

THE MICRO-MOTIVES OF INTERGROUP AGGRESSION: A CASE STUDY IN ISRAEL

by
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Dedicated to:

Wendy,

for making life a wonderful adventure...

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ABSTRACT

THE MICRO-MOTIVES OF INTERGROUP AGGRESSION: A CASE STUDY IN ISRAEL

by

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This dissertation has two main goals. First, it seeks to identify the micro-motives behind individual support for and engagement in aggression against members of an outgroup. It provides evidence that these motives stem from a particular set of beliefs individuals hold regarding their ingroup and the outgroup. It shows that in Israel, individuals who have “group justifying beliefs” are much more prone to support or engage in aggression against an outgroup, even when controlling for the effect of other, more traditional explanators of intergroup violence. After defining these beliefs and presenting an index to measure them (the *Group Justification Index*, or *GJI*), the first part of the dissertation provides evidence that these beliefs predict support for or engagement in aggression against an outgroup. It also highlights three mechanisms behind the relationship between these beliefs and aggression, showing that individuals with group justifying beliefs are more prone to 1) see ambiguous behavior by the outgroup as purposeful aggression directed towards their ingroup, 2) engage in higher levels of zero-sum thinking, and 3) justify aggression against the outgroup than are those who do not hold these beliefs.

Second, this dissertation deals directly with the practicalities of intergroup conflict resolution. Building on the results in the first section of the dissertation, the second and third sections provide evidence that individuals with group justifying beliefs in Israel—those prone to engage in and support aggression against an outgroup—tend to react *negatively* to *positive*, humanizing contact with the outgroup. This suggests that for many of these individuals, an approach to conflict resolution based on the “contact hypothesis” will not yield desired results. The final chapter of the dissertation delves deeper to identify key characteristics and experiences that explain why individuals with group justifying beliefs respond in this counter-intuitive manner. The dissertation concludes with a brief discussion of the import of these findings for the study of intergroup conflict and for conflict resolution. Together, these three studies highlight the importance of individual beliefs in motivating individual acts of aggression against members of an outgroup. They also suggest means for improving attempts at conflict resolution.

CHAPTER I

Introduction

On the evening of September 11, 2009, a group of men emerged from prayer at the Western Wall to return to their homes. On their way, they met a group of Palestinians. What happened next is open to debate. One of the men, a 20-year-old off-duty soldier in the Israeli Defense Forces, felt threatened and would afterwards claim that the Palestinians were about to attack. Consequently, he opened fire, wounding a 13-year-old boy and a 40-year-old Palestinian man in the group. His actions would serve as the spark that would ignite riots lasting nearly two weeks, igniting a “tit-for-tat” spiral of violence between Jewish-Israelis and Palestinians living in Silwan that would lead to additional loss of life and damage to property. Interestingly, others (both Jewish-Israeli and Palestinian) who witnessed the meeting between the two groups that evening had a very different perspective. Most did not perceive a threat, nor did they react with aggression towards members of the “other” group. As such, it is quite possible that had this man been absent from the group, the spark would have never flown, and lives and property might have been saved.¹ For scholars and activists interested in intergroup conflict, this begs the following question: What motivated this man to act with aggression when others, even within his same group, did not?

¹See the Ha’aretz account of this event here: <http://www.haaretz.com/hasen/spages/1114004.html>.

1.1 Overview

This dissertation has two main goals. First, it seeks to provide answers to the preceding question. More specifically, it seeks to identify the micro-motives behind individual support for and engagement in aggression against members of an “outgroup.” Drawing on recent research in social psychology, it provides evidence that these motives stem from a particular set of beliefs individuals hold regarding their ingroup and the outgroup. It shows that in Israel, individuals who have “group justifying beliefs” are much more prone to support or engage in aggression against an outgroup, even when controlling for the effect of other, more traditional explanators of intergroup violence, like political and religious ideology, past experiences with the outgroup, contact with the outgroup, socio-economic status, and so forth. After defining these beliefs and presenting an index to measure them (the *Group Justification Index*, or *GJI*), the first part of the dissertation provides evidence for the claim that these beliefs, more than others, predict aggression against an outgroup.

Second, this dissertation deals directly with the practicalities of intergroup conflict resolution. Building on the results in the first section of the dissertation, the second and third sections provide evidence that individuals with group justifying beliefs in Israel—those prone to engage in and support aggression against an outgroup—tend to react *negatively* to *positive*, humanizing contact with the outgroup. This suggests that for many of these individuals, an approach to conflict resolution based on the “contact hypothesis” will not yield desired results. Chapter 4 delves deeper to identify key characteristics and experiences that explain why individuals with group justifying beliefs respond in this counter-intuitive manner. The concluding chapter highlights the ramifications of this research for theory development within political

science as well as for the practice of conflict resolution.

In pursuing these goals, the dissertation adds to existing work in political science on intergroup aggression in both method and theory. On the methods side, it employs methods and measures common in social psychology but not yet employed in the study of intergroup aggression in political science, presenting data from a series of experiments to measure support for and engagement in actual physical aggression against an outgroup. In particular, it presents results from one of the first studies of intergroup conflict in political science to measure individual levels of actual physical aggression against the outgroup, employing data from a laboratory aggression game, rather than relying on proxies for individual aggression as is commonly done (e.g. “intent to aggress” questions, self-reports of past behavior, or macro-level data—city or country level measures of deaths from intergroup violence.). On the theoretical side, it draws on social psychological theories to highlight the importance of individual-level cognitive processes like “cognitive dissonance” (Festinger, 1957; Festinger and Carlsmith, 1959) and “need for closure” in motivating individuals to act with aggression against an outgroup. This individual, micro-level approach to the study of intergroup conflict runs parallel to valuable work by political scientists like (Horowitz, 1985), Varshney (2002), Fearon and Laitin (1996) and others—research that focuses mainly on macro-level factors, identifying social, institutional, and other structural incentives for intergroup conflict. A more complete understanding of intergroup violence will of necessity combine *both* levels of analysis, highlighting the interaction between the structural factors that incentivize intergroup conflict and the individual-level factors that highlight which individuals will be prone to act on, *or create*, these incentives. In highlighting key mechanisms at work at the individual level, this dissertation brings political science closer to the point where the combi-

nation to the two levels can be more fruitfully examined. Thus, its methodological and theoretical innovations present new insights into the generation and maintenance of intergroup conflict and lay the groundwork for future work that will push understanding further.

1.2 Generalizability

Although the dissertation speaks of intergroup conflict generally, the data used to generate and test the theory and hypotheses presented in the following chapters comes from a series of experiments conducted with Jewish-Israeli participants within Israel's pre-1967 borders in early 2010. This focus on one case of intergroup conflict to the exclusion of others has advantages and limitations. As Gerring (2004) so eloquently argues, a detailed look at one particular case (a "case study") is an excellent, and often the most efficient way to engage in theory building, for it makes it simpler to identify the mechanisms that drive an outcome, decreasing the total of potential confounds. These mechanisms can then be tested in other contexts. Thus, a narrow case study is often a necessary first step in building general theory. This dissertation focuses on identifying the micro-motives for aggression in the Arab-Israeli case. Future work will test these findings in other conflicts and contexts.

This suggests a limitation however: while the data presented here provides an accurate picture of micro-motives for intergroup conflict in the Arab-Israeli case, within Israel's 1967 borders, the results cannot yet be generalized to other conflicts and contexts, for the theory has yet to be tested in these contexts. As such, the argument that the conflict between Arabs and Jews in Israel is "exceptional"—i.e. unlike any other intergroup conflict—cannot be refuted using the data presented here. As will be seen, however, the theory presented here is largely "context independent,"

highlighting cognitive processes and individual-level motivations for conflict that should hold true across many contexts. The conclusion highlights cases in which the particular results presented here should be more or less applicable to additional cases.

1.3 Dissertation Organization

The remainder of this dissertation will proceed as follows, presenting three different papers, here presented as chapters, that build one upon the other:

Chapter II presents the group justification index (*GJI*). It then draws on data from a national survey conducted within Israel as well as a laboratory aggression experiment to show that group justifying beliefs are an excellent predictor of Jewish-Israeli support for, and actual engagement in, aggression against Arab-Israelis. It concludes by highlighting three mechanisms behind the relationship between these beliefs and aggression, showing that individuals with group justifying beliefs are more prone to 1) see ambiguous behavior by the outgroup as purposeful aggression directed towards their ingroup, 2) engage in higher levels of zero-sum thinking, and 3) justify aggression against the outgroup than are those who do not hold these beliefs.

Chapter III deals with conflict resolution, providing data from the national survey experiment that shows that individuals with group justifying beliefs within Israel generally react negatively to positive, humanizing contact with the outgroup. It first describes an experimental manipulation designed to induce individual participants in the survey to see the outgroup as fully human. It then shows that individuals who have group justifying beliefs (and thus, by definition, do not see the outgroup as human) experience cognitive dissonance as a result of the manipulation and as a result are motivated to hold more firmly to their negative beliefs rather than change

these beliefs.

Chapter IV builds on the results presented in Chapter III to highlight certain characteristics that predict which individuals will feel dissonance from the humanizing manipulation and which will not. Chapter V concludes the dissertation with a brief discussion of the import of these findings for the study of intergroup conflict and for conflict resolution. Together, these three studies highlight the importance of individual beliefs in motivating individual acts of aggression against members of an outgroup. They also suggest means for improving attempts at conflict resolution.

CHAPTER II

Fueling the fire: The role of group justification in sustaining seemingly intractable group conflict

Abstract

This paper provides evidence that a particular set of group-based attitudes, presented here as the *Group Justification Index* (GJI), is a better predictor of individual-level support for violence against an outgroup as well as actual engagement in violence against an outgroup than are other, more traditional explanators of group violence commonly employed in political science. Drawing on data from a national survey in Israel, the paper also provides evidence for three mechanisms that link these beliefs and outgroup aggression: it shows that individuals with these particular group beliefs are more prone to 1) see ambiguous behavior by the outgroup as purposeful aggression directed towards their ingroup, 2) engage in higher levels of zero-sum thinking, and 3) justify aggression against the outgroup than are those who do not hold these worldviews.

2.1 Seemingly Intractable Conflict

By all accounts, the conflict between Jewish-Israelis and Palestinians qualifies as what scholars commonly an “intractable conflict.” Although the definition of this distinction varies, an intractable conflict is generally considered a conflict that is

protracted, violent, and perceived by all groups involved as irresolvable—i.e. no acceptable change in group behavior will lead to a peaceful resolution (Bar-Tal, Raviv, Raviv, and Dgani-Hirsh, 2009; Rouhana and Bar-Tal, 1998; Crocker, Hampson, and Aall, 2005). In this paper, I use the phrase “seemingly intractable” in place of “intractable” (as the latter implies an unsubstantiated claim that the conflict will not end) and propose a simpler definition: seemingly intractable group conflicts are those characterized by groups stuck in a protracted spiral of violence in which neither group is willing to take the first steps towards disengagement. In the Israeli-Palestinian conflict, this spiral is characterized by regular, individual and collective acts of violence against the outgroup as well as general support by members of the ingroup for governmental policies that harm the outgroup—behavior often justified as “self-defense.” Not surprisingly, this behavior often invites violence from the other group, and the tit-for-tat spiral of violence continues.

Unfortunately, this spiral of group-based violence is not new, nor is it limited to the Israeli-Palestinian case. Given this reality, a growing body of research on intergroup conflict seeks to understand the factors driving this type of conflict and how it might be resolved. This paper speaks directly to this body of research, providing answers to the question: which individuals in seemingly intractable conflicts are most likely to engage in or support violence against the outgroup? In other words, it identifies the types of individuals that fuel the spiral of violence. In what follows, the paper provides evidence from the Israeli context that the single best predictor of who will support or engage in aggression against the outgroup is an individual’s level of adherence to three specific group-based attitudes that capture the way an individual sees her ingroup and the outgroup. Taken together, these attitudes comprise what I will hereafter call the “Group Justification Index” (GJI). I show that in a national

survey of Israeli Jews aged 18–30, subjects high on this index show significantly higher levels of support for policies that harm Arab-Israelis than those low on the index. These effects hold true when controlling for other, more traditional explanators of support for group-based aggression like religious and political ideology, strength of ingroup attachment, socio-economic status, and past experience with the outgroup. In fact, the results suggest that many of these variables are simply loose proxies for GJI beliefs, such that once a measure of these beliefs is included in a regression model, the effects of these other variables disappear. Additionally, as one of the first in the study of intergroup conflict in political science to measure actual levels of physical aggression against the outgroup, I employ data from a laboratory aggression game played in Israel to show that subjects with high GJI display significantly higher levels of physical aggression directed towards the outgroup than do those low on the index. After presenting these results, I identify three possible mechanisms driving the link between GJI beliefs and aggression. In particular, I show that individuals with high GJI beliefs in Israel are: 1) much more ready to justify violence, 2) see interactions with the outgroup as zero-sum, and 3) see ambiguous behavior by the outgroup as aggressive. I conclude the paper with a discussion of the import of these results.

2.2 Fueling Seemingly Intractable Conflict

For purposes of this project, aggression is defined as “any behavior directed toward another individual that is carried out with the proximate (immediate) intent to cause harm. In addition, the perpetrator must believe that the behavior will harm the target, and that the target is motivated to avoid the behavior” (Anderson and Bushman, 2002). This definition carries no normative subtext: aggression is

aggression whether “justified,” “in self-defense,” or otherwise. “Outgroup aggression” is aggression where a member of the outgroup is the target. I argue that three specific group-based attitudes that describe how an individual views his group and the outgroup are the single best predictor of support for and willingness to engage in aggression against an outgroup. These attitudes, which comprise the GJI index, are outgroup denigration (OD), ingroup glorification (IG), and ingroup victimhood orientation (IVO). The argument that group-based beliefs like these motivate those who fuel intergroup conflict is not new; previous research links a number of other beliefs and factors to support for and engagement in outgroup aggression, the type of behavior that fuels seemingly intractable intergroup conflicts. Here I provide a brief overview of key findings from this past literature.

Perhaps the most recent and compelling work linking group-based beliefs to outgroup aggression comes from Daniel Bar-Tal and colleagues. Building on extensive previous research on this topic (Bar-Tal, 1993, 2007; Rouhana and Bar-Tal, 1998), Bar-Tal and his colleagues highlight the role of what they call “ethos of conflict” in sustaining seemingly intractable conflict, particularly in Israel and the Palestinian Territories. According to Bar-Tal, Raviv, Raviv, and Dgani-Hirsh (2009), this ethos is a particular configuration of societal beliefs that leads to selective information processing and thus “bias and distortion of reality” (94). They highlight eight beliefs that constitute this ethos ranging from beliefs regarding patriotism, security and existential threat, to peace, the ingroup, and the outgroup. Three of the beliefs they highlight correspond loosely to the three that comprise the GJI employed in this research. The authors provide compelling evidence that these beliefs strongly influence how individuals see Jewish-Palestinian encounters: those who hold beliefs that denigrate the outgroup, feel high levels of existential threat, and so on view Palestinians

in these encounters as showing aggression towards the Jews in the encounter, even if the picture does not suggest such aggression.

The ethos research stems from previous work in social psychology that provides evidence that each of these beliefs is individually tied to higher levels of aggression towards an outgroup. For example, recent research by Castano (2008) shows that ingroup glorification (IG) leads to lower levels of sympathy for outgroup suffering and to higher levels of support for aggression against the outgroup. Roccas, Sagiv, Schwartz, Halevy, and Eidelson (2008) shows similar results in recent work. Forthcoming research by Schori, Klar, and Roccas at Tel Aviv University highlights a similar relationship between ingroup victimhood beliefs and support for aggression.¹ A recent article by (Bar-Tal, Chernyak-Hai, Schori, and Gundar, 2009) provides further evidence for the link between ingroup victimhood beliefs and support for aggression against an outgroup.

Beginning with Allport (1954), research has also shown a strong link between outgroup denigration (OD) and outgroup aggression. Drawing on cases around the world as evidence, Allport shows how dehumanizing the outgroup—perhaps the most common form of denigration—allows individuals to support and engage in violence against the outgroup. More recently, Bandura, Underwood, and Fromson (1975); Bandura et al. (1996); Bandura (1999) confirmed and expanded on this finding in a series of laboratory experiments. Even more recent work by Leyens and colleagues provides evidence that individuals who dehumanize an outgroup show significantly higher levels of discrimination and prejudice against the outgroup (Leyens et al., 2003; Pereira, Vala, and Leyens, 2009; Vaes et al., 2003).

Past research also highlights the role of political and religious beliefs in predicting

¹For a brief preview of this work, see:
<http://portal.idc.ac.il/en/schools/Government/politicalpsychology/events/Documents/14.ppt>.

support for policies that harm the outgroup. In Israel, for example, Maoz and McCauley (2009) find that religiosity affects Jewish-Israeli support for peaceful compromise with Arab-Israelis: the less religious an individual, the more s/he will support compromise. Halperin, Canetti-Nisim, and Hirsch-Hoefler (2009) finds similar results for the effect of religiosity on political intolerance towards Palestinians, showing that those with higher levels of religiosity display higher levels of intolerance. In another article, Maoz and McCauley (2008) explore the role of political ideology on support for aggressive policies against Palestinians, finding that the further right on the political scale an individual moves, the higher the level of support for these policies. Halperin, Canetti-Nisim, and Hirsch-Hoefler (2009) shows similar trends for intolerance. These findings are replicated in other research as well (Struch and Schwartz, 1989; Bar-Tal and Teichman, 2005; Bar-Tal, Raviv, Raviv, and Dgani-Hirsh, 2009).

Despite the depth of this past literature, many questions still remain. Perhaps the most important of these stems from a serious limitation in previous research: although the intended focus of much of the prior literature on intergroup aggression is physical aggression, none of the preceding studies use a measure of physical aggression as the dependent variable. Instead, they employ various proxies in its place like “intent to aggress” or “support for aggressive behavior” or a measure of past, self-reported aggression against the outgroup. For numerous reasons discussed in previous work (for example, see Slone, 2003), these proxies are less than desirable. The research presented in this paper uses a measure of actual physical aggression as the dependent variable. As such, it provides a means to test the claims from this earlier research.

Additionally, previous research on the effect of attitudes and beliefs on outgroup aggression has generally taken one of two approaches: 1) it has tended to lump a

number of these beliefs together (as in the ethos study listed above) to look for a general, net effect of these beliefs, or 2) it has looked at the effect of each of these beliefs in isolation. This research takes a different approach: it begins with a theory about which set of these beliefs should best explain outgroup aggression and then creates a measure of this particular set of beliefs that can be compared in its effect to the other beliefs. This enables an exploration of the question: which of the many attitudes and beliefs identified in previous research is the most important predictor of outgroup aggression? I show that group justifying beliefs are a better predictor of outgroup aggression—both support for aggression and engagement in actual physical aggression—than beliefs like political and religious ideology, as well as a better predictor of outgroup aggression than factors like negative past experiences with the outgroup and socio-economic status.

Finally, previous research says little about *how* these beliefs lead to higher levels of outgroup aggression. This research posits and provides evidence for three mechanisms that allows individuals to justify aggression. Thus, this research builds on and expands previous research on this topic. Before turning to the results showing that that GJI levels do indeed strongly predict subject aggression levels, I first describe the Ggroup Justification Index in detail and provide reasons for its formation.

2.3 The Group Justification Index

In chapters III and IV, I argue that individual levels of outgroup aggression are best predicted by understanding what an individual does when he feels a threat to his ideal self image that stems from his ingroup’s interaction with an outgroup. The theory underpinning this argument—the “dissonance justification hypothesis”—will not be described in great detail here, but will be presented in detail in chapter III. In

short, it argues that individuals faced with a credible threat to their self image from ingroup-outgroup interactions (e.g. from ingroup behavior that does not meet the standards set by their self-image) will often engage in group justification, adopting a set of beliefs to protect this self image. In group conflicts, these beliefs will generally take one (or all) of three forms: ingroup glorification, outgroup denigration, or ingroup victimhood orientation. While these beliefs restore the image of the ingroup in the mind of the individual, they have another, more deleterious consequence: they allow individuals to justify aggressive behavior towards the outgroup—behavior that originally was “unjustifiable enough” that it caused a credible threat to their self image. This facilitates the cycle of aggressive behavior that fuels intergroup conflict.

Thus, even though these views contain no explicit invitation to or condonation of violence, I hypothesize that these beliefs should be a better predictor of both support for aggressive policies and actual physical aggression towards the outgroup than other beliefs or factors. Based on previous research by Jost et al. (2003), I also hypothesize that the political and religious beliefs traditionally shown to predict outgroup aggression are largely proxies for the GJI beliefs, such that when GJI beliefs are measured, the relationship between political and religious beliefs and outgroup aggression will attenuate or disappear. As Jost et al. (2003) and others highlight, political and religious ideological preferences are often chosen by individuals based on previously-held psychological predispositions. As such, while there might still be an effect of the specific political or religious ideology beyond the effect of the GJI beliefs that motivated acceptance of the ideology in the first place, I hypothesize that this effect will be small.

I detail the operationalization of each of these worldviews later in the article. Here I provide a brief explanation of each, beginning with ingroup glorification. Ingroup

glorification (IG) measures the degree to which an individual feels his group is superior to other groups. As such, ingroup glorification is very different from ingroup attachment, although both are important and both play a role in predicting levels of outgroup aggression. Glorification implies the group is “better than” or “superior to”—morally, intellectually, or otherwise; attachment simply measures affinity for the group. In a recent article, Brewer (1999) argues that ingroup attachment has no relationship to outgroup violence (e.g. “ingroup love does not lead to outgroup hate”); I include a measure of ingroup attachment in my models to test this claim. To measure ingroup glorification, Jewish-Israeli subjects in my surveys were asked questions like:

- Jewish-Israelis are better than other national groups in all respects.
- In general, Jewish-Israelis are smarter than other groups within Israel.

Outgroup denigration (OD) is the belief that the outgroup is inferior to other groups in general, and to one’s own group in particular. It most often takes the form of dehumanization, either explicit or implicit, through embracing negative stereotypes about the outgroup. To measure the degree to which Jewish-Israeli subjects held outgroup denigrating views towards Arab-Israelis, I asked questions like the following:

- Arab-Israelis are much more primitive than other groups.
- In general, Arab-Israelis do not attach much value to human life.

As its name suggests, Ingroup Victimhood Orientation (IVO) is the personal feeling that one’s ingroup is the victim in its relationship with another group. In my surveys, it was captured with questions like:

- Jewish Israelis have suffered much more than Palestinians as a result of the

conflict between the two groups.

- Every time we try to help the Arab citizens of the State, it blows up in our face, literally.

I combine these three individual measures into a composite measure of group justification—the group justification index (GJI). The remaining sections describe the methods and measures used to test its effect on outgroup aggression.²

2.4 High GJI → Increased support for aggressive policies against the outgroup

The first of the hypotheses presented above suggests that GJI beliefs should be a better predictor of support for aggressive policies against the outgroup (in the case Arab-Israelis) than other factors. Here I describe the methods and measures employed to test this claim. I then turn to a discussion of the results.

