suggest that contact is more effective among those more positively predisposed toward the outgroups.³¹ Compared to direct contact, then, extended contact may be particularly well-suited to post-conflict contexts as a less threatening first step toward mollifying attitudes toward the ethnic 'other.'

Our findings are also consistent with classic dissonance theory ([Festinger \(1954\)](#)). It is argued that "group identification and intensity of religious beliefs will strengthen in the face of a perceived epistemic or existential threat" ([Powell and Clarke \(2013\)](#), 20). Our culture treatment, which downplays the differences and stresses the commonalities between the two communities, may be promoting intergroup tolerance by alleviating these threat perceptions. [Hodson \(2011\)](#) reports similar results in his study of the threat-reducing effects of intergroup contact on intolerant and 'cognitively rigid' individuals.

8 Alternative Explanations and Robustness Checks

It is important to consider whether past exposure to violence may influence ideas about intergroup contact and about Turkish Cypriots generally. Several studies find that the trauma of political violence is passed down through generations and has a long-term effect on political attitudes ([Canetti et al. \(2013\)](#); [Hong and Kang \(2017\)](#); [Lupu and Peisakhin \(2017\)](#)). In the Cyprus context, status as a "refugee"—meaning that one's family was forcibly displaced during the 1974 conflict—remains a highly politically salient identity. To investigate this, we create an indicator for refugee status using a question on our survey which asked respondents whether they or their parents were "born in areas currently under control of the other community." We find that this variable has no significant association with either of our dependent variables, nor is it a significant moderator of our treatments.³² In the Cyprus context, the relationship between refugee status and political attitudes is complex. Refugee families were directly affected by the conflict and, as a group, remain most attached to the notion that any political solution must restore their property rights in North Cyprus; yet, such families also tend to have a history of living in proximity to Turkish Cypriots prior to 1974, and a powerful narrative among these communities attributes the conflict to outside forces rather than to inherent incompatibilities between Greek and Turkish Cypriots. One recent study finds that Greek Cypriot refugees are more ready to support compromises in a political solution than are other Greek Cypriots ([Psaltis et al. \(2020\)](#)). In short, past (familial) exposure to violence in Cyprus does not have a clear unidirectional effect on attitudes toward Turkish Cypriots.

We next undertake a check to investigate whether the effects of our treatments are moderated by alternative measures of prior exposure to Turkish Cypriots. Within Cyprus,

³¹We also ran models using self-reported views toward Turkish Cypriots as a moderator, but we find that neither the empathy nor the culture treatment has an effect on respondents that hold more favorable initial views of Turkish Cypriots. Results not shown.

³²Results available by request.

one’s region and area of residence influences both how easy it is to cross to the North, as well as likely exposure to Turkish Cypriots. It may be that respondents in regions more distant from the crossing points exhibit different reactions to our treatments: For these individuals the status of having never crossed to the North is less a matter of choice than a matter of inconvenience. We re-run our models using an indicator for Nicosia urban dwellers as a moderator (Appendix B3). We find, however, that it has no significant effects. We run analogous tests using an indicator for (a) those outside the Nicosia region and for (b) rural vs. urban residents, but results are not significant.

9 Conclusion

In intractable ethnic conflicts, intergroup trust increases the public’s willingness to support the difficult compromises that are necessary for successful and durable peace deals (Kijewski and Rapp (2019)). Yet, reducing prejudice can be a confoundingly difficult task in deeply divided societies. For this reason, forms of indirect intergroup contact, including extended contact, are of growing interest to scholars and practitioners. These interventions can be surprisingly straightforward to implement. Simply asking people to imagine positive contact with outgroups can reduce anxiety and encourage direct contact (Miles and Crisp (2014)). Extended contact—informing people of the positive contact experiences of others—can reshape views about ingroup norms of tolerance (Dovidio, Eller and Hewstone (2011); Turner et al. (2008)): if I believe that fellow ingroup members have positive views toward the outgroup, I am more likely to adopt those views myself.

