Multiple Group Relations: Maintaining Balance through Indirect Contact Effects

MULTIPLE GROUP RELATIONS:
MAINTAINING BALANCE THROUGH INDIRECT CONTACT EFFECTS

A Dissertation Presented

By

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DEDICATION

To my family and friends

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ABSTRACT

MULTIPLE GROUP RELATIONS:

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Most research on intergroup relations has focused on two groups, whereby one group's attitudes toward another group may change as a result of their contact experiences with that other group. Yet in real life settings, contexts in which groups come into contact are likely to involve multiple groups. This research argues that attitudes and perceptions that members of one group form about another group depend not only on their direct contact experiences with that group, but also on their relationship with third-party groups, and the perceived relationships that third-party groups have with the other group. The present research uses structural balance theory as a guiding framework, and emerging intergroup research on indirect contact effects, to examine these processes in multi-group contexts. First, a field survey study in Lebanon examined how Lebanese contact with and attitudes toward Palestinians (third party) would predict their attitudes toward Israelis. Next, a laboratory experiment was conducted at the University of Massachusetts, Amherst, to test whether multi-group relations and effects would follow similar patterns in an experimental setting. Results show evidence of some third party influence, and these findings and their implications are discussed.

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CHAPTER 1

INTRODUCTION

Throughout history and in many parts of the world, intergroup conflict has been maintained and perpetuated through established group structures rather than direct events and interactions. For instance, one group's transgression against another may elicit a hostile and violent response by the latter group if there exists a history or structurally established negative relation between the two groups, or it may elicit a more tolerant response if the established relationship has generally been a positive one. However, when the state of the intergroup relationship is yet to be established or is susceptible to change, groups may look to their allies and enemies to inform their attitudes, responses, and future relations. The project described in this paper examines these issues using theories and methods from the social psychological literature, as well as other work from the fields of political science, anthropology, history, international relations, and public policy.

In social psychology, much attention has been dedicated to studies of intergroup contact that assess perceptions and attitudes of one group towards members of another group (e.g., Ata, Bastian, & Lusher, 2009; Tausch, Hewstone, Kenworthy, Psaltis, Schmid, Popan, Cairns, & Hughes, 2010). Extensive research has illustrated the positive effects that can be gained from contact between groups in terms of improving intergroup attitudes and changing perceptions of and expectations for contact with outgroup members (see Pettigrew & Tropp, 2006). Until very recently, most studies have typically examined the relationship between two groups, even though political relations around the world often involve more than two parties that shape the dynamics of war and peace. In

these real world settings, where more than two groups exist, how would the structure of these relations be shaped? Would the presence of a "third" group influence one's attitudes toward and relations with other groups? Furthermore, in current peace-building efforts, programs that are designed to improve relations or end conflict between two groups may be neglecting the potential influence a third group may have on the impact of such a program, or inversely, the impact that this program might have on relations with that third group. This research project aims to uncover the potential influence of an outside third party on relations between two groups, and in shaping the make-up of the political and psychological dynamics that occur between multiple groups. It proposes that the direction of this influence depends on how individuals perceive the third-party group relating to others. In other words, indirect channels, such as third-party influence, may exert positive or negative influences on intergroup attitudes and relations.

The intergroup dynamics that occur when more than two groups are involved has been quite understudied in the field of social psychology. Given the reality of having multiple groups in single settings, this research proposes that our experiences vis-à-vis one group can influence our attitudes towards another group, depending on how we perceive these different groups relating to one another. *Balance Theory* (Heider, 1958; originally a theory of interpersonal relations), *Image Theory* (Hermann, 1999; rooted in political science), and emerging intergroup literatures – *Secondary Transfer Effects* (Pettigrew, 2008) and *Extended Contact Effects* (Wright et al., 1997) – provide guiding frameworks to examine these influences in multi-group contexts.

Direct Contact Effects

One of the most frequently studied strategies to improve intergroup relations grows from the intergroup contact hypothesis, articulated more than a half-century ago (Allport, 1954; Williams, 1947). The hypothesis proposes that under optimal conditions where groups interact cooperatively as equals and with institutional support, contact can foster positive attitudes between members of different groups (Pettigrew, 1986; Pettigrew & Tropp, 2006; Sigelman & Welch, 1993). Allport (1954) proposed that when group members get to know each other through such contact, positive attitudes begin to replace old prejudices, and extend from the individuals involved in the contact to the larger groups to which they belong. Thus, the significance of the intergroup contact hypothesis lies in the generalizability of its effects to the outgroup as a whole (Pettigrew, 1998).

Although most research on contact theory has focused on positive conditions and effects of contact, there remains an unexplored – yet equally relevant – need to study negative effects of intergroup contact (Pettigrew & Tropp, 2006). Negative conditions or experiences in contact with individual outgroup members can potentially lead to increased negative attitudes towards the entire outgroup (e.g, Paolini, Harwood, & Rubin, 2010; Reynolds, Turner, & Haslam, 2000).

Balance Theory and Its Application to Intergroup Contexts

The need for a dual focus on positive and negative dimensions of contact can be further informed by Heider's (1958) balance theory. According to Heider (1958), people are motivated to maintain balance and consistency in their attitudes and relations. For example, to avoid imbalances, people may feel compelled to like others whom their friends

also like, or reject those who are disliked by their friends. One way to look at this is through these commonly known formulas:

My friend's friend is my friend
My friend's enemy is my enemy
My enemy's friend is my enemy
My enemy's enemy is my friend

Within a single group, two individuals can achieve a state of balance if both individuals either embrace or reject their group membership, as long as they have positive attitudes toward or relations with each other (Heider, 1958). In intergroup contexts, groups may also feel compelled to rely on their enemies and allies when forming relations with other relevant groups. In line with this argument, the literature in political science shows that relational imbalances in international affairs increase the likelihood of conflict (Maoz, Terris, Kuperman, Talmud, 1997). Furthermore, research by Zhong and colleagues (2008) suggests that a "state of balance is achieved when two parties both like or dislike a third party" (p. 794). Thus, two groups are more likely to bond over their common dislike of a third group. A historical account provided by Duara (1997) illustrates this phenomenon. Although Iranians (mostly Shiites) initially distinguished themselves from other Muslim sects (e.g., Sunni), these negative sentiments dissolved following the Arab-Israeli war. With the emergence of a new common enemy (Israel), conflict between Shiites and Sunnis was eventually replaced by Muslim solidarity. Therefore, the existence of third parties could impact the creation of common attitudes and cooperative relations between groups.

However, the explanation provided by Zhong et al. (2008) does not account for all the processes involved in maintaining multigroup balance. It is possible that regardless of whether groups share a common dislike (or liking) of a third party, it is the quality of

contact and experiences with the third party that could influence attitudes and relations that one group develops toward a target outgroup. This research contributes to the existing literature and to the fields of social psychology and international relations by incorporating balance theory with two potential intergroup mechanisms relevant to indirect contact effects – *secondary transfer and extended contact*.

Indirect Effects of Intergroup Contact

In some contexts where direct contact is not feasible, group members may rely on indirect means to establish and understand intergroup relations. For groups that are segregated or countries that have limited or no direct channels of communication with each other, their relations and intergroup attitudes are likely to be influenced by these indirect contact effects (Dovidio, Eller, & Hewstone, 2011). Therefore, indirect contact could play a strong role in shaping group members' attitudes and behaviors toward other groups. Although the literature on indirect contact effects remains limited (Dovidio et al., 2011), I propose that some processes, such as those involved in secondary transfer and extended contact are relevant to understanding how balance theory may function at the group level. Secondary transfer effects (Pettigrew, 2009) refer to contact's effects in shifting intergroup attitudes to groups not directly involved in the contact. Extended contact effects (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997) refer to how knowledge of others' contact experiences can affect one's attitudes and relations toward other groups. The section below describes these two indirect mechanisms as studied within the social psychological literature on intergroup relations.

Secondary Transfer Processes

Recent studies have explored how intergroup contact affects attitudes not only toward groups with whom contact occurred, but also toward other groups not directly involved in any form of contact. Pettigrew (2009) describes the *secondary transfer effect* as when positive attitudes resulting from contact with one group can *transfer* to other groups. For example, Tausch and colleagues (2010) found that Catholics and Protestants who had contact in Belfast not only showed more positive attitudes toward each other, but also these attitudes generalized to racial minorities as well. Therefore, group members transferred their attitudes from a third party onto outgroups not directly involved in the contact. A longitudinal study in the U.S. demonstrated the robustness of this effect, whereby college students reported less prejudice toward their roommate's ethnic group over time, as well as toward other ethnic groups beyond their own (Van Laar, Levin, Sinclair, & Sidanius, 2005).

In the examples presented above, attitudes were assumed to transfer from one group to the other, based on the level of similarity between these two groups (Pettigrew, 2009). However, it is possible that even when two groups share similarities, they could have negative relations with each other. According to image theory, *enemy* relations are in fact established when two groups do not share compatible goals, even though they may share similar status and/or power (Alexander, Brewer, & Livingston, 2005). In addition, an enemy is defined by a state as one whose intentions or actions are seen as threatening that state's interests (Maoz, Terris, Kuperman, & Talmud, 2007). Consequently, intergroup attitudes would be associated with the particular relations between the groups and the resulting images they form of one another (Alexander, Brewer, & Hermann,

1999). Taken together, these theories imply that perceived relations between a third party and target outgroup would be a critical predictor of attitudes that one forms toward the target outgroup. Thus, while Pettigrew (2009) would propose that this influence is based on perceived similarity between the third party and target outgroup, this paper argues that it may be based on the perceived relationship – whether positive or negative – between the third party and target outgroup. Such a perspective would also be consistent with the basic tenets of balance theory, since attitude transference based strictly on similarity would result in an imbalanced state. In other words, perceived relations between a third party and a target outgroup could also influence the transference of attitudes from one group to the next. If applied to group contexts, balance theory would suggest that an ideal state requires balanced relations between groups (Heider, 1958).

Extended Contact Processes

In addition, the extended contact effect states that the mere knowledge that one's ingroup member has established close relationships with outgroup members can lead one to develop more positive attitudes towards that outgroup (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997); as such, ingroup members can guide and influence individuals' intergroup attitudes and behaviors through vicarious experiences of friendship. In a study among Catholics and Protestants in Northern Ireland, knowledge that ingroup members had friends in the other group predicted more positive intergroup attitudes (Paolini, Hewstone, Cairns, & Voci, 2004). Proponents of the extended contact effect have also highlighted the significance of this process, particularly in situations where two groups have limited opportunities for direct contact (Eller, Abrams, & Gomez, 2012; Christ,

Hewstone, Tausch, Wagner, Voci, Hughes, & Cairns, 2010; Turner, Hewstone, Voci, & Vonofakou, 2008).

I propose that balance theory functions primarily on the basis of these indirect processes to guide relations between multiple groups. In some multi-group contexts where intergroup hostility exists (such as the Middle East), groups may have minimal or no contact with each another (e.g., Lebanese and Israeli citizens). In these cases, it may be their experiences with third-party groups (other than the target outgroup) and extended contact with target groups that would influence their attitudes. The pattern of findings described above would replicate in regions where contact is not common, feasible, or sanctioned by authorities or one's ingroup.

Finally, greater attention is needed to explore both positive and negative processes involved in intergroup contact. Research on contact has focused mainly on positive effects of direct and indirect contact on attitudes, but a disconnect remains between such contact research and what relations exist in real conflict settings (e.g., Dovidio & Gaertner, 2003; Brown & Hewstone, 2005). In multigroup settings, not only do groups have to contend with the negative contact experiences, attitudes, or relations that occur with one group, but also with how these processes unfold in the presence of influential third party groups. In summary, when multiple groups exist, relational dynamics become more complex than what the current literature on intergroup relations presents.

The "Third Party" Effect

In summary, as balance theory might propose, attitudes and relations toward one target outgroup could depend – at least partially – on attitudes and relations toward a relevant third party group. Furthermore, just as positive attitudes may transfer from

experiences with one outgroup to another group, it is conceivable that negative attitudes could also transfer from experiences with a third party group to a target outgroup with whom contact may not have occurred. The quality of contact (positive or negative) that a primary group has with a third party would lead this primary group to establish correspondingly positive or negative attitudes toward the third party. Group members who observe or learn that this third party group has engaged in positive or negative interactions with a target outgroup may then modify their attitudes to correspond with the information they had just received about this contact. If the third party group is one with whom they have positive relations, then people's attitudes towards the target outgroup are more likely to match those they have of the third party outgroup. If they have negative relations with the third party outgroup, however, then it is more likely that any contact that occurs between the third party and target outgroup would have the reverse effect on people's attitudes. Following the algebraic equations of balance theory, the following third party effects are predicted; where "TPG" refers to *third-party group*, and "TO" refers to *target outgroup*:

"I like TPG + I perceive a positive relation between TPG & TO → I like TO"
(i.e., if "TO" are allies of my "TPG" allies, then "TO" are my allies)

"I like TPG + I perceive a negative relation between TPG & TO → I dislike TO"
(i.e., if "TO" are enemies of my "TPG"allies, then "TO" are my enemies)

"I dislike TPG + I perceive a positive relation between TPG & TO → I dislike TO"
(i.e., if "TO" are allies of my "TPG" enemies, then "TO" are my enemies)

"I dislike TPG + I perceive a negative relation between TPG & TO → I like TO"
(i.e., if "TO" are enemies of my "TPG" enemies, then "TO" are my allies)

In other words, contact with a third party should affect one's attitudes toward that third party, which should in turn affect attitudes toward a target outgroup; these effects

should depend on the perceived relation between the third party and target outgroup, and they should occur independent of any effects of direct contact between an individual and the target outgroup.

The first study in this dissertation examines these issues in the context of Lebanese attitudes towards and relations with Israelis, as a function of their experiences with Palestinians. In this particular context, despite the minimal or complete lack of contact between Lebanese and Israelis, contact still occurs between Palestinians and Israelis. Therefore, Lebanese may base their attitudes or relations toward Israelis on the attitudes or relations they hold toward Palestinians and their knowledge about these Palestinians' attitudes or relations with Israelis. The study presented here tests these relationships by assessing Lebanese contact, attitudes, and relations with Palestinians, and perceived attitudes or relations between Palestinians and Israelis, as predictors for Lebanese attitudes or relations toward Israelis.

Research Goals and Hypotheses

The majority of the research that has been conducted on intergroup relations has been based on processes that occur between two groups in conflict, and not enough attention has been dedicated to contexts that involve more than two groups. Moreover, the majority of studies on secondary transfer and extended contact effects has focused on positive intergroup processes, and has for the most part neglected the influence of negative processes. The application of balance theory in a multi-group context relies primarily on people's perceptions of general relations between two groups to help them formulate or modify their attitudes towards one of these groups. These mechanisms are

explored in the studies presented in here, in an effort to distinguish between negative and positive intergroup effects.

By applying balance theory to intergroup relations, this research examines how third-party influences occur through processes akin to secondary transfer effects, but with a few theoretical extensions. First, Pettigrew (2009) suggests that secondary transfer effects occur through mechanisms such as perceived similarities between the group with whom contact occurred and a separate target outgroup. In the present research, I test whether other factors, such as perceived relations between these groups, are equally – or perhaps more – important for predicting attitudes toward the target outgroup. Alexander et al. (1999) have shown that participants who are given information about the relation between two groups subsequently generate images, such as *enemy* and *ally*, and attitudes consistent with the stereotypes of these group images. In multi-group contexts, these consequent attitudes would shape the enemy versus ally relations that maintain structural balance between groups.