2.4.1 Methods and Measures

To assess the validity of this hypothesis, I conducted a national survey in Israel in June 2010. The national survey was conducted in June 2010 by the *Midgam Project*, an online survey research organization founded and administered by Ariel Ayalon (Ayalon, 2009). At the time, the Midgam had a panel of over 30,000 subjects, representing every geographic and demographic sector of Israel. Each of these volunteered to participate in online surveys for pay. Given that most acts of intergroup aggression worldwide are enacted by individuals aged 15-30 (Ginges, 2005), I limited the sample to subjects aged 18–30 years. Using random stratified sampling of subjects

²As can be seen, GJI differs significantly from other, more general measures of individual aggression, like the “trait aggression” (TA) measure developed by Buss and Perry (1992) and the “social dominance orientation” (SDO) measure developed by (Pratto et al., 1994). I included a measure of trait aggression in the survey presented below: in statistical analyses not presented here, no relationship emerged between TA and GJI, and TA did not exhibit statistically significant relationships with the key dependent variables as did GJI. Moreover, the correlation between the two concepts is quite low: 0.0564. I did not include a measure of SDO in the survey instrument used for this research, but plan to do so in future work.

within this panel, I obtained subjects for the survey that represented every major demographic and geographic sector of the Jewish population within Israel's pre-1967 borders.³ Thus, although this is not a true *random national sample*, the subject pool nicely represents the target population within Israel on a number of key demographic variables. For example, religious identification data from the Israel Central Bureau of Statistics for 2009 suggests that roughly 45% of Jewish-Israelis identify as secular, 20% as orthodox or religious, and 35% as "traditional." In my survey, 50.8% identify as secular, 24.9% as orthodox or religious, and 25% as traditional.⁴ As in the general Israeli population at large, my survey contains roughly equal numbers of males and females. Moreover, education levels for subjects in the survey are similar to those in the general population. In the general population in 2008, 37% of adults had completed secondary education. This group comprises 39.8% of my survey population. In 2008, 44% of the Israeli adult population had completed tertiary education; this group comprises 35.2% of my survey population; given that many of my survey participants are at traditional tertiary education age and not yet complete with their education, this percentage will likely increase.⁵ The national survey had 888 total subjects (436 males and 452 females).

The survey included a number of questions designed to measure the relationship of interest (GJIs and support for aggressive policies) as well as questions that measured other beliefs (religious and political), past experiences with the outgroup, and other factors (sex, ses, education, strength of ingroup attachment, etc.). To measure GJI beliefs, subjects were presented with a list of statements like those identified in the

³As stated earlier, these results do not include Arab-Israelis. A similar survey will be conducted with Arab-Israelis shortly.

⁴Israeli religious identification data available here:
http://www1.cbs.gov.il/reader/shnaton/shnatone_new.htm?CYear=2010&Vol=61&CSubject=2.

⁵Israeli education data available here:
http://www.oecd.org/document/52/0,3343,en_2649_39263238_45897844_1_1_1_1,00.html.

previous section of this article and then asked to identify how much they agreed with each statement (1 = strongly disagree; 4 = neither agree or disagree; 7 = strongly agree). Subjects saw 2 - 4 questions for each of the three GJI beliefs (OD, IG, and IVO), randomly distributed in the survey among questions that asked about emotions towards the outgroup, past experiences with the outgroup, and so on. The questions they saw emerged from careful pretests conducted prior to this survey. To create the GJI index variable, I aggregated the results from each of the three measures and then divided by three so that index remained on a 1–7 scale. As such, subjects with $GJI > 4$ show increasing levels of agreement with these beliefs; subjects with $GJI < 4$ show increasing levels of disagreement. Like the individual measures, this composite measure also has nice psychometric properties, with a cronbach α of 0.837. The questions used to measure these beliefs, in both English and Hebrew, can be found in Appendix A.

To measures support for policies that harm the outgroup, the survey asked subjects a number of questions like the following: “Given the security situation, denying Arab-Israelis some basic human rights is justified” and “In the effort to maintain a Jewish state, the government should give priority to Jewish-owned businesses when awarding contracts in Israel.” Subjects were asked to identify how much they agreed with the statements (1 = strongly disagree; 7 = strongly agree).

To test for the effect of GJI on support for aggressive policies, I estimate three regression models. In the first three models, the dependent variable is support for denying Arab-Israelis human rights. To show that the results are statistically and substantively similar across all the “support for aggressive policies” measures, model 4 (“Favor”) presents results for the question presented above regarding the government favoring Jewish-Israelis in business contracts. In the first model (“HRights1”),

I exclude strength of ingroup attachment and GJI (both variables not traditionally included in studies on this subject) to show that I obtain very similar results to those in previous studies (Maoz and McCauley, 2008; Maoz and Mccauley, 2009; Halperin, Canetti-Nisim, and Hirsch-Hoefler, 2009; Bar-Tal, Raviv, Raviv, and Dgani-Hirsh, 2009). I then estimate two other models: “HRights2,” which includes ingroup attachment, and “HRights3” which includes GJI as well. All regressions include the following control variables, all shown in previous studies to play a role in predicting intergroup aggression: “political id” (1= extreme right; 7 = extreme left); “religious id/secular id/traditional id” (a factor variable with 4 levels: Orthodox, Religious, Traditional, and Secular; Orthodox is the base category); “sex” (male/female); “ses” (socio-economic status: 0 = no income – 5 = well above average) and “edu” (education level: 1 = elementary – 4 = university). I also include three additional control variables suggested by colleagues and previous research as possible explanations for levels of outgroup aggression. The first, “neg. outgroup exp.”, is a true/false question that asks subjects to indicate whether the following statement is true (1) or false (2) for them: “I have lost a close friend or family member to death from violence by Arabs.” It is highly likely that individuals who have lost a loved one to violence from the other side will show higher levels outgroup aggression. The second variable, “contact group,” seeks to assess whether subjects who have gone through one of the many Arab-Jewish “contact groups” in Israel show decreased levels of outgroup aggression. It is coded “1 = yes, I have participated in an Arab-Jewish contact group”; 0 = “No, I have not.” This variable will provide a rough, first cut at assessing the impact of these groups. If the groups are working well, subjects who participate in these groups should exhibit lower levels of outgroup aggression.⁶ The final variable,

⁶Here it is important to note, however, that this measure does not fully control for the selection effect inherent in many of these contact groups: individuals already low on aggression levels will be likely to join these groups in the first place! As such, the effect of this variable should be interpreted with caution.

“ingroup attach.”, is a measure of ingroup attachment. This will provide a means to test Brewer’s “ingroup love vs. outgroup hate” claim within Israel. To create “ingroup attach.”, the survey asks subjects the following question: “Now we would like to get your feelings toward some different social groups in Israel using a feeling thermometer. Ratings from 50 to 100 degrees mean that you feel favorable toward the group. Ratings from 0 to 50 degrees mean that you don’t feel favorable toward the group. 50 degrees means you feel neutral toward the group.” Subjects were presented with a list of Jewish sub-groups within Israel (secular, traditional, etc.) as well as other non-Jewish groups within Israel (Druze, Arab-Israelis, etc.). Responses were then recoded on a 7-point scale to match the GJI coding (so the substantive effect of the two can be compared): ingroup attachment values above 4 suggest increasing levels of attachment; values below 4 suggest lower levels of attachment.

2.4.2 Results and Discussion

Table 2.1 presents the results from regressing GJI and the other key variables on Jewish-Israeli support for aggressive policies towards Arab-Israelis. A few patterns immediately emerge from these results. First, it is noteworthy that “HRights1” shows results very similar to those in previous work. Political and religious identification show a substantive and statistically significant effect on support for policies that harm the outgroup. The more subjects move to the left of the political spectrum, the lower their support for these types of policies. Moreover, the more religious a subject is, the more likely she will support aggressive policies. Importantly, according to the results from this model, subjects who have participated in a Jewish-Palestinian “contact group” also show lower support for aggressive policies. Socio-economic status, education level, and sex show no effect on outgroup aggression. These findings replicate previous work (Maoz and McCauley, 2008; Maoz and McCauley, 2009; Halperin,

Canetti-Nisim, and Hirsch-Hoefler, 2009; Bar-Tal, Raviv, Raviv, and Dgani-Hirsh, 2009).

Table 2.1: Effect of GJI attitudes on support for policies that harm the outgroup

	HRights1	HRights2	HRights3	Favor
Intercept	6.614*** (0.403)	1.394* (0.676)	-0.754 (0.658)	-0.072 (0.461)
political id	-0.578*** (0.052)	-0.339*** (0.056)	-0.137* (0.055)	-0.039 (0.038)
religious id*	-0.409 (0.283)	-0.179 (0.270)	-0.246 (0.251)	0.126 (0.174)
secular id*	-1.270*** (0.270)	-0.349 (0.274)	-0.249 (0.255)	0.009 (0.178)
traditional id*	-0.730** (0.277)	-0.120 (0.271)	-0.157 (0.252)	0.081 (0.176)
sex (male)	0.097 (0.122)	0.051 (0.116)	-0.098 (0.109)	-0.106 (0.076)
ses	0.060 (0.054)	0.049 (0.052)	0.051 (0.048)	-0.049 (0.034)
edu level	-0.063 (0.065)	-0.071 (0.061)	-0.065 (0.057)	-0.002 (0.040)
neg. outgroup exp.	-0.104 (0.138)	-0.034 (0.131)	-0.013 (0.122)	-0.021 (0.085)
contact group	-0.430* (0.201)	-0.285 (0.192)	-0.153 (0.179)	-0.149 (0.125)
ingroup attach.		0.799*** (0.085)	0.432*** (0.086)	0.391*** (0.061)
GJI index			0.704*** (0.063)	0.428*** (0.044)
<i>N</i>	809	809	809	795
<i>R</i> ²	0.260	0.333	0.423	0.406
adj. <i>R</i> ²	0.251	0.325	0.415	0.398
Resid. sd	1.697	1.612	1.500	1.039

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

*Orthodox is the base category

However, when ingroup attachment is added to the estimation, the results look different. Religious identification and contact group participation no longer significantly predict levels support for aggressive policies; strength of ingroup attachment does a better job at predicting levels of support for these policies. As my theory would suggest, the results look different still when GJI beliefs are included. Notably, the statistical and substantive effect political identification on support for aggressive

policies dramatically decreases, consistent with my hypothesis that while there is a small unique effect of political ideology, much of the effect attributed to political identification and religious identification comes from it being a poor proxy for GJI beliefs: individuals with these beliefs often gravitate towards one end of the political spectrum. Thus, when a measure of GJI beliefs is included, the effect of political ideology decreases. The results suggest that this same process is happening with ingroup attachment: when GJI beliefs are measured and included in the regression, the substantive effect of ingroup attachment on support for aggressive policies also attenuates. Even so, the results cast doubt on Brewer's "ingroup love does not lead to outgroup hate" claim. In this and other results to follow, strength of ingroup attachment does indeed seem to have a distinct and significant effect on outgroup aggression, even when controlling for GJI beliefs. As expected, the same trends emerge, with GJI showing similar levels of statistical and substantive significance regardless of the question: the results in model 4 ("Favor") look quite similar to the results from model 3 ("HRights3").

As the results from model 3 suggest, the substantive effect of GJI beliefs on support for aggressive policies is large, even when controlling for the other variables. For each unit increase in GJI beliefs, there is nearly a unit increase (.704) in support for aggressive policies. To get a sense for the substantive impact of this relationship, I use the data from the regression results in HRights3 to present a graph of the predicted levels of support for aggressive policies towards Arab-Israelis for two types of individuals within my subject pool: one with high levels of GJI (a 6 on the 7-point scale), and one with low GJI (a 2 on this scale). The national survey data suggest that subjects with high GJI levels are not at all uncommon in the Jewish-Israeli population of Israel; subjects with low levels are much less common. Nearly all subjects answered

the GJI questions (842 out of 888); subjects with a GJI of 6 or higher constitute 10.7% of the population; subjects with a GJI of 2 or lower constitute 2.85% of the population.⁷ Given how closely the survey population mirrors Israeli society in general, these numbers can be assumed to be somewhat representative of the general population within Israel. The graph here assumes that these two individuals only differ on one dimension (GJI beliefs); otherwise they are both politically moderate but slightly right-leaning (a 3 on the 7-point scale, the mode in Israel), religiously “traditional,” male, and moderately educated. They have also both lost a family member to violence from the outgroup, attended a “contact group”, and display moderately high levels of ingroup attachment (6 on our 7-point scale). Figure 2.1 shows the predicted level of support for aggressive policies each of these individual will display:

As the graph illustrates, data suggest that these two individuals, identical in all respects but one, will show dramatically different levels of support for this policy. The individual with high GJI will support the aggressive policy; the individual with low GJI will be strongly against it. In other words, the substantive effect of the GJI beliefs is large enough that a movement across the GJI scale corresponds almost completely with a movement across the support for aggression scale.

2.5 High GJI → Increased physical aggression against the outgroup

Taken together, the foregoing evidence lends strong support for the claim that GJI beliefs are a better predictor of support for policies that harm the outgroup than other, more traditional factors. However, support for aggression is only one part of the story. In this section, I provide evidence that people with high levels

⁷46 of the 888 total subjects did not complete these questions. A close comparison of the demographics of those who did not answer these questions with those who did suggests that these 46 are not statistically different from the remainder.

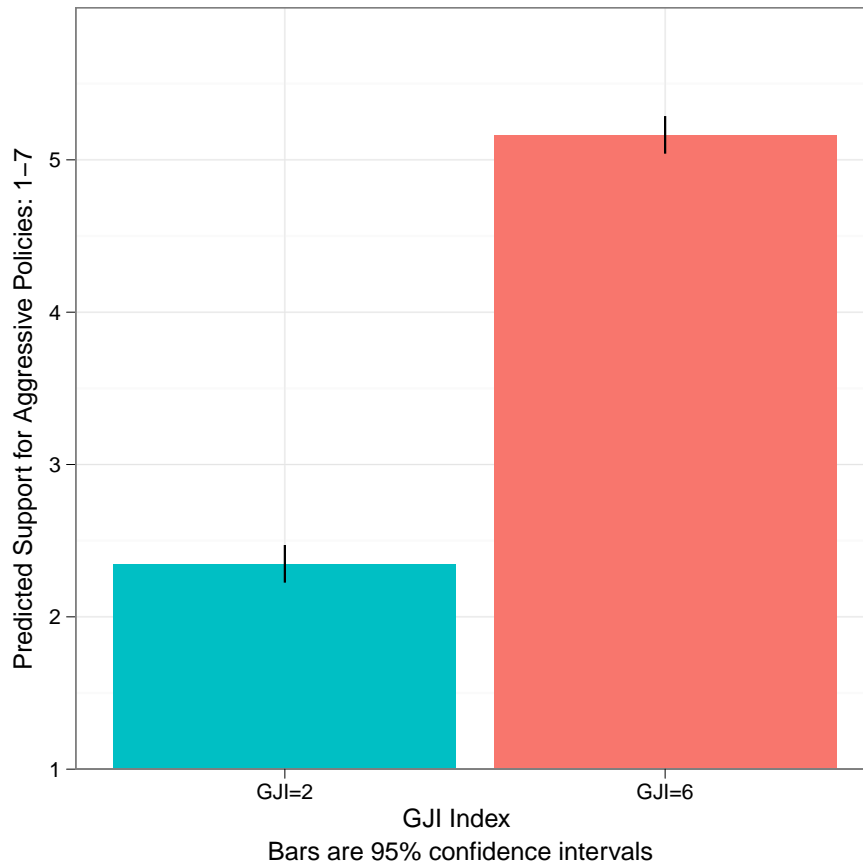


Figure 2.1: National Survey: Predicted Levels of Support for Aggressive Policies

of GJI beliefs display significantly higher levels of physical aggression against the outgroup as well, thus further cementing the role of GJI beliefs in the perpetuation of seemingly intractable intergroup conflicts.

2.5.1 Methods and Measures

To measure physical aggression, I invited university students in Israel to participate in a “computer game that measures reaction time.” They were told the game would be played online against students at Haifa University. Unlike the national survey, I invited only male participants.⁸ As in the national survey, subjects were

⁸Given that most acts of intergroup aggression are committed by young males (Ginges, 2005), including only males makes sense. However, assessing whether males respond differently to females and vice-versa will be an interesting future extension of this work.

between 18–30 years of age. In total, 90 subjects participated in the game. Unlike subjects in the national survey, these participants are not generally representative of the overall Israeli population.

The game was a modified version of the “Competitive Reaction Time-task” (CRT). In recent years, a large body of evidence has combined to suggest that the CRT is perhaps the safest, most reliable, and externally valid laboratory measure of physical aggression available (Giancola and Zeichner, 1995; Giancola and Chermack, 1998; Giancola and Parrott, 2008), although some researchers still hold reservations (Tedeschi and Quigley, 1996, 2000). It has been consistently used since 1967 (Taylor, 1967). As such, it has become the standard in social psychological studies of physical aggression.⁹ To my knowledge, prior to this research, it had not been used to study interethnic aggression.

After subjects arrived at the lab and were briefed on how to play the game, subjects participated in an experimental manipulation that had no discernible effect.¹⁰ As part of the manipulation cover-story, however, subjects were asked to respond to some of the same GJI belief questions as in the national survey. These questions provide a means to discern the effect of these beliefs on levels of physical outgroup aggression. After answering these questions, subjects were given instructions regarding how to play the game, allowed time to practice, and then began playing the game.

The game was simple, consisting of 25 rounds. Subjects were told that a team of research assistants at Haifa University was inviting participants there to play the game and that they would be partnered with a student there.¹¹ In reality, there

⁹For recent examples of its use, see the following work: Bushman, Ridge, Das, Key, and Busath (2007); Anderson and Bushman (1997); Bernstein, Richardson, and Hammock (1987); Giancola and Zeichner (1995).

¹⁰For details on the manipulation, see chapter III.

¹¹Haifa University is known throughout Israel as having the highest Arab-Israeli student numbers. I chose it so that discovering they were playing an Arab-Israeli would not be a shock.

was no opponent; subjects played the computer. They were told that once the game started, they would see the first name and location of their partner appear on the screen, and that their partner would see the same. The CRT was programmed such that one of six names would appear when they started the task, all of them Arab-Israeli.¹² The research assistant then explained that to play the game, they were to click on a square on their screen the moment it shifted from green (set levels), to yellow (get ready), to red (press button). If they were faster than their “partner” in clicking on the square, they would win and get to choose a (safe) level and duration of noise to send through headphones to their partner. When their “partner” was faster, he would win and could deliver a level and duration of sound of his choosing. When subjects won, they were free to choose the sound level (from 60 decibels to 105 decibels, in 5 decibel increments on a scale from 0 to 10—a non-aggressive 0-level is included) and the duration of the sound (from 0 seconds to 2.5 seconds, in 0.5 second increments on a scale from 0 to 10) they would send to their “partner.” The level and duration subjects chose to send to their partner was recorded by the computer program as a measure of physical aggression. Numerous studies conducted over the 40 years of the existence of this aggression measure have shown this laboratory measure of physical aggression to correlate highly with real-world acts of physical aggression.¹³

In reality, the wins and losses, along with the noise-levels subjects would receive from their “partner” when he won, were predetermined. All subjects lost round 1 and their “partner” sent them a noise level of 6. The remaining 24 rounds were divided into three blocks of 8 rounds each, with subjects randomly allocated 4 wins and 4 losses and receiving an average noise level of 5 from their partner.

¹²The list of six names came from a list of the most common names in 1980 for Arab-Israelis, all of them commonly recognized by Jewish-Israelis as Arab names. The names were also all Muslim names.

¹³For a nice overview of these studies, see: Anderson and Bushman (1997).

I use the data from the CRT to estimate the effect of GJI beliefs on physical aggression. As each individual played 25 rounds of the game, the resulting data are time-series-cross-sectional. Therefore, I calculate standard errors using Beck and Katz's panel-corrected standard errors (Beck and Katz, 1995). As previous research has shown a strong "tit-for-tat" dynamic in CRT interactions, I include a lagged variable ("Lagged Agg.") to measure the effect of the noise levels subjects experienced from the computer (i.e. their "partner") in the previous round of the game. I also include a variable ("Round") that simply notes the round number of each round to estimate the effect of duration of the game on aggression (previous research suggests that people tend to get more aggressive as interaction proceeds: (Bushman and Baumeister, 1998)). Due to the constraints of the laboratory setting, I did not ask any further questions of subjects prior to their participation in the game. As such, I do not include the same controls as in the national survey.

2.5.2 Results and Discussion

The results from the model the CRT are in Table 2.2. As in previous research using this aggression measure, both the lagged aggression and the duration variable show positive and statistically significant effects on subject levels of aggression. Even when controlling for these effects, however, the results provide strong support for the claim that in addition to motivating support for aggressive policies, GJI beliefs motivate physically aggressive behavior. The results are highly statistically and substantively significant, suggesting that individuals with higher GJI belief levels do indeed display higher levels of physical outgroup aggression.

To get a sense for the substantive impact of this relationship, I use the data from the regression results just reported to present a graph of the predicted aggression levels of two individuals within my subject pool: one with high levels of GJI (a 6 on

Table 2.2: Effect of GJI attitudes on aggressive behavior against the outgroup

	AggB
Intercept	0.262 (0.356)
GJI	0.791*** (0.051)
Lagged Agg.	0.153** (0.054)
Round	0.040*** (0.009)
N	90
R^2	0.091
adj. R^2	0.090
Resid. sd	2.922

Panel-corrected standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

the 7-point scale), and one with low GJI (a 2 on the scale). Remember from the data given earlier that subjects with these GJI levels constitute a non-negligible portion of the Jewish-Israeli population of Israel. The graph presents the case where these individuals are playing in round 10 of the game and have just experienced a level 3 (very low) noise from their Arab-Israeli “partner” in the game. Figure 2.2 presents their predicted aggression levels on the following round.