Yet, much work remains to understand what kind of information makes for the most effective extended contact interventions, particularly in a conflict setting where negative views of the other can be highly entrenched. For example, does it help to hear that one’s neighbor now empathizes with the plight of the outgroup? Or does this create a backlash as one is confronted with dissonant views? Here, we have shed new light on these questions by examining the pathways through which extended contact works, as well as whether different information treatments are more effective among certain segments of the population.

While we do not find a significant effect of our treatments on average, we do find that they have effects among very religious individuals and among those with less experience of direct contact—both groups which exhibit lower initial levels of trust and tolerance toward the outgroup in Cyprus. Our clearest result, in fact, is that learning about a sense of shared cultural identity with Turkish Cypriots had an impact on attitudes *highly religious* Greek Cypriots, which is correlated in the Cyprus context with the salience of ethnic (Greek) identity and with less support for political concessions to the other side. We also find, perhaps surprisingly, that the empathy treatment—learning that contact induced an understanding of the suffering of the other community—had an effect among those Greek Cypriots that have chosen to never cross into the Turkish Cypriot area.

Our analysis therefore provides reason for cautious optimism about the efficacy of

extended intergroup contact as a tool of peacebuilding in ethnic conflicts, and it provides specific findings as to which interventions may work best—and which to avoid—among particular groups. At minimum, we suggest that extended contact holds promise for softening attitudes among the more intransigent parts of the population. Given the relative simplicity and low risk of this type of intervention—which does not require any movement of people across borders or indeed any face-to-face contact at all—our results certainly lend support for its use in conflict settings, perhaps even in preparation for more elaborate attempts to promote direct contact among populations.

That our experiment was conducted in a longstanding conflict that has bedeviled many attempts to find a solution is also encouraging in terms of the generalizability of our findings to other cases. Beyond Cyprus, the clearest implications of this study are for other intractable conflicts characterized by the physical separation of ethnic groups. Post-Soviet conflicts are, like Cyprus, also marked by secessionist claims and heavy involvement of external powers, including Abkhazia and South Ossetia in Georgia, Transnistria in Moldova, and the Nagorno-Karabakh dispute between Azerbaijan and Armenia. In other cases like Bosnia-Herzegovina and Rwanda, divided societies face the challenge of trying to build a national identity in the wake of genocidal violence, with clear parallels to the interplay between ethnic and pan-national (Cypriot) identity in Cyprus. We also find parallels to the Israeli-Palestinian conflict, where scholars have long seen a role for intergroup empathy in generating societal support for a political solution (see for example [Bashir and Goldberg \(2014\)](#), [Nadler and Liviatan \(2006\)](#)). Ultimately, durable solutions in these cases will require agreement among political elites and the crucial support of outside powers, but building public support for compromise remains an essential underlying step.

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10 Appendix 1. Analysis of Statistical Power

We undertake a power analysis, inputting a desired power target of 0.8 and an alpha level of 0.10.³³ With a dependent variable measured as a 5-point Likert scale, we assume modest effect sizes of either 0.5 or (smaller) 0.3 and a standard deviation of 1 for the dependent variable. Under these parameters: given an effect size of 0.5, a sample size of 99 is needed in order to achieve the 80% power target; and given an effect size of 0.3, a sample size of 275 is needed. Recall that our survey had 518 participants randomly assigned to either the control or the two different treatments. Taking each treatment separately (as a comparison to the control group), our sample size of 330-360 (i.e., 150/172 in the treatment and 186 in the control) exceeds the threshold suggested by the power analysis. If the treatment effect size is a smaller 0.2, the necessary sample size increases to 619. Thus, we expect our experiment to be adequately powered for most reasonable estimates of treatment size, but it would be under-powered to detect very small treatment effects.

The Control Variables

Rural is a dummy variable, where a respondent is coded 1 if they live in a rural area, 0 otherwise. **Education** is a dummy variable where a respondent is coded 1 if they have completed secondary education, and 0 otherwise. **Income** is an ordinal variable ranging from 1 to 6. Respondents are coded 1 if their monthly income is between €250 and €800, 2 if their monthly income is €801 and €1700, 3 if their monthly income is between €1701 and €2600, 4 if their monthly income is between €2601 and €4300, 5 if their monthly income is between €4301 and €6000 and 6 if their monthly income is more than €6000. **Location** is a dummy variable indicating whether the respondent lives in Nicosia

³³All calculations are performed using EGAP's power calculator: https://egap.shinyapps.io/Power_Calculator/.