This study also explores effects related to extended contact processes that occur when merely knowing of an ingroup member's friendship with members of an outgroup can lead people to develop more positive attitudes toward that outgroup as a whole (Wright et al., 1997). While research on extended contact restricts itself to contexts that involve a shared identity between members of the same group, this project proposes that extended contact effects can take place through members of "third-party" groups as well. In addition, while extended contact research has typically focused on positive outcomes, such as improved intergroup attitudes (Wright et al., 1997), contact that occurs at the

negative end of the spectrum may similarly influence attitudes, albeit in an opposite, negative direction.

In sum, the dissertation argues that our attitudes towards a target outgroup are affected by our relationship with a third party group and our perceptions of relations between that third party group and the target outgroup. The studies described below aim to answer three main questions: First, when there is an established relationship between a third party and target outgroup, would one's attitudes or relations toward the target outgroup depend on the perceived relationship between one's group and the third party? Alternatively, would they depend on one's perceptions of the third party's attitudes and behaviors towards the target group? Finally, to what extent would one's attitudes toward a target outgroup depend on the perceived relationship between the third party and target outgroup, or on the perceived similarity between the two?

The extant literature on intergroup contact has not sufficiently explained the possible processes that occur when one group is faced with multiple other groups. Most of this work has also looked at positive contact and its effects, and more research is needed to understand negative contact effects and their potential for generalization (see Barlow, Paolini, Pederson, et al., 2012; Paolini et al., 2010). Direct and indirect contact effects could all potentially manifest themselves in negative and positive experiences and the formation of corresponding attitudes.

Accordingly, in multi-group settings, individuals' attitudes toward a target outgroup are likely to depend on how a third party group responds to that target outgroup, and on the relationship between one's own group and the third party group. Participants would express more positive or negative attitudes towards a target group based on their

own relationship with this third party group, and based on the perceived relations between the third party and target outgroups.

In summary, this research relies on balance theory as a tool to describe how the presence of one group may influence the attitudes and relations that develop between two other groups. These processes occur through indirect contact mechanisms, such that (see Figure 1):

(1) If one group develops a positive attitude towards or relations with a third party group, then the valence of attitudes or relations it develops toward a target outgroup will be positively correlated with the valence of the perceived attitudes or relations between the third party and target groups.

(2) If one group holds negative attitudes/relations toward a third party group, then the valence of subsequent attitudes/relations it develops toward a target outgroup will be negatively correlated with the valence of the perceived attitudes/relations between the third party and target outgroups.

To examine these processes in multiple group relations, two studies are presented. The first study is a field survey in Lebanon that investigates these issues in terms of relationships between Lebanese, Palestinians, and Israelis. The goal of this survey study is to test how Lebanese attitudes toward Israelis (target outgroup) may be predicted through their attitudes and relations with Palestinians (third party). An experimental study with minimal groups then tested whether individuals' attitudes towards a target outgroup would be affected by their experiences with a third-party group and that third-party group's experiences with the target outgroup.

CHAPTER 2

STUDY 1: FIELD SURVEY OF THIRD PARTY EFFECTS: TESTING THE ROLES OF PALESTINIANS IN PREDICTING LEBANESE ATTITUDES TOWARD ISRAELIS

Study 1 focuses on Lebanese relations with Palestinians and Israelis, and how Lebanese attitudes toward Israelis vary in connection to their relationship with Palestinians. After 1948, many Palestinian refugees had to immigrate and seek shelter in various regions of the Arab world, including Lebanon. Unfortunately, not all Lebanese people welcomed them with open arms. For many Lebanese, Palestinians represented a threat to power and resources. For others, the Palestinian Resistance movement threatened to cause a revolutionary social and political change to the Arab society as a whole (Barakat, 1971). Importantly, Lebanon had also become an alternative battleground between the Palestinian Liberation Organization (PLO) and Israel (Mullany, 1991). Such threats led to increased friction between Palestinian refugees and many Lebanese, and historians have often attributed the Lebanese 15-year civil war to this tension (Mullany, 1991). At the same time, many Lebanese have been strong allies of Palestine and Palestinian groups in Lebanon, united in their antipathy toward Israel and Israelis in what is referred to as the "Arab-Israeli conflict" (Hudson, 1978). Others may express sympathy towards the Palestinian cause, but do not necessarily hold positive attitudes towards Palestinians, and not all Lebanese feel negatively toward Israelis. Indeed, Lebanese attitudes towards Palestinians and Israelis vary greatly depending on their personal experiences and points of view. Some extreme views have called for the complete annihilation of the state of Israel and the expulsion of its citizens, while others

have held less harsh attitudes and expressed some willingness to establish dialogue with their Southern neighbors. One goal of this research is to predict this variability in Lebanese attitudes towards Israelis, by examining them within the context of their attitudes towards Palestinians, and how such third-party effects serve to maintain a balanced state of group relations.

The Lebanese context is a particularly useful – albeit challenging – one for examining these issues, because there are restricted opportunities for Lebanese people to engage in contact with Israelis that might impact their intergroup attitudes. As mentioned previously, research has emphasized the importance of indirect contact effects, particularly when opportunities for direct contact between two groups are minimal (Turner et al., 2008; Wright et al., 1997). This situation clearly applies to the context of Lebanon, where contact between Lebanese and Israeli citizens is, in fact, illegal. Having no contact with Israelis, the attitudes that Lebanese individuals develop towards Israelis may then rely heavily on their experiences with Palestinians (with whom they have had more contact), and be informed by their perceptions of relations between Palestinians and Israelis. The same processes would also underlie how Lebanese visualize the structure of relations between the three groups, such that their perceptions of relations between Lebanese and Israelis in general may be informed by how they perceive Lebanese-Palestinian relations as well as how they perceive Palestinian-Israeli relations. That said, it is also worth reminding the reader about the ongoing Israeli-Palestinian conflict, which has created a great deal of hostility between the two groups. This research looks at whether Lebanese perceptions of the intensity of this hostility and animosity might then

influence their own attitudes toward Israelis and/or their own perceptions of Lebanese-Israeli relations.

In the current study, direct contact between Lebanese and Israelis could not be assessed, due to the sensitivity of that question in the Lebanese context. Specifically, the researcher was cautioned not to include items assessing direct Lebanese-Israeli contact since this particular act is illegal and considered a form of state treason in Lebanon. As such, inclusion of such items would have likely aroused suspicion of the researcher's intentions, which could, at the very least, reduce participants' trust in and willingness to respond to the survey, and at a possible extreme, endanger the security of the researcher. Correspondingly, the predicted effects were tested without controlling for direct contact between Lebanese and Israelis, which tends to be minimal given the political context.

The survey in Study 1 focuses on Lebanese attitudes toward Israelis – in addition to how they see the nature of the relationship between Lebanese and Israelis in general – as a function of Lebanese perceptions of Palestinian attitudes and/or relations with Israelis, as well as Lebanese attitudes and/or relations with Palestinians. Since previous research has found that Lebanese attitudes toward Israelis vary (Mullany, 1991; Barakat, 1971), one goal of this research is to predict this variability by examining them within the context of their attitudes towards Palestinians, and how such third-party effects serve to maintain a balanced state of group relations. In the Lebanese context, opportunities for direct contact between Lebanese and Israelis are assumed (since they cannot be directly tested) to be minimal and Lebanese attitudes toward Israelis and general perceptions of Lebanese-Israeli relations may then rely heavily on the informative role that relations with Palestinians could play. For example, if Lebanese have had positive contact

experiences with Palestinians, and know of Palestinians' negative contact experiences with Israelis, this could lead Lebanese to develop negative attitudes toward Israelis. On the same note, if Lebanese have had negative experiences with Palestinians, and know of Palestinians' negative contact experiences with Israelis, then Lebanese attitudes toward Israelis may be more positive than in the previous example.

In summary, the hypotheses for this study are:

(1) Lebanese participants' attitudes toward Palestinians, combined with their perceptions of Palestinian-Israeli relations, will subsequently influence their attitudes toward Israelis.

(2) Lebanese participants' perceptions of Lebanese-Palestinian relations, combined with their perceptions of Palestinian-Israeli relations, will subsequently influence their perceptions of Lebanese-Israeli relations.

(3) In predicting Lebanese attitudes toward Israelis and perceived Lebanese-Israeli relations, the effects of perceived relations between Palestinians and Israelis will be observed beyond the role of perceived similarity.

Participants and Sample

A community sample of 400 Lebanese participants from across the country was recruited over a four-month period (August – November 2011) through their affiliations with several non-governmental organizations (NGO's) that agreed to assist with the data collection process. Items assessed Lebanese direct contact experiences and resulting attitudes toward Palestinians, as well as the perceived relations and perceived similarities between Palestinians and Israelis. Additional variables of primary interest included

Lebanese attitudes toward Israelis and their perceptions of relations between Lebanese and Israelis.

Demographic Characteristics of Community Sample

As part of this survey, respondents answered a number of demographic indicators, including age, gender, religion, political orientation and political party support. Around 5% of respondents did not provide their age, and 3.7% did not provide their gender. Larger proportions of respondents offered no response to questions about religion (15%), political orientation (33.8%), and political party support (33.3%). Given the political instability and sectarian strife in the region, these results were somewhat expected. Earlier that year (January 2011), the Lebanese government had collapsed and some party leaders were talking about changing alliances. A Hezbollah-dominated cabinet was finally formed in June of that year. These events, combined with the wars and political and religious tension over the years, has led cynicism and apprehension about political and religious allegiances.

Of those who did respond to the demographic items, the mean age was 25.5 years (*SD*=6.63), ranging from 16 to 63 years old. As for gender, 208 responded as male (52%) and 177 responded as female (44.3%). The majority of respondents were Muslim (65%), with Muslim Shiites making up 44.8% of the total sample (N=179). Christians made up 18% of the sample (N=72), with the rest belonging to minority groups or undeclared. This religious make-up is to some extent representative of the current religious distribution in Lebanon, although an official national census has not been conducted since 1932 (Maktabi, 1999), due to the political sensitivity of the matter (U.S. Department of State, 2001). Although not necessarily accurate, more recent estimates for

Christians in Lebanon range from 39% to 41.5% of the population, while Muslims are thought to make up around 60% of the population (Central Intelligence Agency, 2014; U.S. Department of State, 2013).

Half of the respondents (N=200, 50%) generally regarded themselves as proponents of the March 8 political block, while 65 respondents (16.3%) regarded themselves as proponents of the March 14 political block, and the rest (33.7%) either declared themselves as "other" or "undecided" or did not provide a response. This was again not unexpected, with the current make-up of the government and the turmoil that the March 14 block was going through. Finally, in terms of political parties, the two most supported parties were Hezbollah (N=58, 14.5%), which belonged to the March 8 movement, and the Future Movement (N=46, 11.5%), which belonged to the March 14 movement.

In addition, information about respondents' education level and income level were gathered. In terms of education, 383 respondents provided a response, and the majority (N=229; 59.8%) reported reaching a college or university education, while only 12 respondents (3.1%) reported achieving basic education, 66 respondents (17.2%) acquired a secondary education (the equivalent of high school level), 32 respondents (8.4%) received technical school education, and 44 (11.5%) had reached a graduate level of education. These demographics parallel what surveys from other sources, such as the World Bank database, which has found that around 51.6 % of Lebanese enroll in higher education (The World Bank, 2009). As for income, only 357 people provided responses to this question, the majority of whom (N = 109; 30.5%) reported an average monthly income ranging between $1,001 – 1,500. 42 respondents (11.8%) reported earning less

than $500 a month, and 88 respondents (24.6%) reported earning between $501 – 1,000 every month. Only 23 respondents (6.4%) reported earning between $1,501 – 2,500 a month, and only 21 respondents (5.9%) reported earning more than $3,500 per month.

Measures

The survey included measures adapted from pre-existing literature on intergroup contact, as well as measures based on interview data conducted prior to the study, to help inform the research and create a culturally sensitive survey (see Appendix A for primary survey measures). Responses to survey items listed below are scored on 7-point Likert scales as indicated below.

Primary Measures to Test Third-Party Effects

The goal of this study is to assess whether Lebanese attitudes toward a third party (i.e., Palestinians) can predict Lebanese attitudes toward a target outgroup (i.e., Israelis), through the perceived relations between the third party and the target outgroup (i.e., between Palestinians and Israelis). Therefore, key measures in the survey assess 1) Lebanese attitudes toward Palestinians, 2) Lebanese attitudes toward Israelis, and 3) perceived relations between Palestinians and Israelis.

Lebanese Attitudes toward Palestinians

A general evaluation scale asked Lebanese participants to describe how they felt towards Palestinians (based on Wright et al., 1997). On a scale from "1" to "7", participants were asked to indicate, how negative/positive, cold/warm, hostile/friendly, and suspicious/trusting they felt towards Palestinians. Responses to the four items were averaged into one attitudes measure ($\alpha = .92$).

Perceived Relations between Lebanese and Palestinians

To measure respondents' perceptions of Lebanese-Palestinian relations in general, participants were asked to report the extent to which they perceived relations between Lebanese and Palestinians to be cooperative-competitive or allies-enemies ($\alpha = .92$) on a 7-point scale.

Perceived Attitudes and Relations between Palestinians and Israelis

To test the proposed moderating influence of perceived attitudes and relations in the present research, participants were presented with two measures. First, to assess their perceptions of Palestinian attitudes toward Israelis, they were asked to rate to what extent they perceived Palestinians to feel friendly-hostile, warm-cold, hostile/friendly, and suspicious/trusting toward Israelis ($\alpha = .98$). To measure their perceptions of Palestinian-Israeli relations in general, participants were asked to state the extent to which they perceived relations between Palestinians and Israelis to be cooperative-competitive or allies-enemies ($\alpha = .92$) on a 7-point scale.

Lebanese Attitudes toward Israelis

The same general evaluation scale used above measured how Lebanese participants felt toward Israelis as the outcome variable. Responses to these four items were also averaged into one attitudes measure ($\alpha = .99$).

Perceived Relations between Lebanese and Israelis

In addition, using comparable items described previously for perceived relations between Palestinians and Israelis, respondents were asked to report on their perceptions of the relations between Lebanese and Palestinians ($\alpha = .92$) and between Lebanese and Israelis ($\alpha = .92$).

Secondary Measures to Test Third Party Effects

In addition, several other measures were included to examine related processes and mechanisms.

Lebanese Contact with Palestinians

Given that direct contact experience predicts intergroup attitudes (e.g., Pettigrew & Tropp, 2006), direct contact between Lebanese and Palestinians were measured in several ways. Lebanese participants indicated how often they have had contact with members of each group, as well as the number of acquaintances and friends they had from each group.

Other items measured the extent to which Lebanese participants' contact experiences with Palestinians were generally positive or negative (e.g., How often have you had had positive/negative contact experiences with Palestinians?"; modified from Barlow et al., 2012). Additional items assessing contact quality asked participants to indicate their levels of agreement to statements such as "When I interact with Palestinians, the contact is almost always pleasant/hostile" (modified from Islam & Hewstone, 1993). Responses to 15 contact items were averaged into one aggregate measure, and the reliability coefficient for these item scales was high ($\alpha = .82$).