As Figure 2.2 suggests, the data predict that individuals with a GJI of 6 will on average blast their “partner” with noise levels nearly *3 times higher* than those with a GJI of 2. This large difference in levels of physical aggression is even more striking due to the significant proportion of survey respondents that fall within the GJI ≥ 6 group—approximately 10%. To be sure, the predicted aggression level of just over 5 on a 10-point scale from individuals with high GJI levels is not extremely high, a credit to the participants. However, it suggests that individuals with high GJI will engage in tit-for-tat aggression, with increase, with members of the outgroup, while individuals with low GJI will not. These data provide strong support for the claim that GJI beliefs motivate the the type of physically aggressive, tit-for-tat behavior

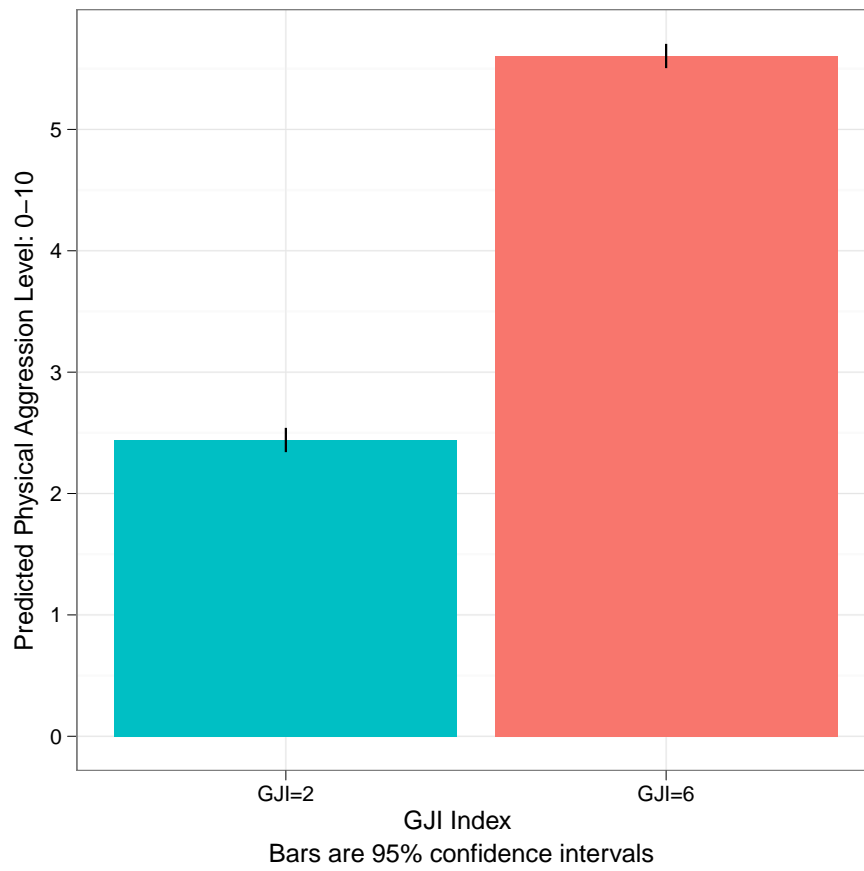


Figure 2.2: Lab Experiment: Predicted Levels of Physical Outgroup Aggression

that fuels seemingly intractable conflicts.

2.6 Possible Mechanisms linking GJI and Outgroup Aggression

As the foregoing data highlight, data from Israel strongly suggest that individuals who hold GJI beliefs are indeed the fuel that keeps seemingly intractable intergroup conflicts burning from one generation to the next. These individuals support policies that harm the outgroup. They also exhibit higher levels of physical aggression against members of the outgroup. This information naturally leads to the following question: *how* do these beliefs motivate aggression? In this section, I provide an initial answer to this question by presenting data that highlight three potential mechanisms. In particular, I show that individuals with high GJI beliefs are: 1) much more ready to justify violence, 2) see interactions with the outgroup as zero-sum, and 3) see ambiguous behavior by the outgroup as aggressive.

2.6.1 Individuals with GJI beliefs are much more ready to justify violence

Previous research on intergroup conflict highlights the role of rationalization, sometimes called “morality shifting” (Castano, 2008) or “moral disengagement” (Bandura, 1999), in motivating violence. In a series of influential articles in social psychology, Bandura provides evidence that violence is often facilitated through moral disengagement: a series of self-justifications that allow an individual to avoid feeling bad about harming another human being (or group of human beings) (Bandura, Underwood, and Fromson, 1975; Bandura, 1991; Bandura et al., 1996; Bandura, 1999). According to Bandura, “cognitive restructuring of harmful conduct through moral justifications, sanitizing language, and exonerating comparisons, taken together, is the most powerful set of psychological mechanisms for disengaging moral control.”

Data from the national survey in Israel suggest that individuals with GJI beliefs

are much more prone to engage in this type of rationalization or justification, thus abetting continued support for and engagement in violence. Subjects in the survey were presented with a series of “exonerating comparisons” statements like the following and asked to respond using the same 7-point scale described earlier (1 = strongly disagree; 4 = neither agree or disagree; 7 = strongly agree): “The tactics used by the Israeli Defense Forces against the Arab-Israelis and Palestinians are much more humane than what they do to us.”

In Table 2.3 I present the results from regressing GJI beliefs on subjects’ responses to the foregoing “exonerating comparisons” statement. I include the same control variables here as in the earlier regressions.

These results highlight the substantive and statistically significant relationship between GJI and the rationalization of violence. Note that of the other variables, only an individual’s sex has a significant explanatory effect on the dependent variable: males are somewhat less likely to engage in the rationalization of ingroup violence, although this effect is substantively quite small. As in previous regressions, a unit increase in GJI beliefs corresponds with roughly a unit increase in agreement with the statement rationalizing ingroup violence, such that an individual with high GJI will engage in high levels of ingroup rationalization of violence. This suggests one mechanism linking GJI beliefs to outgroup aggression.

2.6.2 Individuals with GJI beliefs see interactions with the outgroup as zero-sum

Other work, most notably by Maoz and McCauley (2008) and Maoz and McCauley (2009), finds a relationship between zero-sum thinking and levels of outgroup aggression. Data from the national survey in Israel provide evidence that individuals with high GJI beliefs are much more likely to think in zero-sum terms about the outgroup. To measure degree of zero-sum thinking towards the outgroup, subjects

Table 2.3: Effect of GJI attitudes on justification of violence

	Rationalization
Intercept	1.911*** (0.549)
political id	-0.040 (0.046)
religious id*	-0.268 (0.210)
secular id*	-0.161 (0.213)
traditional id*	-0.047 (0.210)
sex (male)	-0.156† (0.091)
ses	0.023 (0.040)
edu level	0.034 (0.048)
neg. outgroup exp.	-0.123 (0.102)
contact group	0.063 (0.149)
ingroup attach.	-0.008 (0.072)
GJI index	0.893*** (0.053)
<i>N</i>	809
<i>R</i> ²	0.431
adj. <i>R</i> ²	0.423
Resid. sd	1.252

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

*Orthodox is the base category

were presented with the following statement and asked to respond using the same 7-point scale described earlier (1 = strongly disagree; 4 = neither agree or disagree; 7 = strongly agree): “Anything that happens within Israel that’s good for Arab-Israelis will be bad for Jewish-Israelis.” I regressed subject GJI levels on subject responses to this question, using the same controls as described earlier. The results are in Table 2.4:

As the results suggest, a number of factors predict which individuals will think in zero-sum terms about the outgroup. Individuals on the right of the political

Table 2.4: Effect of GJI attitudes on zero-sum thinking towards outgroup

	Zero-sum
Intercept	-0.696 (0.569)
political id	-0.172*** (0.047)
religious id*	0.311 (0.217)
secular id*	0.603** (0.221)
traditional id*	0.545* (0.218)
sex (male)	-0.190* (0.094)
ses	0.004 (0.042)
edu level	-0.128** (0.050)
neg. outgroup exp.	-0.088 (0.105)
contact group	-0.122 (0.155)
ingroup attach.	0.136 [†] (0.074)
GJI index	1.007*** (0.055)
<i>N</i>	809
<i>R</i> ²	0.530
adj. <i>R</i> ²	0.524
Resid. sd	1.299

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

*Orthodox is the base category

spectrum are much more likely to think in zero-sum terms as are individuals who are more secular. Both of these results reflect results in previous research. Interestingly, males are somewhat less likely to engage in zero-sum thinking as are those with increasing levels of education. Knowing an individual's level of ingroup attachment also helps predict that individual's level of zero-sum thinking in predictable ways. However, the largest predictor of zero-sum thinking is once again GJI beliefs, and the substantive effects are once again quite large: for every one-unit change in GJI levels, we would expect a 1 unit change in levels of zero-sum thinking. This provides

support for another mechanism linking GJI levels and aggression.

2.6.3 Individuals with GJI beliefs see ambiguous behavior by the outgroup as aggressive

Finally, data from the national survey suggest that individuals with high GJI levels see behavior by the outgroup differently than do those with low levels. This is a third mechanism linking GJI levels to both support for and engagement in outgroup aggression, for individuals with these beliefs genuinely see outgroup threat where others do not. In previous research, Bar-Tal, Raviv, Raviv, and Dgani-Hirsh (2009) show that subjects who carry an “ethos of conflict” worldview are more likely to see Palestinians as aggressive when shown a picture of a Jewish-Palestinian encounter. Research on racial bias in social psychology shows similar results, with white policemen seeing black individual behavior as more threatening than white (Correll et al., 2002, 2007). In both of these instances, however, the effect is attributed to a mixture of different beliefs. In this study, I explore whether just GJI beliefs—i.e the way an individual sees his group and the outgroup—yield the same results.

To test whether subjects with high GJI levels see ambiguous behavior by the outgroup as purposeful aggression directed towards the ingroup, I merged portions of two articles describing a tragedy that happened in Israel immediately prior to the start of the survey and presented them to subjects in part 2 of the national survey as an article that recently ran in the leading Israeli daily newspaper. The incident involved an Arab-Israeli trucker crossing lanes on one of the main freeways and killing a Jewish-Israeli family. When news of this event hit the media, it ignited a debate over whether this “accident” was really an accident. Most “talkbacks” to articles on this incident in the main newspapers claimed it was not an accident, but just another piece of purposeful aggression, with some posting statements like

the following: "...this was a terror attack as so many similar 'accidents' caused by arabs...this swine must be punished."¹⁴

The following article and question are the English translation of the perception of aggression measure which appeared in part 2 of the national survey. Subjects responded to the question on a 7-point scale:

This question captures your opinion on an event in the current media. You have likely followed the event. Here is a brief portion of an article in Yedioth Ahronoth, dated 23 February 2010, that describes the event:

Four adults and an infant from the same family who died Monday after their car collided head-on with a truck on Highway 90, near the Arava junction, will be laid to rest on Tuesday.

The five victims - Ruti Dahan (57), her daughter Sarit (19), her son Lior (30), his wife Tali (33) and their five-month-old daughter Shilat - were trapped inside the car and burned to death at the scene.

Meanwhile, the truck driver, Muhammad al-Jabour, a Rahat resident in his 20s, told police that he swerved into the opposite traffic lane because the overhead glove compartment suddenly popped open and hit him in the head, distracting him from the road.

A police source told Yedioth Ahronoth that al-Jabour's version of the event was implausible and that the investigation into the lethal crash was ongoing.

The police are still investigating this incident. Given what you know, how

¹⁴See the english-language Jerusalem Post article here for this comment:
<http://www.jpost.com/Israel/Article.aspx?id=169427>.

likely would say it is that the driver intended to harm the family? Please record your answer on the following scale: (7 = very likely, 4 = Neither likely nor unlikely (don't know), 1 = not likely at all).

I also measured GJI levels in this part of the survey, using questions that correlate at the .8 level or higher with questions in part 1. I then regressed subjects' responses to this question on the same control variables as in previous cases. Table 2.5 presents the results.¹⁵

Table 2.5: Effect of GJI attitudes on perception of outgroup behavior

	Pagg
Intercept	-1.696 [†] (0.897)
political id	0.100 (0.073)
religious id*	-0.019 (0.304)
secular id*	-0.058 (0.325)
traditional id*	-0.053 (0.304)
sex (male)	-0.111 (0.138)
ses	-0.036 (0.060)
edu level	-0.074 (0.071)
neg. outgroup exp.	0.312* (0.152)
contact group	-0.100 (0.235)
ingroup attach.	0.515*** (0.117)
GJI index	0.473*** (0.073)
<i>N</i>	615
<i>R</i> ²	0.266
adj. <i>R</i> ²	0.249
Resid. sd	1.626

Standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

*Orthodox is the base category

¹⁵Part 2 of the survey included an experimental manipulation discussed in detail in chapter III. I control for the effect of the manipulation in these results but do not present the regression coefficients for the manipulation in this table. The effect of the manipulation is described in chapter III.

Interestingly, the results suggest that subjects' past experiences with the outgroup influence their perception of outgroup behavior: subjects who have not experienced the loss of a family member to violence from the other side are more likely than those who have to see outgroup behavior as aggressive. This counter-intuitive result needs further exploration and attempts at replication. As one would expect, however, subjects with higher levels of ingroup attachment are more likely to see this accident as not accidental. The results provide strong evidence that those with high GJI levels do indeed see ambiguous actions by members of the outgroup as aggression directed towards the ingroup. As in previous regressions, the effect of these beliefs is both substantively and statistically highly significant: for every unit increase in GJI beliefs, subjects display a roughly half-point increase in their conviction that the accident was not an accident. These results provide evidence for a third possible mechanism linking GJI and outgroup aggression.

2.7 Limitations and Conclusion

Taken together, the foregoing data provide strong evidence that individuals who engage in high levels of group justification as measured by the GJI index are at least part of the fuel that keeps seemingly intractable conflicts burning. In Israel, Jewish-Israeli subjects with high GJI levels exhibit much higher support for policies that harm Arab-Israeli and also exhibit much higher levels of physical aggression towards Arab-Israelis—both forms of behavior that fuel intergroup conflict. The data suggest that GJI beliefs are a much better predictor of this outgroup aggression than are other beliefs (political and religious), past experiences, and socio-economic factors.

These results also provide support for three distinct mechanisms that link GJI

levels to outgroup aggression. They show that individuals with high GJI levels in Israel display 1) increased rationalization of aggression towards the outgroup, 2) increased “zero-sum” thinking towards the outgroup, and 3) an increased tendency to see ambiguous behavior by outgroup members as purposeful aggression directed towards the ingroup. As past research provides evidence that these three behaviors facilitate outgroup aggression, the link between GJI beliefs and these behaviors is an important piece of information for scholars and practitioners of conflict resolution.

Despite the strength of these results, certain limitations should be kept in mind. The first is that these results stem from a detailed analysis of one case of seemingly intractable intergroup conflict: the Arab-Israeli conflict. The data used to generate these results come from a nationally representative pool of Jewish-Israel subjects within Israel’s pre-1967 borders and focus on interactions between Israeli Jews and Israeli Arabs. Similar surveys and experiments with Arab-Israeli subjects will begin shortly; I expect similar results. Detailed case studies of this sort are often a necessary first step in theory building (Gerring, 2004). However, before these findings can be generalized to other conflicts and contexts, further tests are needed. My theory suggests these findings will generalize to other contexts; I will shortly conduct this research in other countries to assess this claim.

This survey data suggests that roughly 40% of the current 18–30 yr. old Jewish-Israeli population hold some level of GJI beliefs (a 5 or greater on the 7-point scale, meaning that they agree with the group-justifying belief statements). I suspect (and will shortly be able to verify) that these numbers are similar for Arab-Israelis as well. The ubiquity of these beliefs among the rising generation within Israel suggests that the behavioral change necessary to move these groups from conflict to cooperation is not likely in the near term. Rather, unless these beliefs are somehow changed in a

large proportion of the populace, this particular intergroup conflict looks to continue.

Appendix A

To measure each of the group justifying beliefs, subjects were presented with the following instructions, and then saw the following statements (randomly distributed in the survey, but here grouped according to the particular GJI belief they seek to measure):

Please rate how much you agree with the following statements on a scale from 1–7 (7 = Strongly agree, 6 = Somewhat agree, 5 = Agree, 4 = Neither Agree nor Disagree, 3 = Somewhat disagree, 2 = Disagree, 1 = Strongly Disagree).

אנא דרג כמה אתה מסכים עם המשפטים הבאים לפי הסולם 7-1 [7 = מסכים מאוד, 6 = די מסכים, 5 = מסכים, 4 = לא מסכים ולא מתנגד, 3 = די מתנגד, 2 = מתנגד, 1 = מתנגד מאוד].

Outgroup Denigration Statements

In general, Arab-Israelis do not attach much value to human life.

באופן כללי, ערבים ישראלים לא מייחסים ערך רב לחיי אדם

In general, Arab-Israelis are intelligent. **Note: reverse-coded.

באופן כללי, ערבים ישראלים אינטליגנטים

In general, Arab-Israelis are lazy.

באופן כללי, ערבים ישראלים עצלנים

Ingroup Glorification Statements

As a group, Jewish-Israelis are generally much more moral than Arab-Israelis.

מקבוצה, יהודים ישראלים בדרך כלל הרבה יותר מוסריים מערבים ישראלים

Jewish-Israelis are better than other national groups in all respects.

יהודים ישראלים טובים יותר מקבוצות לאומיות אחרות מכל הבחינות.

Jews within Israel have many moral values and customs that Arabs within Israel should adopt.

ליהודים החיים בתוך ישראל יש ערכים מוסריים גבוהים שהערבים בתוך ישראל צריכים לאמץ

In general, Jewish-Israelis are more dependable than other groups within Israel.

באופן כללי, יהודים ישראלים אמינים יותר מאשר קבוצות אחרות בתוך ישראל

Ingroup Victimhood Orientation Statements

Jewish Israelis have been suffered much more than Arab-Israelis as a result of the conflict between the two groups.

ישראלים יהודים סבלו הרבה יותר מערבים ישראלים כתוצאה מהסכסוך בין שתי הקבוצות

Despite Israel's desire for peace, the Arabs have repeatedly forced conflict.

למרות הרצון של ישראל בשלום, שוב ושוב נכפו על ישראל מלחמות מצד הערבים

CHAPTER III

When contact doesn't work: The role of dissonance in seemingly intractable group conflict

Abstract

The results presented in chapter II suggest that individuals who hold high levels of group justifying beliefs—as measured by the GJI index—are the fuel feeding the seemingly intractable conflict between Israeli Jews and Palestinians. A long tradition in conflict resolution based on the “contact hypothesis” (Allport, 1954) argues that placing members of groups in conflict in “structured encounters” that humanize members of the outgroup is the best way to change these types of beliefs—and thus an efficient way to lower levels of intergroup aggression. Drawing on data from a national survey experiment conducted in Israel in 2010, I show that for certain types of individuals, humanizing the outgroup causes cognitive dissonance, which motivates these individuals to hold more strongly to their previously held beliefs, rather than lowering them as the contact hypothesis predicts. I also show that individuals who have high levels of group justifying beliefs are the most likely to feel dissonance as a result of the humanizing experience. Taken together, these results suggest that humanizing the outgroup, unless accompanied by other measures that help individuals productively deal with dissonance, will not lower GJI beliefs for the very individuals contact groups seek to target—those with high levels of group

justification beliefs.

3.1 Introduction

The results from in Israel presented in chapter II strongly suggest that individuals who hold high levels of group justifying beliefs—as measured by Gubler’s GJI index—are the fuel feeding the seemingly intractable conflict between Israeli Jews and Palestinians. These individuals, which constitute roughly 40% of the 18–30 year old Jewish-Israeli population, exhibit much higher levels of support for and engagement in aggression against Arab-Israelis (the outgroup). They also display 1) increased rationalization of aggression towards the outgroup, 2) increased “zero-sum” thinking towards the outgroup, and 3) an increased tendency to see ambiguous behavior by outgroup members as purposeful aggression directed towards their group—three specific behaviors linked in previous research to the perpetuation of intergroup conflict (Bar-Tal and Teichman, 2005; Bar-Tal, Raviv, Raviv, and Dgani-Hirsh, 2009; Crocker, Hampson, and Aall, 2005). This evidence should make the goal of individual-level conflict resolution groups within Israel clear: working to lower individual levels of group justifying beliefs.

A long tradition in conflict resolution based on the “contact hypothesis” (Allport, 1954) argues that placing member of groups in conflict in “structured encounters” that ‘humanize members of the outgroup are the best way to change beliefs like those that comprise the GJI—and thus an efficient way to lower levels of intergroup aggression (Maoz, 2011). As such, these groups abound in contexts marked by prolonged intergroup conflict. In Israel, for example, data suggest that roughly 60% of all Arab-Jewish individual-level conflict resolution programs operate based on this model, with humanizing the outgroup as a central goal (Maoz, 2004*a*). Drawing on

data from a national survey experiment conducted in Israel in 2010, I show that for certain types of individuals, humanizing the outgroup causes cognitive dissonance, which motivates these individuals to hold more strongly to their previously held beliefs, rather than lowering them as the contact hypothesis predicts. I also show that individuals who have high levels of group justifying beliefs are the most likely to feel dissonance as a result of the humanizing experience. Taken together, these results suggest that humanizing the outgroup, unless accompanied by other measures that help individuals productively deal with dissonance, will not lower GJI beliefs for the very individuals contact groups seek to target—those with high levels of group justification beliefs.

In what follows, I first present an overview of the contact hypothesis, which argues that humanizing the outgroup lowers levels of GJI and other counter-productive group-based beliefs. I then draw on research in social psychology to present a counter-hypothesis, the “dissonance-justification hypothesis,” explaining how high levels of cognitive dissonance erase this effect, motivating individuals to instead hold tightly to their original beliefs. Finally, I describe an experiment designed and conducted within Israel to test this theory and present the results. I conclude with a discussion of the import of these results for the study of seemingly intractable group conflict and for conflict resolution.

3.2 The Contact Hypothesis

In keeping with past research, I define aggression as “any behavior directed toward another individual that is carried out with the proximate (immediate) intent to cause harm. In addition, the perpetrator must believe that the behavior will harm the target, and that the target is motivated to avoid the behavior” (Anderson and

Bushman, 2002). “Outgroup aggression” is aggression where a member of the outgroup is the target. In chapter II, I present evidence that three specific group-based beliefs, comprising what I call the “GJI index”—are the single best predictor of an individual’s support for and willingness to engage in aggression against an outgroup. These beliefs are: 1) outgroup denigration, 2) ingroup glorification, and 3) ingroup victimhood orientation.¹ A long tradition of research and practice in conflict resolution argues that getting individuals who hold these and other counter-productive views towards the outgroup to see members of the outgroup as human will spur them to change their beliefs, exchanging these views for a more human perspective on the outgroup. Here I briefly provide an overview of this past research.

Building on research on intergroup conflict worldwide, Allport (1954) argued that positive intergroup contact under four conditions would humanize outgroup members and thus decrease intergroup prejudice: 1) equal status of both groups in contact, 2) common goals as part of the contact, 3) mutual dependence in reaching this goals, and 4) institutional support for the contact enterprise. Each of these conditions works to create an environment where participants cannot help but see the humanity of members of the outgroup. And once individuals see the humanity of the outgroup, Allport and others argued, they will naturally drop their negative beliefs (e.g. dehumanization and other prejudiced beliefs) and conflict resolution can begin.