11 Appendix 2. Descriptive Statistics and Balance

TABLE A1: Balance Test³⁴

Variable	Control (N=186)	Empathy (N=178)	Culture (N=150)	<i>Prob>F</i>
Gender (Male)	0.45	0.48	0.50	0.65
Age	45.01	46.34	45.45	0.79
Religiosity	0.50	0.49	0.47	0.86
Education (Post-Secondary)	0.51	0.46	0.49	0.62
Income	2.68 (N=164)	2.62 (N=160)	2.63 (N=131)	0.88
Ideology ³⁵	3.31 (N=133)	3.42 (N=121)	3.16 (N=106)	0.50

³⁴Results based on one-way analysis of variance (ANOVA) tests.

³⁵This is a 7-point categorical variable that ranges from 'far left' to 'far right'

TABLE A2: Representativeness of the Sample

District	Total Population	2011 Census		Target # Respondents		Actual # Respondents	
		% Urban	% Rural	Urban	Rural	Urban	Rural
Nicosia	223,293	72	28	145	57	159 (m=73, f=86)	54 (m=26, f=28)
Limassol	120,598	77	23	109	33	114 (m=57, f=57)	33 (m=13, f=20)
Larnaka	94,472	59	41	50	36	51 (m=27, f=24)	33 (m=18, f=15)
Paphos	47,473	67	33	29	14	29 (m=17, f=12)	14 (m=5, f=9)
Ammoxostos	30,013		100	0	27	0	27 (m=12, f=15)
Total	552,243						

12 Appendix 3. Robustness Checks

TABLE B1: Dependent Variable: Support for Interaction

Independent Variable	Models			
	I	II	III	IV
Treatment: Culture	-0.060 (0.118)	-0.399** (0.167)	-0.119 (0.146)	-0.078 (0.147)
Treatment: Empathy	-0.126 (0.112)	-0.268* (0.161)	-0.259* (0.140)	-0.039 (0.140)
Religiosity		-0.462*** (0.160)		
Culture*Religiosity		0.671*** (0.238)		
Empathy*Religiosity		0.260 (0.226)		
Never Crossed			-0.648*** (0.173)	
Culture*Never Crossed			0.278 (0.250)	
Empathy*Never Crossed			0.477** (0.238)	
Age (18-34)				-0.287* (0.165)
Culture*Age(18-34)				0.049 (0.246)
Empathy*Age(18-34)				-0.248 (0.235)
N	512	511	512	512

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

TABLE B2: Dependent Variable: Trust

Independent Variable	Models			
	I	II	III	IV
Treatment: Culture	-0.024 (0.116)	-0.305* (0.162)	-0.083 (0.142)	-0.004 (0.143)
Treatment: Empathy	-0.056 (0.111)	-0.233 (0.156)	-0.097 (0.137)	0.075 (0.136)
Religiosity		-0.709*** (0.157)		
Culture*Religiosity		0.554** (0.234)		
Empathy*Religiosity		0.350 (0.223)		
Never Crossed			-0.544*** (0.171)	
Culture*Never Crossed			0.258 (0.249)	
Empathy*Never Crossed			0.232 (0.236)	
Age (18-34)				-0.146 (0.163)
Culture*Age(18-34)				-0.066 (0.246)
Empathy*Age(18-34)				-0.401* (0.235)
N	509	508	509	509

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

TABLE B3: The Effect of Location

Independent Variable	DV: Contact	DV: Trust
Treatment: Culture	-0.092 (0.173)	-0.115 (0.139)
Treatment: Empathy	-0.151 (0.137)	-0.161 (0.135)
Nicosia Urbanite	-0.099 (0.169)	-0.092 (0.166)
Culture*Nicosia Urbanite	0.100 (0.260)	0.312 (0.255)
Empathy*Nicosia Urbanite	0.077 (0.240)	0.312 (0.236)
N	512	509

Standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$