Perceived Similarity

Perceptions of similarity between Lebanese and Palestinians ($\alpha = .91$), between Lebanese and Israelis ($\alpha = .96$), and between Palestinians and Israelis ($\alpha = .94$) were also assessed. In three separate items, participants were asked the extent to which they perceived each pair of groups to be similar in political ideology, cultural ideology, and

goals and interests. The scale ranged from "1", being "very different" , to "7", being "very similar".

Extended Contact

Also relevant to the goals of the present research, "third-party" extended contact was assessed through four items asking participants to report their knowledge of members of the third-party group (Palestinians) who have had positive and negative contact with members of the target outgroup (e.g., "How many Palestinians do you know who have had positive/negative contact experiences with Israelis?"). The survey also included items that asked about perceived quality of Palestinians' contact experiences with Israelis (e.g., "When the Palestinians you know interact with Israelis, the contact is almost always pleasant/hostile"), with item responses ranging from 1 (strongly disagree) to 7 (strongly agree). Responses on 14 items were averaged into one aggregate measure, with high reliability ($\alpha = .80$).

Results

To test the hypotheses through the measures described above, regression analyses were used to predict Lebanese participants' attitudes toward and relations with Israelis. In testing for third party effects, Lebanese attitudes toward Israelis ("Lebanese Attitudes toward Israelis" measure) will be predicted by 1) Lebanese attitudes toward Palestinians, and 2) Lebanese perceptions of attitudes and relations between Palestinians and Israelis. The interaction between these predictor variables was tested to explain Lebanese attitudes toward Israelis. In addition, secondary analyses examined the role of perceived similarities between Palestinians and Israelis ("secondary transfer" mechanism) and

Lebanese knowledge of Palestinians' contact experiences with Israelis "extended contact" mechanism), as other possible predictors of Lebanese attitudes toward Israelis.

Mean scores and standard deviations of the study measures are shown in Table 1. Not surprisingly, Lebanese report more positive attitudes toward Palestinians than toward Israelis, $t(358) = 26.2$, $p<.001$. Similarly, Lebanese report more positive Lebanese-Palestinian relations than Lebanese-Israeli relations, $t(374) = 23.0$, $SE=.13$, $p<.001$. Interestingly, though, although participants reported very negative Palestinian-Israeli relations, on average they reported that these were less negative than Lebanese-Israeli relations, $t(383) = 4.1$, $SE=.04$, $p<.001$. This is an interesting observation on Lebanese participants' perceptions that there is stronger enmity between Lebanese and Israelis than between Palestinians and Israelis. In addition, the mean scores for perceived similarity were in the expected directions. First, participants found that Lebanese were more similar to Palestinians than to Israelis, $t(376) = 27.36$, $SE=.11$, $p<.001$. Participants also found that while both Palestinians and Lebanese have very little in common with Israelis, Palestinians might be a little more similar to Israelis than Lebanese are, $t(376)=3.80$, $SE=.04$, $p<.001$. This could make sense since most Palestinians and Israelis live in close proximity and have inhabited the same land for centuries (under different group names).

Table 2 shows correlations between all measures, with noteworthy observations. First, as expected positive contact experience with Palestinians is related to positive attitudes toward Palestinians, $r=.45$, $p<.001$. It was also related to more positive perceptions of Lebanese-Palestinian relations, $r=.19$, $p<.001$, as well as more negative perceptions of Palestinian-Israeli relations, $r= -.16$, $p<.001$ and of Lebanese-Israeli relations, $r= -.16$, $p<.001$. A more interesting finding is that more positive attitudes

toward Palestinians were correlated with more positive attitudes toward Israelis, r=.29, p<.001.

On the other hand, there is a significant positive relationship between perceived Palestinian attitudes toward Israelis and Lebanese attitudes toward Israelis, r=.92, p<.001, such that the more respondents perceived that Palestinians felt positively toward Israelis, the more they themselves felt positively toward Israelis. The data also revealed that attitudes toward Israelis are negatively correlated with perceived Lebanese-Palestinian relations, r= -.55, p<.001, as well as perceived Lebanese-Palestinian similarities, r= 33, p<.001 and Palestinian-Israeli similarities, r=74, p<.001.Moreover, the more respondents felt that any of the pairs of groups were similar, the more positively they felt toward Israelis. Finally, it is worth noting that perceived Lebanese-Israeli relations are negatively correlated with perceived Lebanese-Palestinian relations, r= -.19, p<.001, but positively correlated with perceived Palestinian-Israeli relations, r=.87, p<.001. Therefore, when respondents felt that Lebanese and Palestinians were cooperative allies, or the more they perceived that Palestinians and Israelis were competitive enemies, they more they felt that Lebanese and Israelis were competitive enemies as well.

Of the 400 respondents, only 234 indicated that they have had any form of contact with Palestinians, but four of these did not provide responses on the contact measures. Thus, for analyses involving that measure, responses from 230 participants were analyzed. The mean score for quality of contact and for attitudes toward Palestinians were both above average (M = 5.18, SD = .94 and M = 5.35, SD = 1.2, respectively). A linear regression analysis reveals that the contact of quality that Lebanese respondents have with Palestinians directly and positively influence their attitudes toward them. Thus,

greater positive contact experiences with Palestinians more positive attitudes toward Palestinians, among Lebanese participants, $b = .55$, $SE = .08$, $p < .001$.

Before proceeding with the analysis below, however, it is important to explain some necessary transformations that were performed due to the uniqueness of these data. With a politically charged questionnaire that involved relations and attitudes toward Israelis, participants' responses were expectedly extreme and highly skewed. For example, the mean for participant attitudes toward Israelis is 1.96 on a 7-point scale, with a median of 1.00, i.e. the lowest score on the scale, where 71.8% of participants reported the most negative attitudes toward Israelis. This leaves 28.2% of the values spread across all other values for that construct (see Figure 2 for a sample distribution of Lebanese attitudes toward Israelis, compared to Lebanese attitudes toward Israelis). This positive skewness was found among most variables that refer to relations with Israelis, including perceptions of Palestinian contact with as well as attitudes toward Israelis, Lebanese and Palestinian relations with Israelis, and Lebanese and Palestinian relations with Israelis[1].As such, it was suspected that the assumptions were violated due to the extreme non-normality in the data, so these variables were split and a binary logistic regression, which does not have the assumption of normally distributed residuals, was conducted. In this context and in the case of politically charged responses, the loss of information occurring as a result of splitting responses into dichotomous variables is both minimal and considerably irrelevant to the research question being addressed (for more information, see Farrington & Loeber, 2000).

With this information, these measures should not be treated as pure continuous variables. Therefore, the variables were split into two groups, based on whether they were

extreme or not. This approach allows us to distinguish between (1) those who hold strictly negative attitudes toward Israelis, and (2) those who sway at all from that score. This distinction reflects the nature of the Lebanese political climate, where citizens are expected to dislike Israelis, and thus those who do not strictly adhere to that norm would belong to a category of their own. In this analysis, the question becomes dichotomous, such that it focuses on whether a respondent is someone different from the majority or not. Splitting the variable here may be the appropriate approach given the skewed distribution of data and the question rased above. When asked in this manner, running a regression analysis could not inform us about whether respondents deviated from the norm, but a logistic regression does exactly that.

Logistic regression (LR) is a multivariable method of analysis that is commonly used for modeling dichotomous outcomes in social science research, specifically to overcome limitations or ordinary least squares regression analyses (Bagley, White, & Golomb, 2001; Peng & So, 2002). Therefore, logistic regression will be used to study the relation between the transformed categorical outcome variables of the Lebanese dataset, where the model would predict the logit of the outcome variable from the predictor variable

This first section examines a test of the hypotheses predicting Lebanese attitudes toward Israelis through their attitudes toward Palestinians as well as either (1) their perceptions about Palestinian attitudes toward Israelis or (2) their perceptions about Palestinian-Israeli relations. The section that follows includes another relevant analysis, showing how perceived relations between Lebanese and Israelis could be predicted by the perceived relations between Lebanese and Palestinians and between Palestinians and

Israelis. This latter test sheds an additional light on how third parties shape structural balance in the way individuals perceive relations between multiple groups. Finally, the influence of perceived Palestinian-Israeli attitudes and Palestinian-Israeli relations are each examined while controlling for the potential influence of Palestinian-Israeli similarities.

Predicting Lebanese Attitudes toward Israelis

For the following analyses that involve constructs that have been transformed to dichotomous variables, binary logistic regressions were conducted, first testing the interaction of *Attitudes toward Palestinians* X *Perceptions of Palestinian Attitudes toward Israelis* in predicting Lebanese attitudes toward Israelis. The model was fit to the data to explain the predicted odds of positive Lebanese attitudes toward Israelis, while including two main effects – Lebanese attitudes toward Palestinians and perceived Palestinian attitudes toward Israelis – and their interaction. Entering both predictors and their interaction term into the analysis reveals a significant omnibus test of the overall model, $X^2 = 128.56$, $p<.001$, and this indicates that the model is a good fit to the data. In addition, the estimated variance explained by the model is around 43%, *Nagelkerke* $R^2=.433$. The classification table for Block 1 indicates that the model correctly classifies 81.4% of the cases, which is an improvement over a model that does not include the predictors (Block 0). Based on these indicators, we turn to look at the regression slopes.

First, controlling for other variables in the model, perceived Palestinian attitudes toward Israelis significantly predict Lebanese respondents' attitudes toward Israelis, $b=3.95$, $SE=1.41$, $Wald=7.87$, $Exp(B)=.019$, $p<.001$. Therefore, as perceived Palestinian attitudes toward Israelis change from negative to more positive, Lebanese attitudes

toward Israelis also become more positive. On the other hand, Lebanese attitudes toward Palestinians also predict their attitudes toward Israelis, but not in the expected direction, *b*=.35, *SE*=.12, *Wald*=9.33, *Exp(B)*=1.43, *p*=.002; more positive attitudes toward Palestinians predicted more positive attitudes toward Israelis. There was no significant interaction effect on attitudes toward Israelis, however, *b*=.18, *SE*=.25, *Wald*=.51, *Exp(B)*=1.20, *p*=.476 (when examined separately in a model though, the interaction term significantly predicted attitudes toward Israelis, *b*=.48, *SE*=.06, *Wald*=61.69, *Exp(B)*=.62, *p*<.001), indicating that perceived Palestinian attitudes toward Israelis is a considerably stronger predictor of Lebanese attitudes toward Israelis). The graph depicting this interaction is presented below (Figure 3; see Table 3 for results).

Predicting Perceived Relations between Lebanese and Israelis

Second, a binary logistic regression tested the interaction of *Perceived Lebanese-Palestinian Relations* X *Perceived Palestinian-Israeli Relations* in the prediction of *Perceived Lebanese-Israeli Relations*. Entering both predictors and their interaction term into the analysis reveals a significant omnibus test of the overall model, X^2 = 93.29, *p*<.001, indicating a good fit of the model to the data. In addition, the estimated variance explained by the model is around 33%, *Nagelkerke* R^2=.329. The classification table for Block 1 indicates that the model correctly classifies 79.5% of the cases, which is an improvement over a model that does not include the predictors (Block 0) and correctly classifies 76% of the cases.

Controlling for other variables, perceived Palestinian-Israeli relations significantly predict perceived Lebanese-Israeli relations, *b*=3.49, *SE*=.84, *Wald*=17.17, *Exp(B)*=.03, *p*<.001. Therefore, as perceived Palestinian-Israeli relations change from allies to

enemies, perceptions of Lebanese-Israeli relations become more positive (more allied). Furthermore, perceived Lebanese-Palestinian relations also predict Lebanese-Israeli relations, *b*=-.33, *SE*=.13, *Wald*=6.76, *Exp(B)*=.72, *p*=.009. In other words, higher perceptions of allied relations between Lebanese and Palestinians predict higher perceptions of enemy relations between Lebanese and Israelis. However, there was no significant interaction effect on perceived Lebanese-Israeli relations, *b*=.25, *SE*=.18, *Wald*=2.02, *Exp(B)*=1.29, *p*=.16 (but when examined alone, without controlling for the main variables, the interaction significantly predicted attitudes toward Israelis, *b*=.48, *SE*=.06, *Wald*=61.69, *Exp(B)*=.62, *p*<.001). The graph depicting this interaction is presented below (Figure 4; see Table 4 for summary of outcome statistics).

Adding Perceived Similarity as a Predictor

Next, the influence of intergroup similarity was examined alongside the two predictors, *perceived Palestinian attitudes toward Israelis* and *perceived Palestinian-Israeli relations*. First, *Palestinian-Israeli similarities* was included in the same model with *perceived Palestinian attitudes*, X^2 = 129.80, *p*<.001, *Nagelkerke* R^2=.398. The model correctly classifies 79.3% of the cases (an improvement over a model that does not include the predictors, 71.8%). Controlling for perceived similarity, perceived Palestinian attitudes toward Israelis significantly predict perceived respondents' attitudes toward Israelis, *b*=2.60, *SE*=.31, *Wald*=70.50, *Exp(B)*=.07, *p*<.001. Perceived Palestinian-Israeli similarities, on the other hand, do not predict respondents' attitudes, *b*=-.46, *SE*=.30, *Wald*=2.43, *Exp(B)*=.63, *p*=.119, when controlling for Palestinian attitudes toward Israelis. Therefore, it is perceived Palestinian attitudes toward Israelis – not perceived Palestinian-Israeli similarities – that predict perceived Lebanese-Israeli relations.

Finally, *Palestinian-Israeli similarities* was included in the same model with *perceived Palestinian-Israeli relations*, X^2 = 111.75, p<.001, *Nagelkerke* R^2=.356. The model correctly classifies 76.5% of the cases (an improvement over a model that does not include the predictors, 73.8%). Controlling for perceived similarity, perceived Palestinian-Israeli relations significantly predict perceived Lebanese-Israeli relations, b=2.59, SE=.30, *Wald*=75.93, *Exp(B)*=.08, p<.001. Perceived Palestinian-Israeli similarities also predict Lebanese-Israeli relations, b=-.61, SE=.27, *Wald*=5.28, *Exp(B)*=.54, p=.022. Therefore, perceived Palestinian-Israeli relations predict perceived Lebanese-Israeli relations, above and beyond (and more strongly than) the influence of perceived similarity.

Discussion

This research tests how attitudes and perceptions that members of one group form about a target outgroup depend on their relationship with third-party groups, and the perceived relations that third-party groups have with the target outgroup. To test this in a field context, a survey study was conducted with a sample of Lebanese participants, who were asked to report their attitudes and experiences with Palestinians as well as their perceptions about Lebanese-Palestinian-Israeli relations, and their own attitudes toward Israelis. As expected, Lebanese respondents felt more positively toward Palestinians and very negatively toward Israelis. They also perceived relations between Palestinians and Israelis, as well as relations between Lebanese and Israelis, to be extremely negative.