Since its inception “contact hypothesis” has been the subject of numerous research projects, some providing support for the hypothesis and others challenging it. In Israel, the results are mixed. Some research provides strong support for the idea that intergroup contact indeed improves beliefs towards members of the ethnic outgroup (Schwarzwald, Amir, and Crain, 1992; Maoz, 2000*a*, 2004*b*; Bargal, 2004, 2008),

¹For a detailed description of these group-based beliefs as well as their role in motivating outgroup aggression, please see chapter II.

while noting that certain caveats and problems exist (Maoz, 2000*b*, 2002; Halabi, 2004). Other scholars are not as convinced (Suleiman, 2004*a,b*; Maoz, 2004*a*, 2011). Those who challenge these results often point out that the four conditions Allport identifies as necessary for intergroup contact to positively change beliefs rarely exist in contexts marked by conflict between two groups, thus explaining the mixed results that emerge from these groups (Dixon, Durrheim, and Tredoux, 2005, 2007; Salomon, 2006; Maoz, 2011). Still others challenge the claim that humanizing an outgroup, even under the four ideal conditions, will improve group-based beliefs. To adjudicate these conflicting claims, Pettigrew and Tropp (2006) recently completed a meta-analysis of contact theory research studies conducted around the world during the last 50 years. They find general support for the contact hypothesis, even if the four conditions specified by Allport are not met.

In recent years, supporters of the contact hypothesis approach have gradually won the day in conflict resolution circles in Israel, with a large majority of all conflict resolution groups based to one degree or another on the humanizing approach and “structured encounters” between Israeli Jews and Arabs. Sometimes these encounters are conducted around a getting members from both groups involved in a joint project (the “Joint Projects Model”); other times these groups serve as discussion forums only. In an excellent recent article, Maoz (2011) provides an overview of the different forms these groups take and the strengths and weaknesses of each.

Yet the mixed success of these groups is troubling. In interviews conducted with leaders and individuals involved in conflict resolution groups in Israel, nearly all group leaders reported that humanizing the outgroup does indeed seem to improve beliefs and behavior towards the outgroup for some individuals, but not for others.²

²I conducted these interviews in Israel during August 2008 and again in 2009–2010 with leaders of various conflict resolution groups.

In what follows, I detail how an understanding of cognitive dissonance can contribute to an explanation of this variation and to intergroup conflict in general.

3.3 When contact doesn't work: The Dissonance-Justification Hypothesis

Beginning in the late 1950's, a group of researchers led by Leon Festinger and Elliot Aronson began publishing results showing that "cognitive dissonance" could lead individuals to behave in ways exactly opposite to what theories predicted at the time. I employ the definition of dissonance proposed by this early work (Festinger, 1957; Festinger and Carlsmith, 1959) and later refined by Aronson (1969), Steele and Liu (1983), and Stone and Cooper (2001). Simply put, *dissonance is psychological discomfort that arises when an individual faces a cognition that legitimately challenges beliefs he holds about himself*. These beliefs constitute an individual's "ideal self image;" which explains why an individual would feel discomfort when they are challenged (Steele and Liu, 1983). Thus, if an individual has a belief about himself as kind and then thinks that something he has done legitimately challenges this belief (i.e. he hurts someone else), he feels dissonance. To a certain extent, the content of the beliefs individuals hold about themselves will vary from person to person. However, research suggests a certain set of beliefs are common across most people, particularly the belief that they are humane and that other humans should be treated humanely (Bandura, Underwood, and Fromson, 1975; Bandura, 1991; Bandura et al., 1996; Bandura, 1999).

Dissonance differs from general negative affect (general discomfort) in that it only refers to negative affect induced from the type of self-assessment just described (Elliot and Devine, 1994). Here I will focus on dissonance individuals feel from their

membership in a group that is in conflict with another group.³ In keeping with the earlier definition, to feel dissonance in a relationship with an outgroup is quite different from feeling simply uncomfortable in this relationship (i.e. not liking the outgroup). Thus, “outgroup dissonance” is dissonance that an individual member of a group feels when faced with a sequence of cognitions like the following: “My ingroup is good” and “My ingroup just did something bad,” with “bad” being any behavior that individual feels threatens his self-image through association with the group. In contexts marked by prolonged group conflict, this sequence of cognitions (or others like it) will happen on a regular basis.

Regardless of the source, once dissonance arises, individuals are motivated to resolve the discomfort and protect deeply held beliefs about themselves and their ingroups (Harmon-Jones, 2000; Harmon-Jones and Harmon-Jones, 2002). Past research suggests that most people resolve dissonance using one well-worn strategy: self-justification to keep positive beliefs about themselves intact (Steele and Liu, 1983; Steele, 1988; Tavris and Aronson, 2007). This justification takes many forms, but most commonly includes the two following elements: a) an affirmation of individual or group worth in areas besides the one that is causing the dissonance (Steele and Liu, 1983; Steele, 1988) and/or b) an affirmation that the interaction, behavior, or context causing dissonance is really an “exceptional case” and thus does not really legitimately challenge the individual’s image of himself or his ingroup. Thus, an ingroup member faced with the previous sequence of cognitions (“my ingroup just did something bad”) is more likely to justify ingroup behavior than to change his beliefs about the “goodness” of himself or his group. While preserving an individual’s sense of self worth, this dissonance-justification process has the deleterious consequence of

³Research on group identity suggests that individuals often see the ingroup as an extension of self (Steele, 1997). Even were this not the case, the idea that an individual, having once committed to a group, would feel dissonance from feeling that his group was potentially in error is fully in keeping with theories of cognitive dissonance.

“justifying” behavior against an outgroup that was “unjustifiable enough” originally that it caused dissonance. This opens the door to further justifications for further aggressive behavior, a process that often culminates in a manner described George Orwell over 60 years ago:

We are all capable of believing things which we know to be untrue, and then, when we are finally proved wrong, impudently twisting the facts so as to show that we were right. Intellectually, it is possible to carry on this process for an indefinite time: the only check on it is that sooner or later a false belief bumps up against solid reality, usually on a battlefield.⁴

The group justification index (GJI) is a series of statements that seek to measure the degree to which an individual member of a group in conflict with an outgroup engages in justification of his group. Subjects are asked to identify how much they agree with statements about the outgroup like, “Members of outgroup X are primitive” or “Member of outgroup X only understand violence” and with statements regarding the ingroup like, “My group is the best of all national groups” and “My group is smarter than the outgroup.”⁵ Outgroup denigration, ingroup glorification, and ingroup victimhood orientation all serve as excellent justifications for ingroup behavior vis-a-vis the outgroup. After all, if members of an outgroup “only understand violence,” then certainly the use of violence is fully justifiable. Similarly “logical” justifications for a continuation of violence against the outgroup can be generated using the other beliefs that comprise the GJI as well.

The foregoing exposition of dissonance highlights why humanizing the outgroup might cause some individuals to hold more firmly to group justification beliefs rather than changing these beliefs. In particular, it suggests that individuals who hold

⁴From the essay “In Front of Your Nose,” *Tribune*, London, 22 March 1946. Available online here: http://orwell.ru/library/articles/nose/english/e_nose.

⁵For a detailed list of the exact questions used in the Arab-Israeli context, see the appendix to chapter II.

high levels of group justifying beliefs prior to a humanizing experience with the outgroup, then their original set of beliefs—something similar to “Because outgroup X is not fully human, violent behavior is justified”—will be met with a cognition like the following as a result of the humanizing experience: “Members of outgroup X are indeed human.” This juxtaposition of cognitions will cause dissonance, spur self-justification, and as a result will lead these individuals to hold firmly to their current level of group justification rather than adopting a more humane outlook on the outgroup as the contact hypothesis might predict. I call this process the “dissonance-justification hypothesis.” For individuals with low levels of group justification, humanizing the outgroup will not spur dissonance, and thus we should expect the outcome predicted by the contact hypothesis: these individuals will adopt even lower levels group justification.

3.4 Testing competing hypotheses: A National Survey Experiment in Israel

The contact hypothesis and the dissonance-justification hypothesis predict very different outcomes from humanizing the outgroup. To test their competing claims, I conducted a national survey experiment in Israel in June 2010. The survey subject pool consisted of Jewish-Israeli subjects living within Israel’s pre-1967 borders and sought to measure their levels of group justification vis-a-vis Arab-Israelis. I will shortly complete a similar survey experiment with Arab-Israelis assessing their beliefs about Jewish-Israelis; I expect results from the Arab-Israelis similar to those I will display here from the Jewish-Israelis. As home to one of the world’s longest and seemingly most intractable group conflicts, Israel provides a setting in which cognitive dissonance from intergroup relations will be a common event, making it natural to prime in an experimental setting. Israel also provides a context with a large

number of people on the extreme ends of the group justification index (GJI), with some subjects holding maximum levels of GJI and others holding minimum levels. These two reasons make Israel a unique testing ground for the role of dissonance in intergroup conflict. Future research will test the generalizability of these results to other contexts.

The national survey experiment was conducted online in two waves by the *Midgam Project*, founded and administered by Ariel Ayalon (Ayalon, 2009). At the time of this experiment, the Midgam had a panel of over 30,000 subjects, representing every geographic and demographic sector of Israel. Using random stratified sampling of subjects within this panel, I obtained subjects for the survey that represented every major demographic and geographic sector of the Jewish population within Israel's pre-1967 borders. Given that most acts of intergroup aggression worldwide are enacted by individuals aged 15-30 (Ginges, 2005), I limited the sample to subjects aged 18-30. Although this is not a true *random national sample*, the subject pool generally represents the target population within Israel on a number of key demographic variables (e.g. religious identification, education, sex, etc.). For details on the representativeness of the dataset, refer to the results presented in chapter II. In the first wave of the survey, 888 total subjects answered a series of questions. 436 males and 452 females participated in this wave. One week later, these same individuals were asked to complete another survey. 660 of the original 888 subjects completed this second wave, which began with an experimental manipulation designed to humanize the outgroup (Arab-Israelis in this case) and thus create dissonance. It then asked subjects to respond to questions that measured key variables of interest (group justification levels, dissonance levels, etc.). Those subjects who participated in the second wave of the survey did not differ significantly on key variables from the nationally

representative sample that completed part 1.

Part 2 of the national experiment begins with a cover-story and experimental manipulation designed to humanize the outgroup (Arab-Israelis) for the Jewish-Israeli participants in the survey. This manipulation, designed in collaboration with two Israeli colleagues: Eran Halperin and Gilad Hirschberger, seeks to humanize the outgroup by spurring “reciprocal empathy” in Jewish-Israeli participants. Empathy, we argue, naturally leads to a humanized view of its target. We created this manipulation after trying (in various pretests) the other humanizing manipulations common in social psychology and finding that they did not have any effect in Israel.⁶ To make the manipulation as true to real-life experience as possible, the humanization manipulation is disguised as an op-ed that recently ran in the local newspaper. Here are the screens leading in the manipulation:^{7,8}

[Screen 2:] This survey is funded in part by the Global Progress Project (GPP), an international organization now in over 60 countries. To learn more about our organization, please click “next.” You will then be taken to the survey.

[Screen 3:] As part of our work in Israel, our organization analyzes the content and impact of the Israeli media. You have been randomly assigned to read one of 10 different articles published in the days before and after Holocaust Memorial Day (other survey participants will read other articles on the same subject). Please read the article carefully and provide honest

⁶In particular, we found that the manipulations developed by Batson and colleagues (Batson et al., 1989, 1997, 2002) and Leyens and colleagues (Cortes et al., 2005; Demoulin et al., 2009; Leyens et al., 2000; Vaes et al., 2003) that work in other parts of the world did not work in Israel. We discuss these results as well as the mechanisms linking reciprocal empathy in Gubler, Halperin, and Hirschberger, “Humanizing the Outgroup in Intractable Intergroup Conflict,” 2011, working paper (available upon request).

⁷Subjects saw these texts (and the entire survey) in Hebrew.

⁸In this experiment, I ran two manipulations, using a 2 x 2, fully-crossed design. However, just one of these manipulations—that presented here—had any effect on any of the key dependent variables. As such, I exclude the other manipulation (a “choice to help the outgroup” manipulation) from the analysis presented here. I will be happy to present the results from the fully-crossed model on request.

feedback. Click “ next” to go to the article.

Subjects were then randomly assigned to see either the “humanization treatment” or “humanization control” screen. The treatment screen featured the following text, presented as an op-ed written for the leading Israeli newspaper for Holocaust Memorial Day. In it, an Arab-Israeli, identifiable as such by name and the town in which he lives, expresses empathy for the suffering experienced by the subject’s ingroup.⁹ We hypothesized that this unexpected show of empathy would spur Jewish-Israeli subjects to exhibit reciprocal empathy and thus humanize the outgroup. The control text expresses the predominant Arab-Israeli view on the holocaust.¹⁰

Humanization Treatment Text

This editorial appeared in Yedioth Ahronoth roughly two weeks ago:

As an Arab-Israeli, I sat with mixed emotions in front of the TV screen this last Holocaust Memorial Day. As countless horrors and tales of suffering paraded before my eyes, the following realization washed over me: as Arabs living in Israel, we have not understood the Holocaust. Simply put: The Holocaust is one of the darkest tragedies in the history of mankind. The amount of suffering it caused for Jews is incalculable. To understand the Holocaust is to understand why the Jews feel they need a Jewish State. To dismiss or marginalize the suffering this tragedy caused, and continues to cause, in the lives of our Jewish neighbors is not only a political mistake, but a grave moral injustice. I know a little about suffering: I lost my only

⁹Of note, the fictitious writer expresses empathy for suffering NOT caused by his group as part of the intergroup conflict in which the groups are engaged. Gubler, Halperin and Hirschberger discuss the import of this distinction in other work (“Humanizing the Outgroup in Intractable Intergroup Conflict,” 2011, working paper available upon request).

¹⁰Both the treatment and control texts were written by myself so as to maximize internal validity. However, these texts draw ideas and expressions from op-ed articles that actually ran on Holocaust Memorial day in Israel during this time. The control text also represents the view commonly first expressed by Arab-Israelis in conflict-resolution “structured encounters” when the subject of the Holocaust is discussed – see Halabi (2004) for examples. As such, it represents the view commonly heard by Jewish-Israelis on this topic, making it a clean control condition text.

son to violence in the year 2000. There is not a day that I do not grieve his absence or wonder what he might be doing now if he were still alive. However, we do not delegitimize our own suffering when we recognize theirs. Pain is pain; loss is loss. We should attempt to understand, if possible, how the loss caused by the Holocaust affects their lives.

–Muhammad al-Nasr

Humanization Control Text

This editorial appeared in Yedioth Ahronoth roughly two weeks ago:

As an Arab-Israeli, I sat emotionless in front of the TV screen this last Holocaust Memorial Day. As tales of suffering paraded before my eyes, the following realization washed over me: Jews living in Israel have allowed their grief over the Holocaust to blind them to the suffering of others. The Holocaust happened. Like other minority groups, the Jews suffered. However, an understanding of the Holocaust should lead one to resolve to relieve and prevent suffering of minority groups wherever and whoever they are. As such, to dismiss or marginalize the suffering their actions cause their Arab neighbors is not only a political mistake, but a grave moral injustice. We suffer too! I lost my only son to violence in the year 2000. There is not a day that I do not grieve his absence or wonder what he might be doing now if he were still alive. Their suffering is no more legitimate than ours. I can't feel sorry for a people that cannot see past its own suffering to understand the loss and suffering of others.

–Muhammad al-Nasr

To assess whether these texts did indeed create reciprocal empathy and whether

this led subjects to see Arab-Israelis as more human, subjects were then asked the following questions. To measure empathy, I employed the empathy scale created and verified by Batson and colleagues (Batson et al., 2002). Subjects were asked: “On a scale from 1–7, please indicate how much you felt each of the following emotions as you read this article (1 = not at all; 7 = very much): sympathetic, compassionate, soft-hearted, warm, tender.” Subject responses to these five words were combined and then averaged. To measure how “human” subjects saw the outgroup, the survey borrowed 12 items from the “infrahumanization” scales employed by Gaunt, Leyens, and Demoulin (2002); Leyens, Cortes, Demoulin, Dovidio, Fiske, Gaunt, Paladino, Rodriguez-Perez, Rodriguez-Torres, and Vaes (2003); Pereira, Vala, and Leyens (2009) and colleagues. This 12-item scale included a list of six “secondary emotions” (3 positive and 3 negative) and six “primary emotions” (3 positive and 3 negative) and asked subjects to rate on a 7-point scale (7 = very much, 1 = not at all) the capacity of Arab-Israelis to feel each emotion. Previous research suggests that perhaps the best way to measure whether an individual sees another individual as “fully human” is to measure the degree to which she ascribes secondary emotions to another: Humans ascribe secondary emotions (e.g. “remorse”, “guilt,” “euphoria”, etc.) to humans alone, while assuming that animals can feel primary emotions (e.g. “rage”, “fear”, etc.) (Gaunt, Leyens, and Demoulin, 2002; Cortes et al., 2005; Leyens et al., 2000, 2001; Paladino et al., 2002). The emotions and their Hebrew translations were validated as measures of humanization in pretests as well as by previous research in Israel by Ruth Gaunt.¹¹ I combined the items that measured secondary emotions into one scale to serve as the measure of how “human” participants see the outgroup. As in previous research, these scales both exhibit nice psychometric

¹¹A special thanks to Ruth Gaunt for willingly sharing these data.

properties, with high cronbach α 's (0.937 for the empathy scale, and 0.804 for the humanization scale).

Subjects were then asked to respond to a question that measured their levels of dissonance. To measure dissonance, I employed a variation of the 14-point self-report scale created and validated by Elliot and Devine (1994) and in research since that time (Harmon-Jones, 2000; Harmon-Jones, Peterson, and Vaughn, 2003; Galinsky, Stone, and Cooper, 2000), adding two additional words suggested by research from Haslam et al. (2005) and Haslam (2006). Subjects were presented with a list of emotions (5 of which measure cognitive dissonance) and asked to indicate how much each emotion describes "how you are feeling right now" (1 = does not apply at all; 7 = applies very much). The words used to measure dissonance were: uncomfortable, uneasy, bothered, tense, and concerned. The 5-item dissonance measure has nice psychometric properties, with a cronbach's α of 0.84 in the national survey experiment. The scale also includes measures of negative affect, which have been shown to be distinct from dissonance; I find the same results in these data.

Finally, participants in part 2 of the survey were asked a series of questions to measure their level of group justification (GJI), the dependent variable in this study. To measure GJI beliefs, subjects were presented with a list of statements representing each of the three beliefs that comprise the GJI and then asked to identify how much they agreed with each statement (1 = strongly disagree; 4 = neither agree or disagree; 7 = strongly agree). To measure levels of outgroup denigration (OD), subjects saw statements such as: "In general, Arabs in Israel are much more primitive than Jewish-Israelis" and "In general, Arab-Israelis are violent" (we also included a number of reverse-scored items on this and other scales, such as "In general, Arab-Israelis are intelligent"). To measure levels of ingroup glorification (IG), subjects saw statements

such as: “Jewish-Israelis are better than other national groups in all respects” and “In the conflict with the Arabs, the Jews have continually chosen the moral high ground.” To measure levels of ingroup victimhood orientation (IVO), subjects read statements like: “Jewish Israelis have suffered much more than Arab-Israelis as a result of the conflict between the two groups” and “Despite Israel’s desire for peace, the Arabs have repeatedly forced conflict.” To create the GJI index variable, I aggregated the results from each of the three measures and then divided by three so that index is still on a 1–7 scale. As such, subjects with $GJI > 4$ show increasing levels of agreement with these beliefs; subjects with $GJI < 4$ show increasing levels of disagreement. Each of the individual measures and well as the GJI index has nice psychometric properties.

To test whether only subjects with high GJI levels before the humanization manipulation feel dissonance and thus behave according to the dissonance-justification hypothesis, I also measured GJI levels in part 1 of the survey. Subjects in part 1 were asked different questions than those presented in part 2 of the survey. Prior to running the national survey, pretests showed the questions in both parts of the survey to correlate highly (.7 or higher). In the results that follow, I distinguish between these two measures of GJI levels (one pre- and one post- the manipulation) by calling the measures gathered in part 1 of the survey “original GJI levels.”

The Midgam used block randomization to assign roughly equal numbers of subjects with characteristics thought to impact GJI levels to the humanization control and the treatment condition. However, given the voluntary nature of participation in part 2 of the survey as well as the inability to know subjects’ original GJI levels and past experiences with the outgroup prior to making this assignment, some randomization imbalances occurred. As these variables are not evenly distributed among

the treatment and control condition, I control for these in the regression results presented below. These variables include the following: “original GJI levels” (measured as described earlier); “political id” (1= extreme right; 7 = extreme left); “religious id/secular id/traditional id” (a factor variable with 4 levels: Orthodox, Religious, Traditional, and Secular; Orthodox is the base category in the regression presented below); “ses” (socio-economic status: 0 = no income – 5 = well above average); and “neg. outgroup exp.”, a measure of an individual’s negative past experiences with the outgroup. Subjects are asked to indicate whether the following statement is true (1) or false (2) for them: “I have lost a close friend or family member to death from violence by Arabs.” Other factors that might explain GJI levels are controlled for by the randomization process.

3.5 Results: Humanization → Dissonance for subjects with high GJI

Using the foregoing data and measures, I now turn to a presentation of the results. In this section, I first show that that the humanization manipulation in part 2 of the survey does indeed create empathy for and humanize the outgroup—a necessary manipulation check to show that that texts are having the hypothesized effect. I then show that as dissonance-justification hypothesis would predict, subjects with high original GJI levels do indeed exhibit high levels of dissonance as a result of the humanization manipulation, while the manipulation has no effect on the dissonance levels of those with low GJI.

Table 3.1 presents the empathy and humanization results. These results are obtained by regressing the two dependent variables, “Empathy” and “Human,” on the manipulation and control variables. Following standard practice, I stack the “Human” data so that subject responses to each of the 6 words that comprise the

secondary emotions serve as an individual observation, making these panel data. This allows me to control for the effect of whether these words were of a positive or a negative valence (“Pos/Neg” in the table below). As such, I calculate and report clustered standard errors for the “Human” model.

Table 3.1: Effect of the Manipulation on Outgroup Empathy and Humanization

	Empathy	Human
Intercept	2.633*** (0.494)	6.606*** (0.459)
Humanity Treatment	1.693*** (0.123)	0.213 [†] (0.114)
political id	0.218*** (0.054)	0.090 [†] (0.048)
religious id*	0.162 (0.234)	0.241 (0.262)
secular id*	0.471* (0.237)	-0.135 (0.258)
traditional id*	0.402 [†] (0.229)	-0.108 (0.252)
ses	0.049 (0.046)	-0.085 [†] (0.044)
Neg. outgroup exp.	-0.079 (0.117)	0.097 (0.110)
Original GJI level	-0.232*** (0.059)	-0.471*** (0.057)
Pos/Neg		-0.304*** (0.048)
<i>N</i>	637	3768
<i>R</i> ²	0.449	0.116
adj. <i>R</i> ²	0.442	0.114
Resid. sd	1.282	1.797

Robust standard errors in parentheses

[†] significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

*Orthodox is the base category

These results paint the picture we would expect. Not surprisingly, subjects with high original GJI levels exhibit lower levels of empathy and perception of the outgroup (Arab-Israelis) as human. Given that both of these behaviors run counter to their their group-based beliefs, this is to be expected. It is also not surprising that individuals on the left of the political spectrum display both higher levels of empathy and see Arab-Israelis as more human. This confirms results from previous

research discussed in chapter II (Maoz and McCauley, 2008; Maoz and Mccauley, 2009; Halperin, Canetti-Nisim, and Hirsch-Hoefler, 2009; Struch and Schwartz, 1989; Bar-Tal and Teichman, 2005; Bar-Tal, Raviv, Raviv, and Dgani-Hirsh, 2009). The results also suggest an effect of socio-economic status and religion on empathy and perception of the outgroup as human. Most importantly, however, they show that even when we control for these variables, the humanization manipulation does indeed spur individuals to feel higher levels of empathy for the outgroup as well as to see the outgroup as more human. The substantive effect of the manipulation is quite large, moving subjects nearly two points on the 7-point empathy scale. The effect on humanization is smaller, but still significant. This provides evidence that the humanization manipulation is indeed humanizing the outgroup.

As results in Table 3.2 indicate, the humanization manipulation also affects subject levels of dissonance in the manner predicted by the dissonance-justification hypothesis. This hypothesis predicted that humanizing the outgroup would create dissonance for individuals with high original GJI levels. Given that the nature of this interactive effect is difficult to discern simply by looking the coefficient, Figure 4.1 presents a marginal effects plot of these results. This figure illustrates the marginal effect of the humanizing text (the treatment condition) on dissonance (y-axis) for individuals with differing levels of original GJI beliefs (x-axis). The zero line in the plot represents dissonance levels experienced by those in the control condition. The pattern it presents is exactly that predicted by the dissonance-justification hypothesis. For subjects with original GJI levels lower than 4, the humanization prime either decreases their level of dissonance ($GJI=1$) relative to that of the control group or does not affect their dissonance levels at all. This is not surprising since these individuals hold group-based beliefs that are not challenged by humanizing the outgroup—they

Table 3.2: Effect of the Humanization Manipulation on Dissonance

	Dissonance
Intercept	3.862*** (0.548)
Humanity Treatment	-0.833* (0.417)
Original GJI level	-0.165* (0.077)
political id	0.106* (0.054)
religious id*	0.250 (0.230)
secular id*	0.313 (0.236)
traditional id*	0.266 (0.226)
ses	-0.030 (0.045)
Neg. outgroup exp.	-0.076 (0.116)
Humanity Treatment*Original GJI level	0.209* (0.091)
<i>N</i>	622
<i>R</i> ²	0.042
adj. <i>R</i> ²	0.028
Resid. sd	1.257

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

*Orthodox is the base category

already see Arab-Israelis as human. For subjects with high GJI beliefs ($GJI > 4$), however, the humanizing text increases their level of dissonance. For these subjects, seeing Arab-Israelis as human creates dissonance for the reasons described earlier in the paper by generating a cognition that challenges their ideal self-image. This effect holds true when controlling for the randomization imbalances measured by the control variables, of which the data suggest only political identification has any relationship to subject levels of dissonance, with people on the right exhibiting higher levels of dissonance.

To this point, the results confirm the predictions of the dissonance-justification hypothesis. Humanizing the outgroup does indeed cause dissonance for those indi-

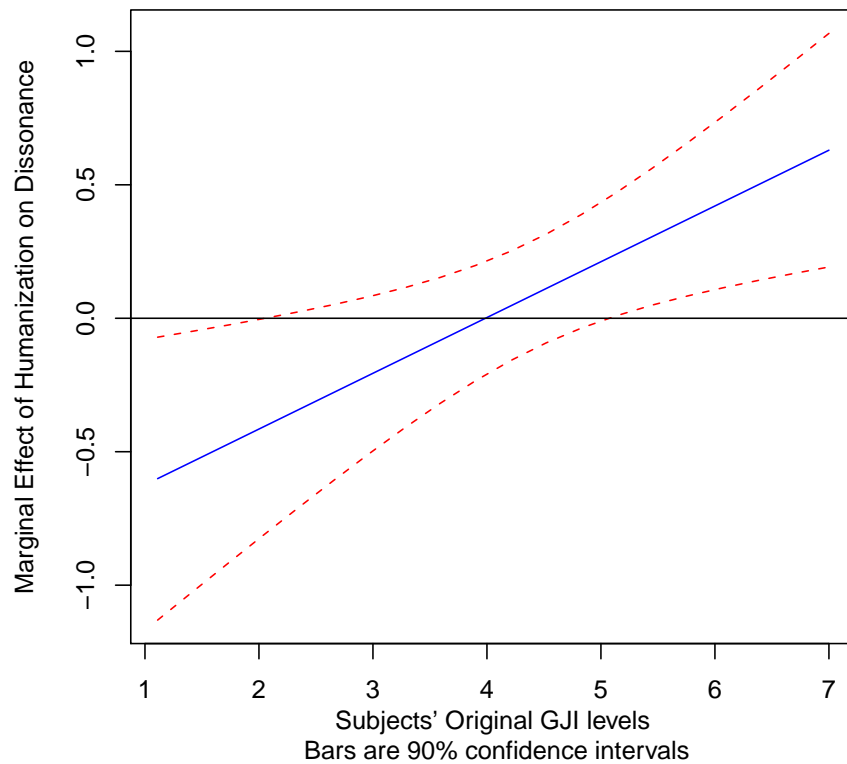


Figure 3.1: Interactive Effects: Effect of the Manipulation and Original GJI levels on Dissonance

viduals invested in group-based beliefs at odds with seeing the outgroup as human. As the results in the next section will highlight, although this effect is small, it has significant implications for the beliefs individuals adopt in response to the humanization experience.

3.6 Results: Dissonance from the Humanization → Increased GJI beliefs

The dissonance-justification hypothesis predicts that individuals who feel high levels of dissonance from humanizing the outgroup will be motivated to hold firmly to their prior beliefs rather than changing them as the contact hypothesis would suggest. In the preceding section, I showed that on average, individuals with high original GJI

levels exhibited increased levels of dissonance from the humanization manipulation while the the same manipulation had either no effect or a slight decreasing effect on the dissonance levels of individuals with low original GJI levels. As such, if the theory is correct, then contrary to what contact hypothesis predicts, individuals with high original GJI levels should show no change in beliefs after experiencing the humanization manipulation; dissonance from the humanization manipulation should erase this effect. On the other hand, individuals with low original GJI levels who experience low levels of dissonance from the humanization manipulation should react as the contact hypothesis predicts, lowering their GJI levels even more. In other words, for both groups, the effect of the humanization manipulation on GJI levels will be dependent on subject levels of dissonance, and vice-versa.

To test the validity of these claims, I divide the survey population into two groups: one containing individuals with high original GJI levels ($GJI > 4$) and the other containing individuals with low original GJI levels ($GJI \leq 4$). For each group, I then regress individual GJI levels recorded after the experimental manipulation on the interaction between the manipulation and subjects' levels of dissonance. As in previous regressions, I control for subjects' original GJI levels as well for as other variables that might predict individual GJI levels after the manipulation and that are not controlled for by the randomization process. When the sample is split, subjects in the low GJI group ($GJI \leq 4$) with different religious and political views, as well as with differing past experiences and socio-economic levels are evenly distributed between the treatment and control condition – i.e. knowing individual information on any of these variables will not allow one to predict with certainty the experimental condition to which an individual was assigned. As such, I do not include these control variables to correct for randomization imbalances in this group. Of necessity,

I include three control variables to correct for imbalances in the $GJI > 4$ group (political id, religious id, and ses). Table 3.3 presents the results for the relationship of interest, excluding control variables.

Table 3.3: Effect of the Manipulation and Dissonance on GJI levels

	Original GJI > 4	Original GJI ≤ 4
Intercept	6.533*** (0.229)	4.205*** (0.436)
Humanity Treatment	-0.489† (0.279)	-1.060* (0.536)
Dissonance Level	-0.079† (0.047)	-0.225* (0.109)
Humanity Treatment*Dissonance Level	0.128† (0.071)	0.238† (0.134)
<i>N</i>	414	204
<i>R</i> ²	0.189	0.025
adj. <i>R</i> ²	0.173	0.010
Resid. sd	0.882	1.139

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

These results provide strong support for the dissonance-justification hypothesis. As predicted, subjects in the group with low original GJI levels change their beliefs towards the outgroup as a result of being made to see the outgroup as human. In particular, when they feel little to no dissonance from the experience (dissonance levels 3 or lower on a 7-point scale), then they behave as the contact hypothesis suggests, adopting even lower levels of GJI beliefs. However, if they feel high levels of dissonance from seeing the outgroup as human, then the humanization manipulation has no effect on their beliefs—they behave like individuals in the $GJI \geq 4$ group. To get a sense for the substantive effect of this relationship, I generated a marginal effects plot that shows the predicted marginal effect of the humanization treatment on subject GJI levels (y-axis) according to individual levels of dissonance from the treatment (x-axis). Figure 3.2 presents the results.

In this figure, the zero-line represents the control condition—i.e. subjects with

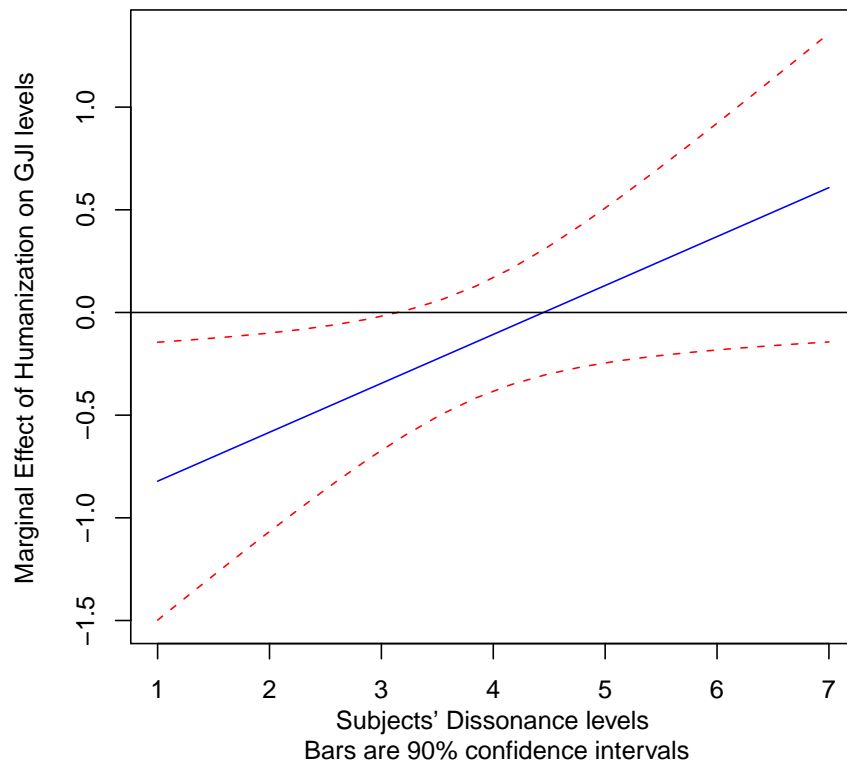


Figure 3.2: Interactive Effects: Effect of the Humanization Manipulation and Dissonance on GJI levels; For subjects with original GJI ≤ 4

low original GJI levels who did not read the text that humanized the outgroup. The blue line represents the marginal effect of the humanization treatment on subject GJI levels based on differing levels of dissonance. The red lines represent 90% confidence intervals. As this plot suggests, individuals with low original GJI levels who received the humanization manipulation and felt little to no dissonance exhibit as much as a 1-point decrease in their level of GJI beliefs relative to those in the control condition. On the GJI index, this is equivalent to a shift from “disagree” to “strongly disagree.” If they felt dissonance from the manipulation, however, then this effect disappears.

For individuals in the high original GJI group (GJI > 4), the results are a little

more nuanced. As was highlighted earlier, individuals in this group on average experienced dissonance from humanizing the outgroup, as the humanized perspective on the outgroup contradicts their group-based beliefs. As predicted, individuals with high dissonance in this group exhibit no change in beliefs as a result of the humanization manipulation – they hold tightly to their previous beliefs. This result runs directly counter to that predicted by the contact hypothesis and directly confirms the dissonance-justification prediction. Interestingly, however, some individuals within this group report feeling low dissonance as a result of the humanization manipulation. Unlike those in the low original GJI group, however, these individuals do not exhibit a decrease in their levels of GJI beliefs, as the dissonance-justification hypothesis would predict. Instead, they act exactly like those in their group who report high dissonance: they do not change their GJI levels as a result of the manipulation. This is evident in the marginal effects plot generated for this group and presented in Figure 3.3.

Two explanations for this anomalous behavior come to mind: 1) these individuals are not truthfully reporting their dissonance levels, which in reality are higher than they care to admit, explaining why they behave like the others in their group or 2) individuals in this group deal with dissonance in a manner different than those in the $GJI \leq 4$ group. Given that this is a self-report measure, I suspect that explanation 1 is more likely. In experiments to be begun shortly in Israel, I will employ a physiological measure of dissonance in addition to the self-report measure used in this experiment. This will allow me to test this supposition. Regardless, the finding that humanizing the outgroup for individuals with high original GJI levels does not lead to lower levels of negative beliefs towards the outgroup, coupled with the preceding evidence for the role of dissonance in this process, has serious

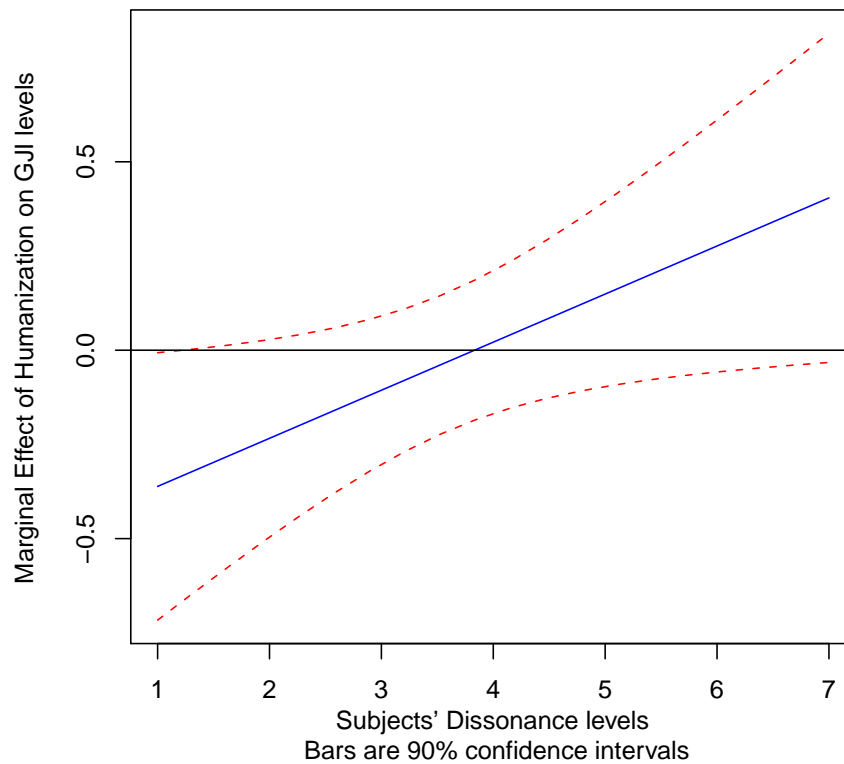


Figure 3.3: Interactive Effects: Effect of the Humanization Manipulation and Dissonance on GJI levels; For subjects with original GJI > 4

implications for conflict resolution. I turn to these in the final section of the paper.

3.7 Limitations and Conclusions

“The more I’ve thought about it, the more I’m convinced that most programs play a dirty trick on their participants: they help them change their views towards the outgroup, but do nothing to help them deal with the resulting dissonance.”

– Reuven Barneis, former conflict resolution facilitator, Israel¹²

Perhaps Barneis’s claim is too strong: a conflict resolution program that does not help participants deal with dissonance might not be a “dirty trick.” Many of these

¹²From an interview conducted in 2009 by the author.

programs do tremendous good. However, the results presented here suggest that such a program might generate unexpected results. And Barneis’s implicit assertion that to improve results groups must understand and then help their participants “deal with dissonance” could not be more correct. As the foregoing results from Israel suggest, contrary to what proponents of humanization approach to intergroup conflict might expect, individuals who feel high levels of dissonance from the humanization approach do not decrease their adherence to group-based beliefs that motivate outgroup aggression—they hold more tightly to these beliefs. While the substantive effect of this shift if not large, the finding that a *positive*, humanizing experience with the outgroup can strengthen an individual’s adherence to *negative* group-based beliefs for some individuals has significant implications for attempts at individual-level conflict resolution.

The most immediate implication of these results draws on the reality that those individuals who experienced dissonance from the humanization manipulation (and thus held more firmly to their beliefs rather than changing them) are the very individuals who should be the target of conflict resolution groups. As results from chapter II suggest, these individuals—with high original GJI levels—are most likely to engage in and support aggression against the outgroup. They are the fuel of seemingly intractable conflicts. As such, if the humanization approach is “not working” for these individuals, as these data suggest, then it is not working for conflict resolution. This reality is likely masked by the selection process that drives most conflict resolution groups: most individuals *self-select into these groups*, likely because they have an initial predisposition towards reconciliation with the outgroup. As such, the majority of these individuals likely come from the “GJI \leq 4” group. As the preceding results highlight, the humanization approach does indeed lower GJI

levels for some individuals within this group: individuals who do not feel high levels of dissonance as a result of the humanizing experience. Thus, the selection process lends itself to a belief in the effectiveness of the approach. However, lowering the GJI levels for a group of individuals with already low levels contributes only minimally to conflict resolution. Rather, the focus of conflict resolution groups should be on the “GJI > 4” group, a group less likely to participate in conflict resolution groups and also, as I have shown, less likely to respond as conflict resolution groups might when they do participate. These results suggest that any approach that will succeed in changing beliefs for this group of individuals will need to help participants deal with dissonance.

The nature of the survey experiment that generated these results suggests certain limitations on their generalizability. First, the experiment I employ here shows just short-term effects. In the short-term, the humanization manipulation coupled with dissonance does indeed change individual GJI beliefs. I do not discuss or measure “long-term” effects. I do not think this is a serious limitation. What I present here represents a theory of the impact of everyday, hour-to-hour interactions on individual beliefs. The “long-term” is a product of these numerous, “short-term” interactions. Second: these results stem from a detailed analysis of the effect of humanizing the outgroup in one particular context: the Arab-Israeli conflict. The data used to generate these results come from a nationally representative pool of Jewish-Israel subjects within Israel’s pre-1967 borders and focus on interactions between Israeli Jews and Israeli Arabs. As such, before these findings can be generalized to other conflicts and contexts, further tests are needed. Dissonance theory suggests these findings will generalize to other contexts. I will shortly begin research in other countries to assess this claim.

In Israel, data suggest that roughly 40% of the 18–30 year old population has high GJI belief levels, greater than 5 on a 7-point scale. This suggests a pressing need to further understand the role of psychological processes like dissonance in generating and maintaining these beliefs. This is an area within conflict studies ripe for further research.

CHAPTER IV

Positive contact with the outgroup: who will react positively, who won't

Abstract

Results presented in chapter III provide evidence that on average, individuals with high levels of group justifying beliefs do not change their beliefs in response to positive, humanizing contact with the outgroup as predicted by the contact hypothesis. Rather, for this group of individuals, positive contact, on average, leads to high levels of dissonance, which erases the effect of positive contact by motivating these individuals to hold more tightly to their negative beliefs rather than replacing them with more peaceful alternatives. However, a detailed look at the data from chapter III highlights an important, and hopeful reality: not all individuals with high GJI beliefs respond to positive contact with dissonance. This paper employs data from a national survey experiment in Israel to show that not all subjects with high GJI beliefs respond to positive contact with the outgroup with dissonance. It then draws on past research to suggest five different individual-level characteristics and experiences that should predict which individuals within the high GJI group will feel dissonance and which will not. Using these same data, it provides evidence for these claims. It concludes with a discussion of the import of these findings for conflict resolution.

4.1 Introduction

The data presented in the preceding chapters on intergroup conflict in Israel suggests two conclusions immediately relevant to the study of intergroup conflict and to attempts at conflict resolution: First, one of the best predictors of which individuals will engage in and support aggression against members of an outgroup is individual levels of group justification, a particular set of group-based beliefs measured by the GJI index. In a national survey in Israel, these beliefs performed significantly better in predicting support for and actual engagement in aggression against members of the outgroup than did traditional factors like political and religious ideology, socio-economic status, and others (chapter II). Second, these data provide evidence that on average, individuals with high levels of group justifying beliefs do not change their beliefs in response to positive, humanizing contact with the outgroup as predicted by the contact hypothesis. Rather, for this group of individuals, positive contact, on average, leads to high levels of dissonance, which erases the effect of positive contact by motivating these individuals to hold more tightly to their negative beliefs rather than replacing them with more peaceful alternatives (chapter III). Taken together, these results paint a bleak picture for conflict resolution, for they suggest that positive contact with the outgroup might not generally lead to more positive beliefs about the outgroup for the very individuals positive contact should target: those with high GJI beliefs.

However, a detailed look at the data from chapter III highlights an important, and hopeful reality: not *all* individuals with high GJI beliefs respond to positive contact with dissonance. Instead, some individuals, even when faced with the same threat to their group image as others as a result of positive contact with the outgroup, respond

without dissonance. Given the negative effect of dissonance on conflict resolution, identifying the characteristics that explain which individuals will feel dissonance from positive contact with the outgroup and which individuals will not will thus provide vital information to practitioners of conflict resolution, for understanding these characteristics will suggest a means to help more individuals respond to the outgroup without dissonance. This paper employs data from a national survey experiment in Israel, described in chapter III, to show that not all subjects with high GJI beliefs respond to positive contact with the outgroup with dissonance. It then draws on past research to suggest *five* different individual-level characteristics and experiences that should predict which individuals within the high GJI group will feel dissonance and which will not. Using these same data, it provides evidence for these claims. It concludes with a discussion of the import of these findings for conflict resolution.

4.2 Theory

As described in the preceding chapters, group justifying beliefs, and their composite index (GJI), measure the degree to which individuals hold the following three views about their ingroup and outgroup: outgroup denigration (negative stereotypes, dehumanization, etc.), ingroup glorification, and ingroup victimhood orientation.¹ In an experiment described in chapter III, Jewish-Israeli subjects within Israel were presented with positive information that humanized the outgroup (Arab-Israelis), with the idea that for individuals who held GJI beliefs, this information would directly challenge these beliefs, thus challenging their “ideal self image” and spurring dissonance.² I argued that challenges to an individual’s core belief about his ingroup come in many forms. However, in societies embroiled in intergroup conflict, they

¹For more on how these beliefs are measured and on the creation of the index, see chapter II.