Attitudes toward Israelis

A primary focus of this paper was to examine whether a third-party group – in this case, Palestinians – would predict the attitudes that respondents held toward the

target outgroup – Israelis – and the relationship they perceived Lebanese and Israelis to have. Specifically, the paper predicted an interaction between one's attitudes toward Palestinians and perceptions of Palestinian-Israeli attitudes to influence respondents' attitudes. The data, however, only partially supported the hypotheses. To begin with, when comparing the first two potential predictors (attitudes toward Palestinians and perceived Palestinian attitudes toward Israelis), data from this study indicated that the attitudes that respondents held toward Israelis were only influenced by how they thought Palestinians felt toward Israelis. In other words, Lebanese attitudes toward Israelis were more positive if they thought that Palestinians felt more positively toward Israelis as well. This statement (and others) could be framed a different way as well, such that when respondents thought Palestinians felt more negatively toward Israelis, they also felt more negatively toward Israelis. However, the way respondents felt toward Palestinians in general did not significantly influence the way they felt toward Israelis. This only varied if respondents felt that Palestinians did not feel extremely negatively toward Israelis. In other words, when Palestinians were thought to hold very hostile attitudes toward Israelis, then Lebanese respondents felt negatively toward Israelis as well, regardless of how they felt toward Palestinians. However, when Palestinian attitudes toward Israelis were seen as less hostile, then the way Lebanese felt toward Palestinians made a difference. In this case, when Palestinians were thought to feel even slightly more positively toward Israelis, then the more respondents liked Palestinians, the more positively they also felt toward Israelis. Hence, the processes underlying structural balance occurred only when Palestinians were not perceived to hold very negative attitudes toward Israelis. One possible reason could be the presence of strong Lebanese norms to hold negative attitudes

toward Israelis. Perhaps only when Palestinians (presumably the main enemies of Israelis) are perceived as less hostile toward Israelis, and Lebanese feel positively and close to Palestinians, do Lebanese feel justified to feel less hostile toward Israelis as well. Although this is not explored in this dissertation, future work will examine the role of norm strength – and other variables – in predicting attitude change within a structural balance model of third party influence. Nevertheless, these preliminary findings offer partial support for the main proposition of this paper, highlighting the role of third parties in the formation of attitudes toward target outgroups.

Perceived Lebanese-Israeli Relations

In addition to looking at how attitudes are formed as a function of third-party influence, the study looked at whether perceived relations between the three groups followed the conceptual model of structural balance as well. Therefore, I examined the influence of perceived Lebanese-Palestinian relations and Palestinian-Israeli relations on how respondents perceived Lebanese-Israeli relations. Once again, the findings strongly supported the existence of third-party influence. First, when examined separately, perceptions of more cooperative and allied relations between Lebanese and Palestinians predicted perceptions of more competitive and enemy relations between Lebanese and Israelis. However, when examined alongside the second predictor, results showed that perceived relations between Palestinians and Israelis played a stronger role in predicting perceived Lebanese-Israeli relations, and in fact, how respondents thought about Lebanese-Palestinian relations ceased to influence perceived-Israeli relations.

In summary, among Lebanese participants, how respondents felt toward Israelis varied as a function of how they perceived Palestinians attitudes toward Israelis and not

as a function of how they felt toward Palestinians. Similarly, how Lebanese respondents perceived Lebanese-Israeli relations varied as a function of how they perceived Palestinian-Israeli relations, more than how they perceived Lebanese-Palestinian relations.

The Role of Perceived Palestinian-Israeli Similarities

One mechanism that was suggested to take place is that of secondary transfer effect. The goal of this dissertation is to challenge one notion of secondary transfer, that the extent of intergroup similarity was what drove people to "transfer" their attitudes from one group to another. In this context, I found that similarities between Palestinians and Israelis predicted more positive attitudes toward Israelis; however, a stronger predictor of these attitudes was, in fact, perceived Palestinian attitudes toward Israelis. In other words, although intergroup similarity is related to attitudes toward the target outgroup, perceived third-party attitudes toward the target group influenced these attitudes more strongly and above and beyond the role of intergroup similarities. Moreover, I also found that perceived relations between Palestinians and Israelis was the main driving factor in how respondents perceived relations between Lebanese and Israelis, above and beyond the role of perceived Palestinian-Israeli similarities.

The Role of Extended Palestinian Contact with Israelis

Another suggested mechanism was that of the extended contact effect, where, in this case, the way respondents saw Palestinian contact experiences with Israelis would influence their own attitudes toward Israelis. However, Palestinian contact with Israelis did not predict attitudes toward Israelis, unless it was examined within the same model as Palestinian attitudes toward Israelis (see Appendix C for a discussion of the results).

Furthermore, in that model, Lebanese attitudes toward Israelis were more negative as Palestinian contact with Israelis was more positive. A similar pattern was also found when the role of Palestinian-Israeli contact in predicting perceived Lebanese-Israeli relations was examined. Further examination of the data will aim to uncover potentially mediating or moderating factors, such as changes in Lebanese attitudes toward Israelis, which could affect this relationship.

Conclusion

In summary, the preliminary findings from this study partially support the proposed hypotheses, and demonstrate how the presence of a third party – in this case, Palestinians – may influence the attitudes that respondents may have toward Israelis, as well as the relations they perceive other Lebanese may have with Israelis. In this particular context, it was the perception of the attitudes that Palestinians held toward Israelis, and of the relationship between Palestinians and Israelis, that subsequently predicted how respondents felt toward Israelis and how they saw the relationship between their own group and Israelis. This was further shown to be true above and beyond any similarities that might have been perceived between Palestinians and Israelis.

The findings from this study provide promising support to the influence of third parties in the formation of attitudes and relations toward a target outgroup. However, as a preliminary examination of third party effects, the study also came with a number of limitations. First, due to the sensitivity of items asking about direct contact between Lebanese and Israelis, this study was unable to measure the influence of indirect third party effects, above and beyond those of direct contact. Furthermore, the context in which the data was collected contains very powerful norms when it comes to political

attitudes, particularly toward Israelis. Therefore, the majority of respondents (between 50% and 70%) felt strongly negatively toward Israelis and the relationship between Israelis and both Lebanese and Palestinians, and this made it difficult to assess responses from across a wide spectrum of attitudes and opinions. Nevertheless, the data provided by respondents who deviated from these norms and the overall results from this preliminary study are encouraging. Future survey studies in other contexts should include assessments of direct contact between the primary group and target outgroup, and where there are no psychological, social, or legal pressures involved.

Furthermore, with this correlational field survey, it is difficult to determine the direction of these influences or the causal role of any of the variables. Regression analyses have shown, in a real world context, that attitudes and relations with a target outgroup (Israelis) can vary as a function of attitudes and relations with a third party (Palestinians) and perceived attitudes and relations between that third party and target outgroup. However, it is possible that one's relations with Palestinians would be a product of their relations with Israelis, instead. One method that could offer clearer conclusion about causality is through a laboratory experiment, which can control for other potentially influencing factors as well as for the sequence of events and information obtained by participants. Thus, an experimental study was conducted to simulate a multigroup context by including three groups. In this study the primary group of participants interacts with and forms attitudes about a "third party" group before being introduced to a target outgroup. This experimental study allows for tests of the causal role of third party effects in a multigroup context.

CHAPTER 3

STUDY 2:

EXPERIMENTAL TEST OF THIRD PARTY EFFECTS

Study 2 seeks to replicate and extend the research presented in Study 1, using experimental procedures that parallel multi-groups settings through the use of laboratory-generated groups. The creation of minimal groups in the laboratory has consistently demonstrated its effectiveness in producing intergroup boundaries and feelings of belonging that correspond to differences in attitudes toward one's own group and other groups (Doosje, Ellemers, and Spears, 1995; Giessner & Mummundey, 2008; Tajfel, Billig, Bundy, & Flament, 1971). Specifically, this experiment tests how a group member's contact experiences with a third-party group, and information regarding relations between a third party and target outgroup, positively or negatively influence their attitudes toward the target outgroup. Two factors were manipulated: (1) whether participants experience positive or negative contact with a third-party group; and (2) whether participants learn that relations between the third-party group and target outgroup are friendly or hostile. Growing from this design, the study tested two broad hypotheses:

1) There would be a main effect of valence of participants' contact with the third-party group: positive contact with a third-party group would lead to positive attitudes towards that group, whereas negative contact with a third-party group would lead to negative attitudes toward that group.
2) The valence of participants' contact with the third-party group would interact with the perceived relations between the third-party group and target outgroup, such that:

a) If participants develop positive attitudes toward a third-party group through positive contact, and learn of positive relations between the third party group and target outgroup, participants would anticipate positive relations with the target outgroup.

b) If participants develop positive attitudes toward a third-party group through positive contact, and learn of negative relations the third party group and target outgroup, participants would anticipate negative relations with the target outgroup.

c) If participants develop negative attitudes toward a third-party group through negative contact, and learn of positive relations the third party group and target outgroup, participants would anticipate negative relations with the target outgroup.

d) If participants develop negative attitudes toward a third-party group through negative contact, and then learn of negative relations between the third party group and target outgroup, participants would anticipate positive relations with the target outgroup.

Participants and Procedure

A total of 201 undergraduate students who were registered in psychology courses at the University of Massachusetts, and who were eligible to earn experimental credit for their participation, were recruited for this study. Another criterion for their recruitment was that they had participated in a prescreening study prior to this one. Although their specific responses to the prescreening were not used this study, participants were informed of group membership based on responses to measures assessed during the

prescreening. Each session required the participation of three undergraduate students who signed up for the experiment in exchange for course credit. Participants were asked to come into the lab for two half-hour studies that ostensibly take place within one 60-minute testing session. The actual purpose of the testing session was to manipulate the valence of contact (positive, negative, or "no information" control) between the participant's group and a "third party" group of confederates. When students showed up for the study, they were told that their responses to a prescreening survey had placed them into one of three groups on the basis of cognitive processing style: "deduction", "induction", or "abduction". The first two group labels, "Inductive" versus "Deductive" thinkers, have been used by Doosje et al. (1995) to create minimal laboratory groups. The third group, "Abductive," comes from research on computational semiotics that differentiates between three different kinds of knowledge units or operators: knowledge extraction (deduction), knowledge generation (induction), and knowledge selection (abduction; see Gudwin, 2002). In this particular study, participants were told that they belonged to the "Deductive" processing group.

They were then given a chance to establish an ingroup identity that stems from their shared processing style, using an abridged version of Wright et al.'s (1997) experimental procedures. Participants were first assigned a same-colored T-shirt to wear during the study and then asked to introduce themselves to other members of their group and spend around four minutes "breaking the ice" by discussing interests that they all have in common and figuring out what characteristics they, as "Deductive" participants, might share.

Participants were taken to a room with one computer and informed that they would interact "virtually" as a group with the "Inductive" group of students (i.e., third-party group), who were ostensibly sitting in a similar computer room; they would work with the "Inductive" group on some assigned tasks for approximately 15 minutes. Virtual contact has been used in previous research to emulate direct contact and has often been found to have similar effects as those observed in direct contact settings (e.g., Hewstone, Cairns, Voci, Paolini, McLernon, Crisp, Niens, & Craig, 2005; Williams, Cheung, & Choi, 2000). Following these procedures, participants were given a survey about their attitudes towards their own group and their expectations for contact with the third party group, as well as their attitudes toward that group.

To facilitate their work together as a "Deductive" group, participants were gathered around one computer and shared their tasks. Virtual responses from the "Inductive" third-party group consisted of one of three different sets of scripts prepared and programmed in advance, and randomly selected for each testing session. In the *positive* contact condition, the third-party group ostensibly communicated pleasant and friendly statements, such as "we're really enjoying working on this task with you." In the *negative* contact condition, the third party group ostensibly communicated unpleasant and hostile statements, such as "working with you has not been fun at all." In a separate control condition, the third party remained neutral throughout the interaction. Following the virtual interaction, participants were seated separately and given a survey to assess their attitudes toward the "Inductive" third-party group, along with their attitudes about the task and manipulation checks (see Appendix B for primary measures used in the study).

Participants were then informed that they would next interact with a new group ("Abductive" thinkers, or the "target outgroup"), with whom the "Inductive" (third-party) group had already interacted. This procedure was used to manipulate participants' perceptions of relations between the third-party group and the target outgroup. The researcher then informed one-third of the participants that the third-party group ("Inductive thinkers") and the target outgroup ("Abductive thinkers") got along very well (positive relations condition), while the other third were told that the two groups did not get along well at all (negative relations condition). The final third of participants received no information about the quality of the relations between "Inductive" and "Abductive" thinkers (control condition).

Following these procedures, participants were asked to complete additional survey questions to check the effects of the manipulation and assess initial attitudes toward and anticipated feelings about interacting with the target outgroup (Abductive thinkers; see below for description of measures). Once they completed the surveys, participants were fully debriefed of the true purpose of the study, given the opportunity to discuss the goals of the study, had any of their questions answered, and finally were thanked for their time.

Measures

The primary goal of this experiment is to examine whether participants' attitudes toward third party groups – resulting from positive or negative contact experiences – and perceived relations between the third party and target outgroups would impact their subsequent attitudes toward the target outgroup. The survey relied on similar items as to those included in the field survey described above, but their frames of reference changed

to the groups involved in the lab experiment. The variables measured in the experiment are as follows:

Manipulation Checks

Contact and Attitudes toward the Third-Party "Inductive" Group.

To check the effectiveness of the first manipulation, participants were asked to report their attitudes towards the third party group, with whom they had a virtual interaction. Items measured the extent to which their contact experience with that group was positive or negative, and whether the interaction was pleasant or hostile. Twelve items measuring quality of contact were scored on a 7-point scale, ranging from "1" (strongly disagree) to "7" strongly agree, where 6 of these items were reverse-coded (α = .96). The next items assessed participants' attitudes toward the third party "Inductive" group, paralleling items used in Study 1. A general evaluation scale asked participants to describe how negative/positive, cold/warm, hostile/friendly, and suspicious/trusting they felt toward the "Inductive group", on a scale from "1" to "7" (adapted from Wright et al., 1997; α=.94).

Perceived Relationship and Interaction between the Third Party "Inductive" and Target Outgroup "Abductive"

Twelve survey items asked about the perceived interaction (e.g., friendly-hostile, positive-negative, etc.) between the "Inductive" and "Abductive" groups (α=.946). Scores were based on a 7-point scale. In addition, two items examined the perceived relations between "Inductives" and "Abductives" (cooperative-competitive, allies-enemies) on a 10-point scale, and with a high correlation of r=.791 (α=.880).

This measure was administered following the feedback that participants received about the interaction between the third party and target outgroup, and before their own group expected to interact with the target outgroup. The survey items used here are similar to those used in Study 1 in assessing the extent to which participants perceived the relation between the third party and target outgroup to be positive or negative.

Outcome variables

Expectations for Interaction with the Target Outgroup

To assess whether their interaction with the third party group impacts their attitudes towards a target outgroup, participants indicated whether they felt negatively or positively toward their upcoming interaction with the target outgroup. The items used for this measure parallel those used in Study 1, but refer to expectations of future interactions, rather than actual experiences (e.g, "My interaction with the Abductive Group will be [pleasant/hostile/friendly/distant]"; see Barlow et al., 2012; Islam & Hewstone, 1993). They provided their responses on a 12-item general evaluation scale, with a reliability of α=.819.