²This stems from the “dissonance-justification hypothesis” described in detail in chapter III.

most often come in one of two forms: 1) information that the ingroup has done something “bad” or 2) positive information about the outgroup. The first form provides a direct challenge to the image of the ingroup and constitutes information like: “We killed women and children in group X.” The second form challenges the image of the ingroup *indirectly* by challenging the justifications individuals use for “bad” behavior against the outgroup. Often, these justifications are built on the premise of outgroup denigration—allowing an individual to believe that the outgroup “deserves” bad behavior for any number of reasons (e.g. it “only understands violence”, etc.). Thus, to receive positive information about the outgroup that undermines this justification will challenge beliefs about the ingroup as well.

The key results in chapter III suggested that positive information about the outgroup did indeed appear to challenge subjects’ self image if they held high GJI beliefs, with subjects who held these beliefs showing an average increase in dissonance when made to see the outgroup as human. Figure 4.1 reproduces the marginal effects plot from this paper, with subjects’ original GJI beliefs on the x-axis (1 = they do not hold these beliefs, 7 = they hold high levels of these beliefs) and the effect line showing the marginal effect the humanizing treatment on subjects’ levels of dissonance as compared to subjects in the control condition. As in chapter III, the model used to generate this effect line controls for a number of other factors: religious id, political id, and socio-economic status.

However, a close look at the data generating this result suggests that not everyone in the high GJI group ($GJI > 4$) exhibited dissonance when faced with this threat to their self image. In fact, many of them did not. Figure 4.2 represents a histogram of the dissonance levels of just those subjects with high GJI beliefs ($GJI > 4$) in response to the humanizing treatment manipulation ($n = 189$).

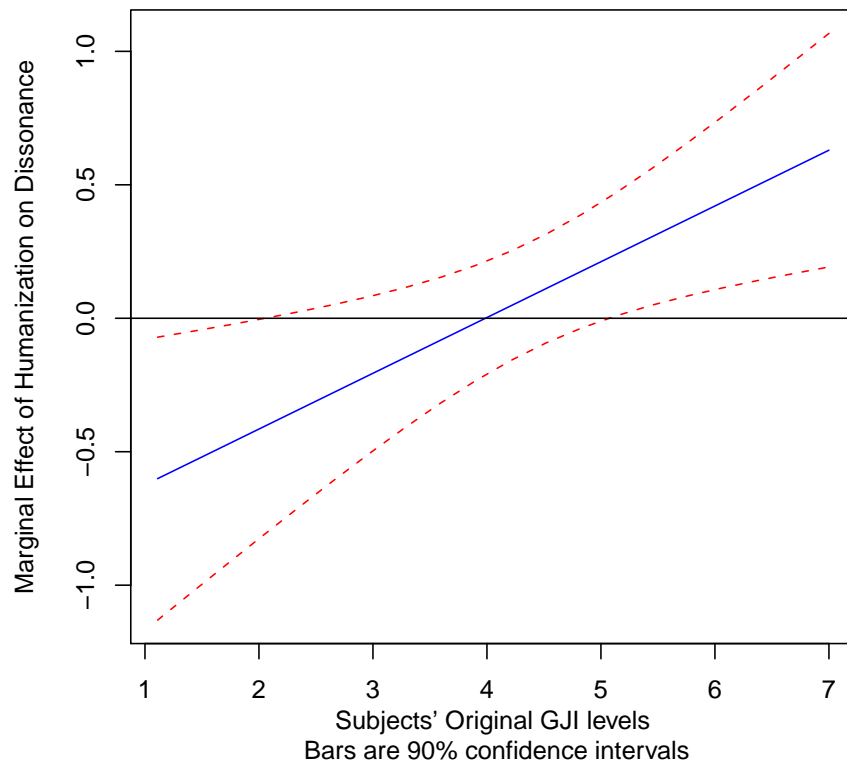


Figure 4.1: Interactive Effects: Effect of the Manipulation and Original GJI levels on Dissonance

The mean dissonance level for this group as a whole is quite average, 3.47, a dissonance level statistically undistinguishable from mean levels of dissonance for all subjects in the national survey prior to participating in the experiment: 3.58. These data suggest that a large portion of this high GJI group—roughly half—did not react with high levels of dissonance when made to see the outgroup as human even though it challenges their beliefs. Thus, the average increase in dissonance highlighted in Figure 4.1 is driven by the other half of the group: those who react with unusually high levels of dissonance to this challenge.

Drawing on past research from social psychology and intergroup conflict, I hypothesize that five different individual-level characteristics and experiences will dif-

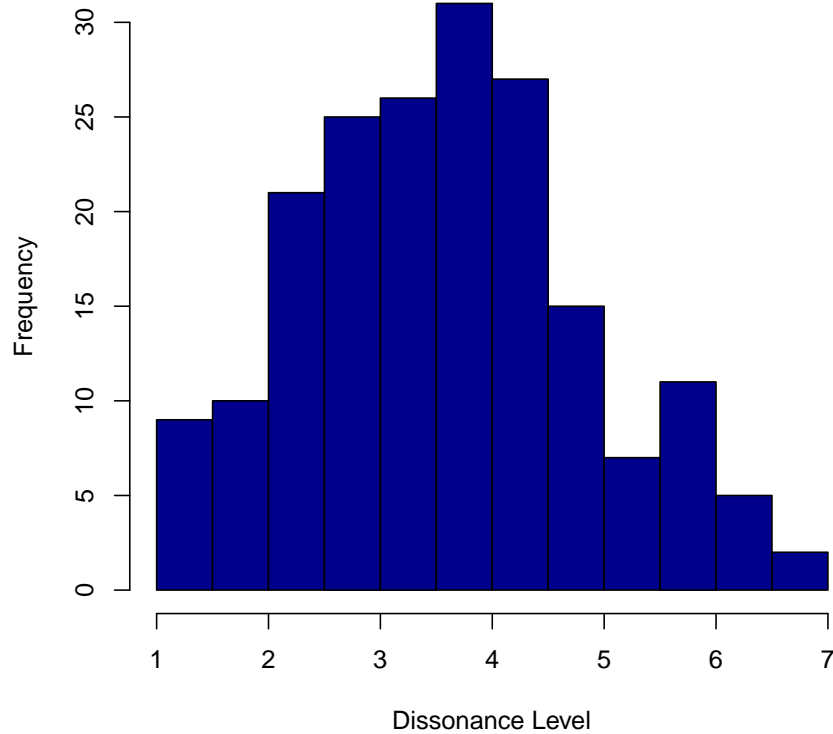


Figure 4.2: Dissonance Levels for high GJI subjects in response to the humanizing treatment

ferentiate these subgroups. The five factors are as follows: 1) the psychological trait called “need for closure”, 2) degree of religiosity, 3) negative past experiences with the outgroup, 4) strength of ingroup attachment, and 5) gender. Despite their apparent differences, each of these factors shares one commonality: they shape how individuals receive positive information about the outgroup. In what follows, I describe the hypothesized role of each in the context of intergroup conflict.

The first of these characteristics, a psychological trait called “need for closure,” identifies the way in which individuals react to information that contravenes their beliefs generally. In a series of seminal articles within social psychology, Kruglanski, Webster, and Klem (1993), Webster and Kruglanski (1994), and Jost et al. (2003)

identify and assess the effects of a psychological characteristic they call “need for closure.” In brief, this characteristic represents the degree to which individuals feel comfortable with ambiguity, disorder, and change. It is composed of four highly related traits, sometimes combined together into one measure, at other times used individually: 1) preference for order, 2) preference for predictability, 3) decisiveness, 4) discomfort with ambiguity, and 5) closed-mindedness. Jost, Napier, Thorisdottir, Gosling, Palfai, and Ostafin (2007) provide evidence that this characteristic predicts a number of political preferences; others use it to predict different outcomes (Kruglanski et al., 2006). This research suggests that individuals with high need for closure will be more likely than those with low need for closure to feel dissonance when confronted with information that challenges their beliefs about the ingroup. Thus, they will be more likely to adopt group justifying beliefs than to consider changing their core beliefs. Individuals with lower need for closure should feel much more comfortable with the cognitions and thus not exhibit higher levels of dissonance. For reasons highlighted in chapter III, for individuals in intergroup conflict that do not see the outgroup as fully human, being made to see this group as human will provide a challenge to their core beliefs. As such, I hypothesize that the higher an individual’s need for closure, the higher the level of dissonance s/he will exhibit when made to see the outgroup as human.

The second, third, and fourth of these factors identify the the salience and boundaries of individual ingroup and outgroup identities, thus shaping the salience of the threat generated by humanizing the outgroup. In Israel, the second of these factors, degree of individual religiosity, plays a role in clearly limiting the boundaries of the ingroup for Jewish-Israelis as well as establishing the salience of the Jewish identity. In particular, highly religious Jewish-Israelis clearly define the ingroup as Jewish,

leaving little room for the inclusion of others (Arabs, Druze, etc.). Moreover, the doctrine behind this definition of the ingroup raises the salience of this group in relation to other groups. This is clear in research within Israel, which shows that the more religious individuals become, the more likely they are to identify “Jewish” (rather than Israeli or any other identity) as their most salient identity. As a natural result of these preferences in the context of intergroup conflict, these individuals are also more likely to hold ingroup glorifying and outgroup denigrating beliefs as well.³ This suggests that for these individuals, positive information about the outgroup that challenges these beliefs will be met with dissonance. More secular Israelis, for whom the salience of their Jewish identity is lower and who are traditionally more willing to include “others” inside their ingroup, should not exhibit this effect. As such, I hypothesize that individuals within this group with higher levels of religiosity will show higher levels of dissonance as a result of being made to see the outgroup as human.

The third of these factors, negative past experiences with the outgroup, also serves as a measure of the threat posed by positive information about the outgroup. Not surprisingly, data from Israel shows that individuals who have experienced harm from the outgroup, or who have close friends or family who have experienced harm from the outgroup, are more likely to hold negative beliefs about the outgroup and engage in glorification of their ingroup as a result of these experiences.⁴ Thus, I hypothesize that these individuals should experience more threat to their self image from positive information about the outgroup than those who have not had these experiences.

³This information comes from my national survey experiment and is currently the basis of another working paper, which will be cited here in support of these claims.

⁴This information comes from my national survey experiment and is currently the basis of another working paper, which will be cited here in support of this claim.

The fourth factor, strength of ingroup attachment, directly operationalizes the salience of the ingroup and thus the salience of any attack on the image of the ingroup. Accordingly, subjects with higher levels of ingroup attachment should feel higher levels of dissonance when faced information that challenges their group-based beliefs because the group is more closely tied to their individual self image. Individuals with low group attachment can easily distance themselves from the group to avoid dissonance; individuals with high group attachment cannot. As such, they will be more likely to feel dissonance and engage in the justification process. This hypothesis challenges the argument first proposed by Allport (1954) and confirmed later by various social psychologists (Brewer, 1999) that “ingroup love” does not lead to “outgroup hate.” However, in certain contexts, I argue that ingroup love can create a heightened level of dissonance that can indeed lead to greater levels of outgroup denigration (as well as increased ingroup glorification and feelings of ingroup victimhood). I thus hypothesize that individuals within this group with high ingroup attachment will exhibit higher levels of dissonance when made to see the outgroup as human.

Finally, I hypothesize that males within this group will respond with higher levels of dissonance when faced with positive information about the outgroup. Females should not exhibit this effect. Unlike the other four factors, this hypothesis does not rest on previous research in social psychology. Rather, it rests on past research in political science that shows that males are much more likely to engage in and support aggression against an outgroup than are females (Ginges, 2005). I propose that dissonance is one mechanism behind this trend, with males more likely to feel dissonance and thus engage in self-justification for violence against the outgroup than females.

4.3 Testing the theory: A National Survey Experiment in Israel

To assess the validity of these hypotheses, I draw on the data from the national survey experiment described in detail in chapter III. This survey experiment, run in June 2010, focuses on Jewish-Israeli and Arab-Israeli subjects living within Israel's pre-1967 borders. As such, these results can be safely generalized to the case of intergroup conflict and conflict resolution within this context, but need additional testing in contexts outside Israel before they can be generalized to additional contexts. Those interested in a detailed description of the survey experiment, its subjects, methods, and measures, are encouraged to read chapter III. In what follows, I provide an abbreviated account.

4.3.1 Methods and Measures

The national survey experiment ran in two waves in Israel during June 2010. The first wave was a traditional survey and ran one week before the second wave, in which subjects were randomly assigned to either a treatment condition designed to humanize members of the outgroup and then measure subjects' levels of dissonance, or a control condition. Both waves of the survey experiment focused on the interaction between Jewish-Israelis and Arab-Israelis living within Israel's pre-1967 borders. This particular survey experiment included just Jewish-Israeli participants, assessing their levels of group justification towards Arab-Israelis; I will shortly begin a complementary study using Arab-Israeli subjects. As the focus of the research is intergroup aggression, and given that most acts of outgroup aggression are committed by individuals aged 15–30 (Ginges, 2005), the survey only included subjects aged 18–30 (subjects aged 15–18 were excluded for IRB reasons). Both waves of the survey experiment were conducted online using the *Midgam Project*, a survey

research group with a panel of over 30,000 Israelis representing every major demographic and geographic sector of Israel (Ayalon, 2009). The Midgam used random, stratified sampling from among subjects within this panel to obtain a subject pool for the survey that represented every major demographic and geographic sector of the Jewish population within Israel's pre-1967 borders. 888 subjects participated in part 1 of the survey, 436 males and 452 females. 660 of the original 888 subjects completed the second part of the experiment. Subjects who participated in the second wave of the survey did not differ significantly on key variables from those who completed part 1. While this is not a true national random sample, data presented in chapter II suggests that it generally approximates the Israeli population at large.

The content of the experimental manipulation that began part 2 of the survey will not be presented in detail here but is available in chapter III. In brief, the manipulation consisted of a treatment condition that presented a text to subjects that induced them to see members of the outgroup, in this case Arab-Israelis, as human, as well as a control text designed to have no effect on perceptions of the outgroup. As results in chapter III suggest, the treatment text—a reciprocal empathy manipulation—did indeed induce subjects to see outgroup members as more human, as measured by the infracommunication measure created by Leyens and colleagues (Leyens et al., 2000; Vaes et al., 2003).⁵ Thus, individuals with high original GJI beliefs who saw the treatment text did indeed experience a challenge to their core beliefs about the outgroup.

To explore whether the five characteristics listed earlier differentiate between members of the high GJI group who responded with dissonance to this challenge and those who do not, part 1 of the survey gathered information from subjects for

⁵See Table 1 in chapter III for these results.

all of the key variables, as well as for control variables. To measure subjects' levels of group justification (GJI), the survey presented subjects with a list of statements representing each of the three beliefs that comprise the GJI and then asked them to identify how much they agreed with each statement (1 = strongly disagree; 4 = neither agree or disagree; 7 = strongly agree). Subjects saw statements like: "In general, Arabs in Israel are much more primitive than Jewish-Israelis", "Jewish-Israelis are better than other national groups in all respects", and "Jewish Israelis have suffered much more than Arab-Israelis as a result of the conflict between the two groups." Their responses to these three variables were then combined to create the GJI index variable by adding individual responses from each of the three measures together and then dividing by three so that index is still on a 1-7 scale.⁶

To measure subjects' level of need for closure, the survey asked questions created and validated in previous work by Kruglanski, Webster, and Klem (1993) and Webster and Kruglanski (1994). For each of these questions, subjects were asked to identify on a scale how much they agreed with statements like the following (1= strongly disagree, 7 = strongly agree): "I don't like situations that are uncertain" and "I tend to struggle with most decisions." Subjects saw three questions for each of the five individual forms of need for closure described above: 1) preference for order, 2) preference for predictability, 3) decisiveness, 4) discomfort with ambiguity, and 5) closed-mindedness. Only two of these scales showed nice psychometric properties, with high cronbach α scores (above .70): preference for order and discomfort with ambiguity. I aggregate these two forms of need for closure to create one measure with a cronbach's α of 0.678. The results presented below are independent of this aggregation: the aggregate results are nearly identical to results obtained using each

⁶Previous work justifies the aggregation of these variables and describes this index in greater detail. See chapters II and III.

of these measures individually instead of the aggregate measure.

The survey asked two questions to measure negative experiences with the out-group. In both questions, subjects were asked to indicate whether the following statement was true (1) or false (2) for them. The first question read: “I have personally experienced physical harm from Arabs.” The second statement read, “A close friend or family member has experienced physical harm from Arabs.”

To measure strength of ingroup attachment, the survey asks subjects the following question: “Now we would like to get your feelings toward some different social groups in Israel using a feeling thermometer. Ratings from 50 to 100 degrees mean that you feel favorable toward the group. Ratings from 0 to 50 degrees mean that you don’t feel favorable toward the group. 50 degrees means you feel neutral toward the group.” Subjects were presented with a list of Jewish sub-groups within Israel (secular, traditional, etc.) as well as other non-Jewish groups within Israel (Druze, Arab-Israelis, etc.). Strength of ingroup attachment is operationalized as the difference between subjects’ favorability towards their ingroup and their favorability towards the other groups in Israel. Subjects’ responses were recoded on a 7-point scale, so that ingroup attachment values above 4 suggest increasing levels of ingroup attachment and values below 4 suggest decreasing levels of ingroup attachment.

Part 1 of the survey also gathered information from subjects on these additional variables, coded as follows: “political id” (1= extreme right; 7 = extreme left); “religious id” (a factor variable with 4 levels: Orthodox, Religious, Traditional, and Secular); “sex” (male/female); “ses” (perceived socio-economic status: 0 = no income, 1 = well below average – 5 = well above average) and “edu” (education level: 1 = elementary – 4 = university).

After randomly assigning subjects to either the humanization treatment or control

condition, part 2 of the survey asked subjects to respond to a question that measured their levels of dissonance. This measure was a variation of the 14-item self-report scale created and validated by Elliot and Devine (1994) and used widely in research since that time (Harmon-Jones, 2000; Harmon-Jones, Peterson, and Vaughn, 2003; Galinsky, Stone, and Cooper, 2000). I added two additional words to the traditional scale, as suggested in recent research by Haslam et al. (2005) and Haslam (2006). Thus, subjects were presented with a list of 16 emotions (5 of which measure cognitive dissonance) and asked to indicate how much each emotion describes “how they are feeling right now” (1 = does not apply at all; 7 = applies very much). As in past research, the 5-item dissonance measure has nice psychometric properties, with a cronbach’s α of 0.84.

4.4 Results and Discussion

With these data in hand, I use traditional OLS regression to estimate the relationship between the five factors highlighted earlier and levels of dissonance for individuals with high GJI beliefs. In each of the following regressions, I also include a set of control variables as a result of randomization imbalances in the experimental treatment. I include these of necessity, as a few variables that might explain subject levels of dissonance when the outgroup is humanized are not evenly distributed among the treatment and control conditions. For example, slightly more secular individuals were assigned to the treatment condition than to the control condition. Thus, to correctly capture the effect of the humanization manipulation itself on dissonance levels, I control for this and other imbalances. The variables included as controls in each regression are the same, and are as follows: 1) political identification, 2) religious identification, and 3) socio-economic status. The effects of other

variables that might explain subject levels of dissonance are controlled for by the randomization process.

As the focus of this research is to differentiate between those individuals within the high GJI group who felt dissonance as a result of being made to see the outgroup as human and those who did not, *I subset the data to include only individuals with high original GJI belief levels: GJI > 4 on the 7-point scale.* As such, I run the following estimations with a subject pool of 427 total subjects, with roughly equal numbers of subjects assigned to the treatment ($n = 189$) and control ($n = 238$) conditions. It is important to keep in mind that the $GJI \leq 4$ group is not included in these results: here we focus only on those with high GJI prior to experiencing a manipulation that humanized the outgroup, as these are the individuals who should be the target of conflict resolution and are also those most likely to feel increased levels of dissonance from humanizing the outgroup in the first place.

4.4.1 The marginal effect of need for closure on dissonance

In the preceding sections, I hypothesized that individuals who have high need for closure will be more likely to feel dissonance when put in an interaction with the outgroup that challenges their core beliefs, like being made to see the outgroup as human. Individuals with low need for closure should not exhibit higher levels of dissonance, for they will be more comfortable with the ambiguity created by the interaction. If this is indeed the case, then Jewish-Israeli subjects with high original group justification levels should exhibit higher levels of dissonance from the manipulation that humanizes Arab-Israelis *if* they also have a high need for closure. To test this hypothesis, I regress subject dissonance levels on a two-way interaction term (humanization manipulation*need for closure), including the three control variables presented above. Table 4.1 presents the results for the relationship

of interest; I do not show the estimates for the control variables.

Table 4.1: Effect of Humanization and Need for Closure on Dissonance levels

	Dissonance
Intercept	2.647*** (0.444)
Humanity Treatment	-0.683 (0.582)
Need for closure	0.031 (0.076)
Humanity Treatment*Need for Closure	0.170 (0.115)
<i>N</i>	419
<i>R</i> ²	0.041
adj. <i>R</i> ²	0.022
Resid. sd	1.251

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

These results provide initial support for the substantive relationship proposed by this hypothesis. As the coefficient on the interactive term indicates, high need for closure does indeed appear to raise levels of dissonance for subjects who experienced the humanization treatment. However, the regression results alone do not indicate the levels of need for closure over which this effect is statistically significant. Thus, to provide a better sense for both the substantive and statistical nature of this relationship, I generate a two-way marginal effect plot that illustrates the marginal effect of humanizing the outgroup (the treatment condition) on dissonance (y-axis) for individuals with differing levels of need for closure (x-axis). The zero line in the plot represents dissonance levels experienced by those in the control condition. Figure 4.3 presents the results.

The figure suggests that individuals with need for closure levels 6 or higher on the 7-point scale do indeed exhibit both a substantively and statistically significant increase in their dissonance levels when subject to the humanization treatment. On the other hands, individuals in the same group (with high GJI), experiencing the

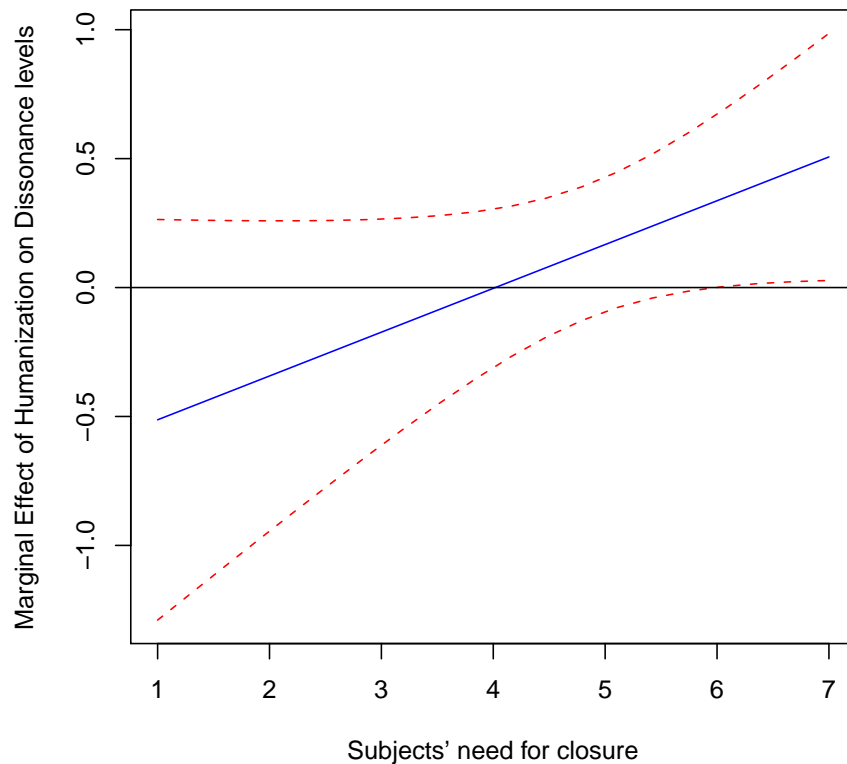


Figure 4.3: Marginal effect of the humanization manipulation on dissonance. Dotted lines are 90% confidence intervals

same challenge to their beliefs from the treatment condition, do not exhibit increased levels of dissonance if they have low need for closure. This provides compelling evidence for our first hypothesis, which suggested that individuals with low need for closure would be comfortable enough with the challenge to their beliefs that they would not experience dissonance. It also suggests that the average increase in dissonance levels exhibited by subjects in the $GJI > 4$ group as presented in chapter III is driven in part, at least, by subjects with high need for closure. Data from the survey suggest that individuals with high need for closure levels greater than 6 on the 7-point scale comprise a substantial portion of all subjects with high GJI beliefs,

roughly 20% of the total.

4.4.2 The marginal effect of religious ideology on dissonance

The second hypothesis proposed that religious and secular individuals would respond differently to being made to see the outgroup as human, with religious people showing higher levels of dissonance than their secular counterparts as a result of perceiving this information as more of a threat to their self image. To test this hypothesis, I regressed subject dissonance levels on the interaction of religious identification and the humanization treatment, with the requisite controls described earlier. As a reminder, the religious identification variable is an ordered categorical variable with four categories (from least religious to most religious): secular, traditional, religious, and orthodox. Table 4.2 presents the results.

Table 4.2: Effect of Humanization and Religious ID on Dissonance levels

	Dissonance
Intercept	2.727*** (0.266)
Humanity Treatment	1.085† (0.555)
religious id*	0.356 (0.259)
secular id*	0.993** (0.326)
traditional id*	0.621* (0.255)
Humanity Treatment*religious id	-0.344 (0.633)
Humanity Treatment*secular id	-1.347* (0.613)
Humanity Treatment*traditional id	-1.180† (0.622)
<i>N</i>	419
<i>R</i> ²	0.050
adj. <i>R</i> ²	0.029
Resid. sd	1.247

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

*Orthodox is the base category

The regression results provide initial support for this hypothesis. As expected,

individuals with higher degrees of religiosity do indeed respond with higher levels of dissonance. To aid the interpretation of these results, I once again generate a marginal effects plot, this time plotting the four levels of religiosity on the x-axis. Figure 4.4 presents the results.

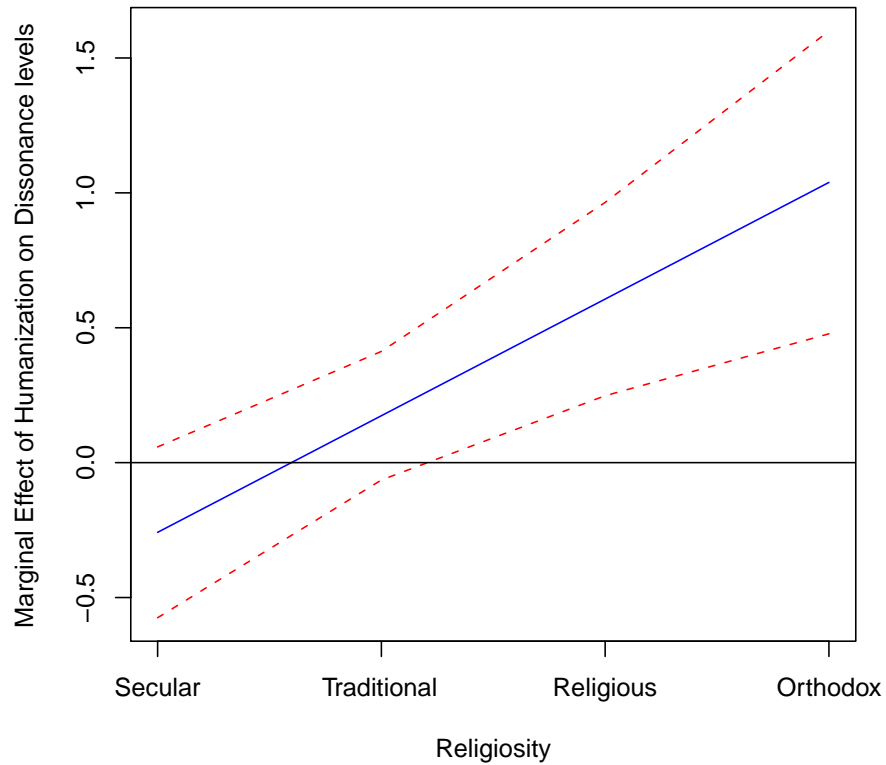


Figure 4.4: Marginal effect of the humanization manipulation on dissonance. Dotted lines are 90% confidence intervals

The marginal effects plot adds further clarity to this relationship, providing strong evidence for the second hypothesis. As predicted, individuals with lower levels of personal religiosity (those who identify as “secular” and “traditional”) do not exhibit a statistically significant increase in their reported dissonance levels as a result of being made to see the outgroup as human. However, individuals in the survey experiment

who identify as religious (“religious” or “orthodox”) show both a substantively and statistically significant increase in their dissonance levels, with orthodox respondents in the treatment condition predicted to exhibit dissonance as much as 1 point higher on the 7-point scale than orthodox respondents in the control condition—a roughly 15% increase in levels of dissonance. As the confidence intervals suggest, this effect is significant at least at the .1 level.

4.4.3 The marginal effect of negative past experiences on dissonance

Hypothesis three proposed that individuals who had significant, negative experiences with members of the outgroup would react with higher levels of dissonance when made to see the outgroup as human. As suggested earlier, this effect should stem from the effect of these experiences on their self-identification and thus on the salience of the threat to their self image generated by humanizing the outgroup. To test this hypothesis, I employ the two questions defined earlier, one measuring an individual’s personal negative experiences with the outgroup and the other measuring the degree to which an individual’s close friends or family have had negative experiences with the outgroup. I estimate a separate model for each factor, interacting each with the humanization manipulation and including the requisite control variables. Table 4.3 presents the results.

The regression results suggest that both measures—personal negative experiences and experiences had by close friends or family—do indeed influence an individual’s level of dissonance when made to see the outgroup as human. The negative coefficients on the interaction terms suggest that individuals who have not had these negative experiences hold lower levels of dissonance as a result of the humanization treatment than those who have had the negative experiences. To get a sense for the substantive and statistical nature of these relationships, I once again generate

Table 4.3: Effect of Humanization and Negative Outgroup Experiences on Dissonance levels

	Dissonance	Dissonance
Intercept	2.186*** (0.526)	2.675*** (0.343)
Humanity Treatment	1.564* (0.678)	1.024* (0.417)
Self neg. experience	0.314 (0.242)	
Humanity Treatment*Self neg. experience	-0.767* (0.358)	
Other neg. exp.		0.072 (0.166)
Humanity Treatment*Other neg. experience		-0.570* (0.250)
<i>N</i>	419	419
<i>R</i> ²	0.038	0.044
adj. <i>R</i> ²	0.020	0.025
Resid. sd	1.253	1.249

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

marginal effects plots, one for each of the variables, presented in Figures 4.5 and 4.6.

As these figures suggest, individuals who have had significant negative experiences with members of the outgroup exhibit significantly higher levels of dissonance than do those in the control condition—both substantively and statistically. Individuals who have personally experienced harm from the outgroup are predicted to exhibit levels of dissonance nearly one point (or 15%) higher than subjects in the control condition. The impact of the negative experiences of close friends or family members is smaller, half a point, but still significant. Taken together, these results provide strong evidence for hypothesis three.

4.4.4 The marginal effect of strength of ingroup attachment on dissonance

The fourth hypothesis suggested that strength of ingroup attachment would also affect subjects' responses to being made to see the outgroup as human, with subjects who have higher levels of ingroup attachment feeling more threat from the humanization treatment and thus exhibiting higher levels of dissonance. Subjects with low

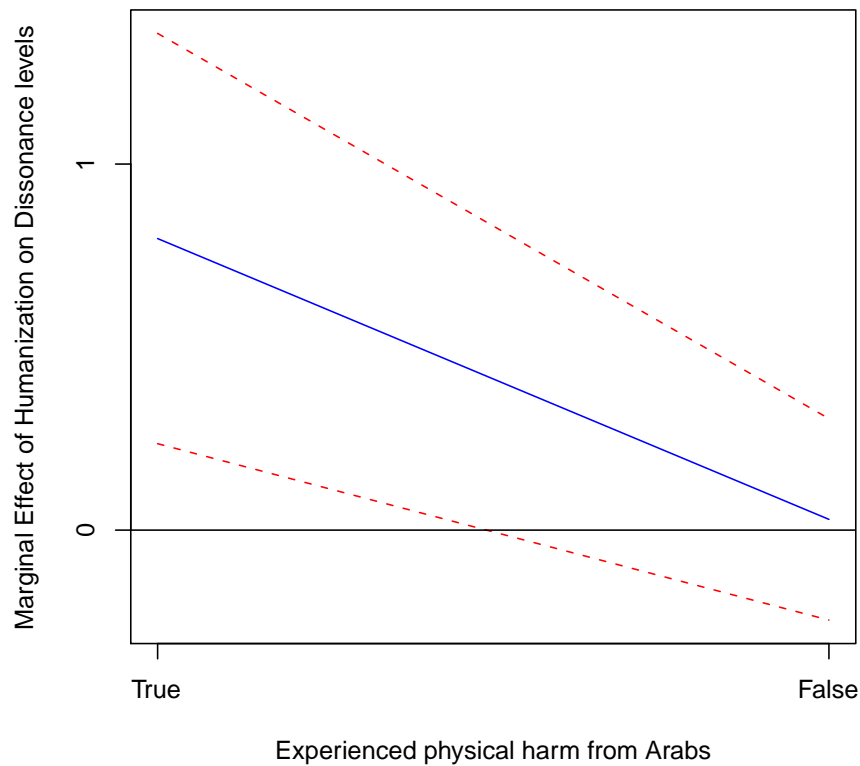


Figure 4.5: Marginal effect of the humanization manipulation on dissonance. Dotted lines are 90% confidence intervals

levels of ingroup attachment should not show an effect. To test this hypothesis, I follow the same procedure outlined above, regressing individual dissonance levels after the humanization manipulation on a two-way interaction including strength of ingroup attachment, including the necessary control variables. Table 4.4 presents the results.

These results present an interesting picture. The coefficients on the individual components of the interaction term are both negative, suggesting that the humanization treatment lowers individual levels of dissonance and also that individuals with high levels of ingroup attachment will exhibit lower levels of dissonance, when

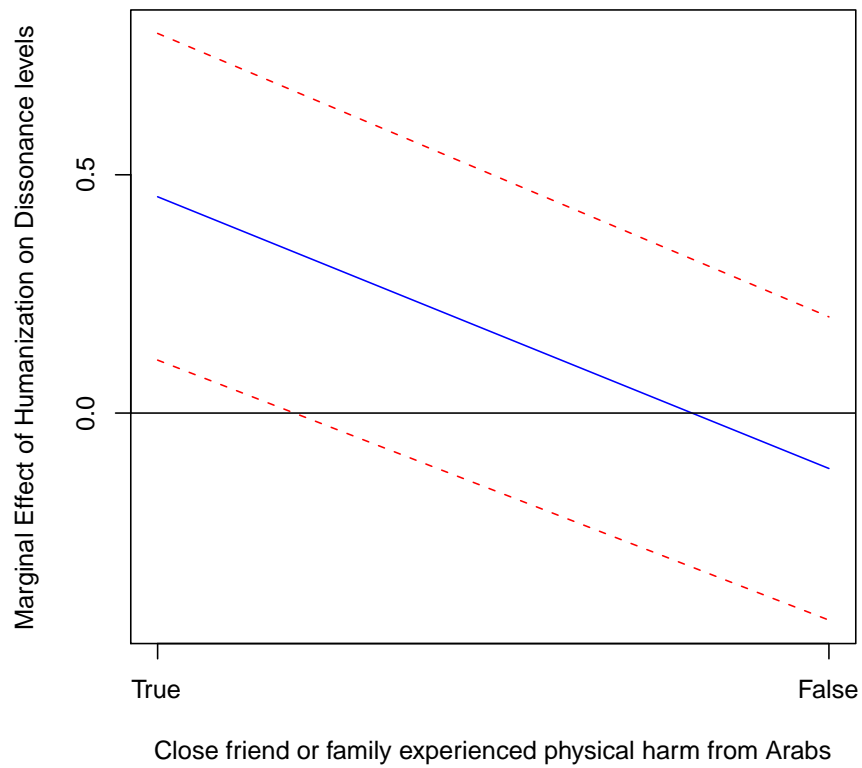


Figure 4.6: Marginal effect of the humanization manipulation on dissonance. Dotted lines are 90% confidence intervals

Table 4.4: Effect of Humanization and Ingroup Attachment on Dissonance levels

	Dissonance
Intercept	4.344*** (0.745)
Humanity Treatment	-2.275** (0.799)
Ingroup attach.	-0.266* (0.114)
Humanity Treatment*Ingroup attach.	0.486** (0.157)
<i>N</i>	419
<i>R</i> ²	0.051
adj. <i>R</i> ²	0.032
Resid. sd	1.245

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

controlling for the interaction. However, the interaction term shows exactly what the hypothesis predicts: individuals with high levels of ingroup attachment are predicted to show high levels of dissonance when made to see the outgroup as human. This picture is made more clear in the marginal effects plot presented in Figure 4.7.

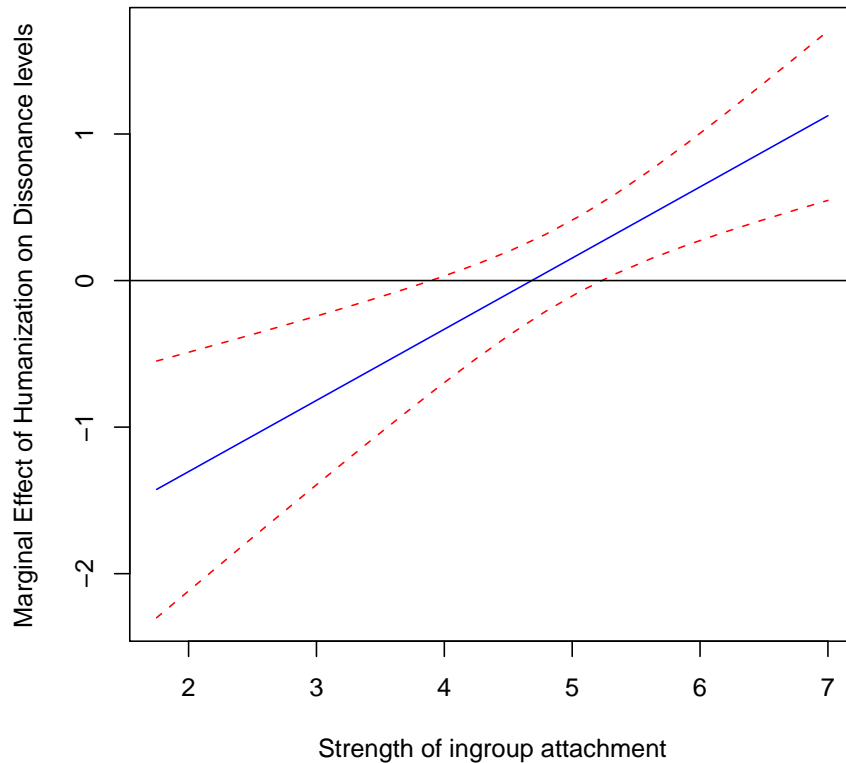


Figure 4.7: Marginal effect of the humanization manipulation on dissonance. Dotted lines are 90% confidence intervals

As this figure illustrates, individuals with high original group justifying beliefs and also high levels of ingroup attachment who are made to see the outgroup as human will exhibit levels of dissonance as much as 1-point (15% of the scale) higher than those in the control group. As the confidence intervals suggest, this effect is highly statistically significant as well. This provides strong evidence for hypothesis four.

Interestingly, however, instead of exhibiting no effect, individuals with low ingroup attachment exhibit a significant decrease (almost 1.5 points, or 21% of the scale) in their levels of dissonance as a result of being made to see the outgroup as human. This mechanism behind this counter-intuitive result deserves further exploration in future research, particularly because of its potential to shape approaches to conflict resolution.

4.4.5 The marginal effect of gender on dissonance

Finally, hypothesis five proposed that males with high GJI beliefs will feel more dissonance when made to see the outgroup as human than will females. To test this hypothesis, I followed the same procedure as above, regressing individual dissonance levels on the interaction of gender and the humanization manipulation, as well as controls. Table 4.5 presents the results.

Table 4.5: Effect of Humanization and Gender on Dissonance levels

	Dissonance
Intercept	3.307*** (0.283)
Humanity Treatment	-0.200 (0.189)
gender (male)	-0.650*** (0.168)
Humanity Treatment*gender (male)	0.774** (0.254)
<i>N</i>	419
<i>R</i> ²	0.062
adj. <i>R</i> ²	0.044
Resid. sd	1.237

Standard errors in parentheses

† significant at $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

The regression results provide initial support for hypothesis five. As the coefficient on the interaction term indicates, males are much more likely to respond with dissonance to being made to see the outgroup as human than are females. Figure 4.8 presents a marginal effects plot to make this relationship more easily to interpret.

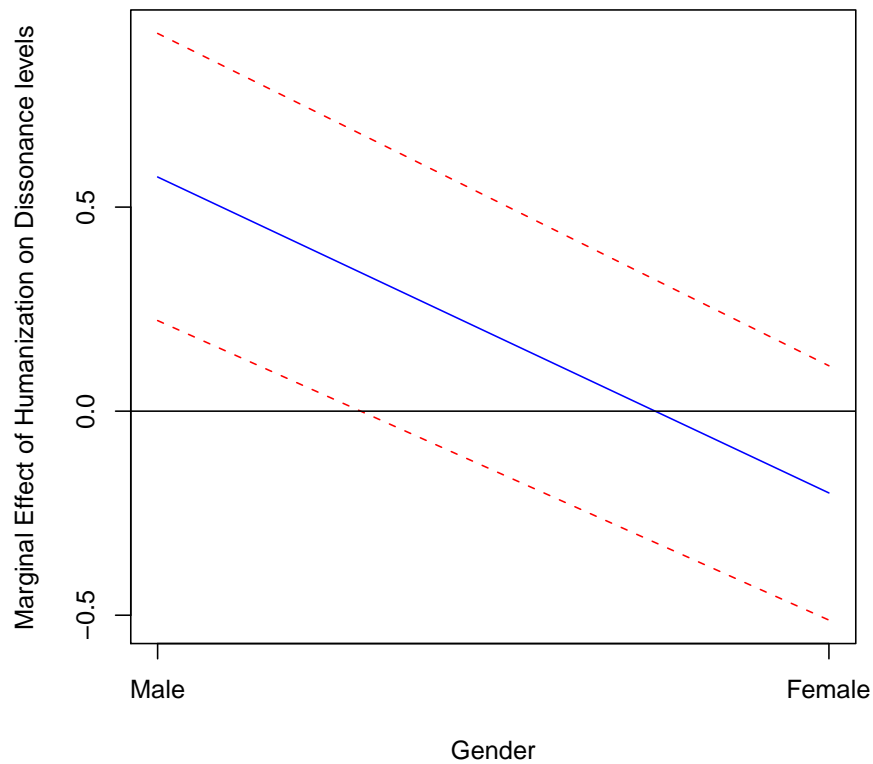


Figure 4.8: Marginal effect of the humanization manipulation on dissonance. Dotted lines are 90% confidence intervals

As this figure illustrates, the model suggests that males in this group who are made to see the outgroup as human will exhibit levels of dissonance roughly a half point higher than their counterparts in the control condition. This effect is both substantively and statistically significant. As predicted, females do not show this same increase. This provides strong support for hypothesis five.

The foregoing results all stem from splitting the data, focusing just on individuals with high group justifying beliefs ($GJI > 4$). Splitting the data makes it possible to present two-way marginal effects plots, much easier to understand than three-way marginal effects plots. However, splitting the data also throws away important

information. As such, I have generated three-way marginal effects plots as well, including these in Appendix A. As expected, these provide additional support for the relationships identified in this section.

4.5 Conclusion

Taken together, the preceding results suggest that individuals with high group justifying beliefs are more likely to respond with increased dissonance levels as a result of information from the outgroup that contravenes these beliefs if they, 1) have high need for closure, 2) are highly religious, 3) have either personally had significant negative past experiences with the outgroup or have close friends or family members who have, 4) have high levels of ingroup attachment, and 5) are male. As suggested earlier, identifying a profile of these individuals has the potential to prove beneficial to individuals and organizations involved in conflict resolution, for it highlights the processes generating the dissonant response. Thus, although it is outside the scope of this paper to suggest specific approaches to help individuals change their need for closure, strength of ingroup attachment, or the way in which they interpret religious beliefs or past experiences with the outgroup, by identifying these variables as the roots of dissonance, the paper clearly establishes the factors conflict resolution groups might target to improve results. The specific approaches taken to address individual needs based on these characteristics and experiences will certainly vary.

Certain limitations must be kept in mind when assessing these results. The data and results presented in this paper come from Jewish-Israeli subjects within Israel's pre-1967 borders. Perhaps different individual-level characteristics will drive dissonance in different contexts. As such, before these findings can be generalized to other conflicts and contexts, further tests are needed.