Attitudes toward Target Outgroup

Another set of four items asked participants to indicate on a scale from "1" to "7", the extent they felt negative/positive, hostile/friendly, cold/warm, and suspicious/trusting toward the "Abductive" group, with a high reliability of α=.884. These items also parallel the ones used in Study 1.

Perceived Similarities between the Third Party and Target Outgroup

To account for the possible mediating effect of perceived similarities between the outgroups, as proposed by Pettigrew's (2009) description of the secondary transfer effect,

a single item assessed how similar or different participants perceived the third party and target outgroups to be. Responses ranged from "very different" to "very similar" on a 10-point scale.

Results

Manipulation Checks

Contact and Attitudes toward Third Party "Inductives"

To check whether the interaction conditions with the third-party "Inductive" group influenced participants' reports on the interaction and their attitudes toward that group, a one-way ANOVA was employed. As expected there was a significant effect of these primary conditions on participants' reports of the interaction, $F(2,197)=78.26$, $p<.001$, $\eta^2=.45$. Post hoc analyses revealed that those in the "negative" condition reported a significantly more negative experience ($M=3.40$, $SD=1.74$) with the "Inductive" third party than those in the positive condition ($M=5.69$, $SD=.82$) , $p<.001$, and those in the neutral condition ($M=5.61$, $SD=.75$) , $p<.001$. However, there was no significant difference in reports between those in the "positive" and "neutral" conditions, $p=.94$.

Similarly, the condition in which the interaction took place significantly influenced the participants' attitudes toward the "Inductive" third party group, $F(2, 196) = 58.82$, $p<.001$, $\eta^2=.38$. Posthoc analysis revealed that participants in the negative condition reported less positive attitudes toward the Inductive third party group ($M=2.76$, $SD=1.44$) as compared to participants in the positive condition ($M=5.30$, $SD=1.60$)), $p<.001$, and those in the control condition ($M=5.24$, $SD=1.54$), $p<.001$; no significant difference between those in the positive and neutral conditions were found, $p=.98$.

Together, these findings indicate that the "negative" interaction condition resulted in more negative responses toward the third party group than the "positive" and "neutral" contact conditions. Given that in both cases, the means were considerably above the midpoint of the scale (an average of 5.46 on a 7-point scale), this implies that perhaps the neutral condition was perceived as positively as the positive condition.

Perceived Interactions and Relations between Third Party "Inductives" and Target Outgroup "Abductives"

To check whether the false feedback regarding ostensible relations between the "Inductive" third party and "Abductive" target outgroups influenced participants' perceptions of that relationship, a one-way ANOVA was employed. The analysis showed that the feedback condition significantly influenced participants' perceptions of the perceived interaction, F (2,194) = 35.27, p <.001, η^2=.27, and the perceived relation, F (2, 194) = 25.72, p <.001, η^2=.21 between the "Inductive" and "Abductive" groups. Participants in the negative condition perceived less positive interactions (M=3.54, SD=1.07) than participants in the positive condition (M=4.70, SD=.82), p<.001, or participants in the control condition (M=4.92, SD=1.11) , p<.001. Along similar lines, participants in the negative condition perceived less positive relations (i.e., that "Inductives" and "Abductives" were more competitive and like enemies, M=4.17, SD=2.00) than those in the positive condition (M=6.24, SD=1.78), p<.001, and those in the control condition (M=6.48, SD=2.25) , p<.001. Once again, there were no significant difference between participants in the positive and control conditions on perceived interactions, p=.45, and perceived relations, p=.80. For both outcome measures, mean scores in the positive and control conditions are above the midpoint (for perceived

interactions, *M*=4.81 on a 7-point scale, and for perceived relations, *M* =5.36 on a 10-point scale), suggesting that relations in the control condition are perceived as positively as those in the positive condition.

Main Outcomes

Based on the procedures outlined above, this experimental study follows a 3 (interaction with third party group: positive/negative/neutral) X 3 (perceived relation between third party and target outgroup: friendly/hostile/control) factorial design. Therefore, a 3 (interaction with third party) X 3 (perceived relations between third party and target outgroup) analysis of variance was employed to predict two outcome variables: participants' self-reported attitudes toward the target outgroup and their expectations for contact with the target outgroup. Similar to the expected results for Study 1, an interaction between the two predictors was expected, such that participants' expected interactions with the "Abductive" target outgroup and attitudes towards the target outgroup will vary in relation to two factors: first, their own experiences with the third party group (positive, negative, or control), and the information they receive from the experimenter about relations (friendly or hostile) between the third party group and target outgroup. The analysis also included perceived similarity as a possible mediator effects between the third party and target outgroup.

Expectations for Interaction with the Target Outgroup

Mean scores on expectations for contact with the target outgroup across experimental conditions are presented in Table 5. Examining first the experimental effects on expectations for contact with the "Abductive" target outgroup, results showed a significant main effect of the initial interaction with "Inductives", $F(2,191) = 24.07$,

p<.001, η^2=.208. A post hoc Scheffe test revealed that participants who had a negative experience with the "Inductive" third party group anticipated a significantly more negative experience with the "Abductive" target outgroup (M=3.91, SD=.89), relative to those who had a positive experience (M=4.71, SD=1.01, p <.001) or a neutral experience (M=4.97, SD=.77, p <.001) with the "Inductive" third party group. Once again, though, there were no significant differences in expectations for contact between those who had positive and neutral experiences with the "Inductive" third party group p=.244.

As for the main effect of perceived relations, the differences were marginally significant, F(2, 191)=2.586, p=.078, η^2=.027 [2]. Post hoc analyses show that those who received negative information about relations between the third party and target outgroups anticipated a significantly more negative interaction with the "Abductive" target outgroup (M=4.31, SD=.92) than those who did not receive any information at all (control condition; M=4.75, SD=1.11, p=.022. There was no significant difference between participants who received positive information about "Inductive-Abductive" relations (M=4.56, SD=.92) and the other two conditions.

Additionally, the analysis found no significant interaction effects between the two experimental conditions on expectations for contact with the target outgroup, F(4,191)=.45, p=.772, η^2=.01.

Attitudes toward the Target Outgroup

Mean attitudes toward the target outgroup ("Abductives") across experimental conditions are presented in Table 6. Again, a 3 (interaction with third party) X 3 (perceived relations between third party and target outgroup) analysis of variance was tested in predicting participants' attitudes toward the "Abductive" target outgroup. This

two-way ANOVA again found a main effect of the contact manipulation, $F(2,191)=4.71$, $p=.01$, $\eta^2=.05$, such that those in the negative contact condition ($M=4.11$, $SD=1.18$) reported significantly less positive attitudes toward the "Abductive" target outgroup than those participants in the control condition ($M=4.76$, $SD=1.17$, $p=.013$, and marginally less positive attitudes than those in the positive contact condition ($M=4.62$, $SD=1.33$), $p=.069$. There was no significant main effect of perceived relations on participants' attitudes toward the "abductive" target outgroup, $F(2,191)=1.18$, $p=.310$, $\eta^2=.013$, and the interaction effect was not significant, $F(4,191)=1,13$, $p=.344$, $\eta^2=.024$.

Perceived Similarities

An additional goal of this paper was to examine the role of the predictor variables – in this case, effect of *interaction with "Inductives"* and *perceived "Inductive-Abductive" relations* – beyond the role of perceived similarities between the third party "Inductives" and target outgroup "Abductives", in shaping the perceptions and expectations that group members may develop toward the target outgroup. First, looking at whether these perceptions were themselves influenced by any of the manipulations, the information received about the interactions between "Inductives" and "Abductives" does not significantly influence subsequent perceptions of the similarities between these two groups, $F(2,188)=2.32$, $p=.101$, $\eta^2=.025$. Interestingly, however, the initial contact that participants had with "Inductives" does influence these perceptions, $F(2,188)=3.77$, $p=.015$, $\eta^2=.040$. Furthermore, there is a significant interaction effect between the two manipulations, $F(4,188)=4.05$, $p=.004$, $\eta^2=.083$.

In line with previous results from this study, a Scheffe post hoc test found that those who engaged in a negative interaction with "Inductives" later found "Inductives"

and “Abductives” to be more different (*M*=5.02, *SD*=2.11) than those who engaged in a neutral type of interaction (*M*=5.98, *SD*=1.96; *p*=.023) and marginally more so than those who engaged in a positive interaction (*M*=5.77, *SD*=1.70, *p*=087). The difference between those in the positive and neutral conditions was not significant, *p*=.862.

With respect to the interaction, the differences were found between the negative and neutral initial contact experiences. For those who had a negative experience with “Inductives”, while they perceived more “Inductive-Abductive” differences than those in the neutral (or positive) contact conditions, these perceptions did not significantly vary as a function of the feedback they received. On the other hand, those in the neutral contact condition, and also experienced a more positive interaction (based on findings reported above), perceived those differences to be greater after hearing that “Inductive-Abductive” relations are bad (*M*=5.00, *SD*=1.76) than when they received no information at all about these relations (*M*=6.88, *SD*=1.83), $F(1,44)=12.21$, $p=.001$, $\eta^2=.22$.

To examine the influence of perceptions of similarity/difference, a regression analysis found that these perceptions significantly predicted participants’ expectations of their upcoming interactions, such that the more similar they perceived “Inductives” and “Abductives” to be, the more positive they expected their upcoming interactions with the “Abductives” to be, *b*=.18, *SE*=.03, *p*<.001, controlling for the effects of both independent variables (contact experience and feedback). Nevertheless, the two main independent variables were still strong predictors of participants’ expectations above and beyond the influence of perceived similarity (for contact with “Inductives”, *b*=.44, *SE*=.07, *p*<.001; for information about the two groups’ interaction, *b*=.15, *SE*=.07, *p*=.04). As for attitude formation, although perceived similarity does predict participant

attitudes toward "Abductives", *b*=.16, *SE*=.05, *p*=.001, the contact experience that takes place with "Inductives" remains a strong predictor of attitudes toward "Abductives", above and beyond that of perceived similarity, *b*=.26, *SE*=11, *p*=.02.

Discussion

The goal of the experimental study was to examine whether a third party group directly causes changes in perceptions of and attitudes toward a target outgroup. To test that, three-person groups were formed in a lab, where they interacted with a designated "third party", then received information about the relations between that third party and another "target outgroup", and were subsequently asked to report their expectations for contact and attitudes toward that target outgroup. The experiment purposefully allowed no contact between the participant group and target outgroup, in order to unambiguously identify the source(s) of the attitudes formed toward them.

The results clearly pointed to a strong influence of contact with the third party ("Inductives") on participants' expectations and attitudes toward the target outgroup ("Abductives"). Specifically, when the interaction with "Inductives" was negative, participants had more negative expectations and more negative attitudes toward "Abductives" – whom they had not interacted with yet – than when the interaction with "Inductives" was positive or neutral. Furthermore, when the information that participants received was examined, analysis found that participants who heard that the "Inductive-Abductive" relationship was negative subsequently reported more negative expectations about their upcoming interaction with "Abductives" than those who heard positive information or no information at all about the relationship. This manipulation did not influence participants' attitudes toward "Abuctives", however.

More importantly, participants seemed to be more affected by their initial interaction with the third party "Inductives' than by the information they received regarding that third party's experience with the target outgroup "Abductives". Given the setup of the experiment, though, this is not entirely unexpected. To begin with, one would expect that direct contact would have a stronger impact in this case, since participants had no knowledge about "Deductives", "Inductives", or "Abductives" prior to entering the experimental session, and thus basing their responses on information obtained within just an hour. Second, participants are exposed to the third party and undergo a pleasant, unpleasant, or neutral interaction with them for about 15 minutes, whereas they are exposed to the information about the "Inductive-Abductive" relationship for less than four seconds. Therefore, a manipulation that lasted significantly longer and that also required interaction and involved an emotional provocation may more likely influence participants' subsequent responses than a manipulation that was considerably briefer and did not require any sort of give-and-take from the participants. This weaker second manipulation could also explain why no interaction was found between the two independent variables. Future studies should take that into account and ensure that participants are exposed to the second manipulation (i.e., information about the "Inductive-Abductive" interaction) for a more substantial amount of time, and with more substantive detail than a simple "They did/did not get along" statement that would also allow for active processing of that information.

The study also examined the role of perceived similarities. First, information about the relationship between the "Inductives" and "Abductives" did not influence how similar or different they were perceived to be. Interestingly, though, the interaction that

occurred between the participants and “Inductives” did affect these perceptions, such that a negative interaction led participants to perceive the “Inductives” and “Abductives” as more different than a positive or neutral interaction did. Again, this could be explained by the high likelihood that that first manipulation was stronger and more impactful, especially when it was negative. It is also possible that participants viewed that particular negative contact experience – and by association, that “Inductive” group – as an exception and not what is typical in these laboratory settings.[3] If participants saw the “Inductives” as deviating from the norm, then they might consequently assume that the “Inductives” are not a typical representation of other groups in this setting, including the “Abductives”. Unfortunately, the study did not measure whether participants found the “Inductives” to be a typical or exceptional group, and this potential factor should be explored in future studies.

The study also found that participants’ perceptions of similarities varied when they had a neutral contact experience with the “Inductives”. For that subgroup, when they were told that the “Inductive-Abductive” contact was negative, they were more likely to conclude that these two groups were also more different from each other than when they received no information. Therefore, when the interaction was neutral, participants relied on the information they received about the “Inductive-Abductive” interaction to inform their perceptions of how similar or different these two groups may be.

Next, when “Inductives” and “Abductives” were perceived to be more similar, participant attitudes toward “Abductives” were more positive, across all conditions of the experiment. More importantly, however, the interaction with the third-party group still played a significant role in shaping participant attitudes toward “Abductives”, above and

beyond the influence of perceived similarities. Moreover, both the interaction with "Inductives" as well as the perceived "Inductive-Abductive" relation influenced how participants anticipated their upcoming interaction with "Abductives" to go, above and beyond the role of perceived "Inductive-Abductive" similarities.

The results of this study are encouraging and indicative of a strong influence of third parties, at least in the initial stage. This is reflective of the mechanisms behind secondary transfer (Pettigrew, 2009), although the future goal of this research is to focus on strengthening the second predictor – relationship between the third party and target outgroup – in order to examine the full extent of the role that this additional factor may play. Moreover, additional measures could directly ask participants what they based their judgments on, regarding the target outgroups.

CHAPTER 4

GENERAL DISCUSSION

In sum, the findings from the field survey and experimental study provide partial support for the hypotheses of this paper, and strong preliminary support for the role of third parties in influencing the way people perceive and feel toward target outgroups. In the field survey, it was the relationship and attitudes held by the third party (Palestinians) toward the target outgroup (Israelis) that predicted Lebanese respondents' own attitudes and perceptions regarding Israelis. This fits within the political context in Lebanon, a place where strong norms and pressures exist concerning people's stance toward Israelis, such that people might only be willing to justify their deviating judgments if they perceived – or at least portrayed – the third party Palestinians as a group that has varied its judgments as well. Since Palestinians have been the main victims of the conflict with Israelis, it may be difficult for the Lebanese to express anything less negative about Israelis until Palestinians do so first and provide "permission" for Lebanese to follow suit.

In the experimental study, on the other hand, it was the participants' interaction with the third party that was the main driving force. As mentioned earlier, this is likely the result of a considerably powerful first manipulation (contact with "Inductives") and a relatively weaker second manipulation ("Inductive-Abductive" relationship). This could be modified in a follow-up study, where more attention would be given to that second factor so that it has an equitable impact to that of the first predictor (contact with "Inductives").

Moreover, a future study should also examine the predictive role of these factors in contexts where direct contact with the target outgroup exists. This scenario is also not unlike real-life contexts where all three groups may interact with one another, but where the mechanisms that underlie structural balance could still exist.

Finally, these preliminary findings open the door for additional questions and paths that can be examined within multigroup contexts. For instance, would the relative status or power of the third party group, with respect to the individual's group and a target outgroup, matter? In other words, would a third party that is seen as having lower status than one's own group still be able to play a strong role in shaping attitudes and perceptions toward the target outgroup? Furthermore, would the same mechanisms exist in contexts that include more than three groups? How would structural balance manifest itself, and how would group members form judgments, if they were faced with multiple third parties? These are questions that are well worth examining in future studies within this line of research and the author remains excited in pursuing these multiple variables and issues that arise when exploring the many facets of third party influence and multiple group relations.

Broader Implications

There are numerous intergroup contexts in the world that involve more than two groups in conflict, where some may establish formal or informal coalitions with other groups, while distancing themselves from other groups. The processes described in this paper carry important implications for how members of different groups form alliances or enemy relations (see Alexander, Brewer, & Livingston, 2005; Alexander, Brewer, & Hermann, 1999). Appraisals of the nature of a relationship, and subsequently

kind of threat or opportunities that an outgroup poses, gives rise to distinct emotional reactions, which can then lead to the formation of distinct group images (e.g., ally vs. enemy), and to distinct action tendencies (e.g., aggression, self-protection) that correspond to those images (Alexander et al., 1999; Cottrell & Neuberg, 2005). Hermann (1985) noted that the formation of group images falls in line with Heider's (1958) balance theory. To maintain a positive moral image of one's own group, the cognitive system looks at the threat or opportunity presented by the outgroup and draws an image of that outgroup that will create balance (Hermann, 1985). What is novel about the research in this paper is that it recognizes the existence of more than one group, and how this added complexity might inform how we evaluate and form attitudes toward other groups. In contexts with multiple groups, members of each group must evaluate their relationship with one outgroup, while taking into account that group's relationship with even other outgroups. These factors could illuminate the psychological processes that are involved in coalition building, especially in areas with ongoing conflict, and where coalitions and alliances serve to enhance a group's strength and ability to respond to potential threats.

What also becomes clear from the preceding discussion is that greater research attention is needed to understand both positive and negative processes involved in intergroup contact. Research on secondary transfer effects have focused mainly on positive effects of attitude transference, and extended contact research has focused mainly on positive effects in relation to knowledge of ingroup members' intergroup contact experiences. In reality, attitudes can change drastically and in both positive as well as negative directions. In line with previous research (e.g., Barlow et al., 2012;

Paolini et al., 2010), the experimental study has shown that negative contact processes may have stronger influence on attitudes than positive contact.

In multi-group settings, where three or more groups are involved, the influence of positive as well as negative processes may become more complicated. Not only do groups in this context have to contend with the negative contact experiences, attitudes, or relations that occur with one group, but with how these processes unfold in the presence of a third influential group. In summary, when multiple groups exist, relational dynamics become more complex than what the existing literature on intergroup relations presents. The current research hopes to have shed some light on the possible factors that may play a role in building coalitions and forming attitudes towards multiple groups.

Table 1

Mean Scores and Standard Deviations Measures of Contact, Attitudes, and Perceived Relations and between Lebanese, Palestinians, and Israelis

	N	Mean	SD
Primary Predictor Measures			
Lebanese Attitudes toward Palestinians	370	4.87	1.53
Perceived Palestinian Attitudes toward Israelis	361	2.18	2.20
Perceived Lebanese-Palestinian Relations	376	3.66	1.84
Perceived Palestinian-Israeli Relations	385	.74	1.50
Secondary Predictor Measures			
Lebanese Contact with Palestinians	234	5.15	.91
Perceived Palestinian Contact with Israelis	354	1.77	.84
Perceived Lebanese-Palestinian Similarities	388	4.87	1.64
Perceived Palestinian-Israeli Similarities	384	2.13	1.94
Perceived Lebanese-Israeli Similarities	377	1.87	1.82
Outcome Measures			
Lebanese Attitudes toward Israelis	377	1.96	2.06
Perceived Lebanese-Israeli Relations	384	.58	1.50

Table 2

Correlation Matrix for Measures of Attitudes, Perceived Relations, Perceived Similarity, and Contact

		1	2	3	4	5	6	7	8	9	10	11
1	Contact with Pal	1										
2	Attitudes toward Pal	.45**	1									
3	Pal. Contact w. Isr	-.30**	-.20*	1								
4	Pal Attitudes to Isr	-.11	.23*	.04	1							
5	Leb Attitudes to Isr	-.06	.29**	-.02	.92**	1						
6	Leb-Pal Relations	.19**	.02	-.17**	-.61**	-.55**	1					
7	Pal-Isr Relations	-.16*	-.11*	.07	-.09	-.08	-.22**	1				
8	Leb-Isr Relations	-.16*	-.02	-.01	-.07	-.04	-.19**	.87**	1			
9	Leb-Pal Similarities	.28**	.54**	.22**	.28**	.33**	.16**	-.21**	-.13*	1		
10	Pal-Isr Similarities	-.09	.20**	.07**	.79**	.74**	-.64**	-.07	-.10*	.22**	1	
11	Leb-Isr Similairities	-.10	.30**	.03	.81**	.78**	-.61**	.06	-.02	.26**	.89**	1

Note: For correlations that include direct contact with Palestinians, sample size ranges from 197 to 234. With the remaining variables, however, sample size ranged from 229 to 384.
** $p < .01$ (2-tailed); * $p < .05$ (2-tailed)

Table 3

Logistic Regression Outcome Table for Predicting Lebanese Attitudes toward Israelis

	Parameter Estimate	SE	Wald	Exp(B)
Constant	1.43*	.58	6.10	.24
Attitudes to Palestinians	.35**	.12	9.33	1.43
Perceived Pal Attitudes to Israelis	3.95**	1.41	7.88	.02
Att to Pal X Pal Att to Israelis	.18	.25	.51	1.20

** $p < .01$; * $p < .05$

Table 4

Logistic Regression Outcome Table for Predicting Perceived Relations between Lebanese and Israelis

	Parameter Estimate	SE	Wald	Exp(B)
Constant	1.34*	.57	5.51	3.8
Lebanese-Palestinian Relations	.33**	.13	6.76	.03
Palestinian-Israeli Relations	3.49***	.84	17.17	.03
Leb-Pal Rel X Pal-Isr Rel	.25	.18	2.02	3.80

*** $p < .001$; ** $p < .01$; * $p < .05$

Table 5

Mean scores for expectations for contact following both conditions of interaction with "Inductives" and perceived relations of "Inductives" and "Abductives"

DED-IND Interaction	IND-ABD Interaction	N	M	SD
Negative	Negative (Enemy)	24	3.79	.696
	Positive (Ally)	21	4.03	1.05
	Control	18	3.92	.94
	Total	63	3.91	.89
Positive	Negative (Enemy)	21	4.43	.98
	Positive (Ally)	21	4.69	.74
	Control	21	5.01	1.20
	Total	63	4.71	1.01
Neutral	Negative (Enemy)	21	4.80	.79
	Positive (Ally)	21	4.95	.69
	Control	24	5.15	.82
	Total	66	4.97	.77
Total	Negative (Enemy)	66	4.31	.92
	Positive (Ally)	63	4.56	.92
	Control	63	4.75	1.11

Table 6

Mean scores for attitudes toward "Abductives" following both conditions of interaction with "Inductives" and perceived relations of "Inductives" and "Abductives"

DED-IND Interaction	IND-ABD Interaction	N	M	SD
Negative	Negative (Enemy)	24	4.11	1.14
	Positive (Ally)	21	4.15	1.43
	Control	18	4.10	.96
	Total	63	4.11	1.18
Positive	Negative (Enemy)	21	4.50	1.48
	Positive (Ally)	21	4.60	1.49
	Control	21	4.76	1.01
	Total	63	4.62	1.33
Neutral	Negative (Enemy)	21	4.82	1.03
	Positive (Ally)	21	4.23	1.20
	Control	24	5.17	1.13
	Total	66	4.76	1.17
Total	Negative (Enemy)	66	4.46	1.24
	Positive (Ally)	63	4.33	1.37
	Control	63	4.71	1.12

Figure 1: Conceptual model: How attitudes/relations toward a third party and perceived relations between the third party and target outgroup are expected to predict attitudes/relations toward that target outgroup.

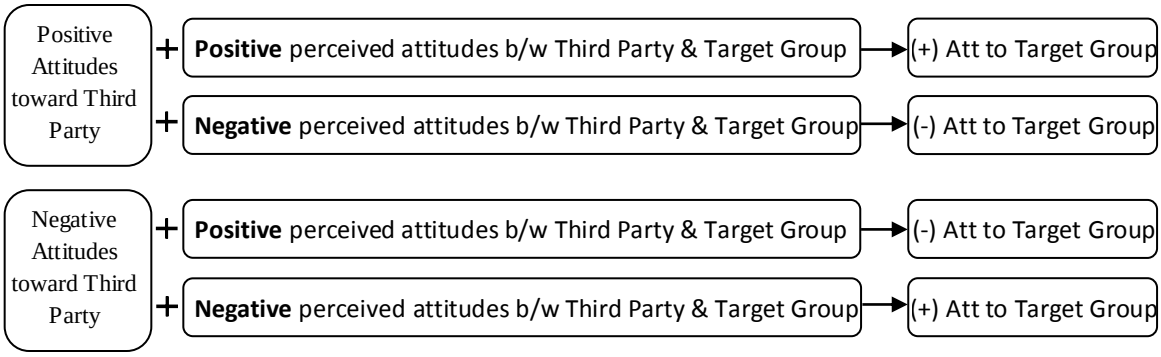
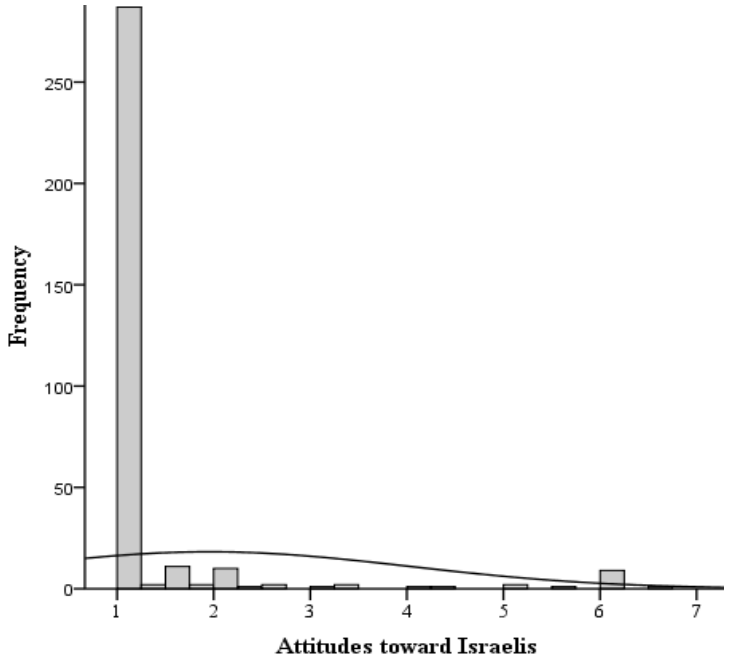


Figure 2: Frequency distribution graphs (histograms) depicting Lebanese self-reports on their attitudes toward Israelis (skewness = 1.89, SD = .13) compared to toward Palestinians (skewness = -.49, SD = .13).



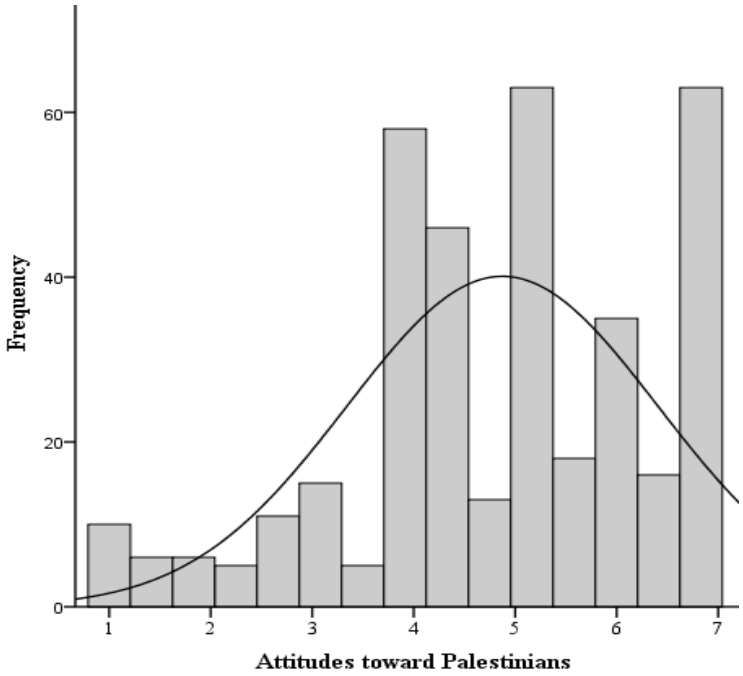


Figure 3: Binary regression graph depicting Lebanese attitudes toward Israelis as a function of their attitudes toward Palestinians and their perceptions of Palestinian attitudes toward Israelis.