Appendix A

In what follows, I present three-way marginal effects plots that assess the same relationships identified in the two-way plots presented in this chapter, using the full rather than splitting the data. All regressions used to generate these plots have an *n*-size greater than 610. Each plot presents the marginal effect of the treatment condition (humanizing the outgroup) on subject levels of dissonance, with the zero line in each plot representing no effect (i.e. subject dissonance levels statistically indistinguishable from the control group). In each plot, subjects' original levels of group justification are on the x-axis, with levels 1–3 on the left capturing low self-image threat and numbers 5–7 on the right capturing high self-image threat. Unless stated otherwise, to capture the interactive effect of the third moderating variable (i.e. need for closure, past experiences, etc.), each plot contains two lines: one representing subjects “low” on the factor, the bottom 10% of the subject pool, and the other representing subjects “high” on the factor, the top 90% of the pool. Traditionally, three-way marginal effects plots have five lines, representing individuals at each of the following points in the distribution: min, first quartile, mean (or median), third quartile, and max. In other documents, I have generated plots with these five lines. However, given the difficulty of interpreting a plot with this many moving parts, and the fact that the relationships described here are linear (the five-line plots verify this), I have opted to present just the high-low results—2 lines instead of 5. I will present the other plots upon request. In these plots, the stars on the effect lines represent the portion of the marginal effect that is statistically significant at the 95% level; portions of the effect lines without stars are not statistically significant. In sum, the marginal effect lines in each plot can be interpreted as the effect of

the treatment condition (outgroup humanization) on subjects' levels of dissonance, conditional upon subjects' original GJI levels and the different third moderating variables (need for closure, religiosity, past experiences, ingroup attachment, and gender). These results come out as expected, with significant marginal effects for the individuals on the right hand side of the graph (those with high original GJI beliefs).

Need For closure: three-way marginal effect plot

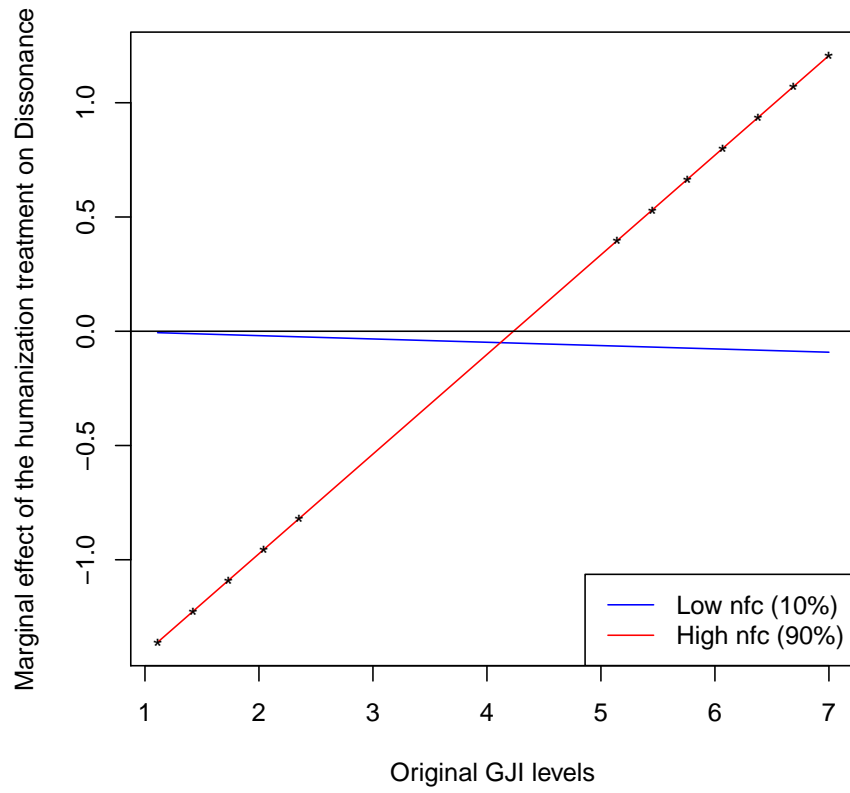


Figure 4.9: Marginal effect of the humanization manipulation on dissonance. Stars represent statistical significance with 95% confidence intervals

Religious ideology: three-way marginal effect plot

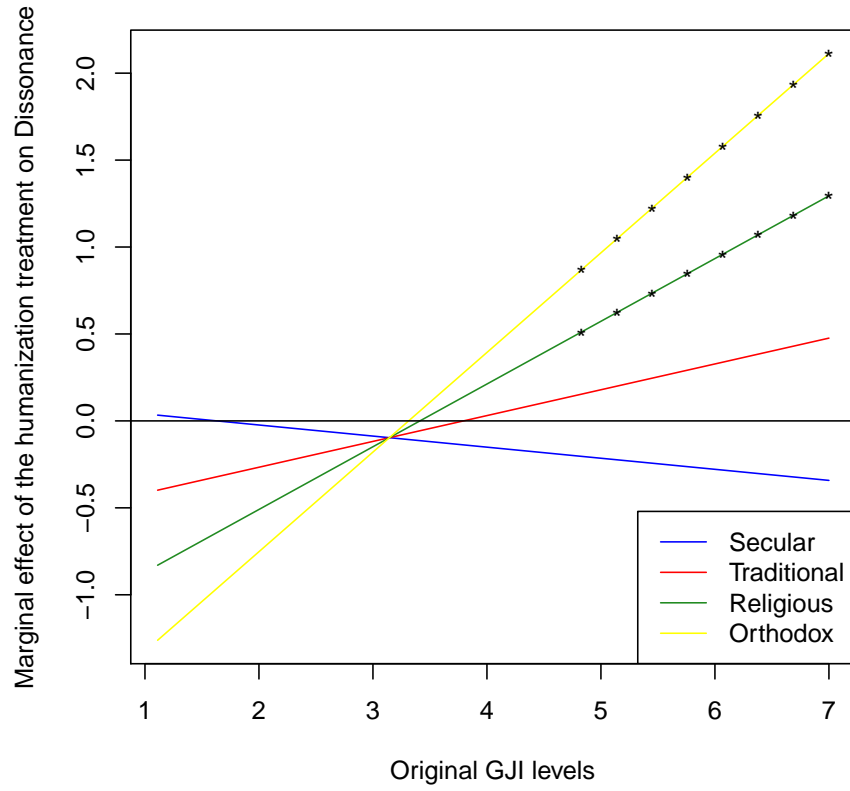


Figure 4.10: Marginal effect of the humanization manipulation on dissonance. Stars represent statistical significance with 95% confidence intervals

Negative Past Experiences: three-way marginal effect plots

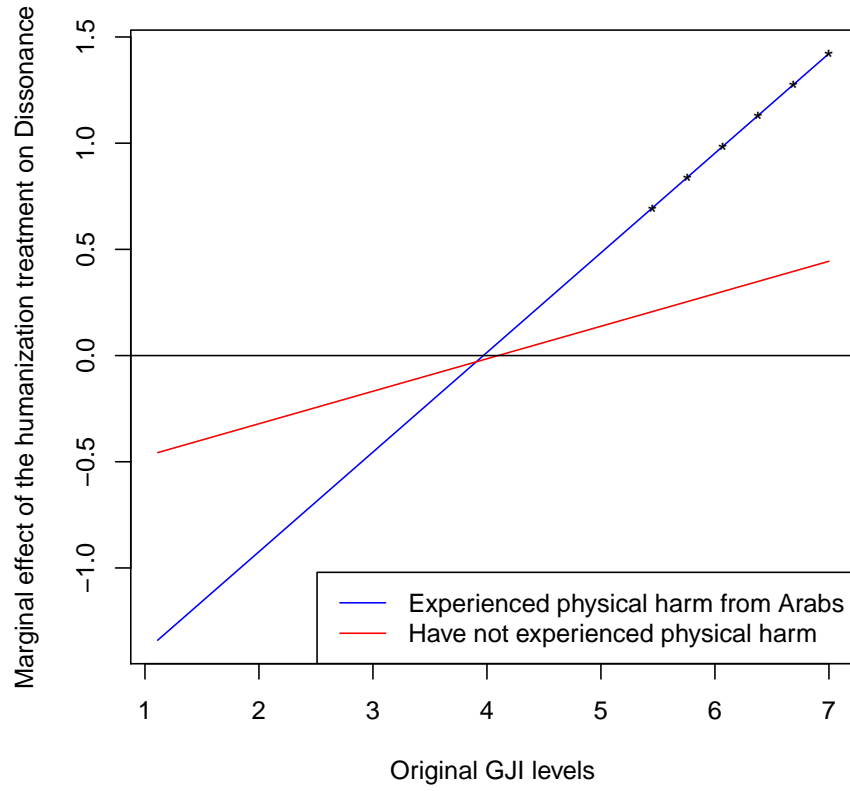


Figure 4.11: Marginal effect of the humanization manipulation on dissonance. Stars represent statistical significance with 95% confidence intervals

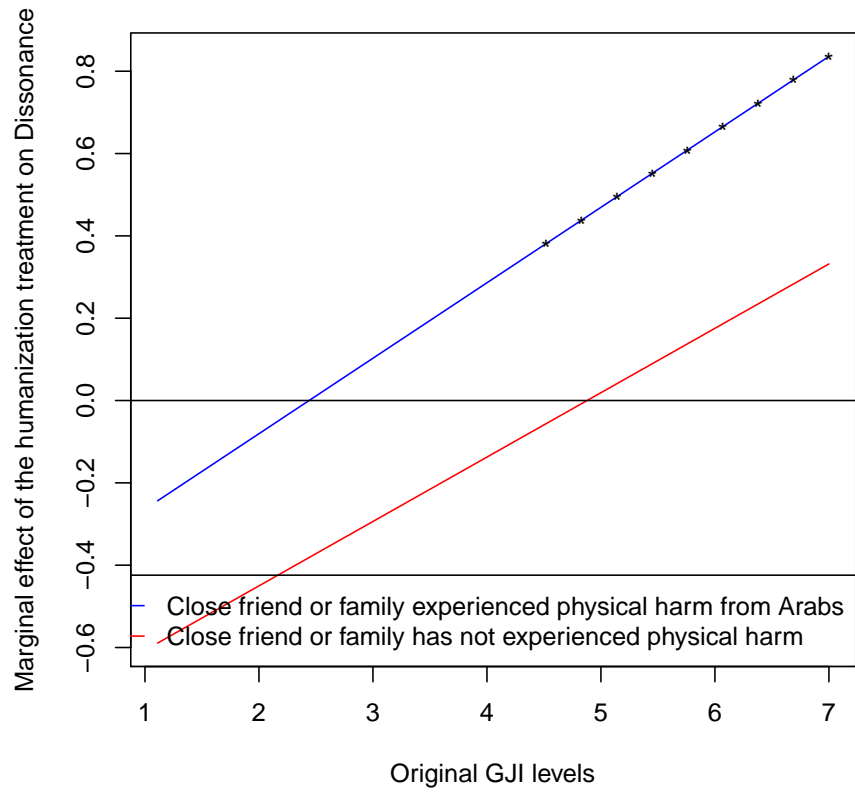


Figure 4.12: Marginal effect of the humanization manipulation on dissonance. Stars represent statistical significance with 95% confidence intervals

Strength of ingroup attachment: three-way marginal effect plot

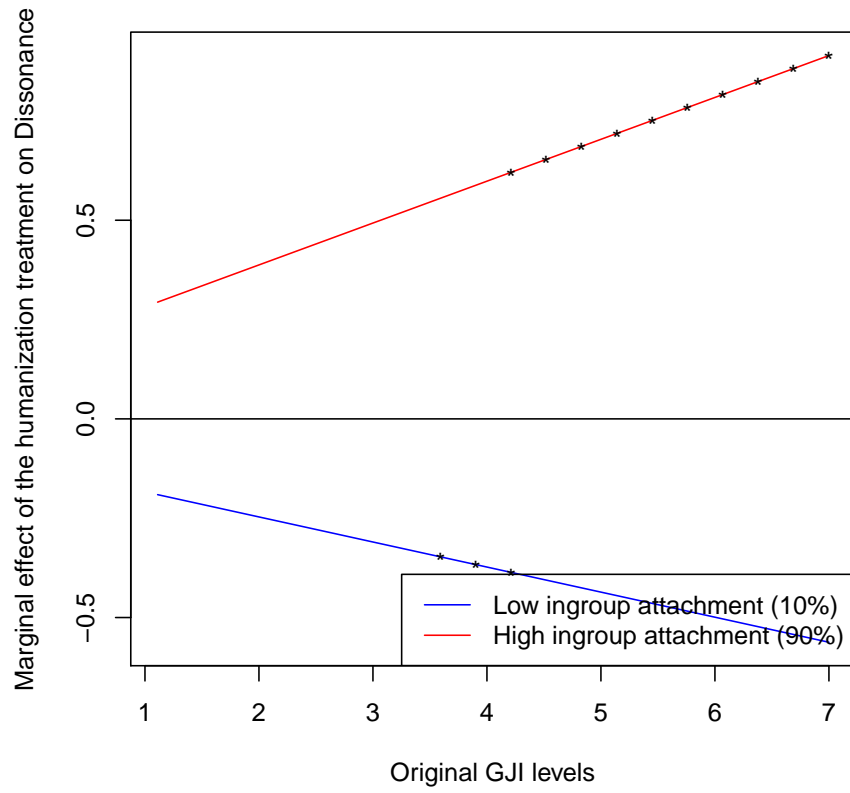


Figure 4.13: Marginal effect of the humanization manipulation on dissonance. Stars represent statistical significance with 95% confidence intervals

Gender: three-way marginal effect plots

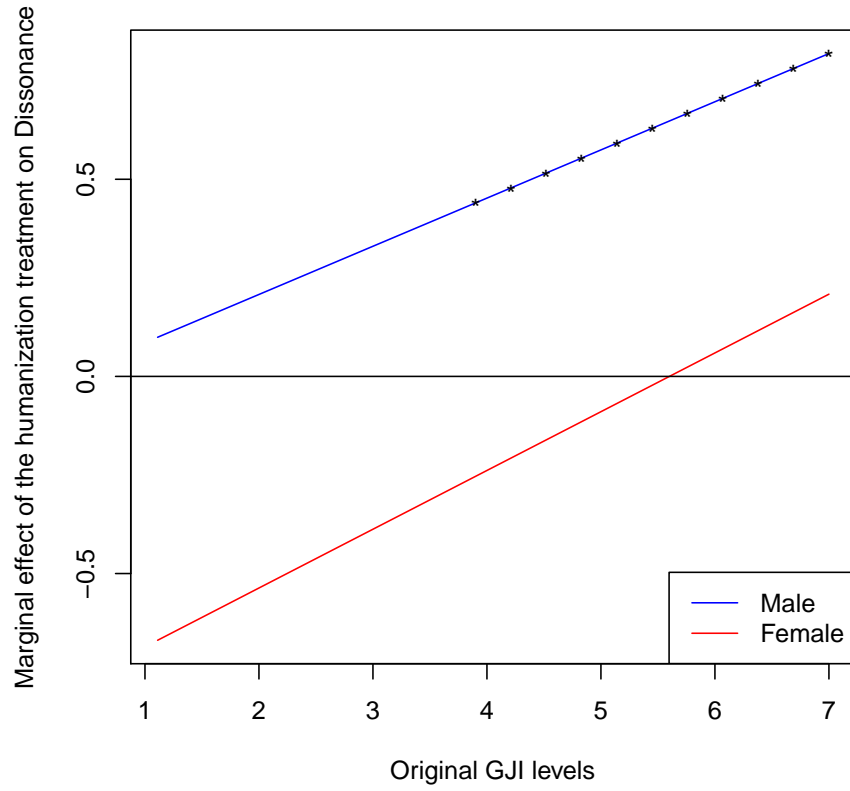


Figure 4.14: Marginal effect of the humanization manipulation on dissonance. Stars represent statistical significance with 95% confidence intervals

CHAPTER V

Conclusion

At the outset, this dissertation identified two main goals: 1) to identify micro-motives behind individual support for and engagement in aggression against members of an outgroup and 2) to provide information necessary to improve conflict resolution at the individual level. The preceding chapters address both goals. Chapter II introduced the concept of “group justifying beliefs” (*GJI*) to measure the degree to which individuals engage in ingroup glorification, outgroup denigration, and harbor feelings of victimhood about their group. Drawing on data from a series of recent surveys and experiments in Israel, it illustrated how individuals with these beliefs in Israel were much more prone to support and engage in aggression against members of an outgroup than were individuals without these beliefs. It concluded by highlighting three key mechanisms to explain the link between these beliefs and aggression, showing that individuals in Israel who held these beliefs are more prone to 1) see ambiguous behavior by the outgroup as purposeful aggression directed towards their ingroup, 2) engage in higher levels of zero-sum thinking, and 3) justify aggression against the outgroup than are those who do not hold these beliefs. Along the way, it presented theory specifying how and why these beliefs motivate aggression. In so doing, it identified key micro-motives that separate the aggressive from those who

are not aggressive. The results provide a profile of those individuals who should be the target of conflict resolution groups.

Chapters III and IV of the dissertation addressed the second goal: providing information that should help improve conflict resolution programs. Chapter III presented results from recent experiments in Israel that show that individuals who feel dissonance from positive contact with the outgroup will, in general, react negatively to this contact. Chapter IV probed these results further, noting that not all individuals react to positive contact with the outgroup with dissonance and then highlighting key characteristics of individuals who will.

Taken together, these chapters suggest the following **three implications** for individuals and groups focused on individual-level conflict resolution. In conclusion, I briefly address the import and implications of each.

1. Individuals with high group justifying beliefs should be the target of conflict resolution programs. These results suggest that reducing individual adherence to group justifying beliefs can reduce support for and engagement in aggression against an outgroup.
2. To help individuals with these beliefs adopt more peaceful beliefs towards the outgroup, conflict resolution programs must help their participants minimize dissonance. Otherwise, even *positive*, humanizing contact with members of the outgroup can lead to *negative* results.
3. Individuals with certain characteristics and past experiences are more likely than others to react with dissonance from positive, humanizing contact with the outgroup. In particular, in Israel:
 - (La) Individuals with high need for closure are more likely than those with low need for closure to react with dissonance.

- (Lb) More religious individuals are more likely to react with dissonance
- (Lc) Those who have either personally experienced physical harm from members of the outgroup, or who have friends or family members who have, are more likely to react with dissonance.
- (Ld) Individuals with high levels of ingroup attachment are more likely to react with dissonance, and
- (Le) Males are more likely than females to react with dissonance.

The first point suggests the need for targeted recruitment by conflict resolution groups of individuals with high group justifying beliefs rather than recruitment based on other characteristics or on volunteerism. Although recruitment of these individuals will likely be more difficult than recruiting based on religious or political ideology, as individuals with group justifying beliefs will likely be more hesitant to participate in conflict resolution groups than will others, these individuals generally engage in and support aggression against an outgroup.

However, chapters II and IV suggest that for these individuals, the dominant conflict resolution strategy—the “contact hypothesis”—is not likely to see great success in inducing a positive shift in beliefs about the outgroup. Rather, unlike individuals with low group justifying beliefs, these individuals in general react with dissonance to positive contact with the outgroup. This leads to the second main implication of this research for conflict resolution groups: success in changing group justifying beliefs will likely be best achieved by helping individual participants avoid or minimize dissonance when their beliefs are challenged. This suggests the need for explicit inclusion of dissonance-reducing strategies in conflict resolution programs. Recent research suggests a number of potential strategies that might be employed. For an example of one such strategy, see recent research by Fein and Spencer (1997).

To aid practitioners in adopting dissonance-reducing strategies in their conflict resolution attempts, chapter IV identifies key characteristics that predict which individuals will feel dissonance when their core beliefs are threatened by positive contact with an outgroup member. This information provides the third main set of implications of this research for conflict resolution. It suggests that conflict resolution groups take a different approach to their participants based on these characteristics. For example, participants with high need for closure will react differently to a challenge to their core beliefs about the outgroup than will those with low need for closure. The same will be true for individuals who have personally lost a friend or family member to violence from the outgroup. These individuals, as well as individuals with the other characteristics described in point three above, will particularly need dissonance-avoidance help if they are to experience positive belief change towards the outgroup.

Of course, adopting dissonance-avoidance strategies is only one way to help participants in a conflict resolution setting react with positive belief change when their core beliefs are challenged by positive contact with members of an outgroup. Participants might also be explicitly taught to constructively *deal with dissonance* once they feel it, such that they do not engage in self-justification—for it is not the dissonance itself that motivates aggression, but an individual's response to it, particularly the decision to self-justify. From a theoretical standpoint, both self-justification *and* self-correction will minimize the negative effects of dissonance. Although most individuals self-justify when faced with dissonance, recent research by Stone and Cooper (2001) suggests that some individuals react differently, self-correcting, or changing whatever views or behavior are at the root of the dissonance. Thus, identifying individual-level characteristics that motivate some individuals to self-correct could

also aid conflict resolution practitioners in identifying strategies to help participants positively change their beliefs about an outgroup. I have already begun research on this topic.

To be sure, these results need to be tested in different contexts. This is particularly true of the characteristics and experiences highlighted in chapter IV, for these might be partially a product of the unique Israeli context. Thus, while I expect the “dissonance-justification hypothesis” to apply to various other contexts, some of the individual characteristics identified here, like individual religiosity, might have different effects across contexts. In Israel, for example, the result that religious individuals tend to react with greater dissonance and thus with increased levels of aggression towards an outgroup when put in positive contact with an outgroup member, might be a product of the unique linkage between national identity and religiosity. Thus, religious individuals in Israel might experience greater threat from seeing the outgroup (Arab-Israelis) as fully human than will the non-religious, thus heightening the likelihood of a dissonant response. As the link between national and religious identity varies across contexts, it is at least somewhat likely that this relationship will be different across contexts. Other characteristics and beliefs highlighted here—particularly “need for closure”, gender, and strength of ingroup attachment, are much more likely to apply across varied contexts, as they are likely much less affected by the particular context of Israel. To explore this and other possibilities, I have already begun research in the United States context and plan to expand to other countries shortly.

This research in other contexts will also rectify a particular shortcoming of the work presented here: as is standard in cross-sectional work, these findings draw on surveys and experiments conducted at different times to tell a causal story. Chapter II

highlights a strong link between group justifying beliefs and support for engagement in and support for aggression. Chapters III and IV draw on experiments conducted shortly thereafter that show that we can manipulate these beliefs by invoking dissonance. I draw on the totality of these data to infer that dissonance indirectly affects support for and engagement in aggression against an outgroup (i.e. dissonance \rightarrow GJI beliefs \rightarrow aggression). However, a cleaner way to validate this argument will be to include a measure of aggression in the dissonance experiments themselves, such that each piece of the argument is properly sequenced. This will be done in my future research.

In conclusion, these findings provide strong, initial evidence for the importance of understanding the role of individual-level beliefs in intergroup conflict. As illustrated in the introduction, even small, individual acts of aggression can lead to large-scale intergroup violence. Thus, understanding the beliefs that form the micro-motives behind these individual acts of aggression will help scholars better understand the conditions under which intergroup conflict might erupt. It will also provide conflict resolution groups with a clearer understanding of the beliefs they should target as well as ways in which they should approach their targets.

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