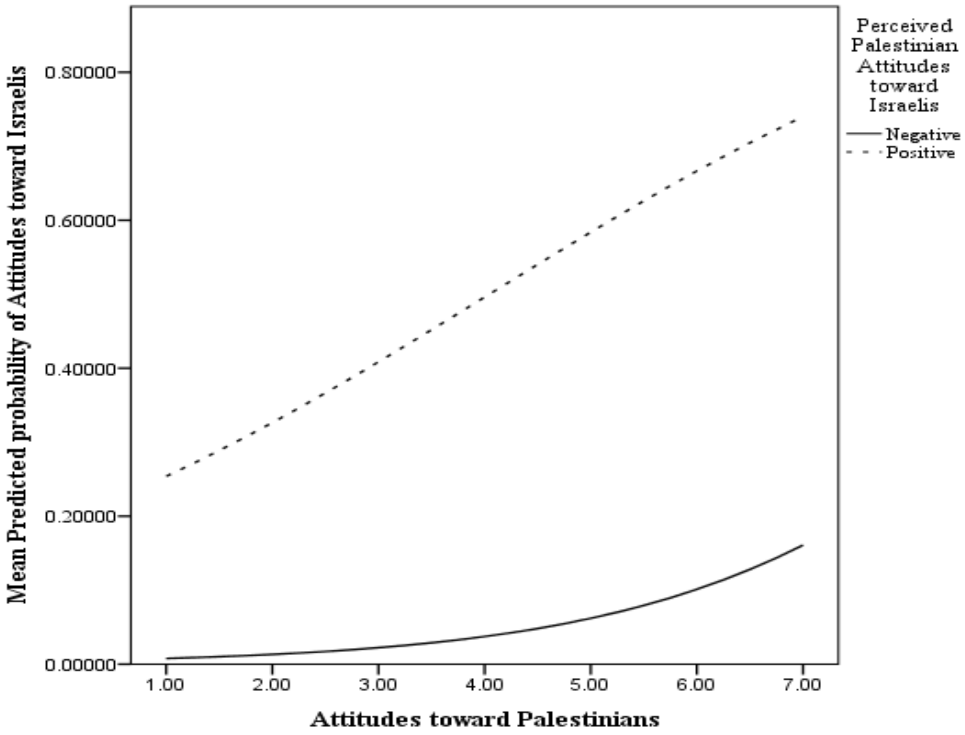
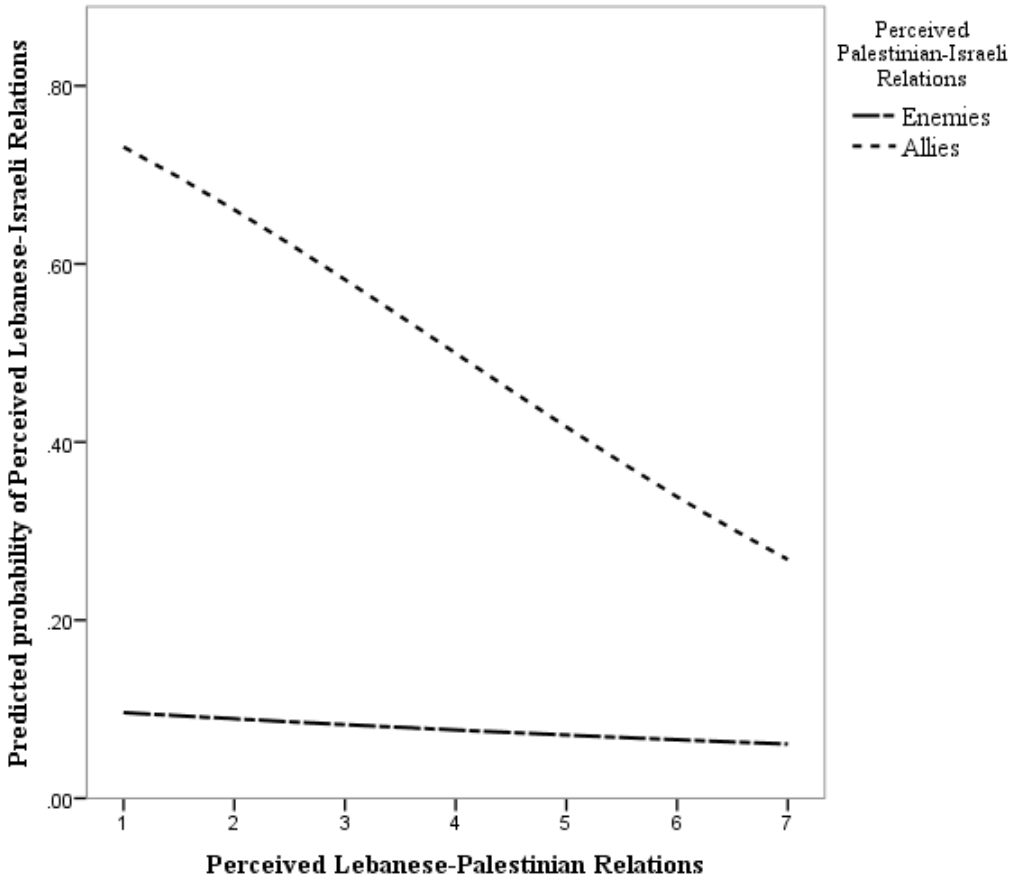


Figure 4: Binary regression graph depicting perceived Lebanese-Israeli as a function of their perceptions of Lebanese-Palestinian and Palestinian-Israeli relations.



APPENDIX A

EXCERPTS FROM SURVEY ASSESSING LEBANESE RELATIONS WITH PALESTINIANS AND ISRAELIS

Measures to Test Third-Party Effects

Lebanese contact with Palestinians.

Please respond to the following questions based on YOUR experiences and how YOU feel towards PALESTINIANS.

1) Have you had any form of contact with Palestinians? ☐ Yes ☐ No

If you have answered "No" to question 1, please skip to item 7

2) If you have had contact with Palestinians, how much contact have you had with Palestinians who live in:

	Not much contact						A great deal of contact
a. Lebanon	1	2	3	4	5	6	7
b. West Bank/Gaza	1	2	3	4	5	6	7
c. Jordan	1	2	3	4	5	6	7
d. Other (specify): _____	1	2	3	4	5	6	7

3) If you have had **contact** with Palestinians, please indicate how often you have had each type of contact with Palestinians, using the number that best represents your response.

☐ I have never had any form of contact or interaction with Palestinians

	Almost Never						Almost Always
e. Face-to-face	1	2	3	4	5	6	7
f. Over the phone	1	2	3	4	5	6	7
g. By email	1	2	3	4	5	6	7
h. Blogospheres/ chat rooms	1	2	3	4	5	6	7
i. Social network website (Facebook…)	1	2	3	4	5	6	7
j. Other (specify): _____	1	2	3	4	5	6	7

4) Of the Palestinians you know, how many would you consider to be close friends?

Almost none of them	1	2	3	4	5	6	Almost all of them
☐	☐	☐	☐	☐	☐	☐	☐

5)

6) Please reflect on your interactions with Palestinians, when responding to the items below:

	Almost Never			Some-times			Almost Always
How often have you had had POSITIVE CONTACT EXPERIENCES with Palestinians?	1	2	3	4	5	6	7
How often have you had FRIENDLY INTERACTIONS with Palestinians?	1	2	3	4	5	6	7
How often have you had HOSTILE INTERACTIONS with Palestinians?	1	2	3	4	5	6	7
How often have you had NEGATIVE CONTACT EXPERIENCES with Palestinians?	1	2	3	4	5	6	7

7) Please read the following statements and circle the number that corresponds with your level of agreement to each statement.

	Strongly Disagree			Undecided			Strongly Agree
1. When I interact with Palestinians the contact is almost always pleasant.	1	2	3	4	5	6	7
2. When I interact with Palestinians we almost always interact as equals.	1	2	3	4	5	6	7
3. When I interact with Palestinians the contact is almost always unpleasant.	1	2	3	4	5	6	7
4. When I interact with Palestinians, there are almost always differences in power or status.	1	2	3	4	5	6	7
5. When I interact with Palestinians the contact is almost always friendly.	1	2	3	4	5	6	7
6. When I interact with Palestinians it often feels like we cooperate well with each other.	1	2	3	4	5	6	7
7. When I interact with Palestinians the contact is almost always hostile.	1	2	3	4	5	6	7
8. When I interact with Palestinians it often feels like we are competing with each other.	1	2	3	4	5	6	7
9. When I interact with Palestinians I feel that the contact is intimate like being with good friends and family.	1	2	3	4	5	6	7
10. When I interact with Palestinians I feel that the contact is distant like with strangers or people unknown to me.	1	2	3	4	5	6	7

Lebanese attitudes toward Palestinians.

8) Think about how you feel toward Palestinians **in general**.

To what extent do you feel? (circle number to indicate your response)

a.	Negative	1	2	3	4	5	6	7	Positive
b.	Cold	1	2	3	4	5	6	7	Warm
c.	Hostile	1	2	3	4	5	6	7	Friendly
d.	Suspicious	1	2	3	4	5	6	7	Trusting

Lebanese attitudes toward Israelis.

9) Think about how you feel toward Israelis **in general**.

To what extent do you feel? (circle number to indicate your response)

a.	Negative	1	2	3	4	5	6	7	Positive
b.	Cold	1	2	3	4	5	6	7	Warm
c.	Hostile	1	2	3	4	5	6	7	Friendly
d.	Suspicious	1	2	3	4	5	6	7	Trusting

Process variables.

Perceived Similarity.

1) **Please indicate below how different or similar these pairs of groups are in terms of political ideology:**

Palestinians & Israelis

Very Different	1	2	3	4	5	6	7	8	9	10	Very Similar

2) **Please indicate below how different or similar these pairs of groups are in terms of cultural values:**

Palestinians & Israelis

Very Different	1	2	3	4	5	6	7	8	9	10	Very Similar

3) **Please indicate below how different or similar these pairs of groups are in terms of goals and interests:**

Palestinians & Israelis

Very Different	1	2	3	4	5	6	7	8	9	10	Very Similar

Perceived Relations.

4) **Please indicate on a scale of 1 -10 the extent to which the groups below are in a cooperative vs. competitive relationship:**

Palestinians & Israelis

Cooperative	1	2	3	4	5	6	7	8	9	10	Competitive

5) **Please indicate on a scale of 1 -10 the extent to which the groups below have an ally versus enemy relationship:**

Palestinians & Israelis

Enemy	1	2	3	4	5	6	7	8	9	10	Ally

Extended contact between Palestinians and Israelis.

6) **Please respond to the following questions based on the PALESTINIAN people that you know**

	None	Few	Some	Many	Very Many
How many Palestinians do you know that have had POSITIVE CONTACT EXPERIENCES with Israelis?	1	2	3	4	5
How many Palestinians do you know that have had FRIENDLY INTERACTIONS with Israelis?	1	2	3	4	5
How many Palestinians do you know that have developed FRIENDSHIPS with Israelis?	1	2	3	4	5
How many Palestinians do you know that have had HOSTILE INTERACTIONS with Israelis?	1	2	3	4	5
How many Palestinians do you know that have had NEGATIVE CONTACT EXPERIENCES with Israelis?	1	2	3	4	5

7) AMONG THE **PALESTINIANS YOU KNOW** WHO HAVE HAD CONTACT WITH ISRAELIS, WHEN THEY INTERACT WITH ISRAELIS…

	Strongly Disagree			Undecided			Strongly Agree
1. .. the contact is almost always pleasant.	1	2	3	4	5	6	7
2. ..they almost always interact as equals.	1	2	3	4	5	6	7
3. .. the contact is almost always unpleasant.	1	2	3	4	5	6	7
4. .. there are almost always differences in power or status.	1	2	3	4	5	6	7
5. .. the contact is almost always friendly.	1	2	3	4	5	6	7
6. .. it often seems like they cooperate well with each other.	1	2	3	4	5	6	7
7. .. the contact is almost always hostile.	1	2	3	4	5	6	7
8. .. it often seems like they are competing with each other.	1	2	3	4	5	6	7
9. .. it seems like the contact is intimate like being with good friends and family.	1	2	3	4	5	6	7
10.. it seems like the contact is distant like with strangers or people unknown to THEM.	1	2	3	4	5	6	7

APPENDIX B

ITEMS ASSESSING PARTICIPANT RESPONSES TOWARD EXPERIMENTAL THIRD PARTY AND TARGET GROUPS

Measures to Test Third-Party Effects

Participant contact with third party "deductive" group (manipulation check).

Please respond to the following questions based on your experiences with the DEDUCTIVE GROUP. Please read the following statements and circle the number that corresponds with your level of agreement to each statement.

	Strongly Disagree			Undecided			Strongly Agree
1. My interaction with the Deductive Group was pleasant.	1	2	3	4	5	6	7
2. My interaction with the Deductive Group was as equals.	1	2	3	4	5	6	7
3. My interaction with the Deductive Group was unpleasant.	1	2	3	4	5	6	7
4. My interaction with the Deductive Group was based on differences in power or status.	1	2	3	4	5	6	7
5. My interaction with the Deductive Group was friendly.	1	2	3	4	5	6	7
6. I felt like we cooperate well with each other.	1	2	3	4	5	6	7
7. My interaction with the Deductive Group was hostile.	1	2	3	4	5	6	7
8. I felt like we were competing with each other.	1	2	3	4	5	6	7
9. I felt like the interaction was intimate like being with good friends.	1	2	3	4	5	6	7
10. I felt that the contact is distant like with strangers or people unknown to me.	1	2	3	4	5	6	7
11. I had a positive experience with the Deductive Group	1	2	3	4	5	6	7
12. I had a negative experience with the Deductive Group	1	2	3	4	5	6	7

Participant attitudes toward the "Deductive" group.

13) Think about how you feel toward the Deductive Group.
To what extent do you feel? (circle number to indicate your response)

a.	Negative	1	2	3	4	5	6	7	Positive
b.	Cold	1	2	3	4	5	6	7	Warm
c.	Hostile	1	2	3	4	5	6	7	Friendly
d.	Suspicious	1	2	3	4	5	6	7	Trusting

Participant attitudes toward the target "Abductive" group.

14) Think about how you feel toward the Abductive Group.

To what extent do you feel? (circle number to indicate your response)

a.	Negative	1	2	3	4	5	6	7	Positive
b.	Cold	1	2	3	4	5	6	7	Warm
c.	Hostile	1	2	3	4	5	6	7	Friendly
d.	Suspicious	1	2	3	4	5	6	7	Trusting

Participant Inductive Group anticipated contact with target Abductive Group.

Please reflect on your upcoming interactions with the **Abductive Group**, when responding to the items below:

Please read the following statements and circle the number that corresponds with your level of agreement to each statement.

	Strongly Disagree			Undecided			Strongly Agree
1. My interaction with the Abductive Group will be pleasant.	1	2	3	4	5	6	7
2. My interaction with the Abductive Group will be as equals.	1	2	3	4	5	6	7
3. My interaction with the Abductive Group will be unpleasant.	1	2	3	4	5	6	7
4. My interaction with the Abductive Group will be based on differences in power or status.	1	2	3	4	5	6	7
5. My interaction with the Abductive Group will be friendly.	1	2	3	4	5	6	7
6. I feel like we will cooperate well with each other.	1	2	3	4	5	6	7
7. My interaction with the Abductive Group will be hostile.	1	2	3	4	5	6	7
8. I feel like we will be competing with each other.	1	2	3	4	5	6	7
9. I feel like the interaction will be intimate like being with good friends.	1	2	3	4	5	6	7
10. I feel that the contact will be distant like with strangers or people unknown to me.	1	2	3	4	5	6	7

11. I will have a positive experience with the Abductive Group	1	2	3	4	5	6	7
12. I will have a negative experience with the Abductive Group	1	2	3	4	5	6	7

Perceived Similarity between the third party "Deductive" and target "Abductive" groups.

27) **Please indicate below how different or similar you believe the "Deductive" and "Abductive" Groups are:**

Very Different 1 2 3 4 5 6 7 8 9 10 Very Similar

Process variables (Manipulation Checks).

Perceived Relations between the third party "Deductive" and target "Abductive" groups.

28) **Please indicate on a scale of 1 -10 the extent to which the "Deductive" and "Abductive" Groups have a cooperative vs. competitive relationship:**

Cooperative 1 2 3 4 5 6 7 8 9 10 Competitive

29) **Please indicate on a scale of 1 -10 the extent to which they may be allies versus enemies with one another relationship:**

Enemy 1 2 3 4 5 6 7 8 9 10 Ally

Perceived extended contact between third party ("Deductive") and target "Abductive" groups.

Please think about the Deductive Group and their experiences with the Abductive Group when responding to the items below.

WHEN THE **DEDUCTIVE** and **ABDUCTIVE** GROUPS INTERACTED WITH EACH OTHER…

	Strongly Disagree			Undecided			Strongly Agree
1. .. the contact was pleasant.	1	2	3	4	5	6	7
2. ..they interacted as equals.	1	2	3	4	5	6	7
3. .. the contact was unpleasant.	1	2	3	4	5	6	7
4. .. there were differences in power or status.	1	2	3	4	5	6	7
5. .. the contact was friendly.	1	2	3	4	5	6	7
6. .. it seems like they cooperated well with each other.	1	2	3	4	5	6	7
7. .. the contact was hostile.	1	2	3	4	5	6	7
8. .. it seems like they were competing with each other.	1	2	3	4	5	6	7
9. .. it seems like the contact was intimate like being with good friends.	1	2	3	4	5	6	7
10.. it seems like the contact was distant like with strangers or people unknown to THEM.	1	2	3	4	5	6	7
11.… the contact was positive	1	2	3	4	5	6	7
12.… the contact was negative	1	2	3	4	5	6	7

APPENDIX C

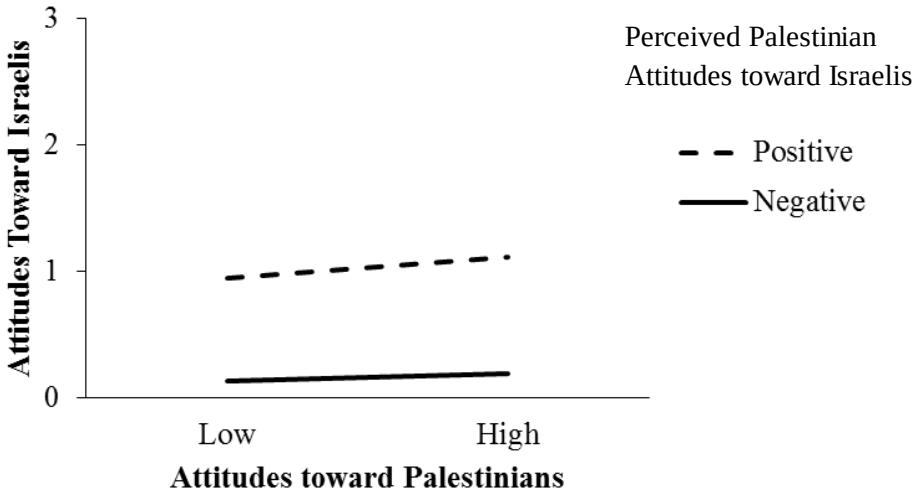
FIELD SURVEY – TREATING CONSTRUCTS AS CONTINUOUS VARIABLES

Below are the results of linear regression analyses that parallel analyses conducted through binary logistic regression, which treat some constructs as dichotomous rather than continuous. It is worth mentioning, though, that both types of analyses yielded very similar results and this provide confidence in the results provided in both sections of the paper.

The overall model included both predictors (Lebanese attitudes toward Palestinians and perceived Palestinian attitudes toward Israelis) and their interaction term, with *adjusted* R^2 = .86. First, perceived attitudes of Palestinians toward Israelis significantly predicted Lebanese attitudes toward Israelis, b=.68, SE=.08, p<.001. In other words, with every one unit increase in respondents' perceptions of positive Palestinian attitudes toward Israelis, respondents' own positive attitudes toward Israelis increased at a rate of .68. However, the main effect of attitudes toward Palestinians did not uniquely predict attitudes toward Israelis, b=.02, SE=.04, p=.65. Nevertheless, there is a significant interaction effect of these two predictor variables, b=.036, SE=.01, p=.005. When Palestinians are perceived to hold more negative attitudes toward Israelis (i.e., when respondents scored these attitudes as low as "1"), Lebanese attitudes toward Israelis remain negative as well, regardless of their attitudes toward Palestinians, b=.05, SE=.03, p=.08. However, when Palestinians were perceived to hold more positive attitudes toward Israelis (i.e., when respondents scored these attitudes as higher than "1"), the more

positively respondents felt toward Palestinians, the more positively they felt toward Israelis, *b*=.91, *SE*=.13, *p*<.001 (see Figure 5).

Figure 5: Regression graph depicting Lebanese attitudes toward Israelis as a function of their attitudes toward Palestinians and their perceptions of Palestinian attitudes toward Israelis.



The next regression model examined both Lebanese attitudes toward Palestinians and perceived Palestinian-Israeli relations as predictors for Lebanese attitudes toward Israelis, as well as their interaction term, *adjusted* R^2 = .09. The zero-order correlation above had already revealed that perceived Palestinian-Israeli relations did not correlate with Lebanese attitudes toward Israelis, β=.08, *p*=.12 and thus, as expected, the regression shows that perceived Palestinian-Israeli relations does not significantly predict Lebanese attitudes toward Israelis, *b*=.34, *SE*=.22, *p*=.13. Similarly reflecting the zero-order correlations obtained, attitudes toward Palestinians significantly predicted Lebanese attitudes toward Israelis, *b*=.54, *SE*=.11, *p*<.001. This would imply that overall, with every one unit increase in respondents' positive attitudes toward Palestinians, their

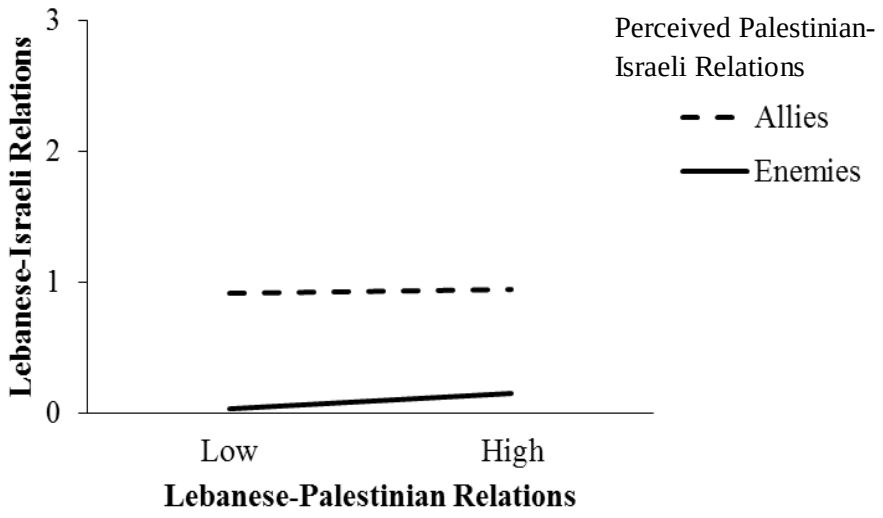
positive attitudes toward Israelis increased at a rate of .54. Moreover, the interaction effect in this model is marginally significant, b = -.08, SE=.04, p=.06. However, the previous regression analysis demonstrated that the relationship between respondents' attitudes toward Palestinians and their attitudes toward Israelis in fact varies as a function of perceived Palestinian attitudes toward Israelis. Therefore, an interpretation of results that does not include that moderator (perceived Palestinian attitudes toward Israelis) must be performed with caution.

In addition, although perceived Palestinian-Israeli relations do not predict respondents' attitudes toward Israelis, the zero-order correlation showed a significant relation between perceived Palestinian-Israeli relations and Lebanese-Israeli relations. Therefore, the following section examines the extent that respondents perceive all relations between multiple groups within a framework of structural balance.

Predicting Perceived Relations between Lebanese and Israelis. To test the presence of structural balance for the three groups, perceived relations between each pair (Lebanese-Palestinians; Palestinians-Israelis; Lebanese-Israelis) were examined. Correlational analysis (found in Table 2) indicate that the more Lebanese and Palestinians were perceived as allies, the more Lebanese and Israelis were perceived as enemies, r = -.19, p < .001. Furthermore, the more Palestinians and Israelis were perceived as enemies, the more Lebanese and Israelis were also perceived as enemies, r = .87, p < .001. However, when both variables and their interaction term were entered into a regression equation (*adjusted* R^2= .72), findings show that perceived Palestinian-Israeli relations are significant predictors of perceived Lebanese-Israeli relations, b=.96, SE=.07, p<.001, whereas perceived Lebanese-Palestinian relations no longer predict perceived Lebanese-

Israeli relations, *b*=.03, *SE*=.03, *p*=.30. In addition, when controlling for the two main effects, there was no significant interaction effect of perceived *Lebanese-Palestinian Relations* X *Palestinian-Israeli Relations*, *b*=.03, *SE*=.02, *p*=.15. Therefore, we conclude that the way respondents perceive Lebanese-Israeli relations depends on the way they perceive Palestinian-Israeli relations, but perceived Lebanese-Palestinian relations do not play any role in the prediction (see Figure 6 below).

Figure 6: Linear regression graph depicting perceived Lebanese-Israeli relations as a function of perceived Lebanese-Palestinian relations and perceived Palestinian-Israeli relations.



Adding Perceived Similarity as a Predictor. The purpose of asking respondents about their perceptions of similarities between groups was to assess the role that group similarities might play when it comes to third party influence. Correlations presented in Table 2 show that perceived similarities between Palestinians and Israelis is positively correlated with Lebanese attitudes toward Israelis, *r*=.74, *p*<.001. Furthermore, perceived Lebanese-Israeli relations were negatively correlated with perceived Lebanese-

Palestinian similarities, b=-.13, p=.012, but not significantly correlated with perceived Palestinian-Israeli or Lebanese-Israeli similarities. The hypothesis of this paper posits that the effects of perceived attitudes and relations between Palestinians and Israelis will be observed beyond the role of perceived similarity. This was tested with both outcome variables, *attitudes toward Israelis* and *perceived relations between Lebanese and Israelis*. First, "Palestinian-Israeli similarities" was entered into a regression equation with "perceived Palestinian attitudes toward Israelis". This model was a better fit for the data than a model containing "perceived Palestinian attitudes toward Israelis" alone, *change in* R^2= .002, F(1,341)=4.01, p =.046. Controlling for Palestinian-Israeli similarities, perceived Palestinian attitudes toward Israelis strongly predicted respondents' attitudes toward Israelis, b=.86, SE=03, p<.001. More importantly, the semi-partial correlation for this predictor only drops to r=.53 (from a zero-order correlation of .92). On the other hand, while controlling for these perceived attitudes, we find that perceived Palestinian-Israeli similarity also predicts attitudes toward Israelis, b=.07, SE=.04, p=.046. However, the partial correlation here drops to r=.04 (from a zero-order r=.75), indicating that perceived Palestinian attitudes toward Israelis are stronger than perceived Palestinian-Israeli similarities in predicting respondents' attitudes toward Israelis.

As for the role of perceived Palestinian-Israeli similarities on perceptions of Lebanese-Israeli relations, including this measure in a regression with Palestinian-Israeli relations does not improve the model, *change in* R^2=.002, F(1, 379) = 2.67, p=.10. Perceived Palestinian-Israeli relations is still a strong predictor of perceived Lebanese-Israeli relations, b=.87, SE=.03, p<.001, such that the more respondents feel that

Palestinians and Israelis are enemies, the more they also feel that Lebanese and Israelis are enemies, *adjusted* R^2 = .75. Once again, the semi-partial correlation in this case merely drops to *r*=.86 (from a zero-order *r*=.87). However, while controlling for perceived relations, perceived similarity between Palestinians and Israelis does not have a significant influence on the perceived relations between them, *b*=-.03, *SE*=.02, *p*=.10, and the semi-partial correlation is *r*= -.04 (from a zero-order *r*=-.10). These two findings indicate that perceived Palestinian attitudes toward or relations with Israelis are stronger predictors of respondents' attitudes toward Israelis and perceived relations Lebanese-Israeli relations, respectively, above and beyond the influence of perceived Palestinian-Israeli similarities.

Adding Extended Contact as a Predictor. Secondary processes such as "third-party" extended contact were assessed by asking participants to report their knowledge of members of the third-party group's (Palestinians') contact experiences with the target outgroup (Israelis). A linear regression analysis reveals that Palestinian contact experiences with Israelis did not significantly predict Lebanese attitudes toward Israelis, *b*= -.05, *SE* = .13, *p* .72 or perceived Lebanese-Israeli relations, *b*=.02, *SE=.10, p*=.86. Nonetheless, we tested whether extended contact may contribute to predicting Lebanese attitudes toward Israelis, beyond what could be predicted by perceived Palestinian attitudes or relations with Israelis. Hence, when this measure (perceived Palestinian contact with Israelis) was included in the model with perceived Palestinian attitudes toward Israelis, the model showed a significant improvement R^2 *change* =.003, *F*(1,334), =6.07, *p*=.014. Furthermore, in this model, perceived extended contact between Palestinians and Israelis significantly predicted Lebanese attitudes toward Israelis, *b*= -

.12, *SE*=.06, *p*=.04, such that more positive perceived contact between Palestinians and Israelis predicted more negative Lebanese attitudes toward Israelis. When included with perceived Palestinian-Israeli relations in the model predicting Lebanese attitudes toward Israelis, however, there was no significant improvement of fit, R^2 *change* <.000, $F(1,336)$, = .02, *p*=.089. Nevertheless, the same model predicting perceived Lebanese-Israeli relations showed a significant improvement over one that only included perceived Palestinian-Israeli relations. While perceived Palestinian-Israeli relations remains a stronger predictor, *b*=.90, *SE*=03, *p*<.001, perceived Palestinian contact with Israelis is able to account for some of the remaining variance, *b*=-.10, .05, *p*=.02.[4]

APPENDIX D

NOTES

[1] The specific variables are: (1) perceived Palestinian contact with Israelis, (2) perceived Palestinian attitudes toward Israelis, (3) respondents' attitudes toward Israelis, (4) perceived relations between Palestinians and Israelis, (5) perceived relations between Lebanese and Israelis, (6) perceived similarities between Palestinians and Israelis, and (7) perceived similarities between Lebanese and Israelis.

[2] When not controlling for "contact with inductives" as an interacting variable, the effect of the perceived Inductive-Abductive relationship becomes significant, $F(2,191)=3.196$, $p=.043$, $\eta^2=.033$.

[3] To support this, a comparison of how participants felt toward the "inductives" before and after the interaction reveals a significant difference, such that for the subgroup who went through the negative interaction, their scores on the thermometer dropped two points (on a 7-point scale) after the interaction (pre-interaction $m=4.76$, $sd=1.50$; post-interaction $m=2.77$, $sd=1.45$), $t(64)= -8.26$, $se=.24$, $p<.001$). On the other hand, attitudes toward "inductives" improved following a positive and neutral interaction, $t(130)=4.83$, $se=.13$, $p<.001$.

[4] *Extended contact* was tested in other models, where it did not significantly predict any of the outcome variables, except in the cases stated above, where the direction was opposite of what the paper proposes. Due to these inconsistencies, interpreting results related to this measure require further examination of the data, pertaining to possible moderators (e.g., this influence may be mediated by perceived Lebanese-Palestinian relations, which is negatively correlated with *Palestinian-Israeli contact*, $r= -.17$, $p=.001$). Unfortunately, this is beyond the scope of this dissertation but will be examined in future work.

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